This is to certify that the
thesis entitled

FRAMES OF MACKINDER AND "THE MUSLIM QUESTION":
A CRITICAL GEOPOLITICS OF U.S. GEOGRAPHICAL
IMAGINARIES REGARDING ENVIRONMENTAL SECURITY IN
UZBEKISTAN

presented by

David Lee Baylis

has been accepted towards fulfillment
of the requirements for the

_____M.S._____   degree in   _____Geography_____

_____
Major Professor's Signature

_____18 - AUG - 09_____
Date

MSU is an Affirmative Action/Equal Opportunity Employer

PLACE IN RETURN BOX to remove this checkout from your record.
TO AVOID FINES return on or before date due.
MAY BE RECALLED with earlier due date if requested.

DATE DUE	DATE DUE	DATE DUE

FRAMES OF MACKINDER AND "THE MUSLIM QUESTION":
A CRITICAL GEOPOLITICS OF U.S. GEOGRAPHICAL IMAGINARIES
REGARDING ENVIRONMENTAL SECURITY IN UZBEKISTAN

By

David Lee Baylis

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

MASTER OF SCIENCE

Geography

2009

ABSTRACT

FRAMES OF MACKINDER AND "THE MUSLIM QUESTION":
A CRITICAL GEOPOLITICS OF US GEOGRAPHICAL IMAGINARIES
REGARDING ENVIRONMENTAL SECURITY IN UZBEKISTAN

By

David Lee Baylis

The hydropolitical debate taking place within the former Soviet Republics of

Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan) has

garnered significant attention from the international media over the last two decades. This

has been instigated by an increasing interest in international sites of environmental

degradation as contested spaces prone to conflict, particularly with the rise of

environmental security as a dominant geopolitical discourse following the end of the

Cold War and the collapse of the Soviet Union. Critical attention has not been paid to the

specific ways in which the hydropolitical debate has been *constructed* within Central

Asia, and how it has been packaged, disseminated, and received within the U.S. through

the media and government policy documents. Environmental security juxtaposes U.S.

security concerns regarding the potential threat of Islamic extremism alongside rapidly

declining environmental and social conditions in Central Asia. However, this rendering

of security as environmental security has had a detrimental impact on both the social and

environmental landscape of the region, particularly in Uzbekistan. This research aims to

show how environmental security renders an overly simplistic and dangerous geographic

imaginary of religion and society in Uzbekistan, ultimately benefiting the security

interests of those establishing the geopolitical discourse while failing to directly address

the root causes of social and environmental degradation in the region.

ACKNOWLEDGEMENTS

TABLE OF CONTENTS

LIST OF FIGURES

KEY TO ABBREVIATIONS

ADB – Asian Development Bank

BG - Boston Globe

BI – Brookings Institute

BWO – Basin Water Organization

CSM - Christian Science Monitor

DSP – U.S. and Uzbekistan Declaration of Strategic Partnership, 2002

ECACP – Environmental Change and Acute Conflict Project

ENCOP – Environmental Conflict Project

ESI – Environmental Security Initiative, 1998

GEF – Global Environmental Facility

HF – Heritage Foundation

ICWC – Interstate Commission for Water Cooperation

ICWC-SIC – ICWC Scientific Information Center

IMU – Islamic Movement of Uzbekistan

IRP – Islamic Revival Party of Tajikistan

ISA - International Security Affairs

IWRM – Integrated Water Resource Management

NATO – North Atlantic Treaty Organization

NGOR – Uzbekistan Nongovernmental Registration Law

NSS91 – United States National Security Strategy of 1991

NSS98 – United States National Security Strategy of 1998

NYT - New York Times

OEF – Operation Enduring Freedom

OFJ – Uzbekstan Mahalla Consolidation Law "Ochiq Fuqarolik Jamiyati"

OSCE – Organization for Security and Cooperation in Europe

OSCE-ISD – Organization for Security and Cooperation in Europe Istanbul Summit Declaration

RAND - Rand Project Air Force

RFERL – Radio Free Europe Radio Liberty

SSI - Strategic Studies Institute

UNDP – United Nations Development Programme

UNDP-UNEP-OSCE-NATO – Environmental Security Program for Central Asia and the Caucasus

UNEP – United Nations Environmental Programme

UZT – Uzbekistan National Environmental Agency (Tabiat)

UZY – Uzbekistan National News (Yangliklar)

WB – World Bank

WP - Washington Post

1. INTRODUCTION

1.1 Conceptual Background

The hydropolitical debate taking place within the former Soviet republics of Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan) has garnered significant attention from the international media over the last two decades. This has undoubtedly been instigated by an increasing interest in international sites of environmental degradation as contested spaces prone to conflict. The neo-Malthusian resource scarcity debate in relation to water as a contested resource has been addressed significantly by a broad range of academics (Gleick 1998). Much of this work has focused on the generation of intricate databases accounting for the sites and situations of conflicts as they pertain to resource scarcity.

However, critical attention has not been paid to the specific ways in which the hydropolitical debate has been *constructed* (and the construction here, I would argue, has been three-fold) within Central Asia: how it has been packaged, disseminated, and implemented. Media accounts of the process behind the annual attempts at creating a transboundary water use agreement have proliferated within the last decade. Unfortunately, media accounts typically lament the perpetual failure of these talks to reach common ground (often before the agreement has officially failed) without critically assessing why such discussions are predestined to fail despite unanimous recognition among member states of dire environmental circumstances. Few accounts go beyond a limited and deterministic assessment of resource scarcity and the assumption of incompatible demands among states gleaned from a surface-level assessment of the hydropolitical process. Predictions of conflict are often exclusively focused on

1

population, religion, and ethnic-based determinants fracturing within the remnants of the Soviet political and technical structure.

Central Asia's history is one dominated by the dynamics and power transformations of transitional empires. Central Asia's diverse imperial/colonial history, (be it Persian, Mongol, Timurid, Durrani, Russian, or Soviet) has woven a complex tapestry of social and cultural fibers into the fabric of everyday life in Central Asia. Western influence has only recently reentered the picture with the fall of the Soviet Union, on hiatus since the days of the Great Game. Much of this attention has been directed toward development projects, aimed at economic growth and democratization, primarily in the form of base construction for the "War on Terror" and energy resource exploration and extraction. There is widespread agreement that these initiatives have failed, allowing for accelerated social, economic, and environmental degradation.

Eric Sievers, formerly a consultant for several projects in the region during the 1990s, levied an interesting critique of the Western development regime as it has emerged in Central Asia. Most notably, in *The Post-Soviet Decline of Central Asia* (Sievers 2003) he condemned these agencies for erasing the place-specific democracy construction that emerged during Gorbachev's Perestroika-era reforms. In a fashion similar to Tim Mitchell's critique of Western development regimes in Egypt as purely technopolitical endeavors (Mitchell 2002), through an analysis of Central Asia's changing stocks of capital, Sievers' critique addressed how totalizing and universal expert development schemes ignored a critical junction in Central Asia's historical experience; one that has had both social as well as material consequences (Sievers 2003).

An interesting connection can be drawn between Eric Sievers' socio-economic analysis of the Central Asian landscape and Adeeb Khalid's historical-cultural assessment of the political and religious landscape. In *Islam After Communism* (Khalid 2007), Khalid traced the influences upon and evolution of, a highly contextualized, historicized, and socially/culturally contingent formulation of uniquely Central Asian Islam. In doing so, Khalid emphasized how the political power structures in each of the post-Socialist Central Asian states adapted strategies for co-opting localized and loosely Islamic traditions through various legal and political mechanisms. For example, Uzbek President Islam Karimov's simultaneous endorsement of state sponsored local or traditional Islam through the incorporation of local *mahallas* and his tough stance on "Wahhabi" Islamic extremism as a means of consolidating power (Khalid 2007) are evidence of the enduring political relevance of Islam in Central Asia (McGlinchey 2005).

The mahallas, roughly translated as *neighborhood*s, are communal, typically urban, social units that have been the primary non-centrally planned building blocks of civil society in Uzbekistan and throughout Central Asia. According to Sahadeo and Zanca, alongside "joint families, clans, tribes, and villages, the mahallas are central to individual and group identities and relations" (Sahadeo and Zanca 2007; p. 33). In addition, described as "densely social places" (Sahadeo and Zanca 2007; p. 77) or vast, tightly-knit repositories of social capital, mahallas were pivotal in the promotion and success of certain Perestroika and Glasnost-era policies as they materialized in Central Asia. In fact, the mahalla survived and even prospered throughout the entire Soviet-era. That prosperity, however, is threatened by the Karimov regimes' crackdown upon Islamic extremism and on groups engaging in non-state authorized Islamic practice,

including the regular *zifoyat* gatherings (group meetings) taking place within mahallas (Sahadeo and Zanca 2007; p. 78).

Despite significant differences in the content of Siever's and Khalid's work, due in part to the divergent nature of their individual research questions, both of these authors uncovered interesting connections among development, democracy construction, and environmental degradation as they have occurred in Central Asia. Sievers and Khalid each described how the failure of development initiatives in the region, the collapse of local economies, the loss of human, monetary, and physical capital, and the steady decay of the landscape, have been discursively linked to the vestiges of Soviet-era Communism. Technical and political elites, developers, and the international popular media have joined together in their geopolitical depiction of Central Asia as a ticking time bomb of complete ecological collapse, impending conflict, and Islamic extremism. Nevertheless, while the Central Asian environmental landscape is in dire condition, the predictions of widespread local conflict and an influx of Islamic extremism have failed to materialize.

1.2 Research Questions

In this thesis, I focus my analytical lens on Uzbekistan in order to answer the following questions:

- How has the current social and environmental condition in Uzbekistan been framed in the post-Cold War era?

- What political, social, and environmental characteristics are emphasized by this post-Cold War discourse? In other words, which particular geographical imaginaries are sustained or obscured?

- What effect has this post-Cold War discourse had on the region's local NGOs, and mahallas of Uzbekistan (i.e. the dominant figures in the emerging Soviet environmental movement during Perestroika and Glasnost)?

1.3 Hypotheses

- The failure of transboundary water agreements and continuing environmental degradation are not purely endogenous to the region, nor solely a vestige of "Soviet" era policies.

- There is a common U.S. geographical imaginary of Central Asia as a whole, and of Uzbekistan in particular, that characterizes the region as prone to conflict.

- Following the post-Cold War geopolitical transition, Uzbekistan is framed as an "environmental security" risk by major U.S.-affiliated international policy and security organizations (e.g., RAND and NATO).

- Under this discourse of environmental security, the potential for conflict is linked to environmental degradation, Malthusian population characteristics, the failure of democracy in the region, and the strong potential for Islamic extremist groups to take root. As a whole, environmental security is a new post-Cold War discourse.

In this thesis, I argue that this geographic imaginary makes several historical and cultural assumptions while neglecting a discussion of democracy-building efforts that took place during the Perestroika era, between 1987 and 1991. This overly simplistic geographical imaginary actually serves to hide its origin and realize itself, via the U.S.'s own reluctance to continue early Perestroika-era democratic and environmental reforms. As a result, the entrenched *nomenklatura*, or former Soviet-era political leadership, (i.e. Karimov in Uzbekistan) is able to engage in further penetration of local institutions and

society. This is evidenced by the Karimov regime's reorganization of NGOs and local mahallas under state control.

Ultimately, I argue that the discourse of environmental security is a short-term and poorly contextualized solution to Uzbekistan' environmental and social problems. Through its overtly Malthusian and Orientalist assumptions, an environmental security narrative places realist concerns of security above that of the Uzbek people (e.g., as with U.S. operations in Afghanistan, Karimov's authoritarian policies), while simultaneously obscuring environmental security's own complicity in ongoing environmental degradation. Environmental security that emphasizes security over environment is not a long lasting and sustainable option for the region.

Despite the fact that certain environmental concerns, (i.e. the rapid desiccation of the Aral Sea in particular) in Central Asia are near unanimously agreed upon by political leadership in the five former Soviet states, annual attempts to initiate transboundary water use agreements among the independent Central Asian states continually fail as environmental and social conditions deteriorate - save for a few widely lauded "successes," (e.g., the *partial* ecosystem revival associated with the North Aral Sea project). I argue that the general failure of these environmental agreements is not solely a factor of endogenous characteristics within the region (e.g., the Soviet legacy of an incompatibility of demands for water sharing among states) despite the widespread usage of these narratives in Western (and specifically U.S.) development literature, international relations think tanks, and the U.S. popular media. Rather, the current reality in Central Asia was helped along by a hybrid of endogenous conditions along with U.S. policies and representations of the region in the post-Cold War era.

In this research, I demonstrate how a U.S. security discourse that emphasizes fear and uncertainty, a revival of the Russian Imperial "Muslim question," and an inversion of the late Soviet-era U.S. policy regarding "extremist" elements within the region has developed and is being applied to Central Asia under the guise of "environmental security." This security discourse, rendered as environmental security, juxtaposes alleged threats of Islamic extremism alongside continuing social and environmental degradation. While this continuing degradation is often framed as solely a byproduct of the Soviet era, I argue that the Western *Soviet*-Orientalist gaze (Mitchell 1988 with my addition of *Soviet* to Mitchell's "gaze") often excludes discussions of U.S. development initiatives and their failure to allow for place-specific democracy constructions of the Perestroika/Glasnost-era to continue.

I also argue that there are two watershed moments in U.S.-Uzbek relations that highlight the true security goals and realities of the environmental security geopolitical discourse as realized in Uzbekistan: the events immediately following the onset of the U.S. lead *Operation Enduring Freedom* into Afghanistan as well as U.S.-Uzbek relations following the events in Andijon, Uzekistan on 13-14 May 2005. After initial attempts to promote market-based democracies failed in the region during the 1990s, the U.S. slowly disengaged from many development projects in the region, focusing its attention elsewhere. However, following the attack on the World Trade Center in New York City on 11 September 2001, Central Asia and Uzbekistan in particular became a central focus of U.S. international security policy, now rendered as environmental security. However, the stated goals of environmental security, to promote social and environmental stability and peace, were put to the test when the Karimov regime brutally put down an uprising in

the northern Uzbek city of Andijon on 14 May 2005. The regime claimed that the uprising was fundamentalist (allegedly initiated by the group Hizb ut-Tahrir) in nature, however, journalistic accounts indicate that the mass of individuals that congregated in Andijon were protesting the unfair arrest and incarceration of 23 local businessmen. While the Uzbek government reported that 187 were killed, unofficial estimates put that number at 1,000 or more (Khalid 2007). While the U.S. initially reprimanded the Uzbek government, Karimov himself removed the Americans from their Karshi-Khanabad base, only to have the U.S. ask for Uzbek assistance again in 2008. Security indeed, but for whom and at what cost? And what of the environment?

Finally, I argue that an instrument effect of this exclusion and Soviet-Orientalized rendering is the repressive legislative measures of the entrenched nomenklatura in Central Asia. For example, despite international condemnation of authoritarian policies in the region, the Karimov regime in Uzbekistan is able to utilize the U.S. environmental security discourse to engage in further acts of supression; namely, the continued penetration of local and grassroots institutions that thrived during Perestroika and were significant players in the emerging environmental movement (i.e., the mahalla, NGOs and other local level organizations/institutions). Thus, an overly simplified and historically inaccurate US narrative of Central Asia, suffering from the old stereotypes of the so-called Muslim question and Mackinder's geopolitics, has actually helped realize the formerly reified imaginary – with negative consequences for human and environment alike.

1.4 Contribution to the Body of Geographical Literature

This research contributes to the limited critical geopolitical literature that considers environmental policies and institutions. My research fills gaps in the body of literature pertaining to environmental security discourses, post-Soviet geographical imaginaries, and the theoretical frameworks of Tim Mitchell and James Ferguson. I conclude by echoing Klaus Dodds' (Dodds 2001) and Nick Megoran's (Megoran 2007) call for more research focusing on ethnographic approaches to critical geopolitical frames and how the failure to do so ultimately succeeds in "producing" these same "dangers and vulnerabilities" (Dodds 2001: 469). Through my critical geopolitical analysis of environmental security as it pertains to Uzbekistan, I am attempting to answer Paul Robbins' call for more linkages between political geography and political ecology (Robbins 2003).

2. LITERATURE REVIEW

2.1 Ecological Politics and Political Ecologies

Environmental concerns commonly cross both disciplinary and sub-disciplinary boundaries. Two subfields of geography have contributed substantially to the body of research regarding human-environment interactions: political geography and political ecology. However, while both have traditionally engaged in similar lines of inquiry, they have often done so myopically, making only passing reference to the analysis, interpretation, and interactions of political institutions with the environment as assessed within their counterpart field (Robbins 2003).

In this section, I address the foundations and frameworks between political geography and political ecology with respect to human-environment research, paying particular attention to those that focus on the construction and implementation of environmental and development discourses. I have aggregated the reviewed body of literature into two categories beneath an overarching analysis of post-colonial studies with respect to environmental and development discourses: resources and conflict/environmental security and resources and governance (especially in terms of scale frames, conservation, and institutional frameworks). While further subdivisions are possible, for organizational purposes these two subcategories provide clear and logical breaks within the larger body of literature. In addition, I highlight the distinctions between the literatures in each category, published either as political geography or political ecology.

Before beginning the review process, I summarize briefly each of these categories. A strong link exists between political geography and political ecology in the

postmodern tradition with respect to postcolonial studies of environmental and development discourses (i.e., critiques of Western dominated development regimes and neo-imperial/neo-colonial power relations as in Blaikie 2004, Escobar 1995, Escobar 1996, Adams 2001, Dalby 2004, Peet and Watts 2004, Radcliffe 2005, and Sharp 2006). The environmental security literature crosses boundaries outside of geography and pertains to assessments and critiques of ecological degradation within states as catalysts for conflict and destabilization and thus, threats to the modern international state system itself (Soroos 1995). Much of the work in political geography and political ecology critiques the fundamentally realist and Malthusian assumptions of environmental security (note Dalby 2002, Haas 2002, Flint 2003, and Dalby 2004).

The research regarding resources and governance, which emphasizes scalar assessments, conceptualizations, and interactions of governance and identity that cross permeate political ecology and political geography, is perhaps one of the most cohesive elements shared by the two subfields. Studies of scale and the "local trap" within political ecology (e.g., Purcell and Brown 2005, Batterbury and Fernando 2006, and Blaikie 2006) can be directly linked to David Delaney's political construction of scale (Delaney and Leitner 1997) and political geographer John Agnew's "territorial trap" (Agnew 2003). The bulk of the resources and governance literature focuses on the form and function of institutional arrangements. In this review, I pay particular attention to the literature as it pertains to water resource management, concluding by narrowing my focus to Central Asia.

Throughout the literature review, I trace the methodological and theoretical connections between political geography and political ecology. I then engage in a short

discussion and review of critical geopolitics scholarship, emphasizing recent efforts to assess environmental issues, which have predominantly been the realm of political ecology. Finally, I place the linkages between these two sub-disciplines in the context of my own research interests regarding discourses of democracy, security, and environmental degradation in Uzbekistan. Ultimately, as noted previously, I seek to answer Paul Robbins' call for further integration between the subfields by demonstrating a narrative method for engaging the "analytical and practical benefits of such a convergence" (Robbins 2003), linking critical geopolitics and critical legal analysis of environmental frameworks.

2.2 Postcolonial Studies, Problematization, and the Production of 'Objects'

Can representation be purely objective? If not, does the particular way in which an object or subject is represented have practical social and material consequences? Are representations manifestations, constitutive of power, both, or neither? What is the real relationship between representation and power? Political ecologists and political geographers alike have actively engaged in this line of questioning through the analytical lens of postcolonial studies and critiques of development theory. The Islamic world has been quite negatively impacted by Western representational constructs. Central Asia is perhaps even more susceptible to this, as recent efforts to promote security and democratic reform highlight, due to its unique Islamic and Soviet history.

Foucauldian knowledge/power dynamics, which manifest through *discourses* of place, environment, and development, and the formulation of and opportunities for contesting 'colonial power and knowledge' beneath these hegemonic discourses, are the

foundational elements of postcolonial studies (Radcliffe 2005). This work is part of the larger body of postmodern literature that critiques the fundamentally Cartesian view of a singular, universally discoverable, knowledge or truth about the a priori world *out there* (Agnew 2003 and Dodds 2007). What followed from this line of reasoning, emphasizing the assumption of complete separation between observer and observed, was the subsequent structuring of the world, as envisioned through a supposedly unbiased and detached scientific gaze, which commenced with the European Age of Enlightenment (Mitchell 1988, Escobar 1996, and Agnew 2003). Modifying Marxian historical materialism, where Marx implied that, in fact, social existence determined consciousness (Marx, Engels et al. 1978), postmodernists in the tradition of Foucault perform *archaeologies* of power-laden expert discourses that arrange social existence; they seek to disassemble and deconstruct the power relations that help to promote certain dominant interpretations of reality (i.e. "regimes of truth" for Foucault) (Foucault 1972).

The power behind the production of knowledge about objects can be extended to a discussion of Western representations of the non-Western world and the globalization of governmentality from a Western center (Sidaway 2000; Watts 2003; Sharp 2006; Sharp 2008) as a means of compartmentalizing and organizing an otherwise chaotic and unmanageable world (Mitchell 1988; Watts 2003). The act of producing knowledge about objects from a postcolonial standpoint has been critiqued, most notably in Edward Said's *Orientalism,* as a process that reinforces hegemonic cultural, social, and political discourses of the West via the *othering* of the so-called third world (Said 1979).

This formulation of the other, facilitated primarily through language via Foucauldian *discourses* (i.e. "statements with practical effects") (Abu-Lughod 2005) or

"shared, structured ways of speaking, thinking, interpreting, and representing," (Dryzek 1997) socially constructs a world by helping to realize a formerly reified geographic imaginary. In effect, representations do have material consequences (Braun and Castree 1998). Often, the ocular-centric modes of Western science and understanding simplistically observe and classify characteristics of the non-Western world as *problems* which require the Western Development experts' diagnosis and prescription, to use the medical terminology of Foucault (Ferguson 1990, Escobar 1995, Escobar 1996, Mitchell 2000, and Mitchell 2002) for is often accomplished without consideration of the complex globalizing linkages or colonial histories that perpetuate these conditions (Escobar 1995 and Mitchell 2002). Critiques of the ocular-centric address the dual fallacy of the ocular or gaze: an over reliance on visual metaphors and methods in science studies (can invisible phenomenon be explained visually? Is the visual always indicative of underlying phenomenon), and the assumption that scientific observation in the Cartesian tradition is detached and unbiased.

Said was specifically concerned with the reproduction and dissemination of erroneous conceptions of the Middle East and the subsequent internalization of these images by Middle Eastern political elites through "culture talk," which reinforces certain Islamic generalizations and promoting the notion of a "good Muslim/bad Muslim" dichotomy (Mamdani 2004). This process of othering relies on the power of *topoi,* or "myths drawn from the colonial imagination and stereotypes" (Hartmann 2005; p. 13), which function as the "referential basis of interpretation [for] making a textual account seem coherent within a particular culture's norms" (Hartmann 2005; p. 13).

However, the fashioning of the other is also required to maintain a concrete conception of the self. In other words, the European fashioning of a distinct *Orient* and *Occident* was an act of self-preservation of European identity that continues today (Mitchell 1988, Escobar 1996, and Agnew 2003). This fundamental geographic imaginary of the world as "exhibition" and "museum," or European modernity and non-European antiquity, is perpetuated by the Western development agenda of problematization and technopolitics (Mitchell 1988; Mitchell 2002).

In James Ferguson's *The Anti-Politics Machine,* Ferguson assessed the Foucauldian question of how a "learned discourse" (i.e. Western development theory) becomes indispensable or governmentalized (Ferguson 1990). Ferguson applied Foucault's analytical framework to the discourse of development with respect to Lesotho, arguing that the consistent failures of these development discourses to alleviate poverty and reverse the process of uneven development should have led to their demise as viable solutions to the so-called problem of under development (Ferguson 1990). Ferguson's argument tied into the broader discussion of the problematization of poverty as elaborated upon by Arturo Escobar in *Encountering Development* in which the Cold War era engendered the discursive impoverishment of nearly two thirds of the world (Escobar 1995). Poverty is juxtaposed in the developing world alongside criteria established in the developed world, allowing for the creation of new "discourses and practices that shape reality" (Escobar 1995). In essence, underdevelopment and poverty in the Third World are objectified or problematized in such a way that the development practitioner's solution is rendered as a technical problem within the widely accepted body of knowledge established by development experts.

The unintended instrument effects that accompany the objectification and representation of underdevelopment by the development discourse result from the exercise of power by the state targeted for development. The state *allows* itself to be subjected to the experts of development, albeit opportunities for resistance to development theory and the structural adjustment policies that accompany it may be limited, because the state's power is expanded and strengthened by the establishment of "local governing machinery" facilitated by the development discourse, i.e. increase in roads, funding for *surveillance* of rural/isolated territories (Ferguson 1990; p. 253). The development projects did not only restrain the state, impinging on its power, they also enabled it. As Ferguson wrote, "The development apparatus is not a machine for eliminating poverty; it is a machine for reinforcing and expanding the exercise of bureaucratic state power – with poverty as the entry point" (Ferguson 1990; p. 255).

However, we can also see that the development discourse fashions the state as a kind of object that conforms with the development expert's framing of said problem within a particular body of knowledge. Escobar refers to this fashioning of knowledge about the developing state as the three components of the development apparatus: aboriginal economy, peasant population, national government. Each is tasked with developing the economy and is deemed unfit to do so (Escobar 1995). As Timothy Mitchell pointed out in *Rule of Experts*, the state is just one such object that is often poorly conceived of due to so-called experts ignorance of the fractured and unpredictable nature of fashioning technical solutions through problematization (Mitchell 2002).

In *Rule of Experts*, Mitchell looked at the production of several objects within Egypt from WWII until the 1980s. These objects include: the economy, the market,

property, universals, capitalism, and, perhaps the most all encompassing, the territorial state of Egypt. In doing so, Mitchell addresses the idea of agency from a perspective that is typically not utilized when referring to conventional objects. Objects, such as the economy, are fashioned in such a way that experts can position themselves outside of it and look down upon it analytically (Escobar 1995; Mitchell 2002). In a similar fashion to Ferguson's discussion of development experts in Lesotho, economy as an object can be problematized and solved through the development and implementation of technical solutions.

In Mitchell's case study of Egypt, he demonstrated how international organizations objectified the state by framing Egypt's "fundamental problems" as limited natural resources and rapid population growth (Mitchell 2002). Mitchell describes how this neo-Malthusian argument was legitimated in a classic Foucauldian sense, through the construction of a particular body of knowledge regarding Egypt as a state and an economy (Mitchell 2002). The solution to Egypt's categorical problems was to be found in large-scale engineering projects that would irrigate and fertilize the deserts and create a second Nile River Valley that would support Egypt's growing population (Mitchell 2002).

However, the projects of economic reform were beneficial to only a select few within the multiplicity of "logics and essences" that allow global capitalism to function (Mitchell 2002; p. 303). The new irrigation techniques brought with them malarial mosquitoes that ravaged rural populations, leading to the manufacture and ubiquitous usage of DDT (Mitchell 2002). Green Revolution agricultural "improvements" were encouraged, such as the usage of fertilizers and the production of high-end cash crops,

that allowed foreign penetration of markets and the concentration of wealth in the hands of a few at the expense of self-sustained staple food supplies. Finally, while the second Nile River has yet to be built, the "problems" of population density have been "solved" through the diversion of vast quantities of water, supplies, and electricity to Egypt's suburban desert oases (Mitchell 2002).

By fashioning the state of Egypt as a national economy, Egypt is made into an object, a set of objects in fact that can be analyzed by experts. Egypt's people and landscape become a laboratory for testing these various expert logics, logics that ultimately mirror the fractured logic of capitalism (Mitchell 2002). Enframing the economy and the state is an attempt at containerizing all other forms of power and agency. However, as Mitchell demonstrates, "the forces and overflows it must contain are not limited to those of human agency, whose rationality itself contains forms of the irrational and non-human" (Mitchell 2002; p. 299). By attempting to create objects that can be problematized and analyzed, the potential agency of these newly formed objects and the outcomes of trying to control or manipulate agency that is not fully realized, results in a tendency to "overlook [or ignore] the forms of leakage, network, energy, control, violence, and irrationality that can occur" (Mitchell 2002; p. 300). Do objects have the type of agency that we normally attribute to people? While such a direct comparison is unclear, it is obvious that the process by which objects such as "economy," or "state," are fashioned are simplistic and focus to heavily on what Mitchell describes as the *binaries* of the real and the represented (Mitchell 2002; Robbins 2007).

Binaries play a crucial role in postcolonial and development critiques. Jacques Derrida describes the role of the binary, the existence of supposedly diametrically

opposed and thus mutually exclusive categories, i.e. man and woman, is to create one category in the absence of another (Derrida 1997). In this sense, you are a women because you are *not* a man. Thus the binary creates through exclusion; this is a fundamental component of psychological understandings of *identity crisis* and is often at the root of most xenophobia. We can historically trace the role of binary construction in most nationalistic endeavors. Like Tim Mitchell's argument in *Colonising Egypt*, Europeanness is reinforced because it is juxtaposed by a strong caricature of the "Oriental" Egypt (Mitchell 1988).

However, as Mitchell demonstrates, binaries are often false dichotomies. According to Bruno Latour, through binaries we attempt to "purify" the world, yet despite these efforts "hybrids" remain and our ignorance of, or unwillingness to except, the existence of hybrids simply reinforces them (Hartmann 2005); thus is the "paradox of modernity," or for Mitchell "the fractured logic of capital" (Mitchell 2002; p. 303). Several scholars have assessed how binaries are resisted (i.e., "traditional ecological knowledge" in Berkes 2004, "multiple modernities" in McMichael 1997, "actor-network theory" in Latour 1993, and "situated knowledges" in Hartmann 2005). However, the process by which these narratives are created, imbedded in the human conscious, and reinforced in society must first be addressed. That process, the production of geographic imaginaries, is often accomplished through *framing*. Frames are simplistic, easy to remember, and thus dominant representation of place, are implicated in our understanding of how the world works, and thus, how it comes to exist (Hartmann 2005). Reality and representation are blurred beyond distinction.

Attempts at classifying objects through expert knowledge focus too heavily on notions of "real" and "representation," "expert" and "indigenous" knowledge, object and subject. There is much more going on than these simplistic bifurcations propose. As Mitchell wrote, "Power and agency must be made a question, rather than an answer known in advance" (Mitchell 2002; p. 42).

2.3 Environmental Discourses and the Production/Destruction of Nature

How have discourses of power been implemented in the construction of the human/nature divide, perhaps one of the oldest and most pivotal of binaries? Specifically, what power lies in the ability to set the boundaries between humans and nature? Who is involved and who is excluded in this process? Political ecology in particular has played a dominant role in the renegotiation of the subject/object positionality of the environment, often questioning the origins and continued usage of questionable discursive formulations of place, environment, and development (Zimmerer 1993, Batterbury, et al. 1997, Adams 2001, Adger, et al. 2001, Peet and Watts 2004, Blaikie 2004, and Hecht and Saatchi 2007). This literature often rejects long-standing discourses of environmental degradation, such as the Malthusian population thesis, the incompatibility of humans/natural environments, and uneducated "traditional" farming practices, as overly simplistic and problematic assumptions when linked causally to deforestation and regeneration, soil degradation, and indigenous knowledge.

Tim Forsyth advocates a "realist political ecology agenda" that seeks to "understand the ramifications of environmental degradation, but in a way that acknowledges the social and political construction of definitions of degradation" (Forsyth

20

2001; p. 147). In this sense, scientific assessments must be understood in light of the complex biophysical as well as political agendas that comprise them. The theory of Himalayan environmental degradation (THED), in which indigenous land use practices were solely blamed for soil degradation in upstream Nepal, and Western China is one of the most widely recognized examples. Despite THED's debunking, the Chinese government in particular has continued to endorse THED as a nationalistic scientific endeavor, undoubtedly as a means for controlling rural localities (Forsyth 1996, and Blaikie 2004).

With a legacy that traces back to the dynamic notions of landscape and human environment interconnectedness of Sauer, Kropotkin, and even George Perkins Marsh (Marsh 1864, Sauer 1983, and Robbins 2004), elements of political ecology have recently engaged in postmodern archaeologies or deconstructions of formerly concretized conceptions of environment, nature, and their *construction* and *destruction* (Robbins 2004). A notable example is William Cronon's controversial narrative of the historical transformation of *wilderness* from place of fear and exile in European and Christian mythology, to place of spiritual and political idealism through the incorporation of the "Doctrine of the Sublime" (Cronon 1995; p. 73). Wilderness became a religious experience in the United States, but was also inextricably linked to myths of power, masculinity, democracy, and hegemony (i.e. Frederick Jackson Turner's "Frontier Thesis") (Cronon 1995).

Wilderness conceived of in the majestic and primeval sense of *pristine,* (read previously uninhabited by humans) mountains, rivers, and forests, became a relay point between God and democracy, and thus, the goal of preservation became the isolation and

protection of these sacred spaces. However, as Cronon pointed out, a fundamental flaw

of this ideal was its erroneous assumption of a pristine wilderness, which was often

accomplished through a re-writing of the history of wilderness as one that excluded

human interaction and a rejection of human-occupied space as *natural* (Cronon 1995).

These assumptions are the fundamental basis of the human-environment bifurcation that

exists today.

David Harvey described an additional process by which nature is socially

constructed, linked to its human-derived materialist qualities and discursive

transformation into "resource" via capitalist modes of production. This social

construction varies both spatially and temporally, based on the type and availability of

nature-turned-resource commodity, as well as historical relevance, "value," and use

(Harvey 1996). One of the classic examples of a relatively abundant and "worthless"

natural material being discursively transformed into a valuable resource commodity is the

diamond. Aside from its relative utility as a hard-cutting material, diamonds acquire

most of their value due to the artificial control over their supply by the De Beers family

(Le Billon 2001). Unfortunately, the violent conflict that arises over access to this highly

constructed commodity is very real.

Just as a Euro-centric or now Western-centric ordering of space had

compartmentalized the social and political attributes of the world, it had also succeeded

in a second formulation of the other: human space and natural space. As Escobar

describes, this pair of bifurcations, Western/non-Western and human/natural, are

inextricably linked within the development agenda. Western imaginaries of democracy

and development have been packaged and sent to all corners of the developing world in

order to save them from themselves. Capital's new "ecological phase" (i.e. sustainable development) emerged with the United Nations World Commission on Environment and Development's Bruntland Report (Escobar 1996; p. 332).

The new global vision sought to invert the "limits to growth" argument by merging the "old enemies of environment and development" (Escobar 1996; p. 330). A modified imaginary of the non-Western world as incapable of defending its environment and often, in fact, culpable in its degradation was merged with the old imaginaries of difference. For Escobar, "what is problematized is not the sustainability of local cultures and realities, but rather that of the global ecosystem, the 'global' being defined according to a perception of the world shared by those who rule it" (Escobar 1996; p. 330).

Escobar's critique of development as a complete failure that promotes the "schizophrenic coexistence" of sustainable and unsustainable forms of capitalist exploitation is one extreme of the development argument (Escobar 1996; p. 334, and Harvey 1996). However, other researchers within political ecology and political geography have focused on how other constructions of nature have contributed to particular outcomes. Much of the literature in political ecology, as previously discussed in section 2.2, seeks to deconstruct both sets of bifurcations. With respect to water, the literature often addresses perceptions of water scarcity and the policy agendas that either constitute or are constituted by this narrative (Johnston 2003). Environment is conceptualized as both actor and stage, subject and object. Often, these studies highlight that scarcity is actually an effect of access, not material existence (Peet and Watts 2004).

Other studies highlight how resources are valued through different scalar discourses, from local to international, and how conceptions of scarcity differ between scales in which scarcity "is as much a social construct as an ecological construct" (Derman and Ferguson 2003; p. 281). Other times, these narratives can be linked to historical and political struggles or expressions of power. For example, Alatout demonstrates how environmental narratives are fashioned that differentiate between concepts of territory and quality of life in Palestine and Israel and how discussions of sovereignty, security, territory, and populations can permeate environmental meanings (Alatout 2006).

A significant body of literature focuses on the dissemination and internalization of environmental narratives through governmental processes in parallel fashion to Foucault's governmentality. Tim Luke traced the emergence of environmentality through an archaeology of the widely used, though ambiguous, term *environment*. The word's early French/English origin was actually used in verb form, "to environ," in the sense of "encircling, encompassing, or enveloping" (Luke 1995; p. 64). With the advent of the global world view, the rapid deployment of *environment* in place of nature, or wilderness is described by Luke in relation to Foucault's description of governmentality and the harnessing of *bio-power* through the transformation of populations into datums. Human life and activity was quantified into a set of statistical functions focused through a prism of expert knowledge on humans and populations (medicine, psychology, etc), as a means for modeling, predicting, and controlling human activity (Foucault, Senellart et al. 2007).

For Luke then, an effective *geo-power* could also be harnessed by environing the world; the carving up of the Earth into global spaces, monitored, and assessed through new forms of *eco-knowledge* (Luke 1995). Paralleling Escobar's argument, Luke described this new regime of environmental truth as an "eco-panopticon" through which, using the exact language of the aptly named *Worldwatch Institue*, specific expert narratives calling for "an ecologically defined *vision* of how an environmentally sustainable society would *look* in a new *vision* of a global economy" are made and reinforced, through which all human agency could then be redirected (Luke 1995; p. 76 my emphasis). Again, the sources of these narratives are largely Western in perspective, begging the question that sustainability via particular understandings of capitalism, democracy, and environment is the ultimate goal.

Arun Agrawal refered to environmentality as "a framework of understanding in which technologies of self and power are involved in the creation of new subjects concerned about the environment" (Agrawal 2005; p. 166), while leaving room for subjects (not necessarily individuals) to renegotiate their positionality over time based on experiences. Allowing for this renegotiation opens the door to such questions as to "when, why, and how some subjects rather than others come to have an environmental consciousness" through an understanding of both "practice and imagination" (Agrawal 2005; p. 165). Clearly the door is opened for geographical imaginaries, as referenced by Agrawal's acknowledgement of Benedict Anderson's *Imagined Communities,* although Agrawal's denouncement of Anderson's totalizing of hegemonic discourses, and his subsequent agreement with Appadurai's more fluid and less deterministic understanding of "imagination" is instructive (Agrawal 2005). While the dominant imaginary is a

construct of powerful elite representations, there are spaces and opportunities for renegotiation of, and resistance to, such hegemonic discourses (Agrawal 2005, and Megoran 2006).

Environmentality research focuses on how technologies of power are wielded by different scales of governance to educate populations as good environmental stewards. In addition, it questions what internal characteristics of individual subjects best facilitates this transformation, and whether acceptance of an environmental discourse actually equates to transformed environmental consciousness. Often this research addresses development projects focused on conservation and preservation areas (Campbell 1999, MacDonald 2005, and Zimmerer 2007) and critiques development projects as reconfigurations of power for controlling the globalizing world order, i.e. "disciplinary articulations of eco-knowledge might be interpreted as efforts to generate systems of geo-power over, but also within and through, nature for the governance of modern economies and societies" (Luke 1995; p. 57).

Political geographers have also assessed the role of discourse in the construction of place and have often focused on the role of law as a "site of cultural production," although they have only recently turned their attention from urban (Blomley 1994, Delaney 2001, and Mitchell 2000) to other spaces, i.e. *nature* (Delaney 2001, and Delaney 2003). Delaney discussesd how law as social constructor distinguishes and makes ordinary the distinction between categories, i.e. the distinction between private and public or human and nature (Blomley 1994, and Blomley, et al. 2001). Just as power-knowledge have been linked by Foucault, so too have power and law been linked by Delaney and Blomley into a *power-law* construct (Delaney 2001).

Delaney argued that law is a particularly powerful discursive producer of nature and its antithesis, due to the common assumption of law as unbiased authority, and due to law's unique ability to discursively erase its own complicity in its self-preservation. In addition, for Delaney, other discourses of nature must arguably trace their material consequences "to the degree that they were validated by law" (Delaney 2001; p. 489, and Delaney 2003). For example, Delaney notes that the view of nature as resource provider is linked to the legal conception of property and right of use (Delaney 2001). Thus, while norms and values reflect the internalization of an environmental narrative, it is the law that constitutes this social existence.

Finally, political geographers have also assessed discourses of nationalism, identity, democracy, governance, and their relationship to place and development (Agnew and Duncan 1989, Hardt 2001, Agnew 2005, and Harvey 2006). Much of this work critiques the linkages and assumptions between specific interpretations of democracy and capitalism in a globalizing world. Dalby questioned the assumption of Western democracy as the *sine qua non* of sustainable development and environmental protection. International relations scholars commonly flaunt two sets of truisms regarding the superiority of democracy: democracies rarely if ever fight other democracies; and, democracies have significantly better environmental records. Dalby pointed out the flaw in this type of reasoning, noting that democracies often export conflict to non-democracies, have actively engaged in the manipulation of developing democratic processes, and neglect their own complicity in complex "third map" or commodity chains and negative externality dislocations. Therefore, while advanced socialist states like the Soviet Union exhibited horrific environmental practices, "might

this be because, at least in part, its resource extractions and dirty industries were within its borders?" (Dalby 2002; p. 66).

In particular, the themes of empire and the neo-imperial orderings of global space via neoliberalism have had a profound influence on writings of environment and development (Agnew and Duncan 1989, Harvey 1996, Hardt 2001, Dalby 2002, Dalby 2004, Agnew 2005, Harvey 2005, and Harvey 2006). According to Simon Dalby, while "environmentalists have long bemoaned the damage done by what is frequently termed the domination of nature. Once one asks the simple geographical question, *what is the geography of the domination of nature?* the answer fairly quickly reveals itself as the history of colonization and imperialism" (Dalby 2004; p. 161). A postcolonial analysis of the production of objects and subjects via discourse permeates the remainder of the literature review of political geography and political ecology, although along slightly different trajectories.

2.4 Natural Resources and Conflict: Environmental Security Discourses

Some of the most common and powerful human/environmental discourses coalesce around nature as a resource that can spur human conflict. This has materialized in Central Asia since the collapse of the Soviet Union with respect to water and energy resources. Indeed, the linkages between natural resources and conflict are ubiquitous in political geography and political ecology; "Resources have been used in the past, and will be used in the future, as tools or targets of war and as strategic goals to be fought for" (Gleick 1993). Despite near-unanimous disapproval in the academic community, the vestiges of environmental deterministic thinking are apparent in the neo-Malthusian

28

linkages between population growth and resource scarcity, in no small part due to the dynamic and high-profile nature of the "scarcity equals conflict" discourse. The overwhelming appeal in the mainstream media of Jared Diamond's "Collapse" and Thomas L. Friedman's "The World is Flat" are a testament to the simplistic resonance and eloquence of such narratives (Walker 2006). The resource and conflict literature has three main iterations, each of which will be discussed briefly: (1). scarcity and conflict, (2). abundance and conflict, and (3). dependence and conflict (Deudney 1990, Anderson 1991, Le Billon 2001, Peluso and Watts 2001, Dalby 2002, Haas 2002, Dalby 2004, and O'Lear 2004). Perhaps no individual is more synonymous with the scarcity and conflict thesis than Thomas F. Homer-Dixon (Deudney 1990, Le Billon 2001, and Dalby 2002).

A foundational figure within the scarcity and conflict literature, Homer-Dixon's most notable research contributions focused on the construction of an international survey that sought to identify the prospects for determining the likelihood of resource scarcity and environmental degradation leading to civil, intrastate, and international conflict (Homer-Dixon 1994). Homer-Dixon hypothesized that decreasing supplies of *simple resources* (i.e. water, would lead to *resource wars*). Second, he hypothesized that large-scale migrations due to resource shortages would fuel nationalistic and ethnic conflict. Finally, Homer-Dixon hypothesized that shortages would also generate economic collapse, leading to social and civil unrest within states. Homer-Dixon's alarmist findings asserted that environmental scarcities would lead to the collapse and fragmentation of states, uncontrollable out-migration, and an increase in external aggression among states to alleviate internal institutional stresses (Homer-Dixon 1994).

A new world order predicated on environmentally based conflicts required a new international security agenda (i.e. environmental security).

In large part, the rise of environmental security can be traced to the fall of the predominant global security discourse centered on bipolarity, spheres of influence, and arms races, and the need for a new "doctrine" or discourse of international security (Dalby 2002). According to Peter Haas, "the attractiveness of these doctrines is not solely the nature of the argument they make, but rather their affinity to the values and beliefs invoked by the person making the argument" (Haas 2002; p. 1). With the collapse of the Soviet Union, the previous 70-year ideological war between First and Second World to gain the "hearts and minds" of the Third World had largely evaporated. Its institutional framework, policies, practitioners, and legacies were, however, still very much in place.

Corresponding with Homer-Dixon's "resource conflicts," Thomas Kaplan's "The Coming Anarchy," Samuel Huntington's "The Clash of Civilizations?," and phrases like "population bomb" that had been in existence since the Club of Rome, environmental threats found new vitality in the quest to bring the now "developing world" into the fold (Dalby 2002). With the political ideological threat of communism dispelled, a new and global ecological threat and global risk society was articulated to take its place (Dalby 2002).

Four general environmental discourses invoking resource access have been articulated: Boserupian or cornucopian (human innovation would extend the limits of nature), Malthusian (population growth would exacerbate a limited supply of earth's resources), sustainable development (proper management of earth's resources would

offset natural limitations), and postmodern (resource distribution and uneven development, not resource supplies, are key) (Haas 2002). While much of the recent debate regarding resources and conflict has been conducted between Malthusian and Cornucopian theories, a post-Rio Conference shift towards sustainable development has occurred (Haas 2002). This marks a transition in the debate that has been critiqued as a redistribution of blame rather than a more egalitarian redistribution of resource access and environmental justice, linked to Harvey and Escobar's neo-liberal reconceptualization of nature and Luke's discussion of the process of environing (Luke 1995, Escobar 1996, and Harvey 1996).

As Dalby points out, so-called "global environmental threats" are often unabashedly linked to "poor indigenous land use practices" (i.e., the "upstream-downstream argument") (Blaikie and Muldavin 2004) with little attention afforded to the larger-scale influences of "ecological shadows" cast by advanced industrialized states (Dalby 2002; p. 150). Concepts such as the ecological shadow and footprint call for more nuanced understandings of the commodity chains that situate resource extraction and depletion, i.e. negative externalities or *bads* (Luke 1995) in far-off localities while the benefits are reaped in the industrialized and now post-industrialized West. Therefore, it is cruelly and doubly ironic that geographic imaginaries of these places as exotic paradises are disseminated on the one hand, initiating grand lamentations when purportedly endogenous environmental degradation is revealed. Western development and scientific experts levy burdensome International Monetary Fund and World Bank austerity measures against these countries, blaming localized degradation exclusively on

31

the local without ever implicating the more powerful and perhaps more culpable exogenous actors.

A significant portion of the resource scarcity and conflict/cooperation literature pertains to water (Wolf 1989, Gleick, et al. 1991, Gleick, et al. 1993, Wolf 1995, Wolf 1996, Gleick 1998, Giordano and Wolf 2002, and Wolf, et al. 2002). However, this literature complicates Homer-Dixon's assumptions by focusing on water and conflict/cooperation from a comparative institutional perspective that varies between the local, state, transnational, and international scales. Giordano, Giordano, Wolf (Giordanoand Wolf 2002) have constructed event databases that quantify water-related conflicts (violent, legal, or otherwise) at each scale. Their studies address the apolitical notions in Homer-Dixon's hypothesis by highlighting the complexity inherent at each scale and between scales, as well as the strong variance in characteristics among states. For example, in their cross-study analysis of Israel, India, and South Africa in relation to their neighboring riparian states, the authors find that the complex nature of these relationships "highlights not only the intricacies of hydro-political dynamics and their variation across geographic space, but also the need to consider the often-distinct historical and political conditions within a region or basin if water relations are to be well understood" (Yoffe, et al 2003; p. 9). Other contingent factors include the existence and strength of international water laws, institutions, and treaties, the type and quality of governance within riparian states and across basins, and the role of uncertainties including climatic variation and the ability of institutions to adapt to these uncertainties (Yoffe, et al, 2003).

By and large, the apocalyptic prophecies of Homer-Dixon, Kaplan, and Huntington have failed to materialize on a global scale, and in instances where resource issues are implicated in conflict, myriad complications to Homer-Dixon's hypothesis are apparent (Dalby 2004). Two other bodies of resource and conflict literature build on the shortcomings of Homer-Dixon's hypothesis. First, in contrast to the resource scarcity literature, the resource abundance literature elaborates upon the concept of a *resource curse* (Auty 1994, Le Billon 2001, Sachs and Warner 2001, and Collier and Hoeffler 2005).

In this argument, scarcity is not the primary motivator for conflict, but rather the complications that arise from abundant resources make states more susceptible to violence. Conflict is a result of resource abundance-derived rents being used to fund economically rather than politically driven internal conflict, as ruling elites and opposition forces compete for highly taxable resource supplies (Le Billon 2001). In addition, resource abundance is linked to "poor economic growth and development," due to the disproportionate amount of institutional and financial assistance that is wrapped up in mono-resource economies. Therefore, much of the resource abundance literature demonstrates a strong positive correlation between resource abundance-fueled economic stagnation and internal conflict (Auty 1994, Sachs and Warner 2001, and Collier and Hoeffler 2005).

The third and final resource and conflict thesis modifies the abundance theory, arguing that abundance alone is not a causal factor for conflict, but rather resource *dependence* (i.e. resource curse). As Le Billion wrote, scarcity and abundance themselves are social constructs of the environment when seen outside of their explicit

social and political contexts. The critical methods of political ecology in particular have highlighted the need to assess the historical context of resource dependence within countries, the material and social characteristics of a particular resource, and its specific political economy (Harvey 1996, Le Billon 2001, Peluso and Watts 2001, Haas 2002, and O'Lear 2004). According to Le Billion, "resources and armed conflicts are related to the distortionary effects of *dependence* upon valuable resources on societies, the *conflictuality* of natural resources and their political economies" (Le Billon 2001, p. 566).

These "distortionary effects" and their conflict economies have various economic, social, and spatial implications. The resource curse or "Dutch disease" is a common affliction of resource-rich countries by which export-oriented income causes national currencies to rise (Le Billon 2001, and O'Lear 2004). In Central Asia, this phenomenon has been noted with respect to energy resources in Azerbaijan, Kazakhstan, and Turkmenistan (Luong and Weinthal 2001, and Kim 2003). Agricultural resources, like cotton, are also linked to the resource curse literature with respect to Uzbekistan (Kim 2003). The impact on non-resource related sectors is two-fold. First, non-resource-related sectors experience a talent and brain drain to the more competitive and lucrative resource-oriented sector and the affiliated rent-seeking associated with the resource sector. The impact on more socially beneficial sectors (education, research, health) through a loss of human and physical capital is exacerbated, of course, by the currency appreciation (Le Billon 2001, Peluso and Watts 2001, and O'Lear 2004). Resource rents provide viable sources of income and power for maintaining entrenched political leadership, reinforcing patronage systems and kleptocracy. Such systems are often classified as *failed governments* or *failed states* due to the emphasis they place on

34

personal wealth and accumulation over and above the social welfare of the population

(Le Billon 2001).

In addition, certain spatial characteristics of resources contribute to spaces prone

to conflict. Resources may be classified as either point source (located heterogeneously at

explicit locations, i.e. mines, oil and gas wells, etc) or diffuse (homogenously distributed,

i.e. agricultural resources) (Le Billon 2001, Peluso and Watts 2001, and O'Lear 2004).

Additionally, resources may exhibit *fragmentation*, or isolation that increases the

likelihood of territorial competition for resource sites and creates vast spaces of no-

man's land between resource sites. A corollary effect of resource fragmentation is

peripherality. As resource sites become increasingly contested and dangerous,

comparatively safer trans-border trade increases, exacerbating outflows of human and

physical capital and leading to further fragmentation (Le Billon 2001, Peluso and Watts

2001, and O'Lear 2004). Finally, as O'Lear demonstrates, borders themselves play a role

in the nature of resources and conflict, as those borders that lack concrete

conceptualization increase the likelihood of contestation (O'Lear 2004, and Diehl 2007).

There are several possible outcomes associated with these spatial characteristics

of resources. "Resource lootability" (Le Billon 2001; p. 569, and Collier and Hoeffler

2005) is attributed primarily to point-source, extractive resources and increases the

likelihood of fragmentation and opposition to political regimes and elites. There are also

tactical locations (Le Billon 2001) along resource supply chains that serve as secondary

points of interruption. At both the point source and tactical locations, the establishment

of heavily governed militarized spaces (pipelines and rigs in particular, but also dams,

mines, railroad and shipping networks, etc.), which are prone to conflict among competing entities, serve as another point of capital divergence from other sectors.

However, the postmodern environmental discourse advocated by some further complicates the picture (Le Billon 2001, Peluso and Watts 2001, Watts 2003, Peet and Watts 2004, and Watts 2004). Building on the framework of governmentality while inverting Foucault's outcome of "governable spaces," Watts emphasized how a particular type of resource "economization" (in this case "oil capitalism") produces various "ungovernable spaces" that represent a variety of contentious and unpredictable *violences* (Watts 2004). In Watts' account of oil-oriented "violent environments" in Nigeria, struggles among new players (local chieftainships), ethnic groups, and the nation-state complex highlight the weakness in articulating any simplistic accounting of resources and conflict, whether they be associated with scarcity or abundance (Watts 2004). The power relationship between the discursive transformations of environment and development are called into question.

2.5 Resource Governance: Scale frames, Conservation, and Hydropolitics

The flipside of the resources/conflict literature, in conjunction with work done by individuals like Wolf and Gleick, has concentrated on examples of resources and interstate/intrastate cooperation. Within this literature, particularly that which focuses on natural resources and institutional arrangements, much emphasis is placed on scales of governance and the various roles of international, regional, state, and local entities. This literature assesses which governmental scale is the most appropriate level for concentrating environment and development reforms, often based on the assumption that

decentralization of environmental conservation, governance, and development initiatives to the local level through community-based natural resource management (CBNRM) are likely to be the most "democratic" and beneficial to local populations (Berkes 2004). International development agencies such as the World Bank, International Monetary Fund, and Asian Development Bank have made CBNRM their *modus operandi* (Leach et al. 1999, and Tsing et al. 1999). With respect to Central Asia, much of the research traces the failure of transboundary water agreements to the vestiges of the Soviet-era.

Berkes proffered that, in order for community-based conservation to be effective, it is essential that a cross-scale approach consider the scale at which the complex ecological problem is articulated, and the scale at which it is to be managed. Therefore, an international environmental issue such as climate change can be micro-managed at the local scale only if it is couched within an effective international scale management plan. However, scale as a seemingly innocuous concept is itself shown to be highly objective. The *local*, for example, can only be understood in relation to particular perceptions of what constitutes locality, as competing groups within the same "locality" may be shown to have highly differing interpretations of the said space (Mitchell 2000, and Walker and Fortmann 2003). At this point, it is necessary to focus on political geography's discussion of scale, particularly in John Agnew and David Delaney's argument regarding the articulation or construction of scale, and the historical particularities that make such imaginaries of scale seemingly indispensable. In Central Asia, local control of water allocation and management evaporated beneath the Soviet legacy of centralized governance.

For Delaney and others (Smith and Dennis 1987, Herod 1991, and Delaney and Leitner 1997; p. 93), "nested political scales of authority," the institutional and societal arrangements from household to neighborhood and from local to global are constantly in transition. Peter Walker's discussion of conflict among residents in Sierra County, California, is demonstrative of this. Both long-term ranching residents as well as recent migrants consider themselves as locals. In addition, large mining companies with vested interests in Sierra County operating at regional, national, and international scales successfully inject themselves into the political debate as local entities (Walker and Fortmann 2003). For Delaney, these scales are negotiated and/or projected upon the landscape, often covertly. Therefore, before the more complex arguments *about* scale can be deconstructed, the scale of representation *itself* must first be deconstructed (Delaney and Leitner 1997).

John Agnew built on this concept in terms of its most common incarnation within political geography: the Westphalian modern nation-state. Agnew refered to the dominance of state-centric realist conceptualizations of international relations as a vestige of the European ocularcentrist organization of global space, based in the Cartestian history of observation as central to science and reality. Therefore, the very mapping of global space, from cartography to urban planning, is centered on perspective, fixed in the tradition of the "European gaze." The linkage between the visual and the known can be seen today in the predominance of European or other Western geographic imaginaries, as evidenced by postcolonial critique (Agnew 2003).

Today, however, the problems of a state-centric international order are evident in the "friction" between realist frameworks and rhetoric, and a globalizing society of

38

porous and increasingly irrelevant borders (Tsing 2004). A rigid and impractical system

of state-centric international relations, overlain by an increasingly complex global

problematic, is what Agnew refered to as the "territorial trap" (Agnew 2003; p. 53).

Subsequent scholars have commented also on the state-centric systems inability to

successfully manage complex environmental scales, from ecosystem to global (Dalby

2002). Several political ecologists have modified Agnew's and Delaney's territorial trap

and constructions of scale in their critiques of the local trap of CBNRM. Much of this

work builds on Ferguson's discussion of instrument effects associated with downscaling

power and authority (Ferguson 1990). Several key points arise in their critique of scalar

assumptions, democracy, development, and environment.

Much of the scholarship critiquing scales of governance and the territorial trap

pertains to assumptions implicit in the linkage between environmental management and

democracy. Often democracy is viewed as both necessary and sufficient for so-called

sustainable development, and democracy is assumed to be at its purest incarnation at the

local level. There are a few logical leaps made within these assumptions, the first being

that environmental management is best achieved by Western (and specifically U.S.)

development regimes' agendas for sustainable development.

Aside from negating the complicity of the developed world in the developing

world's environmental problems, as Simon Batterbury and Jude Fernando pointed out,

sustainable development initiatives tend to pay attention only to circumstances where

"states and capital interests coalesce," despite their strong argument for decentralizing

control to the local (Batterbury and Fernando 2006). Therefore, commitments to cultural

sensitivity in the governance agenda are tolerated only if they are compatible with

capitalism and modern state structures (Batterbury and Fernando 2006). This begs two questions in line with the ecological fallacy: that the concerns of the local are those of the state and international, and that everyone's interests are best served by Western models of development. Not only is development assumed, but also that Western models of democracy are the logical pathway by which to achieve this (Batterbury and Fernando 2006).

The second assumption being critiqued is that the local scale is inherently prone to more egalitarian and democratic institutions for adjudication and distribution (Purcell and Brown 2005; Batterbury and Fernando 2006; Blaikie 2006). However, a cadre of "local trap" critics demonstrates that there is, in fact, "nothing inherent about any scale," and that "the agenda of those who are empowered" determines the outcome of any development initiative (Purcell and Brown 2005). Purcell and Brown showed in their analysis of bee-keeping projects in the Brazilian Amazon that a discourse centered on the local is often stressed because it is an effective strategy for obtaining and consolidating power. In addition, many competing groups may simultaneously use the local frame while articulating competing claims for legitimacy (Walker and Fortmann 2003, and Purcell and Brown 2005).

As Purcell and Brown's case study illustrated, factions may arise within previously unified local scales, i.e. the splintering of the beekeeper's collective. Finally, as Watts' case study of ungovernable spaces and factions associated with the Nigerian oil economy demonstrates, local scales are as prone to despotism as states (Watts 2004, Purcell and Brown 2005, and Blaikie 2006). Blaikie demonstrated this in his assessment of CBNRM in Malawi and Botswana, in which he uses the term "decentralized

despotism" from Mamdani (Blaikie 2006, 1943, and Mamdani 1996). In addition,

Blaikie critiqued the validity of inscribing internationally generated (and specifically

Western) definitions of local in place, prior to an assessment of the particularities of

place. Batterbury and Fernando provided a series of potential solutions to these concerns.

First, they agreed with Blaikie that "good governance" needs to adhere to "local context"

(Batterbury and Fernando 2006).

Finally, governance, environment, culture, and place are all framed by meaning,

as well as corresponding threats to these imaginaries of place. Dalby addressed these

notions in his discussion of "external threats" and local communities in relation to the

"not in my backyard" (NIMBY) phenomenon (Simon and Mackenzie 1997). Different

incarnations of local community may form and disperse in response to perceived external

threats. Hilda Kurtz refered to this as a process of "naming, blaming, and claiming"

through the construction of "scale frames and counter-scale frames" (Kurtz 2003, p. 249).

In the NIMBY example, despite the fact that there may be internal needs associated with

an external threat (the local community benefits from the electricity from a coal-fired

power plant) responsibility for negative externalities can be displaced, depending on the

strength of the coalition and its ability to create an imaginary of place.

2.6 Critical Legal Geographies

Central to the discussion of resources and governance is the role of law. In

Central Asia this has emerged, not only with respect to the discussion of transboundary

water agreements, but also in relation to the role of law in the production of Western-

style market democracies. However, a more recent offshoot of political geography

concerns its engagement with the critical legal studies movement initiated in the 1980s by jurist Roberto Unger, and its critique of law and law's impact on space. Essentially, Unger sought to unravel the discursive transformations perpetrated within the legal profession that served to self-substantiate the law's claim to be an objective and apolitical juridical science (Unger 1983). Unger articulated that law is, in fact, a purely political field, in which the subject matter and the practitioners themselves are embroiled in a strategic agenda of representation, legitimation, and inclusion, as well as the antithesis of these statements. Unger focused his critical lens on the historical and political construction of two seemingly untouchable ideologies: Western ideals of democracy and free markets. These two concepts have received significant critical attention within geographic analyses of environment and development; however, this has rarely been undertaken in relation to the legal constructions that have helped to sustain them.

Law has historically been conceptualized as an articulation of the practical and the logical, and legal scholarship reinforces this notion in a three-fold process. The main objective of legal scholarship is the "rationalization of the real," (Blomley 1994; p. 9) meaning that law, as a body of knowledge, makes practical sense in relation to the activities of daily life, i.e. protections for individuals, property, etc. Second, legal scholarship is particularly adept at justifying its own existence, via a *seemingly* tightly woven history of case studies, legal precedents, and rulings. Finally, legal practice itself is steeped in a mythology of rationality and order, appearing as socially respectable, reliable, and unbiased (Blomley 1994, and Blomley, et al. 2001). However, as Unger initially points out in his critique, law is not objective and is actively engaged in the erasure and re-inscripition of its own history. Legal geographer Nicholas Blomley has

shown that history is not the only thing that law is engaged in the construction of. Space and law are also mutually constitutive.

Nicholas Blomley was one of the first geographers to explicitly state that legal practitioners had for too long engaged in an overt exclusion and/or decontextualisation of spatial concepts. Consequently geographers, perhaps in part due to a legacy of inferiority complexes in relation to the hard sciences (of which law was essentially claiming to be) tended not to critically engage juridical concepts in their work (Blomley 1994). Blomley argued that, with respect to geography, "law does indeed matter" and demonstrates many ways in which the critical legal geographic project has, since Kropotkin's critiques of the geographical imaginary of "statist nationalism," sought to shed light on the "effect of legal practice on space" (Blomley 1994). Kropotkin's particular interest in human-environment interactions, and his historical legal geography of the downfall of "communal economic free spaces" and the rise of "commercial Roman law" and the elite "hierarchical" ordering of space (Blomley 1994) serve together as an ideal segue into the current body of human-environment literature that considers the role of legal institutions.

Paul Robbins noted that while Blomley and other legal geographers have focused on the role of law in the production of urban spaces (Blomley 1994; Mitchell 2000; Blomley, Delaney et al. 2001; Mitchell 2003), there is plenty of room for including legal constructions of nature in the critical legal project (Robbins 1998). A significant portion of this literature review has been devoted to the discursive construction and destruction of nature. Legal dimensions of this process have received some attention (Delaney 2001; Delaney 2003), by way of law's ability to construct and/or permit spaces where particular understandings of nature persist.

For example, the international frameworks promoting sustainability and conservation have set the limits of the discussion by defining what pristine natural spaces are, who can access them, and who is allowed to make decisions regarding use, access, and exclusion (Robbins 1998; Hecht and Saatchi 2007). In addition, law helps constitute the boundaries of the legal process, and therefore the boundaries encompassing the space where the legal process takes place, by arbitrating among truth regimes and the geographic imaginaries constructed by these regimes. Due to the specific role of the legal process, legal constructions of space defer to those geographic imaginaries that are backed up by accepted standards of evidence, often those from the privileged perspective of official or expert knowledge, often to the disadvantage of traditional or local knowledge (Robbins 2000).

2.7 Legal Geographies of Water

The literature pertaining to water law is extensive, diverse, and cross-disciplinary. As such, I touch briefly on some of the foundational elements of transboundary water principles and networks. I also assess the water law literature as it pertains to Orientalized geographic imaginaries. This literature surveys the historical precedents that separate water law from other forms of property or land-based law in the European legal context. Much of this is tied to the complex spatial character of the hydrologic cycle; due to water's literally fluid, exceptionally dynamic, and interdependent materiality it has traditionally confounded historically situated predominate legal systems. Water, by its very nature is transboundary in character with respect to all boundaries, whether human, political, or otherwise (Teclaff 1991). As such, most of the writings on the historical

development of watercourse access and use law and transboundary water management

access adhere to the principles of the UN Water for Life Resolution in which access to

clean water is deemed a fundamental human right. Management of water is assessed

through three primary areas of study: treaties and agreements that fail to allocate water

effectively; treaties that effectively allocate water among internal states; and effective

international transboundary water treaties (Kliot 2001).

Historically, the Westphalian nation-state system promoted territorial

sovereignty, often extending this sovereignty over territorial waters. The result was the

partitioning and defense of fractured lentic and lotic ecosystems (Teclaff 1991). There

are notable exceptions to the territorial claims upon watercourses. Freedom of navigation

was a commonly documented phenomenon along the Tigris and Euphrates Rivers in 5000

BCE. These practices continued in Europe and the Middle East through the Roman

Empire and Middle Ages, and were officially codified by the French Executive Council

in 1792 through its natural law evoking proclamation that "navigable rivers" were to be

shared by all states (Teclaff 1991). The state-centric emphasis is notable, particularly as

applied during the colonial period. For example, while contestations would arise over

navigation rights of the primary rivers of Europe based on historical access and use

claims, the European colonizers adopted these rulings unequivocally in places like

Africa, due to the fact that Africa's rivers were deemed to be "unencumbered" by a

history of use. African human history was ignored as the rivers were essentially rendered

natural and without prior human ownership or usage (Teclaff 1991).

The history of water use contrasts starkly with that of navigation. Cultural

characteristics are often used to define different customary law approaches to water

allocation. One of the most well known examples of this is the *Oriental Despot* in which

large-scale irrigation projects are linked to particular ruling elites. As the name indicates,

the Oriental Despot reinforces the East/West binary, as it is deemed a cultural

particularity unique to the East. Grounded in the various economic theories of

individuals as divergent as Richard Jones, John Stuart Mill, Karl Marx, and Friedrich

Engels, is their distinction between "Asiatic" and "industrial modes of production"

(Wittfogel 1953; Wittfogel 1960).

Oriental Despotism was grounded in a set of assumptions. Oriental or

"agrodespotism" differed from industrial despotism in that the "old society was semi-

managerial" encompassing total political power while allowing for "limited social power

whereas the industrial despot maintained control over all forms of power" (Wittfogel

1960; p. 29). It was claimed that the Oriental Despot maintained total control, through

the leveling of status within society. The ruling elite maintained all power within a single

family or individual without the existence of other nobility. Fear was the essential

element of the Oriental Despot's power (Wittfogel 1960). The theory was popularized

under the writings of Karl Wittfogel, who often compared the despotic character of

communist states to the Oriental Despot.

The Oriental Despot was thus linked to culturally specific mechanisms for water

allocation: the large-scale irrigation project and the lack of European conceptions of

private property in the East. One was contingent upon the other, since under the Oriental

Despot "public works were deemed the realm of the central government" and through the

control of these public works, the Oriental Despot controlled the entirety of society

(Ervand 1974; p. 6). This "Orientalized" conceptualization of water law continued to

permeate discussions relating to transboundary networks in the East, although the body of Islamic law pertaining to water conflicts describes water as a gift from God accessible to all (Ahmad 2000).

In terms of geographic considerations of legal frameworks, J.A. Allan, Abdel Metawie, and others have analyzed the resource scarcity argument for water in the Middle East and Africa through an assessment of the effectiveness of legal mechanisms for arbitrating conflicts among water users (Allan 2000, Allan 2002, and Metawie 2004). Kathryn Furlong and others debate the complexities of Mekong Basin hydropolitics by assessing how ecological arguments, scales of representation, and mechanisms for controlling access and use of water are included in the institutional process of drafting policy (Bakker 1999, Klein 2003, Furlong 2006, and Sneddon and Fox 2006). Similar research has been conducted for the Ganges-Brahmaputra Delta (Brichieri-Colombi 2003), the Tungabhadra River Basin (Mollinga 2001), the Indus River Basin (Mustafa 2007), and the Amu Darya and Syr Darya (O'Hara 1997, O'Hara and Hannan 1999, Uitto 2002, and Wegerich 2008).

2.8 Critical Geopolitics and Critical Environmental Geopolitics

However, central to the field of political geography (and an ideal topic for political ecology to merge with) sits the critique of resource oriented classical geopolitics. In addition, nowhere has classical geopolitics played a more seminal role than Central Asia. The history of classical geopolitics can be traced to the writings of statesmen and scholars of the Great Powers in the final decades of the 19th century. Following a wave of colonialism that culminated with the Scramble for Africa, all of the world's "empty

spaces" had been declared claimed by the European gaze (Ó Tuathail, et al. 1998, Agnew 2003, and Dodds 2007). The world was now stated to be "at the end of geography" and a new articulation of *geo-power*, the ordering, naming, and describing of geographic space, was oriented around a new "closed global space" in which all places must be treated as part of the global totality. Tuathail wrote, "It is no longer possible to treat struggles for space in isolation from each other, for all are parts of a single, worldwide system of global space" (Ó Tuathail, et al. 1998; p. 21).

Geopolitics can therefore be defined as "the politics of writing global space" (Ó Tuathail 1996). Central to the geopolitical writings of Halford Mackinder, Friedrich Ratzel, Alfred Mahan, Rudolph Kjellen, Karl Haushofer, and Nicholas Spykman, was the construction of a geopolitical gaze within this closed global space that sought to establish tactics for organizing and controlling the new geographic arrangement. Their writings elicited strong nationalistic and masculinist claims, creating narratives of global others and promoting notions of neo-imperial expansion, not only for dominating global space, but for saving the inhabitants of these other (read non-European) global spaces from themselves (Ó Tuathail 1996, Agnew 2003, and Dodds 2007).

Mackinder's "The Geographical Pivot of History" for example, constructed a theory of world domination that established Central Asia as the global pivot (Mackinder 1904). Essentially, Mackinder argued, whoever controlled the pivot region or *Heartland* could control the outer rims of the globe (Ó Tuathail 1996, Ó Tuathail, et al. 1998, Agnew 2003, and Dodds 2007). His thesis served as a fundamental backbone of early twentieth century international relations that prevailed throughout the Cold War and arguably continues to influence international affairs. Perhaps most importantly

geopolitical writings, often endorsed if not implicitly written by "military and political elites," created distinctly subjective narratives or geographical imaginaries that were treated as concrete and scientifically objective geographic realities. In the words of Nicholas Spykman, "Geography does not argue, it just is" (Ó Tuathail 1996; p. 52).

Critical geopolitics are a body of strategies that seek to "challenge the 'geographing' of global political space as a pre-given system of containers for politics, a state-centric system of space" (Ó Tuathail 1996; p. 62, and Ó Tuathail, et al. 1998). The critical geopolitical method has traditionally utilized Derridean methods of textual deconstruction to establish a Foucauldian archaeology of geo-power discourses. Originally aimed at the writings of statecraft (speeches, policy documents, treaties, and laws), of individuals acting in the capacity of states, "speaking power to power" (Ó Tuathail 1996, Ó Tuathail, et al. 1998, Agnew 2003, and Dodds 2007), more recently critical geographic studies have demonstrated how geographical imaginaries of place are created and reproduced via popular media, i.e. television, newspapers, tabloids, film, and music (Dalby 1990, Dalby 1996, Dodds 1996, Myers, et al. 1996, Sharp 1996, Boland 2000, Sharp 2000, Sparke 2000, Klein 2003, Culcasi 2006, and Debrix 2008).

Orientalist discourses that simultaneously exoticize the places of the East, while characterizing them as developmentally backwards, dangerous, prone to conflict and savagery, and in stark contrast to modern Western society are particularly abundant (Said 1979, Myers, et al. 1996, Sharp 1996, Sharp 2000, Klein 2003, Sharp 2006, and Sharp 2008). Finally, a more recent push has sought to include ethnographic accounts of various forms of resistance or beneath hegemonic discourses. For example, Nick Megoran used a combination of ethnography and critical geopolitical deconstruction to

assess "everyday resistance" to state discourses of fear and violence regarding a disputed border between Kyrgyzstan and Uzbekistan (Megoran 2004, Megoran 2004, Megoran 2005, Megoran 2005, Megoran 2006, Megoran 2007, and Müller 2008).

However, rarely has the critical lens of critical geopolitics been directed at environmental issues, despite significant attention to the construction of environmental security discourses, from climate change to the "who will feed China?" media campaign (Dalby 1996, Boland 2000, Dalby 2002, Barnett 2003, Debrix and Weber 2003, and Dalby 2004). Fewer still have focused on the geopolitical discourses inherent in discussions of environmental policy, environmental institutions, and development policy. Simon Dalby's account of the Rio Conference as presented in the United States press is a notable example (Dalby 1996). Fairly detailed historical, political, and legislative accounts exist with respect to hydropolitics in the American West (Worster 1992), including media accounts of hydropolitical debates (Sonnett, et al. 2006), yet there is much room for expanding this line of inquiry to other spaces of environment and development. As such, my purpose in this thesis is to full the lacunae in the literature regarding critical environmental geopolitics, focusing on Uzbekistan in particular.

To demonstrate the potential benefits of fully integrating critical geopolitical lines of inquiry with the subject matter of political ecology, I use Paul Robbins' metaphor of political ecology as both "hatchet" and "seed" (Robbins 2004). As hatchet, political ecology seeks to conduct archaeologies of the power relations behind dominant discourses pertaining to humans and environment, and to deconstruct the fundamental elements that reinforce and recreate these discourse on the landscape. Critical geopolitics has sought to do the same, in relation to the activities of government and political

regimes. In effect, both disciplines emphasize the power of geographic imaginaries of place, however, critical geopolitics attention to practice of "framing," through law, speeches, government documents, and popular media, needs to be more fully engaged in deconstructing the linkage between international affairs, development and environmental institutions, and the politics of othering. As "seed," according to Robbins, by deconstructing power relations, the doorway has been opened for inserting new narratives in place of the old dominant ones. Real options for environmental and social justice can be inserted and negotiated within these new discursive interstices.

Since the end of the Cold War, debates have raged over the shape of the new world order and the existence of national and international security concerns that potential threaten to disrupt the global system. However, "there are not only struggles over security *among* nations, but also struggles over security *among* notions. Winning the right to define security provides not just access to resources, but also the *authority* to articulate new definitions and discourses of security" (Lipschutz 1995; p. 8). Environmental security has clearly been posited as one of these new discourses I also argue that this takes place *within* nations as well, however each scale is interwoven in the process. The Karimov regime's efforts to further securitize Uzbekistan beneath the questionable claim of "Islamic extremism" and the exacerbation of economic and environmental degradation in Uzbekistan can be linked to the U.S. geopolitical *topoi* or discourses of "Communism," "Islam and terrorism," and "environment and democracy."

I argue that the critical geopolitical method is well positioned to productively contribute to the body of literature that extends between political geography and political ecology, particularly with respect to the legal geographies centered on discourses of

environment and development. In the section that follows, I outline my critical geopolitical methods for assessing U.S. geographical imaginaries regarding democracy, security, and environmental degradation in Uzbekistan.

3. HISTORICAL CONTEXT AND GEOGRAPHICAL SETTING

3.1 Geopolitics and Hydropolitics in Central Asia

Within the broadly defined field of '"postsocialist studies" a concerted effort has

been made to assess development regimes and the discourses of development and

transition in the countries of the former Soviet Union. This literature has sought to

untangle the interwoven notions of "property relations and private ownership, the

promotion of multi-party politics, and the status of NGOs" (Hann 2006) and to

deconstruct the assumption of a single, linear path to prosperity via *a de facto* course of

Western modernization (McMichael 1997, and Humphrey and Sneath 1999). In short,

the prospect for a multiplicity of "modernities" must be taken into account, and those

practices previously conceived of as traditional should be reevaluated if a lasting social,

environmental, and economic stability is what is truly sought. However, most of these

writings are outside the field of geography, in rural sociology and economic

anthropology. In addition, this work has tended to concentrate on East Asia, Russia,

Inner Asia-Mongolia, and China (Humphrey and Sneath 1996, Humphrey and Sneath

1999, Humphrey 2002, Verdery and Humphrey 2004, and Hann 2006).

A critical evaluation of environment and development is lacking with respect to

post-Soviet Central Asia. For example, the literature on the hydropolitical debate in

Central Asia continues to problematize the ongoing "water crisis" as a matter of

technopolitics and/or a source of conflict; as an issue that can be solved through

technological solutions (i.e. sustainable water resource management) and as a source of

potential international instability between competing parties. Thus environmental

security platforms are often endorsed with respect to this region. For example, in 2002

the United Nations Development Programme (UNDP), then United Nations Environment

Program (UNEP), and the Organization for Security and Co-operation in Europe (OSCE)

launched the Environmental Security initiative (ENVSEC) in conjunction with the United

Nations Economic Commission for Europe (UNECE), the Regional Environmental

Center for Central and Eastern Europe (REC), and the North Atlantic Treaty

Organization (NATO) (Tookey 2007).

UNDP-UNEP-OSCE-NATO have produced several reports identifying

"environmental security hotspots" throughout Central Asia through annual ENVSEC

reports, couched in neo-Malthusian vocabulary that can be traced back to the Brundtland

Report. These reports argue that local communities and NGOs need to play a greater role

in enacting and monitoring their own policies and that political leadership needs to play a

greater role in promoting transboundary cooperation and environmental awareness.

However, it is expected that these goals will be in conjunction with OSCE-UNDP-

UNEP-NATO guidance and mandates (Tookey 2007). Most development assessments

agree that progress is impeded by the vestiges of Soviet engineering (both social and

technical), as well as the cultural particularities of Central Asia, particularly its Islamic

history. "A sharper focus and commitment is needed by the governments of Central

Asia. They must overcome the legacy from the days of the former Soviet Union, where

the environment suffered" from Soviet style industrialization and agricultural practices,

specifically mining (uranium), cotton production, and weapons manufacturing (Tookey

2007). However, there are lacunae in these historical descriptions that require further

attention, particularly the more recent history from Perestroika forward.

One would be hard-pressed to find much disagreement with the critical assessment of most Soviet environmental practices. However, the policies that would eventually lead to the human-induced depletion of the Aral Sea were themselves a product of geopolitical motivations: spheres of influence, arms races, and nationalism. One of Josef Stalin's primary goals was to ensure the Soviet Union's primacy in the global system through domineering agricultural prowess. He envisioned a transformation of the seemingly blank and barren deserts of the south into an agricultural powerhouse. This was to be achieved through the diversion of vast quantities of river water for intensive irrigation of the region, and by ignoring the indigenous knowledge regarding irrigation practices that had been in place for decades. In particular, the practice of individuals in the community voting in local mirabs and aksakals (literally 'white-beards' or village elders, often experienced in the usage and allocation of water for agricultural purposes) was abandoned (Zavgorodnyaya 2002). Soviet engineers began to draw up their own plans for the irrigation of Central Asia's vast deserts.

Early on, in the drafting of their plans, it was acknowledged that diverting large amounts of water from tributaries in the region would halt the flow of waters into the Aral Sea. However, Soviet engineers remained unconcerned, declaring the Aral Sea as "a mistake of nature" that would be rectified by the superiority of Soviet science and planning. In this sense, nature itself was problematized and the solution would be found in the privileged expansion of Soviet technology and policy throughout the region, particularly through agricultural developments as envisioned by Grigory Voropaaev (Wegerich 2008). Following in the footsteps of his predecessor, Nikita Khrushchev implemented the next wave of Stalinist-inspired reforms by enacting the Virgin Land

Policy of 1953, which included the expansion of irrigation throughout Central Asia (Wegerich 2008). Eventually, this policy would lead to an increase in irrigated land from 4.5 million hectares in 1965 to 7 million hectares in 1991 (Wegerich 2008).

Large-scale development projects, particularly dams and canals, were constructed to facilitate this transformation. Similar to Tim Mitchell's case study of Egypt (Mitchell 2002), massive irrigation projects such as the Nurek Dam in Tajikistan and pumping stations throughout Turkmenistan rapidly changed the landscape of the region and created a complex, interconnected development network that diffused the water allocation and irrigation apparatuses unevenly (Wegerich 2008). In essence, water management infrastructure was constructed or implemented where it made sense in terms of resources and technology, but not socially (Wegerich 2008). While the Central Asian states' political borders were consciously drawn up in an effort to divide the peoples of Central Asia into nationalistic categories and steer their allegiances toward their northern neighbor, the hydropolitical borders completely ignored these political boundaries.

For example, the utilization of the Amu Darya did not correspond to any administrative boundaries (Wegerich 2008). Central planning from Moscow directed water management throughout Central Asia, focusing on the drafting of basin plans by regional design institutes (from the Syr Darya Basin plan completed in 1982 to the final Amu Darya Basin Plan drafted in 1987) that designated limits for water allocation between republics and set targets for the eventual development of irrigated lands within each basin sector (Burghart and McKinney 2002). In addition, in response to breaches in the plan by local authorities during periods of drought-induced water scarcity, Moscow imposed Basin Water Organizations (BVOs) in each administrative area run by central

officials to ensure that basin plans were complied with. Communal maintenance of land,

a type of agricultural practice that had been essential during the pre-Soviet era, was

abolished and replaced with government bodies such as the Regional Directorates of the

Ministry of Land Reclamation and Water management (O'Hara and Hannan 1999).

In terms of infrastructure, hydro-electric power plants, damns, and large canals,

were overwhelmingly located in the upstream states, particularly Tajikistan, while the

bulk of irrigated cotton production was concentrated in Uzbekistan and parts of

Turkmenistan. For example, the construction of the Bassagi-Kerki Main Canal, the

predecessor to the Karakum Main Canal, began in 1954 and today has diverted 12.9 cubic

km of water across the Karakum Desert in Tajikistan (O'Hara and Hannan 1999). In

addition to irrigation, Soviet policy promoted the usage of highly mechanized farm

implements, resulting in an exponential increase in field size and the corollary need for

24-hour irrigation (O'Hara and Hannan 1999).

During this 25-year period, Soviet water policy tended to favor Turkmenistan and

Uzbekistan while Tajikstan became a water supplier and Afghanistan was ignored as a

buffer state (Wegerich 2008). However, the circumstances that favored Uzbekistan as the

so-called hydro-hegemon would rapidly change following the collapse of the Soviet

Union and the advent of sustainable water resource management in the region with the

declaration of the Aral Sea as an ecological crisis. While Soviet scientists and officials

claimed that the death of the Aral Sea was a necessary evil (Rakhimov 2005), as Mitchell

showed with respect to the unforeseen outcomes of using DDT on mosquitoes in the

Mediterranean (Mitchell 2002), the Aral's demise had much more far-reaching

consequences then could ever have been predicted. The most extreme effect, by virtue of

its dramatic visibility, was the physical transformation of the Aral Sea itself and its surrounding environment. As is Figure 1 below makes quite apparent, the Aral Sea, once the fourth-largest lake in the world, had lost 90% of its volume and 74% of its area within the span of less than 30 years (Stone 1999).

In fact, the Aral is no longer one single body of water, as Figure 1 illustrates. Beginning in 1987, the Aral had begun to separate into two bodies of water connected by a small channel: the smaller North Aral Sea fed by the Syr Darya and the larger South Aral Sea fed by the Amu Darya (Micklin, et al. 1996, and Micklin 2002). The shrinking sea exposed 3.6 million hectares of salty seabed. In addition, the salinity of the reduced water bodies increased from 10 to 100 grams of salt/liter, killing of virtually all species of fish as well as most other life within the Aral (Micklin, et al. 1996, and Micklin 2002).

The effect on the human environment was equally extreme. The extermination of the fish populations was a moot point and only added insult to injury to the dozens of small fishing villages that once dotted the Aral's coastline. Fishing villages like Muynak, Uzbekistan, full of ports and canneries, now sat 70 km or more from the closest shoreline (Stone 1999). The climate itself was irrevocably altered by the Aral's disappearance. Toxic dust storms ravaged the barren salt flats of the dried lake bed. The Karakalpakstan autonomous region of Uzbekistan has one of the highest recorded death rates from respiratory illnesses at 167 per 100,000 (Stone 1999).

The final blow was dealt to the very reason the Aral was drained (i.e. cotton). The changing microclimate itself, a regional drought that has been directly linked to the loss of the Aral's maritime effect, has negatively impacted Central Asian cotton production. Most Soviet methods for irrigation of cotton and management of its

production were maintained after the collapse of the Soviet Union, although with a significant reduction in the funding available maintain these practices.

The Soviet irrigation network could never have been defined as efficient. Lacking the requisite funding to repair and maintain the irrigation network canals fill with mud and salt and require dredging. Outdated pumping equipment, with little possibility of acquiring replacement parts, rusts and is ultimately abandoned (O'Hara and Hannan 1999). An estimated 28 percent of water simply evaporates; some argue that this figure is in fact quite conservative and the actual amount of water lost to leakage and evaporation is probably closer to 60 percent (Wines, NYT 9 December 2002; 14A).

While a rapidly deteriorating irrigation system lacking a sufficient supply of human and physical capital functions improperly, salinization associated with a rising water table from over-irrigation fills fields with as much as 700 tons of salt per hectare (Stone 1999). With the earth literally salted over, $300 million is lost in crop production each year (Uitto and Duda 2002), forcing the exile of over 250,000 former inhabitants from the region (Blua, RFERL 12 April 2005). International reaction, after decades of ignorance, was shocked out of its stupor when the Iron Curtain lifted and the extent of the devastation was plainly visible. A massive body of water, on par with that of the Great Lakes, had nearly been destroyed by so-called technological expertise.

3.2 Shelving Perestroika: An "Environmentally Benign Democratic Peace"?

However, by the mid 1980s, amidst Gorbachev's calls for reform and referendum and a "revolution from above" as part of the newly enacted policies of *Glasnost* (frank discussion) and *Perestroika* (restructuring), an increasing awareness of environmental

degradation and a significant groundswell of environmental activism among the general

populace materialized (Robinson 1988). Alongside the establishment of Union-wide

environmental organizations, such as the newly constituted State Committee on

Environmental Protection (*Goskompriroda*), community-sponsored environmental NGOs

and other grassroots environmental movements appeared on the Soviet landscape,

including those whose specific concern was the protection of water resources (Sievers

2003). From Islamic laws extolling water's importance within a "community of water

use," (Ahmad 2000) to the widespread usage of age-old aphorisms regarding "water as

gold" as state propaganda, Eric Sievers questioned how a society that continuously places

as much emphasis as it does upon the intrinsic, social, and economic importance of water

can continue to systematically degrade it (Sievers 2003).

In pursuit of this question Sievers engaged in an analysis of the various stocks of

capital and their usage within the former Soviet states of Central Asia. As he points out,

while each state maintains natural, human, social, and organizational capital, the

continuing practices of environmental degradation are best linked to the poorly

understood situation of organizational capital in the region. Sievers first presented a clear

definition of organizational capital as "the rules and various organizations within a

community and [that which] refers functionally to the ways in which these rules and

organizations shape incentives related to actions intended to impact the social and natural

environment" (Sievers 2003; p. 71).

Essentially, this is a sticks and carros legal framework that either encourages or

discourages individuals and groups from participating in the political arena. These rules,

intentional or otherwise, "impact and shape the social and natural environment" (Sievers

2003; p. 71). Sievers wrote that, while there is extensive research within the development community relating to stocks of organizational capital, it tends to be framed exclusively within the Western developmental paradigm. Thus, terms such as "capitalism, communism, democracy, rule of law, subsidiarity" are viewed within a particularly exclusive and predetermined context (Sievers 2003; p. 70).

An effect of this is the assumption that certain characteristics of organizational capital are necessarily associated with certain "normative aspirations" (i.e. "sustainability, human rights, and the eradication of poverty") (Sievers 2003; p. 70). Democracy is excluded from this list by Sievers due to the fact that, while democracy is often associated with human rights compliance, it is neither necessary nor sufficient for its existence. "Democracy and communism are not only **not** the only possible types of government [and] they are also not uniformly practiced....democracy is rarely argued for democracy's sake, but rather for democracy as a proxy for some other aspiration." In the case of Western democracy, democracy is often proximally associated with market economies (Sievers 2003; p. 70).

Sievers stated that, by semantically confusing organizational capital in the post-Soviet states of Central Asia, its real influence on the environmental landscape of Central Asia is being overlooked within the overall scheme of development in the region. Much of this damage goes in hand with the discursive shell game that is being played by IGOs, NGOs, and governmental officials. Western newspapers in the late 1980s tended to focus on extreme Soviet projects for environmental reform, rather than the expansion of grassroots environmental movements. For example, an article from the 20 December 1988 edition of the *New York Times* regarding the status of the Aral Sea references the

61

"ambitious and controversial engineering scheme: tapping two Siberian rivers and diverting their water to Central Asia" (Keller, NYT 20 December 1988; p. 1C). A similar article also referenced the project in relation to the ongoing demand for water to irrigate the ever-expanding cotton fields of Uzbekistan (Keller, NYT 20 December 1988; p. 1C). Perestroika-era environmental groups are all but omitted in these journalistic accounts, and if they are they are often mischaracterized.

While much of the current state of water and land degradation is continually (and appropriately) associated with past Soviet practices, both government officials and international development organizations are guilty of continuing this damaging legacy as well. According to Sievers, "if a problem of the post-Soviet era in Central Asia is that development agencies incorrectly conflate paper plans with real world impacts, the practice is not unprecedented in the region, but, rather echoes Soviet-era practices of tweaking paper reports for political purposes" (Sievers, 2003; p. 195).

Sievers pointed to the period both immediately preceding and following the fall of the Soviet Union as essential to understanding the current state of organizational capital in the region today. Perestroika allowed for a sharp increase in established NGOs in the region. Of the 2,500 – 4,000 registered NGOs in Uzbekistan, only 158 of these organizations are still active (Sievers 2003). However, while 60% of these organizations indicate that they are comprised of "citizens interested in environmental protection," less than 20% report that they are involved in the drafting of conservation and environmental laws in their region (REECA). Less than 10% of organizations surveyed in the report utilize public reviews in relation to forestry and water resource protection and energy efficiency programs (REECA). Perhaps even more telling is the scale of involvement of

the various organizations, from local to regional, national, and international. Overall, 35% of all environmental NGOs that are active in the region are constituted at the local level (villages and towns), with 29% at the regional, 28% at the national, and 14% at the international.

Sievers pointed to the fact that traditional structures of community governance (mahalla residential community associations) allowed for the flourishing of environmental NGOs during Perestroika. However, while these local associations have survived into the post-Soviet period, the emphasis on problematic transboundary agreements for water use by international NGOs and IGOs alongside new reforms (particularly in Uzbekistan) that seek to incorporate mahalla organizations within the state structure have resulted in an overall weakening of citizen involvement in the environmental reform process. This process has been exacerbated by the entrenchment of the Soviet-era *Nomenklatura* in positions of power within each of the individual state governments (Sievers 2003).

How and why was this entrenchment allowed to come about? Political stability and economic reform was sought over the uncertainty of democratic reform, and this stability was ultimately supported (tacitly or otherwise) by Western developers who immediately engaged in their familiar mantra of privatization and sustainable development (Sievers 2003) alongside the emerging notion of environmental security. For example, a *New York Times* article from 1993 references how President Karimov engaged in a "crackdown on political opposition," which allegedly had ties to Islamic fundamentalist groups. As the article points out, the U.S. was quick to open an embassy in Tashkent, "seeing Uzbekistan as a bulwark against Iran-style Islamic rule, which

seems to have replaced Communism as the West's nightmare of choice" (Erlanger NYT 13 Feburary 1993; p. 4).

The legacies of the Russian imperial "Muslim question" (i.e. the fear that political Islam would topple tsarist rule in Russia as discussed in Crews 2006, and Burbank, et al. 2007) Mackinder's heartland thesis, Orientalist thinking, and the Islamic extremist *topo* linger heavily over Central Asia and in Uzbekistan in particular. Just as the Russian imperial elite debated the imminent threat of a consolidated Islamic uprising against the Russian empire, so too have U.S. officials from all branches, from military to foreign aid, constructed a discourse of post-Soviet Central Asia as a potential hot-bed for Islamic extremism. However this discourse reflects a poor understanding of Central Asia's unique history in relation to Islam. As Adeeb Khalid (2007) illustrated in *Islam after Communism*, Central Asia has never had a strong history of political Islam and this subdued "everyday life" articulation of "Muslimness without Islam" was further enhanced by 70 years of Soviet secular policies.

Being a Muslim in Central Asia is fundamentally different than in the rest of the so-called Islamic world in that *Muslimness* is part of an identity that is linked to community and tradition, not necessarily political and strong theological beliefs (Khalid 2007). Therefore, despite the widespread appeal of narratives positing Central Asia as the new Afghanistan, i.e. the alarmist writing of Ahmed Rashid in *Jihad: The Rise of Militant Islam in Central Asia* (Rashid 1994, and Rashid 2002), and despite Central Asia's bordering Afghanistan, the unique history of civil society and religion in this region makes such predictions largely false and irresponsibly dangerous (Khalid 2007).

However, the Uzbek government has been a strong ally in U.S. led actions against drug-runners and fundamentalist elements since 1999 and most recently in the "War on Terror," since 2001. In 2002, the US and Uzbekistan signed a declaration of strategic partnership, with Karimov being a strong supporter of U.S. foreign policy "from Iraq to Cuba" (Khalid 2007; p. 184). Karimov has been quick to link any acts of resistance or violence in Central Asia to "extremists," "fundamentalists," or "Wahhabis," largely conflating the meanings of these terms to his own ends. In particular, the Islamic Movement of Uzbekistan (IMU) and the Islamic Revival Party (IRP) (a legally recognized political party in Tajikistan, since the end of the Tajik civil war) have been labeled as factions of larger scale terrorist organizations (Khalid 2007).

The IMU fought alongside the Taliban in Afghanistan and is a registered terrorist group with the U.S. State Department. However, their links to international terrorist elements are tenuous, and it appears that their existence is more closely associated with local level political dissatisfaction (i.e. Karimov himself) (Khalid 2007). While the relationship between Uzbekistan and the U.S. has cooled since the violent shooting of hundreds of protestors at Andijon in May of 2005, as Khalid argued, this is largely due to Karimov's own interests in re-orienting power relationships away from the West; U.S. international policy is still interested in reopening strategic points of access in the region (Khalid 2007). However, it is clear that Karimov's primary interests have been served by his relationship with the US government and his support of the discourses of terrorism and Islamic extremism: further penetration into Uzbek civil society.

This loss of emphasis on local involvement is a fundamental agent in the further decline of the environmental condition in the region. As resources shift from local

initiatives to protect the environment toward international environmental agencies, small-scale yet tangible, *on-the-ground* environmental reforms have been replaced by large scale, *on-paper,* environmental draft laws, annual conferences, and seminars where legislation is adopted over issues that have already generated consensus (prevention of wildlife poaching) (Sievers 2003). As Sievers states, the end result has been sustainable development efforts that are, in essence, "a strategy, wrapped in a program, inside a plan [where] the language and unchallenged ideological platitudes of the international environmental sphere are, especially within the post-Soviet republics, no different and no less rich than Orwellian doublespeak" (Sievers 2003; p. 200).

Sievers described two primary reasons for the current status of organizational capital in the region. The first relates to structural alterations in the global economic system due to globalization (tight commodity markets, increased personal mobility). The second contributing factor relates to the strict policies of international donor communities, primarily, the "distortion of local societies and the lack of emphasis on the stronger aspects [of community] in Central Asia, i.e. education, science, and Perestroika expressions of consensus for substantive democratic reforms" (Sievers 2003; p. 201). By completely excluding all things "Soviet" in the region, Western developers and policy makers have adopted the security-laden post-Cold War discourse of environmental security, exacerbating the conditions for those very things they purportedly wished to eliminate (i.e, a "foreign aid enterprise...although directed towards building the non-state economy, democratic accountability, and a new reliance on effectiveness over jingoism that has itself been almost exclusively state directed, unaccountable, and definitely managed for ideological and political correctness") (Sievers 2003; p. 202).

The result of the refusal to incorporate Perestroika-era social and environmental reforms is a continued policy stalemate among the entrenched leadership of the post-Soviet Central Asian republics, the gradual incorporation and/or disenfranchisement of the local-level environmental NGOs, and the continued degradation, loss, and overuse of Central Asia's environment, especially water. "The actions of Western development agencies, especially Americans, in ignoring Perestroika dialogs and advocating what, in effect, was a *tabula rasa* approach to democracy, rule of law, and civil society...derailed much of the potential for reform in the region" (Sievers 2003). Rather, the region itself is continuously characterized as lacking the capacity for real democratic reform; as this *New York Times* articles laments, that it "display[s] little appetite for either democracy or open markets. Political repression is intense, corruption is widespread and economic policy owes more to Stalin than *George W. Bush*" (Andrews, NYT 31 May 2002; p. 10A my emphasis).

The political repression of the *nomenklatura* is directly addressed, but in such a way as to assume it is, was, and always will be the status quo of the region. In some instances, almost paradoxically, Central Asia's independence alone is seen as the culprit for the collapse of the Soviet water use system. From the NYT: "What ultimately caused trouble was the potent brew of independence, which collapsed the central control and socialist economics that underpinned the tradeoffs for so long'" (Wines 2002 December 9) From statements such as these, the old geographical imaginary of the Oriental Despot is alive and well.

In Uzbekistan, this climate has resulted in an environmental legal framework that relies on technological solutions adapted from Western and Soviet methods, and an

annual meeting of the ICWC International Fund for Saving the Aral Sea that ultimately

fails to come to an agreement on a water-management pact (Parshin 2008). In addition,

development policy is seen as a corollary of security policy (i.e. the emphasis on

development schemes in line with ENVSEC). As Mitchell and Ferguson pointed out,

experts are often not aware of placed-based particularities and tend to focus on the

suspensions of politics from situations through technopolitcal solutions. For example,

those individuals and groups working on the partial restoration of the North Aral Sea

have lauded it as a triumphant comeback and a resounding success (Micklin 2002). If the

Aral Sea was destroyed by humans, surely it can be saved by them as well? All that is

needed is an agreement on sustainable resource use that satisfies each individual state.

However, by endorsing these environmental security and technologically oriented

solutions, the place-specific democratic institutions associated with Perestroika and the

most effective instruments for social and environmental progress (i.e. mahallas and

NGOs) have been impacted negatively by the Karimov regime's further penetration into

Uzbek civil society.

4. METHODS

4.1 Frames and Narrative Analysis

My research assesses the framing of environment, democracy, and security

through the production of a particular geographic imaginary with respect to Uzbekistan.

This geographic imaginary emphasizes the policy goals of environmental security, as it

has been articulated since the end of the Cold War and the drafting of the United States

National Security Strategy of 1991 (Dalby 2002). I assess critically the development of

this environmental security influenced geographic imaginary of environment, security,

and democracy in Uzbekistan by engaging in narrative or discourse analysis of popular

media representations of the region, policy documents and statements, and speeches.

Qualitative methods such as narrative or discourse analysis are the predominant research

methods of critical geopolitical practitioners (Dalby 1996, Dodds 1996, Myers, et al.

1996, Sharp 1996, Boland 2000, Barnett 2003, Megoran 2004, Mercille 2008, and Müller

2008) and have also been a foundational component of political ecology (Peet and Watts

2004, Blaikie 2004, and Robbins 2004). Narrative analysis has also been an increasingly

vital component of environmental policy related research (Richardson 2001).

The narrative analytic method differs from the content analytic method in that

content analysis in the social sciences is quantitatively driven with standardized programs

and methods for coding content data genuinely agreed upon, whereas no standardized

method exists for narrative analysis. Proponents of narrative analysis, in the tradition of

Derrida and Foucault, argue that positive-empiricist methods claim objectivity through

mechanistic assumptions and are problematic in that they often obscure their own

69

historicity and require deconstruction in order to understand the power-laden dynamics that have rendered them as expert and objective understandings of a singular truth or reality, at the expense of all other interpretations (Smith 1992). In essence, purely objective analysis of highly subjective and complex matters is argued to be problematic as "more than three decades of science studies have shown us that a crude, empiricist 'test' that can yank the rhetorical illusion cleanly from the 'facts' is chimera" (Hartmann 2005; p. 9). The facts themselves must also be questioned.

By avoiding "context-free" understandings, narrative analysis actively engages context and seeks out underlying meaning, demonstrating the important contingencies of history, politics, culture, geography, and environment with respect to communicated word, imagery, and sound. Through a critical reading of the content of policy documents, media accounts, speeches, and literature, "narrative analysis permits a holistic approach to discourse that preserves context and particularities...which may not be available by other methods" (Smith 1992; p. 327). Narrative analysis facilitates the archaeology of powerful frames, or widely circulated and sustained representations of people and place, (Hartmann 2005) which are complicit in the longevity of particular geographic imaginaries (i.e., Orientalism); thus the processes of legitimation and dissemination behind a geographic imaginary can be excavated and critiqued.

In this research I utilize narrative analysis in order to parse out the complex relationships imbedded in the environmental security discourse with respect to Uzbekistan. I engage in narrative analysis of several sources from within the United States and the Karimov regime of Uzbekistan, as well as the policies of various intergovernmental agencies with which these countries are affiliated. This approach to

discourse analysis assesses the frames of environment, security, and democracy that are articulated and sustained within a post-Cold War geographical imaginary of Uzbekistan. Narrative analysis will be conducted with respect to the following sources:

1. United States

    a. International Policy and Security Organization Documents

        i. National Security Strategy of the United States, 1991 (NSS91)

        ii. National Security Strategy of the United States, October 1998 (NSS98)

        iii. Organization for Security and Cooperation in Europe, Novermber 1999 (OSCE-ISD) – *Istanbul Summit Declaration*

        iv. Heritage Foundation, 30 August 2002 (HF) – *U.S. Policy in Central Asia and the War on Terror*

        v. Brookings Institution, 5 April 2004 (BI) – *Central Asia's Failing State*

        vi. Strategic Studies Institute, May 2004 (SSI) – *Strategic Consequences of the Iraq War: U.S. Security Interests in Central Asia Reassessed*

        vii. Rand Project Air Force 2005 (RAND) – *US Interests in Central Asia: Policy Priorities and Military Roles*

        viii. International Security Affairs, 23 March 2006 (ISA) – *Geopolitics and US Security Policy in Central Asia*

        ix. Congressional Research Service, 7 August 2008 (CRS) – *Uzbekistan: Recent Developments and U.S. Interests*

        x. United Nations Environmental Programme, United Nations Development Programme, Organization for Security and Cooperation in Europe, North Atlantic Treaty Organization (UNDP-UNEP-OSCE-NATO) – *Environment and Security: Transforming Risks into Cooperation (EnvSec)*

    b. Four major US newspapers (1988-2008)

        i. *New York Times* (NYT),

    ii. *Washington Post* (WP)

    iii. *Christian Science Monitor* (CSM)

    iv. *Boston Globe* (BG)

2. Uzbekistan

    a. President I.A. Karimov – *Uzbekistan on the Threshold of the 21st Century*

    b. Uzbek NGO Registration Law (NGOR)

    c. Uzbek Mahalla Consolidation Law (OFJ)

The structured analysis of these documents proceeded as follows. Primary international foreign policy documents authored by organizations and think tanks in the United States were selected for analysis due to their capacity to illustrate concisely US foreign policy in Central Asia. Each document reflect the interests of the political parties and corresponding administrations that engaged issues of environment, security, and democracy in Central Asia, from President George H. W. Bush and the dismantling of the Soviet Union, to President Bill Clinton and Vice President Al Gore and the rise of Environment Security following the National Security Strategy of 1991, to President George W. Bush and the wars in Iraq and Afghanistan.

In addition, each document highlights fundamental policy shifts that took place in the region during the period from 1999 and 2008. These policy shifts will be placed in context with events that transpired in Uzbekistan between 1999 and 2008. Of particular importance are two watershed moments: events immediately following both the launch of *Operation Enduring Freedom* in Afghanistan in late 2001 and the brutal quelling of the Andijon uprising on May 14th, 2005. Media accounts from both U.S. media outlets,

as well as international organization such as *Radio Free Europe Radio Liberty* (RFERL) and *Eurasianet.org* will be used to construct an historical background to these policy documents.

Finally, each documents was reviewed 5 times in order to verify the narrative content, paying careful attention to any references made regarding environment, security, and democracy, and the linkages among these concepts. This exact method of narrative analysis was then performed on the U.S. affiliated international governmental organization documents. The content of both sets of documents was used to articulate the dominant topoi or frames of Central Asia within U.S. foreign policy with respect to the linkages among environment, security, and democracy.

In conjunction with this formal critical geopolitical analysis, I assessed how the formation of these frames of Uzbekistan within U.S. documents of statecraft were disseminated as a popular geographical imaginary via four major US newspapers: *the New York Times* (NYT), *the Washington Post* (WP), *the Christian Science Monitor* (CSM), and *the Boston Globe*. These papers were chosen due to their wide circulation, and their significant contribution of content to smaller national, regional, and local newspapers throughout the country. I collected, read, and analyzed all stories in these four newspapers that referenced Uzbekistan between 1 January1987 and 28 February 2009. This time span was chosen to include references that were made regarding the region during the Gorbachev Perestroika years.

During this 22-year span, "Uzbekistan" was mentioned the following number of times: NYT 7, WP 3, BG 3, CSM 3. In order to broaden the scope of my analysis, I widened the search term to reference "Central Asia," which thus included the common

reference to the region as the "Former Soviet States of Central Asia." During this 22-year span 'Central Asia' was mentioned the following number of times: NYT 22, WP 14, CSM 12, BG 2. While the wider search string was less specific, it yielded significantly more results, allowing for a greater assessment of the U.S. policy framing of Central Asia and how it has been captured by the popular media. These newspaper articles will also lay a foundation of historical events that correlate to policy shifts in the region, as evidenced by the analysis of the geopolitical policy documents.

Cross-comparative analysis of the environmental security frames was then compared to Uzbek President Islam Karimov's writings on the topic of security. Ultimately, much of the press coverage in Uzbekistan reflects the positionality of the Karimov regime as free press is non-existent in the region (Freedman 2005). Free news agencies that cover Central Asia, such as *Radio Free Europe Radio Liberty* (RFERL) and *Eurasianet.org* are banned within Uzbekistan, as are many other independent news agencies (Tynan 2008). Therefore, the internal topoi of environmental security tends to be dominated by the monolithic framing by the Karimov administration. Finally, I place this two-way frame in conversation with recent legislative actions undertaken by the Karimov regime: the NGO re-registration law (NGOR), and the mahalla consolidation law (OFJ).

Through narrative analysis of these policy documents, I will demonstrate the linkage between U.S. framings of environmental security in Uzbekistan and U.S. policy interests in the region in conjunction with the geopolitical discourse of environmental security. I then placed this discourse in conversation with Karimov's own political and legal actions in Uzbekistan. As stated in my hypothesis, section 1.3, I argue that these

frames present Uzbekistan as an environmental security risk where the potential for conflict is linked to environmental degradation, the failure of democracy in the region, and the strong potential for Islamic extremism to take root. Meanwhile, the U.S. pursues its own geopolitical agenda in the region, under the auspices of promoting environmental sustainability and democratic reform through the geopolitical frame of "environmental security." As previously stated, I goal was to show that "environmental security" has been realized primarily as the build-up of military infrastructure, the reinforcement of a brutal authoritarian regime, and the continued degradation of environmental and social conditions in the region; the self-fulfilling prophecy of Thomas Homer-Dixon's resource conflicts are essentially reified.

5. NARRATIVE ANALYSIS AND DISCUSSION

5.1 Creating the Frames of Environment, Security, and Democracy in Uzbek Central Asia: Critical Geopolitical Analysis of Major Policy Documents

5.1a National Security Strategy of 1991

While the foundation of the current U.S. policy position with respect to environmental security in Uzbek Central Asia is grounded in decades of Cold War ideology and posturing, its current discursive formation (i.e. the transformation of global spheres of influence into global socio-environmental threats) was articulated within President George H W Bush's National Security Strategy of 1991 (Barnett 2001, and Dalby 2002). This declaration trumpets the collapse of the Soviet Union as the end of an era, and the beginning of a new one marked by "new crises and instabilities." The document openly indicates U.S. reluctance to deviate from traditional foreign policy paths, however, emphasizing the former Soviet Union's residual capacity "to destroy American society with a single, cataclysmic attack…[with the] retention of more than 6,000 strategic weapons" (NSS 1991). By emphasizing early on the need for cautious demilitarization in light of the "dangers that remain," the U.S. presented its argument for the maintenance of significant military spending and an ongoing global military presence (NSS 1991). These unclassifiable and unpredictable "dangers" frustrated attempts at articulating a coherent military strategy that fully justified such expenses both at home and abroad.

However, while the dangers themselves are not fully defined, their geographic locations certainly are. Although Central Asia itself is not referenced, the "troubled evolution of the Soviet Union or the volatile Middle East" are presented as almost guaranteed sources of future conflict: where the vestiges of communism and the

revitalized threat of Islamic extremism meet (NSS 1991). In the NSS91 section entitled *The Soviet Future* (NSS 1991), the former Soviet Union is presented as a region in which the "die-hard adherents" of communist ideology are expected to clash violently with proponents of long-overdue democratic reform.

The NSS91 clearly indicates where the U.S. position is with respect to democratic reform in the former Soviet Union; it will assist them on a path to democracy that is only structured in line with IMF and World Bank "technical advice" offered at the London Economic Summit of July 1991 (NSS 1991). Democratic values are linked to the promotion of market-principled economic reform throughout the document, and inextricably tied to the promotion of peace through "IMF, World Bank, and GATT sponsored policies" which will "allow friendly states to achieve the security and stability essential for political freedom and economic growth" (NSS 1991). Market-based economic principles are seen as necessary and sufficient for the promotion of real democracy.

In addition, "competition" is reinforced between the former polar powers, as reference is made to the ever-present threat of conflict between the two powers. The East/West binary is also strongly evoked, but in a particularly Malthusian context, as new European security risks are defined as population and migration-based. According to the NSS91, "from the Soviet Union and Eastern Europe, from North Africa and the Near East, we could see thousands fleeing economic hardship and seeking a better life. For Western European countries there could be enormous economic, social and political strains...an unprecedented challenge to the new Europe, testing its moral and political character" (NSS 1991).

From another segment of the document: "malnutrition, illiteracy, and poverty put dangerous *pressures* on democratic institutions as hungry, uneducated or poorly housed citizens are *ripe for radicalization* by movements of the left and the right" (my emphasis (NSS 1991)). The image of mass, migrating, poor populations as sources of extremist-based conflict would continue to proliferate in discussions of new global security initiatives, especially after the publication of Robert Kaplan's *The Coming Anarchy*, eventually becoming one of the cornerstones of environmental security itself. The NSS91 interestingly deflects any current and future claims made by the former Soviet Union to U.S. complicity in the internal problems of the former Soviet Union, which the NSS91 claims are entirely "problems created by decades of domestic tyranny, misrule and mismanagement" (NSS 1991).

Although briefly, the NSS91 does specifically reference the environment, and this reference narrowly articulates the foundational concerns of environmental security. "Global environmental concerns...ozone depletion, climate change, food security, water supply, deforestation, biodiversity and treatment of wastes...respect no international boundaries. The stress from these environmental challenges is already contributing to political conflict" (NSS 1991). The document goes on to vaguely call for "global stewardship"; however, the implications of the proceeding statement are clear, especially when seen in context with the previous discussion pertaining to the threat of mass population migration. Environmental stressors are linked to population pressures and conflict, the central argument of Thomas-Homer Dixon and the other resource and conflict scholars.

5.1b National Security Strategy of 1998

While the Bush NSS91 is held up as the first national security document to promote population and scarcity-driven factors for human-ecologically derived conflict in the post-Cold War context, the Clinton National Security Strategy of 1998 (NSS98) directly states that "natural resource scarcities can trigger and exacerbate conflict" (NSS 1998). As the title of this document implies, a "National Security Strategy for a New Century" is one that must take into serious consideration this environmentally driven conflict mechanisms.

Thus, the Global Environmental Facility (GEF) of 161 member states and the Environmental Security Initiative (ESI) was described as a means for "addressing regional environmental concerns and thereby reducing the risks to U.S. interests abroad" by "undertaking the development of an environmental forecasting system to provide U.S. policymakers advance warning of environmental stress situations which have the potential fro significant impact on U.S. interests" (NSS 1998). Such stress factors are a Malthusian checklist: "resource depletion, rapid population growth, environmental damage, new infectious diseases and uncontrolled refugee migration" (NSS 1998) The direct causal models of Homer-Dixon are evident in this statement, which proposes a system based on population and resource statistics for predicting sites of state failure, political contestation, and violent conflict. Notably, globalizing factors as a whole are a recurrent theme, and transnational concerns are placed alongside the increasingly visible threat of terrorism (particular ongoing concerns relating to the activities of Osama bin Laden), extreme nationalism, and international crime (NSS 1998).

The seriousness with which the Clinton Administration advocated the new ESI is evident throughout the NSS98. For example, while the intelligence community has long provided support to a range of US military, diplomatic, and law enforcement activities, US environmental agencies and activities are explicitly included in the new intelligence network (NSS 1998). Environmental provisions are expanded within the international economic sphere as new environmental regulations are added to the World Trade Organization (WTO) agenda and a new WTO Committee on Trade and Environment is established. "Environmentally sound" and "sustainable" development are seen as the lynchpin for promoting Western democratic principles worldwide (NSS 1998). This is only a slight modification from the NSS91 and it retains much of the heavy reliance on free market principles. This is especially true in relation to discussion of US motives for promoting democracy in the newly independent states (NIS) of Eastern Europe in particular. Similar to those concerns put forth in the NSS91, the NSS98 also warns of the potential threat destabilized NIS pose to the security of Western Europe. Central Asia itself receives only one passing mention in the entirety of this document – as a potential source of vital energy resources (NSS 1998).

5.1c OSCE Istanbul Summit, November 1999

With the new emphasis on environmental security tentatively established, the Organization for Security and Cooperation in Europe met in Istanbul in November of 1999 in order to discuss ongoing threats to European security. While much of this document concerns tensions in the increasingly "Balkanizing" region of the former Federal Republic of Yugoslavia, the five state of Central Asia receive considerable

attention, particularly the "significant increase in [OSCE] cooperation with the five

participating states in Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan,

Uzbekistan) (OSCE 1999). Of note is the three-part emphasis on "strengthening the rule

of law [and] the respect for human rights" while rooting out sources of "international

terrorism, violent extremism, organized crime, and drug and arms trafficking" and

addressing the sources of "economic and environmental risk," including those related to

"water resources, energy, and erosion" (OSCE 1999). The specific response to these

concerns will be further addressed in the section dealing with the UNDP-UNEP-OSCE-

NATO ENVSEC Program.

5.1d Heritage Foundation 2002

While founded in 1973, the Heritage Foundation gained significant visibility as a

conservative think-tank under the Reagan administration, gaining further ascendancy

within the political power structure underneath the presidency of George W. Bush. Its

prominence during this period was the impetus behind my decision to include HF's

Central Asian Policy document as part of my analysis. Although short, its message is

clear and powerful with respect to U.S. interests in the region. In addition, while also

invoking the realist Soviet-era critique and the environmental security paradigm that

precedes it, it simultaneously revitalizes the sleeping specter of Mackinder and the notion

of Central Asia as global pivot that pervades policy documents regarding Central Asia

today.

Central Asia is thrown into the U.S. spotlight after nearly a decade of relatively

quiet and neglected decay. These same neglected states are now re-imagined as

"breeding grounds for international terrorist groups aimed at the United States" due to economic and environmental stressors and the failure of democratic reform, doomed to follow in the footsteps of southern neighbor Afghanistan. Again, broad economic reform is posited as the means for avoiding such an outcome in order to integrate "these states into [the] competitive global economy" and reengineer them as partners in the new post-Cold War geopolitical framework: the so-called War on Terror (Pascoe 2002). Partnerships among the United States, Uzbekistan, and Kazakhstan and peaceful democratic reforms in the region are stressed, in ironic contrast with the simultaneous promotion of increased support for U.S. funded "military infrastructure, training, military exchanges, and development of interoperability with U.S. and international forces" for weeding out terrorist cells and sources of terrorist capital (Pascoe 2002).

Uzbekistan is referred to as "the most interesting test case of our policy of enhanced engagement" (Pascoe 2002). The U.S.-Uzbek Declaration of Strategic Partnership (DSP) asserts that the U.S. will assist the Uzbek government in the promotion of a "secular state based on the rule of law, market based economy, and effective social safety net" (USDOS 12 March 2002). The HF document points out that the Uzbek government has improved its human rights record in line with the DSP, including new engagement with U.S. sponsored economic institutions (IMF), the release of 860 political prisoners, the legalization of the "Birlik" opposition party, and the invitation of the UN Special Rapporteur on Torture to visit and file a report (Pascoe 2002). The HF report also laments the lack of U.S. media coverage of these "promising steps" being taken in Uzbekistan (Pascoe 2002). Karimov of course is very interested in promoting a particular formulation of a secular state based on his rule of law, in which most forms of religious

observation become Wahhabi or extremist. In addition, he also seeks to advance the Uzbek market economy through the unrelenting production of cotton. The secular state and market-based conceptualizations are just as easily perverted as the communist or theocratic conceptualizations of governance.

5.1e Brookings Institution 2004

Identifying itself as one of the oldest "independent research and policy institute[s]" (BI 2009) in Washington D.C., the Brookings Institute report from 2004 reflects the change in U.S. engagement with Central Asia that transpired following the U.S.-led war in Iraq. The Brookings Institution report is a bleak assessment of security and terrorist-related activities in the region. It opens by linking a recent "set of suicide bomb attacks and violent encounters with police" in Uzbekistan to the Uzbek government's new alliance with the United States against al Qaeda sponsored terror (Hill 2004). While the document does relate the events to the increasingly repressive actions being taken by the Karimov regime (e.g., "mass arrests of observant Muslims as suspected members of radical Islamic groups"), it does so by conjecturing that disenfranchised Uzbek citizens, frustrated by poor environmental and economic conditions and government repression, are actively turning to Islamic extremist groups "like the Islamic Movement of Uzbekistan which...gained traction by recruiting among disaffected young Muslims." Authoritarian regimes and "largely unreformed economies" are recognized as key factors in transforming Central Asia into the "breeding grounds for further terrorism" (Pascoe 2002).

According to Hill, "Islamic radicalism, militancy, and violence" is the main culprit "filling the political space between the people and the government in Uzbekistan" (Hill 2004). This document correctly highlights the negative social attributes of political oppression and degradation, but addresses the alleged symptom (Islamic radicalism) rather than the disease (political repression) as the fundamental threat to security: U.S. security. It does so in such a way as to simplistically assume a particular form of Muslim culture in the region; one that arguably does not exist. As previously discussed in section 3.2, Central Asia's specific Islamic cultural history is apolitical, and focused on custom and tradition, not religious-political based institutions. The dissatisfaction is with the Karimov regime, although in general the Uzbek experience with everyday life, conditioned by its particular traditionalist culture articulation of Muslim identity and the secular influences of the Soviet era tends to promote quiet acceptance of political repression. Finally, it is also of note to point out that, in terms of environmental security, U.S. policy dominated by narrow terrorism-centric terms have generally eclipsed any references to viable environmental options for achieving said security.

5.1f Strategic Studies Institute 2004

The Strategic Studies Institute, a division of the U.S. Army War College, is the U.S. Army's primary core of security studies analysts. In addition, the Institute also provides auxiliary research assistance to officials within the Department of Defense. This report also reflects the recent events in Iraq and critiques U.S. policy that is solely focused on promoting antiterrorism efforts in Central Asia as "counterproductive" thus "contributing to the radicalization of political opposition movements and discrediting

both democratization and the U.S. commitment to it" (Wishnick 2004). The report is correct to critique the U.S. emphasis on counterterrorism tactics that support the strengthening of regional authoritarian leaders. However, a return to the geographical framing of the region from the perspective of Halford Mackinder, and the overtly simplistic rendering of religion and culture in Central Asian, are particular questionable. In addition, while the report recognizes "simultaneous, interrelated political, economic, social, *environmental,* and military security threats" it does not elaborate upon those threats (Wishnick 2004).

The report can be broken down into several sections. First is an overview of U.S. relations with the five former Soviet republics since the onset of Operation Enduring Freedom in Afghanistan, beginning with then-U.S. Secretary of Defense Donald Rumsfeld's visit to Tashkent, Uzbekistan, for the signing of an agreement allowing the U.S. to stage 1,500 military personnel at Karshi Khanabad airbase. As part of this agreement, the U.S. agreed to target IMU training camps in Afghanistan, vocal opponents of the Karimov regime (Wishnick 2004). Uzbekistan also assisted U.S. Central Command (CENTCOM) since December, 2001, signed an official "strategic partnership" allowing the US to remain in Uzbekistan for "as long as necessary to complete antiterrorism operations in Afghanistan," and assisted NATO by providing "medical and logistical assistance" since May 2003 (Wishnick 2004). Several of the initial agreements were established largely in private (Wishnick 2004) although Karimov was quick to tout his new U.S. alliance, at home and regionally, as a vocal supporter of the War on Terror. Images have since been published depicting Karimov's visit to the 9-11 memorial at the World Trade Center site in New York City.

The second section of the paper outlines U.S. military and strategic interests in the region: security, energy, and internal reform (Wishnick 2004). In terms of security, the document quickly reinvigorates Mackinder's vision of Central Asia as pivot, claiming that an increased U.S. presence will draw regional players into the "Central Asian arena"; particularly Russia, China (the old Great Game actors) and potentially India, further complicating security interests. The renewal of a "Great Power rivalry" is deemed evident in the document. Energy and internal reform are tied together, as valuable energy resource deposits in Central Asia are seen as the mechanism for brining market reform and thus democratic prosperity to the region (Wishnick 2004).

The bulk of the document goes on to explain the appropriate U.S. national security strategy for achieving these goals. The Middle East, Central Asia, and Northeast Asia are framed as an "arc of instability" composed of "weak states vulnerable to radical movements." The suggested U.S. strategy: continued preemption, as originally advocated in the U.S. National Security Strategy of 2002 (i.e. "the only defense is to take the war to the enemy). The best defense is a good offense" (Wishnick 2004). The eight pages immediately following this statement discuss the appropriate siting of bases from Afghanistan to Turkey.

This section is followed by an interesting discussion of opinions in Central Asia regarding the U.S.-led War on Terror. The article notes that, with the exception of Uzbekistan, the four additional Central Asia leaders were critical of U.S. intervention. This is linked to Uzbek interest in reorienting its position westward while the remaining states retained closer ties with Russia. However, the SSI states that the primary reasoning behind the other state's critiques, especially Kazakhstan's, was the fear that an increased

flow of oil from a U.S. occupied Iraq would decrease prices in the regional and global markets.

The document then reasserts the claims of policy documents that have proceeded it; there is "some evidence" that Central Asia is a potential source of Islamic extremism and has already witnessed the rise of various extremists groups (i.e. the IMU and the IRP). The report goes on to claim that citizens in the 5 Central Asian states are exhibiting signs of increased distrust due to continued penetration of local religious organizations and the widespread "repression of Islamist activity, mass arrests, and the mistreatment of prisoners…as a result, Islamist groups may retain greater support in the absence of other means of channeling political support and in the face of mounting discontent" (Wishnick 2004).

The document ends by addressing a greater need to focus on elements of "human security" (Wishnick 2004) in the region, yet if fails to define what this might entail. The entire region retains the imagery of a vast Islamic powder keg, where Russian and Chinese interests lie just over the horizon waiting to take advantage of a highly destabilized region that is also in conflict over energy resource sites. The closest that the SSI comes to providing a policy solution for the region is its support of demining efforts and increased surveillance of drug-trafficking, through a combined focus on the geopolitically oriented notion of Mahan's soft and hard powers: focusing on the advancement and dispersal of superior U.S. military technologies with allied states. (Wishnick 2004). However, these concerns are not linked at all to the previous discussion of security-based concerns within Central Asia itself. They reflect U.S. security interests in "a key theater in the war on terror" but do not highlight the benefits

for individual Central Asians. The human-ecological sustainability of the region and the promotion of human rights mechanisms are left unaddressed, aside from a casual reference to the 1994 UN Human Development Report (Wishnick 2004).

5.1g RAND Project Air Force 2005

Rand Project Air Force is a subsidiary of the larger Rand Corporation, a non-profit policy institution, and is the Air Force's "federally funded research and development center for studies and analysis" (Oliker 2005). The tone of this RAND document is perhaps most interesting due to the time of its publication: after the events in Andijon, Uzbekistan, in May 2005. The RAND report opens by bluntly stating that "the current U.S. military presence in Central Asia is something of an historical accident. The question is whether or not it is also an anomaly" (Oliker 2005). While all the previous documents since the War on Terror began recognized the crucial geopolitical position of Central Asia for U.S. security interests, the RAND report suddenly posits that although OEF certainly elevated the status of Central Asia for U.S. policy makers, the region itself is of only short-term interest and is of greater value as a bargaining chip among other regional powers, particularly China and Russia (Oliker 2005)

The RAND report makes several policy suggestions along this line of reasoning. In terms of a role for the military in general, the RAND advocates a continued focus on the strategic placement of "semi-warm" bases throughout the region (those that can be fully staffed within a short period of time) but, as the SSI document also advocated, also promotes the training and modernization of local militaries in response to the ongoing War on Terror, arms control, and drug trafficking (Oliker 2005). It would appear that,

after Uzbekistan requested that the U.S. abandon its post at Karshi Khanabad air base due to a disagreement between the two states over the legal status of U.S. involvement in the area, the difficulties that the U.S. military were experiencing engaging in contract agreements with authoritarian regimes was fully realized. Secondly, the report acknowledges that on an international scale of relevance, maintaining permanent presence in the region is not worth diminishing relationships with Russia and China, and that the U.S. would be better suited in pursuing its strategic interests through regional third parties that are already allies (i.e. Turkey).

At several times, the RAND report invokes the language of Cold War bipolarity, "i.e. Russia's continuing distrust of U.S. imperialism" and the rapid "realignment" of Uzbekistan with China and Russia following the events of Andijon (Oliker 2005). The RAND report recognizes that language emphasizing the "zero-sum" game of alignment is a "relic of the Cold War era." However, this "relic" will apparently continue to inform U.S. military strategy in the region, despite a general lack of direct economic or strategic benefit to the U.S. (Oliker 2005). The RAND report conceptualizes the Caspian Basin and other Central Asian energy resources as of little interest to the United States (contrary to ongoing discussions regarding Caspian pipelines), but as strategically important to Russia in particular, and by default, a geopolitical interest of the U.S. (Oliker 2005). However, these interests are short-term, as "U.S. interests in the region should end once OEF has been completed" (Oliker 2005).

5.1h International Security Affairs 2006

However, as I have previously discussed, the events of Andijon only briefly altered U.S. policy objectives with respect to Central Asia, and Uzbekistan in particular as the 2006 policy briefing from International Security Affairs (ISA) regarding security issues in Central Asia demonstrates. ISA is one of the primary advisory groups to the Department of Defense; as the Assistant Secretary of Defense for ISA serves as the principal advisor to the Under Secretary of Defense for Policy and the Secretary of Defense on international security strategies, especially as they pertain to NATO, the Middle East, and Africa.

The language of this ISA document, given as part of the Annual ISA convention in San Diego, is a distubing endorsement of the traditional geopolitical writings of Mackinder, Spykman, and Mahan. As the document states in its introduction with respect to East Europe and Central Asia, "this [current] situation creates an area in which different axis as strategic, geopolitical, raw materials and energy-related issues, and even ideologies converge" a "return of the Great Game to Central Asia...highlighted after the publication of works as Brzezinski's *The Grand Chess Board*, and Michael Klare's *Resource Wars*" (Cantalapiedra 2006).

While the first half of the document contains a synopsis of Mackinder and Mahan's writings regarding the "Heartland" and "Shatter-Belt" respectively, placed in historical context with developing U.S. interests in Central Asia, the second half of the document discusses the Bush policy for the region, first advanced in the National Security Strategy of 2002 (NSS02). Much of the NSS02 rearticulates the revisions to containment policy expressed in the NSS91 and NSS98, namely the positions of Primacy

and Selective Primacy (Cantalapiedra 2006). The "Primacy Posture" basically states that all international security policies should promote a global mandate of "democracy and free markets," of which the U.S. would the central or "prime" (singular) component. In addition, the corollary states that in order to achieve this, the U.S. must actively block attempts by other powers to control "a region whose resources would, under consolidated control, be sufficient to generate global power." The report goes on to state that "preponderant power must be the object of US policy" (Cantalapiedra 2006).

The spread of democracy was central to this position, ala President George W. Bush, although the ISA makes it abundantly clear that the conditions of such a democracy would be under no uncertain terms. As stated in the Clinton administration's Engagement and Enlargement Strategy, "the successor of a doctrine of Containment must be a strategy of *Enlargement,* Enlargement of the world's free community of *market democracies*" (my emphasis) (Cantalapiedra 2006). The ISA recognizes critical positions to this strategy, especially those that questioned the juxtaposition of realism and liberalism, yet claims that the new "Grand Strategy" of President George W. Bush addressed these concerns by emphasizing the threat of "uncertainty" associated with a post 9-11 world (Cantalapiedra 2006). Market based democracies are argued to be the sole protection against a new world disorder, i.e. "an international order according to U.S. values" (Cantalapiedra 2006).

The ISA concludes by addressing how the Bush Grand Strategy should be understood with respect to Central Asia. Essentially, it is argued that the U.S. engagement in Central Asia responds to a new reading of the Monroe Doctrine and Manifest Destiny through the preservation of American principles in a larger ideological

sphere of influence and "a posture of avoiding the rise of challenger powers that seek

regional or world hegemony" (Cantalapiedra 2006). The ISA reverses the claims made

by RAND, emphasizing the geopolitical and "geo-energy"-based importance of the

region; competing claims for Central Asia's resources alongside unstable social

arrangements require a strong U.S. presence. Ultimately, the ISA claims that the U.S. has

the "techno-militaristic" capability to project power across Mahan's "Middle Strip" in

order to dominate the "Heartland" of Central Asia for the promotion of "prosperity" and

"stability" (Cantalapiedra 2006). The statements are grandiose, yet once again,

conceptualizations of security are overwhelming addressed in terms of U.S. interests.

While "stability" is sought through market-based reforms, the vast interrelated complex

of social and environmental degradation within the region is left completely unanalyzed

aside from another passing reference to resource conflict among states. At this realist

scale, the dynamics of everyday life on the ground are completely invisible or over-

generalized. In the next subsection, I assess how these framings have been reformatted

under the umbrella of "environmental security" in Central Asia, as a program designed in

conjunction with the United Nations Development Programme (UNDP), the United

Nations Environment Programme (UNEP), the Organization for Security and

Cooperation in Europe (OSCE), and the North Atlantic Treaty Organization (NATO).

5.1i UNDP-UNEP-OSCE-NATO Environmental Security

How are political, cultural, and social "security" concerns implicated in, and

linked to, concerns over environmental degradation and resource access within Central

Asia broadly? The most visible application has been a joint effort between the United

Nations Development Programme (UNDP), the United Nations Environmental

Programme (UNEP), the Organization for Security and Cooperation in Europe (OSCE), and the North Atlantic Treaty Organizations joint Environmental Security Initiative (UNDP-UNEP-OSCE-NATO ENVSEC, from now on just ENVSEC) that aims to link security concerns broadly with issues of environmental degradation and development (Schlingemann 2005).

While the term environmental security has been in existence since the mid-1980s, brought into the mainstream political and academic circles through the research of Gunther Baechler and Thomas Homer-Dixon and given an "official" stamp of approval in the National Security Strategy of 1998, the ENVSEC initiative began to codify the theoretical framework of Baechler and Homer-Dixon into guidelines and principles based upon conditions in regional case study sites. Working papers were drafted during the pilot phase of the program in 2003 for Southeast Europe (the Balkans) and Central Asia. Similar working papers were drafted for other regions beginning in 2004, including Eastern Europe and "the Circumpolar Arctic" (Schlingemann 2005). Background data for these papers and the studies that would follow were compiled from an assortment of international agencies, including not only the four contributors to ENVSEC but also the Asian Development Bank (ADB), UNICEF, the World Bank, and the individual ministries of foreign affairs within each state (Carius, Feil et al. 2003). Ultimately, local and environmentally based conflicts are conceptualized as international security threats, particularly to U.S. interests in the "crucial part of Central Asia" and its role in the ongoing War on Terror (Schlingemann 2005).

The ENVSEC theoretical foundation follows Baechler's Environmental Conflict Project (ENCOP) and Homer-Dixon's Environmental Change and Acute Conflict Project

(ECACP). Figure 1 demonstrates how ENVSEC has integrated the main arguments of Baechler and Homer-Dixon into their regional policy analysis, focusing on a relatively linear pathway that takes population pressure as its starting point, assumes environmental degradation as a given, and then predicts conflict among competing groups linked to the loss of livelihood that develops under these conditions. More specifically, these "conditions," i.e. limited supplies of resources and inadequate mechanisms for their fair distribution, are defined as "social consequences" derived from "ecological marginalization" and "environmental discrimination" – Baechler and Homer-Dixon's exact terminology (Schlingemann 2005).

In Central Asia, ENVSEC assesses population growth and migration as two of the key components that could potentially incite conflict, particular in regions of formerly limited population, as well as areas where there are dense concentrations of ethnic diversity, postulating that conflicts over limited resource access would be exacerbated by the existence of ethnically driven tension. Population and ethnicity mapping feature prominently in the ENVSEC assessment of conflict in the region, particularly centered upon the densely populated (and prone to high population growth) Ferghana Valley in eastern Uzbekistan, western Tajikistan, and southwestern Kyrgyzstan.

Causal Pathway of Conflict Over Natural Resources

Population Growth

Environmental Degradation

Natural Disasters

Environmental Scarcity

Loss of Livelihood

Eco-Marginalisation

Environmental Discrimination

- Reduced Economic Productivity
- Forced Migration
- Segmentation of Society

Environmentally Induced Conflict

Unequal Resource Access
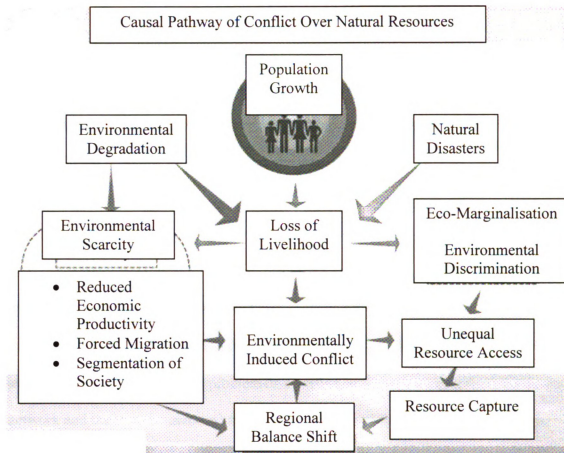
Regional Balance Shift

Resource Capture

Figure 1 This diagram, prepared as part of the official ENVSEC initiative, demonstrates the Malthusian causal pathway that links population growth, resource scarcity, environmental degradation and the potential for conflict (http://maps.grida.no/go/graphic/causual_pathway_of_conflict_over_resources)

While "ethnic dimensions" are described in relation to the potential for water conflict, no empirical evidence is provided to corroborate this claim. ENVSEC maps identify areas of key environmental concern, placed in context with the population-based conflict factors. Even at this regional scale though, the particular conflict sites remain broadly defined in terms of population and resource based generalities. In the local case studies, i.e. agricultural production in Uzbekistan for example, political economic factors (how has restricted agricultural privatization been enforced and why do incentives for

effi

agri

bee

wi

pro

an

un

E\

fra

an

ne

fa

id

er

ar

(S

"r

H

se

et

Th

efficiency remain low while the extent of cultivated land expands?) behind accelerated

agricultural production are not discussed.

Homer-Dixon and Baechler's framework for resource scarcity-based conflicts has

been critiqued within political ecology and political ecology for either not taking the

wider political economy of natural resources into account (what larger-scale factors

produce particular markets and how do these markets materialize at nested scales?)

and/or for narrowly conceptualizing the historical, political, and cultural processes that

underlie resource economies. For example, in the case of water in Central Asia, while the

ENVSEC correctly blames centralized water allocation mechanisms and a weak interstate

framework for water allocation as contributing factors to inefficient water distribution

and management, it frames the problem as a vestige of Soviet planning (both the water

network and the state boundaries) trapped in a new era of "national identity creation,"

failing to recognize the continuing Soviet character of these supposedly new national

identities (Schlingemann 2005). Karimov himself is an ongoing "vestige" of the Soviet

era; he and his policies are not an artifact, but a concrete reality that exists due to initial

and ongoing U.S. support for "stability" in the region after the Soviet Union collapse

(Sievers 2003).

Islam is also drawn into the discussion as a potential factor in the strengthening of

"national and political identities," thus leading to further destabilizing conditions.

However, in the same paragraph the authors recognize that "Soviet policies of

secularization [contributed to] a popular identification with Islam as somewhat more of an

ethnic/identity determinant than an indicator of religious belief" (Schlingemann 2005).

The two statements seem to negate each other. If, as the document states, a paradigm

shift has occurred transforming local identity-centered understandings of Islam (in existence well before the Soviet era (Khalid 1998, and Khalid 2007) has occurred, then why haven't political Islamic groups been successful in establishing a strong foothold in the region? Despite continued U.S. concerns regarding the rise of extremist Islam across Central Asia (which the U.S. military itself attempted to foment during the late Soviet-era via the distribution of Uzbek translations of the Koran in an attempt to incite Islamic revolt in the region. The effort ultimately failed.) such events have not occurred, despite brutal authoritarian violence, (i.e. Andijon), in which only a year later Uzbek citizens themselves tend to downplay the events, largely out of fear of retaliation and/or incredulity at the perceived "foolishness" of Uzbeks who would protest (Khalid 1998, and Khalid 2007). The ENVSEC is correct to describe Islam as a locally "stabilizing factor," but perpetuates the alarmist Islamic extremist argument by labeling it a "mobilizing factor" (Schlingemann 2005).

Perhaps most frustrating is that ENVSEC recognizes cultural and historical characteristics as integral to the environmental and political situation in Uzbekstan, but limits them to the archaic and oriental geographic imaginaries, i.e. the "persistence in Central Asia of pre-Russian, pre-modern conservatism, especially *concerning the legitimacy of power*" (Schlingemann 2005). Prior "modernization" efforts, i.e. the Jadidist movement in the early twentieth century (Khalid 1998, and Khalid 2007), and the Perestroika-era reforms (Robinson 1988, and Sievers 2003) are discursively erased in favor of the environmental and political imaginary of the Oriental Despot, now coupled with the international security notions of Mackinder, and the simplistic resource scarcity and conflict arguments of Baechler and Homer-Dixon.

ima

Gra

sec

sel

dis

circ

Sci

Ce

fac

of

pa

"e

ye

in

re

av

A

K

Is

Vl

5.2 Disseminating the Frames of Environment, Security, and Democracy in Uzbek Central Asia: Critical Geopolitical Analysis of Major US Newspapers

Popular media renderings essentially reflect three post-Soviet geographical imaginaries of Central Asia: U.S. strategic interests framed in the imagery of the "New Great Game," the role of Islam, and the linkage among environment, sustainability, and security. Policy based framings of environmental security, political Islam, and the selectively interpreted legacy of the Soviet era have been picked-up, reinforced, and disseminated by the popular media. Newspaper accounts in four of the most widely circulated U.S. newspapers (*New York Times* NYT, *Washington Post* WP, *Christian Science Monitor* CSM, and *Boston Globe* BG) highlight the power of these framings of Central Asia – and Uzbekistan in particular -- and the existence of story archives facilitates comparative and historical narrative analysis. A cross-time narrative analysis of these geographic framings reflects the evolution of U.S. policy interests in the region, particularly the transition from "containment" and "spheres of influence" to "environmental security."

Media coverage of Central Asia during the late Soviet Perestroika and Glasnost years portrays the region as an anomaly, unstable and at the mercy of seemingly incompatible culture, political, and geographic circumstances. Islam in particular is rendered as an ever present threat lurking just beneath the omniscient Soviet eye, awaiting any sign of weakness in the Iron armor. In the 12 February 1988 NYT article *Allah and Gorbachev Mixing in Central Asia* (Keller 1988), statements from Russian K.G.B. mirror earlier comments by Russian Imperial authorities regarding the dangers of Islamic uprising (i.e. the so-called "Muslim Question"). For example, one K.G.B chief, Vladimir V. Petkel, states, "clerics who favor a jihad or Islamic holy war, have set out to

infiltrate party, government and law" (Keller 1988). The ongoing existence of "Islamic

traditions" such as arranged marriages, the "underground" and "unofficial Sufi

brotherhood," the recent proliferation of mosque construction, and increasing ties with

Afghan clergy were described as examples of the resiliency of Islam in spite of Soviet

policy and the possible rise of political Islam (i.e. Iranian style) in the region (Keller

1988).

The narrative of political Islam as incendiary threat was vivid in several headlines

during the late Perestroika and Glasnost era, reflecting U.S. international security

documents. Examples includedMartha Brill Olcott's (professor and chair of Political

Science at Colgate University) 29 January 1990 CSM article *Soviet Central Asia: Next to*

Erupt? (Olcott 1990) and Grace Halsell's 21 March 1991 CSM article *A Muslim Time*

Bomb (Halsell 1991). Comparing the situation in Central Asia to previous events in Iran

and Afghanistan, Olcott described how under Perestroika and Glasnost, the prospects for

"secular nationalism" were simply not possible in the Central Asian republics and that, by

default, Islam would be the rallying force in the region due to its influence as a marker of

"communal identity." Environmental security was invoked by the imagery of a rapidly

expanding Muslim population, livelihood declines, and social and environmental

degradation, which would ultimately result in widespread rioting and attacks on the

"Christian colonizers – the Russians" (Olcott 1990). Halsell offered a similar narrative

and furthered the environmental security argument, adding Mackinder to the mix as well,

by describing how Russia's dependency on Central Asian resources would likely

exacerbate violent conflict in the region, as the former colonizer will do battle with

"Central Asian Muslim revolts" over the contested commodities of cotton, oil, coal, and

gold (Halsell 1991). Similar statements are also made in the 31 May 1992 article NYT

U.S. Remains Moscow-Centric on Once-Soviet Asia (Crossette 1992), in which Islam was

described as having "a stronger hold on the masses of Central Asia than Orthodox

Christianity had on the Russians."

Gorbachev's reforms were also tied to narratives of environmentally based

instability in the region, especially as U.S. foreign policy increasingly shifts its traditional

Cold War strategy to environmental security. Counter to those who were arguing that

Islam would become the primary threat to stability in the region, the 6 November 1988

NYT article *Will Czar Cotton Still Reign Across Soviet Central Asia?* (Keller 1988) and

the 20 June 1992 NYT article *Uzbeks, Free of Soviets, Dethrone Czar Cotton*, argued that

the legacy of "Stalinist demand for self sufficiency in cotton" (Erlanger 1992) would be

the primary factor influencing conflict in the Central Asia, particularly with respect to

soil and water degradation. The prospect for peace, it was claimed, was to be found in

Western based economic reform of the cotton sector, specifically the privatization of the

cotton farms and the neoliberalization of state production mechanisms, redistributing

agricultural management local and private enterprises, thus ending the "tyranny of

Uzbekistan's farms" (Erlanger 1992). Immediately following the collapse of the Soviet

Union, media coverage of Central Asia presented a positive image of the region as

potentially productive, abandoning much of the chaotic imagery that proliferated during

Perestroika. This optimism, however, would prove to be short lived.

New security threats were identified, including the rise of narcotics trafficking

linked to organized crime and terrorist funding in *Central Asia's Drug Bazaar*, NYT 16

November 1992 (Lubin 1992) and *The World; Meet Stan, and Stan, and...* NYT 7 May

1995 (Specter 1995), as well as ethnic-based conflicts such as in Chechnya, the Caucasus (i.e., conflict between Armenians and Azerbaijanis), and the Tajik Civil War of the mid-1990s (Bronner 1993). In addition, earlier positive hopes for democracy and environmental sustainability in the region have all but evaporated; and in their place, articles that reflect on entrenched authoritarian regimes and desiccated water bodies are commonplace (Specter 1995). In less than three years, Central Asia reverted from a land of promise where "rational water use and economic reform" were extolled (Erlanger 1992) back to a regionally and potentially global security threat (i.e., a 2nd to 3rd World shift). Specter's statement summed up this reemergent geographic imaginary, framed in the environmental security paradigm shift; "The thing about the stans that keeps Russia and the West nervous is that they could be much more dangerous than they are" (Specter 1995).

Mackinder's enduring influence in the minds of western observers was apparent in the new environmental security framing of Central Asia, as evidenced by the articles *Buffeted by Big Powers, Central Asia Gravitates Closer to Russia's Orbit* CSM 19 March 1996 (Greenwald 1996) and *Fear and Loathing in the 'Stans'* 2 August 2000 (Rumer 2000). This re-emergent emphasis on Central Asia as prize (i.e., natural resources) or peril (i.e., prone to instability and conflict, and therefore difficult to manage) was often described as a "new Great Game." However, as late as 2000, editorials like Rumers' were suggesting that the US should back out of the any activity in Central Asia and allow Russia and China to move in, suggesting that the costs of the region were simply not worth the alleged benefits of engagement. Rumer suggested that "American interests

would best be served if the struggle for influence there could be avoided altogether" (Rumer 2000).

The events of 11 September 2001 dramatically altered the importance of Central Asia to U.S. security interests, however and once again the region received considerable attention, in particular as a battleground in the "War on Terror" -- as well as a source of potential allies and militarily strategic bases. Islam was once again rendered a significant security threat in *Islamic Militancy in Central Asia* 28 CSM February 2002 (Norton 2002), *Fighting Terror Regional Tensions* BG 27 October 2002 (Filipov 2002), *Islamist Gambit in Central Asia* CSM 19 July 2005 (Weir 2005), *Rice, on Way to Central Asia, Reprimands Uzbekistan* 11 October 2005 (Wright 2005), *Cutting Deals in Democracy's Dead End* NYT 3 February 2008 (Chivers 2008), and *After '05 Uzbek Uprising, Issues Linger for West* NYT 29 May 2008 (Tavernise 2008). These articles shared a common theme in that, while they acknowledged that the repressive authoritarian regimes of Central Asia, (i.e., Karimov) were likely implicated in the rise in extremist related activities in the region (particularly after events in Andijon), they also echoed the sentiments of the U.S. international security documents (i.e., SSI, ISA, etc.) placing U.S. strategic interests above human rights concerns and social and environmental degradation within Central Asia.

Central Asia is suddenly transformed from troubled land, too mired in its own past to be salvaged and of any use to U.S. interests (even its energy resources were described as of marginal interest to the U.S. (Rumer 2000)) to a region of "strategic importance to the U.S." (Tavernise 2008). Just three years earlier, the leaders of the former Soviet republics were described as practically begging for U.S. assistance -- but to

no avail (Rumer 2000). Now the region is of prime strategic importance in several arenas, both in terms of military strategy and energy resource access, as referenced in the article *Central Asia on Front Line in Energy Battle* NYT 20 December 2007 (Kramer 2007). According to United States Secretary of Energy Samuel Bodman, in contrast to the RAND report from 2005, "opportunities [in Central Asia] are opening that could not have been imagined *even a year ago*" (Kramer 2007 my emphasis).

In particular, despite widespread acknowledgement of President Karimov's human rights abuses, Uzbekistan was described as a vital ally in the War on Terror. Three articles in particular, - *Air Base Flap Reflects Tension Over US Presence in Central Asia* CSM 6 February 2009 (Lubold and LaFranchi 2009), *U.S. to Widen Supply Routes in Afghan War* NYT 31 December 2008 (Shanker and Oppel 2008) and *Conflict Narrows Oil Options for West* NYT 14 August 2008 - demonstrated how the U.S. reluctantly and quietly acquiesced to the *status quo* in Uzbekistan in order to secure supply routes for medical supplies, oil and gas, and other "non-lethal goods" (Shanker and Oppel 2008).

These media accounts reflected a transition in U.S. policy, whereby environmental security policies gradually placed the threat of Islamic extremist oriented terrorism above social and environmental degradation. These accounts often provided direct quotations from U.S. international affairs analysts, U.S. diplomats, and military officials, who acknowledged that despite the repressive regimes of individuals like Karimov, U.S. ties with Central Asia were a necessary evil in a greater struggle. According to Martha Bill Olcott, "if we didn't have a war in Afghanistan, we might have the luxury to take a moral stance" (Tavernise 2008). One Western diplomatic official,

who wished to remain anonymous, stated, "Uzbekistan is simply too important to ignore. Once you go into isolation mode, you lose the ability to engage with the rest of the population" (Tavernise 2008). However, the U.S. was willing to engage in a policy of "isolation" with respect to other "rogue" states (i.e., Iran and North Korea). An unnamed European official responds to this by stating, "You can't compare Uzbekistan and North Korea...not every right is violated all the time. It's not that systematic" (Tavernise 2008).

Even the events of Andijon were not "systematic" enough to force the U.S. to confront the Karimov regime with stiff sanctions. In fact, as previously stated, in a show of force and defiance in the face of international pressure Karimov initially kicked the U.S. out of its Karshi Khanabad airbase (as well as expelling countless international NGOs and media groups including RFERL and Eurasianet) and reoriented itself toward China and Russia, only to have the U.S. quietly engage in talks with Uzbek officials for the reopening of supply routes two years later. Admiral William J. Fallon, after a visit with Uzbek diplomats, stated, "I told them that we couldn't do much about that past, but that we could look to the future" (Chivers 2008). As this same article aptly summarized, "the exuberant vision of nurturing pluralistic societies and governments responsive to popular will" as articulated in the NSS91 and NSS98 "has been quietly recalibrated. Democracy promotion is not gone, but has taken its place in a wider portfolio of interests" including military, counter-narcotic, and counter-terror (i.e., U.S. interests) (Chivers 2008).

Why such a complex, contradictory, and shifting geographic imaginary of Central Asia in such a short period of time? Why has U.S. policy posited environmental security

as the new "Grand Strategy" for the region, yet relatively little attention is paid by the popular media to the meaning of environmental security? In fact, the only narrative that remains consistent with respect to Central Asia is the ongoing coverage of the Aral Sea desiccation and the failure of transboundary water agreements in the region (e.g., *Despair Looks Like a Sea that Died* NYT 4 March 2001, (Frantz 2001) and *Old Farming Habits Leave Uzbekistan a Legacy of Salt* NYT 15 June 2008 (Tavernise and Stern 2008)) which do reflect the environmental security narrative in their repetitive coverage of the negative impacts of population growth, the potential for ethnic and/or Islamic-oriented conflict, and the legacy of a Soviet-Orientalized culture on environmental policy in the region.

Clearly, environmental security as a project of promoting ecological stability and Central Asian-specific democratic reforms took a secondary position to the larger U.S. security concern amid the ongoing War on Terror. Under this specific framing of environmental security, Karimov positioned himself as dominant ally in the fight against Islamic extremism. His own framing of security issues in Uzbekistan, aided by the narrative of environmental security linking degradation to Islamic extremist uprising, have resulted in the regime's deeper penetration of Uzbek civil society, further weakening both democratic and environmental reform and reinforcing the reified imaginaries of a failing despotic Uzbek state. In relation to water in particular he has accomplished this through the dismantling and reorganization of local NGOS and local social organization units (i.e., *mahallas*), which were the original centerpieces of Perestoika and Glasnost-era environmental reform.

5.3 Reinforcing the Frames of Environment, Security, and Democracy in Uzbek Central Asia: Critical Geopolitical and Legal Analysis of Uzbek Environmental Security

5.3a Islam Karimov's *Uzbekistan on the Threshold of the 21ˢᵗ Century*

Karimov himself invoked environmental security in his book *Uzbekistan on the Threshold of the 21ˢᵗ Century* in which he outlined factors or "threats" to Uzbekistan, linking together "security, stability, and sustainability" (Karimov 1997). Preceding the release of the NSS98 by a year, Karimov promoted security as first and foremost, a statewide interest that must seek contain "ethnic, regional, and local conflicts and aggressive separatism" in order to maintain "[state] interests, and zones of influence or to change the strategic balance of power in their favor" (Karimov 1997).

Karimov invoked Mackinder when he declared that Uzbekistan's unfortunate geopolitical positioning at the "strategic center of the crescent comprising the richest oil and gas preserves of the Persian Gulf, Caspian Sea and Tarim Basin...are expected to play a role in the future of Euro-Asia and ultimately the whole world" (Karimov 1997). He then proceeded to link Mackinder to the emerging neo-Malthusian arguments of Homer-Dixon and Baechler, stating that demographic and ethnic pressures threatened to transform Uzbekistan into a new Afghanistan, a "hotbed of instability...torn by internal conflicts which are encouraged by religious extremism, ethnic intolerance, drug trafficking, and external forces of different kinds" (Karimov 1997). He continued to emphasize emphatically that stability cannot be achieved in the region until the transboundary effects of terrorism, drugs and arms trade, and ironically, environmental degradation, and human rights violations would no longer proliferate throughout the region.

Finally, in a statement of self legitimation, Karimov argued that "international relations should stipulate the right of each sovereign state (deriving from its own national interests) to identify the extent of its participation in international entities and collective agreements on security, in order to ensure its own independence ad stability. Naturally, we imply that the protection of security and the unacceptability of infringements of other states' interests should be ensured, and there should be no return to the anguish and tragedy of the military-political confrontations of the recent past" (Karimov 1997). Just as Karimov has argued that the environmental legacy of Uzbekistan is "Soviet vestige" and that the water that was taken from the Aral "was *forgotten* [to be] drained blood from the sea," (Karimov 1997) he also endeavored to separate himself from the Soviet past, despite the fact that he himself is a Soviet vestige.

5.3b Loss of Organizational Capital: Uzbek NGOs and Mahallas

Yet Karimov is deeply embedded in the ongoing social and environmental degradation of Uzbekistan. His call for self determination of national security, juxtaposed alongside the geopolitical gamesmanship of alternating between Russian economic and U.S. security interests disproportionately benefits the reinforcement of his own power over and above the interests of the Uzbek state, let alone its people or environment. For example, Karimov's "Law for Non-State Non-Profit Organizations" (1999) has direct implications for local NGO involvement within Central Asia hydropolitics. Article 2 recognized the authority of international law above and beyond state law "in cases of discrepancy" (1999). This stipulation in and of itself is particularly interesting, in relation to water, as the international precedent for universal access to

water mirrors Uzbekistan's own argument within the trans-boundary framework. Article 2 was arguably the most important aspect of the law with respect to NGO activities as it protect them from being discredited by the media, while Article 10 protects them from state intervention. The relevance of this law in relation to the involvement of local level NGOs in the environmental movement will be addressed in the final section.

By refusing to recognize Perestroika era reforms in the region, Western development organizations stifled place-specific democratic reforms in Central Asia. The effect was the loss organizational capital directed towards social, political, and environmental reform in the region. From the environmental perspective, the grassroots, locally based NGOs established during Perestroika in Uzbekistan were either incorporated into the new state framework, or were made irrelevant (Masaru 2006). For example, the rise of "quasi-NGOs with official government support" (Farmer 2001) and the establishment of a re-registration process for NGOs amidst President Karimov's calls for "*ochiq fuqarolik jamiyati*" (i.e., open civil society) (Masaru 2006) are indicative of the current situation. In effect, Western development organizations missed out on a perfect opportunity to support free and open reforms in the region, particularly in Uzbekistan.

Uzbekistan's historical geography is one punctuated by waves of conquest and consolidation. As such, its people have tended to develop highly adaptive and "hybridized" conceptions of civil society, particularly since independence. "Thirteen years of independence have nurtured in this country a unique hybrid of national and Muslim symbolism, rule by decree, and a statist approach to socio-economic development. However, since the entrenchment of the *nomenklatura*, the Uzbek people's

own inclination toward localized civil society, often referred to as *mahalla* (roughly

translated as neighborhood or local) has been adapted by the state government as its

official *fuqarolik jamiyati*, or civil society" (Masaru 2006). The implications for

environmental NGOs are particularly revealing in relation to the legal framework that

now exists.

The first implication is that while Uzbekistan remains fairly rich in various forms

of physical and human capital that can be directed towards environmental reform, these

stocks are rapidly being depleted, squandered, and lost (Sievers 2003, and Masaru 2006).

The increasing "brain drain" of Soviet-era engineers and scientists coincides

paradoxically with an increased emphasis on technological solutions to the region's

environmental problems. The governmental process itself appears fractured as it

continues to pursue *on-paper* development plans that and water use forums that

ultimately break down. The situations is consistently presented as contentious by

Western media and IGOs and "the very imagery of Uzbekistan as a developing country

(despite the fact that just over a decade ago there was much evidence to the contrary)

(Sievers 2003, and Masaru 2006) implementing step-by-step reforms has profited the

administrators by protecting their office and tight control over the populace...while their

self-fulfilling prophecy of 'Islamic extremism' served to radicalize small groups of

Islamist movements..." (Masaru 2006). By failing to allow for democracy to take its own

form, democracy of any form is now under calculated assault in Uzbekistan (Masaru

2006).

Secondly, and more directly related to locally-based environmental NGOs,

President Karimov has steadily worked to consolidate the most integral component of

Uzbek civil society, the *mahalla*, fully into the state apparatus. The government run or

quasi-NGO, "*Mahalla* Foundation," was established as the umbrella organization that

would unify the once autonomous individual *mahallas* (Masaru 2006). Through the

incorporation of *mahallas*, the re-registration of coinciding NGOs, and the legitimation of

quasi-NGOs, local knowledge is not being eliminated – it is being absorbed and

neutralized and replaced by a system dominated by the Western incarnation of

sustainable development that problematizes environmental degradation through

technology and science while suspending the role of local governance from the

hydropolitical debate. This is made apparent in the legal framework of the ICWC and

Uzbek NGO registration law in particular.

6. IMPLICATIONS AND CONCLUSION

Geopolitical discourses typically reinforce the geopolitical imaginary which they create. This is accomplished through a cyclical process of producing, validating, and disseminating "easy to manage chunks of the world" (Dalby 1996). A new dominant global discourse to replace the Cold War geopolitical imaginary of bipolarity and spheres of influence has yet to fully take shape. In its stead, discourses relating to terrorism (often represented as Islamic extremism), development, and environmental degradation compete and coalesce (Dalby 2002). In my thesis, I have argued that political interests in Uzbekistan (i.e., in the Karimov regime) have harnessed the U.S.-sponsored discourse of environmental security in order to consolidate power by infiltrating Uzbek civil society. As such, continued environmental degradation is reinforced as an "instrument effect" (Ferguson 1990).

In terms of theory, I advocated in this thesis for a deeper exploration of the nexus between critical geopolitics as an assessment of geopolitical discourses (i.e., writings of global space by intellectuals of statecraft as well as the guardians of popular culture and information) and critical legal components of political ecology (i.e., mutual landscape effects/controls of institutions, laws, governance, and the politicized nature of law and space as they interact with each other while simultaneously excluding each other). I did this by engaging in a critical geopolitics that assesses both news [i.e., wide-circulation U.S. newspapers such as (i.e., NYT, WP, CSM, BG)] and non-news (e.g., development project papers and documents, and text of speeches) in accordance with widely accepted critical geopolitical and critical legal geographic practices (Dodds 1996).

However, I also echo the concerns of Martin Muller and propose that a further investigation associated with my research will need to take into account discourse as "not only language, but language in practice" (Müller 2008). Further research must pay careful attention to the hegemonic discourses at play in Uzbekistan (external via the media and internal via the Karimov regime) and the examples of emerging and/or stifled local discourses that "transgress and subvert the divisive logic of separate spaces which emanated from official, text-based narratives" (Megoran 2006). As such, I advocate an ethnographic assessment of this research, in order to determine how local strategies are adopted in response to environmental security. What is the lived environment of environmental security in Uzbekistan? How do people negotiate the securitization of the social and natural environment? Are the events in Andijon an appropriate regional proxy or an anomaly? Such an ethnographic account would resemble Nick Megoran's analysis of security discourses on the Uzbekistan-Kyrgyzstan border (Megoran 2004).

My research shed light on the geopolitical discourse of environmental security in Central Asia that has direct implications for the social and physical landscape of this region. Despite increasing global attention with respect to multi-scale, hydropolitical debates not only in Central Asia but throughout East Asia, South-East Asia, South Asia, Africa, and the western United States, few critical geopolitical studies of this topic have been done. Fewer still have focused on the nexus between critical geopolitics and environmental issues. None have focused specifically on Central Asia. This critical geopolitical approach assessed the effect of a process of representation with regards to environment, security, and democracy in Central Asian Uzbekistan. Ultimately, I demonstrated that there is a circular self-sustaining connection among these concepts that

helps reinforce a particular geographic imaginary of Central Asian Uzbekistan. Rather, new narratives of cooperation that explore the myriad connections historically among the ethnic groups of the region, particularly between Persian and Turkic culture, should be emphasized over conflict.

The promotion of Malthusian and Orientalist-inspired understandings of the social and environmental condition of Uzbek Central Asia have helped to realize the formerly reified geographic imaginary of the region. Karimov has been able to maneuver aptly beneath the U.S. environmental security discourse, and in doing so, has succeeded in dismantling the very social organs that were most likely to stimulate social and environmental reform in Uzbekistan. Environmental security, articulated as a means for realizing short-term U.S. security goals in the region, cannot achieve the requisite long-term environmental, social, and broadly conceived "democratic" reforms that are necessary for the advancement and freedom of the Uzbek people as long as the predominate assumptions associated with "security" in Central Asia continue to trump the processes that benefit human-environment interaction.

BIBLIOGRAPHY

Abu-Lughod, L. (2005). *Dramas of Nationhood: the Politics of Television in Egypt.* Chicago: University of Chicago Press.

Adams, W. M. (2001). *Green Development: Environment and Sustainability in the Third World* London: Routledge.

Adger, W. N., et al. (2001). Advancing a Political Ecology of Global Environmental Discourses. *Development and Change, 32*, 681-715.

Agnew, J. (2003). *Geopolitics: Re-Visioning World Politics.* London: Routledge.

Agnew, J. (2005). *Hegemony: the New Shape of Global Power.* Philadelphia: Temple University Press.

Agnew, J. & Duncan, J. (1989). *The Power of Place: Bringing Together Geographical and Sociological Imaginations.* Boston: Unwin Hyman.

Agrawal, A. (2005). Environmentality: Community, Intimate Government, and the Making of Environmental Subjects in Kumaon, India. *Current Anthropology, 46*(2), 161-190.

Ahmad, A. (2000). Islamic Water Law as a Comparative Model for Maintaining Water Quality. *Islamic Law and Culture, 2000*(159), 159-186.

Alatout, S. (2006). Towards a Bio-Territorial Conception of Power: Territory, Population, and Environmental Narratives in Palestine and Israel. *Political Geography, 25*(6), 601-621.

Allan, J. A. (2000). *The Middle East Water Question: Hydropolitics and the Global Economy.* London: I.B. Tauris.

Allan, J.A. (2002). *Water Security in the Middle East: the Hydro-Politics of Global Solutions.* New Yorkd: Columbia University Press.

Anderson, B. (1991). *Imagined Communities: Reflections of the Origin and Spread of Nationalism.* New York: Verso.

Andrews, E. L. (2002, May 31). New U.S. Allies, the Uzbeks: Mired in the Past. *The New York Times*, p. 10A. Retrieved Feb. 28, 2009, from http://www.nytimes.com/

Auty, R. M. (1994). Industrial Policy Reform in Six Large Newly Industrializing Countries: The Resource Curse Thesis. *World Development, 22*(1), 11-26

Bakker, K. (1999). The Politics of Hydropower: Developing the Mekong. *Political Geography, 18*(2), 209-232.

Barnett, J. (2001). *The Meaning of Environmental Security: Ecological Politics and Policy in the New Security Era.* London: Zed Books.

Barnett, J. (2003). Security and Climate Change. *Global Environmental Change, 13*(1), 7-17.

Batterbury, S., & Fernando, J. (2006). Rescaling Governance and the Impacts of Political Environmental Decentralization: An Introduction. *World Development, 34*(11), 1851-1863.

Batterbury, S., et al. (1997). Environmental Transformations in Developing Countries: Hybrid Research and Democratic Policy. *The Geographical Journal 163*(2): 126-132.

Berkes, F. (2004). Rethinking Community-Based Conservation. *Conservation Biology, 18,* 621-630.

Blaikie, P. (2006). Is Small Really Beautiful? Community-Based Natural Resource Management in Malawi and Botswana. *World Development, 34*(11), 1942-1957.

Blaikie, P., & Muldavin, J. S. S. (2004). Upstream, Downstream, China, India: The Politics of Environment in the Himalayan Region. *Annals of the Association of American Geographers, 94*(3): 520-548.

Blomley, N. K. (1994). *Law, Space, and the Geographies of Power.* New York: Guilford Press.

Blomley, N. K., et al. (2001). *The Legal Geographies Reader: Law, Power, and Space.* Oxford: Blackwell Publishers.

Blua, A. (Apr. 12, 2005). Asia: Irrigation, Pollution Threaten Lakes. *Radio Free Europe Radio Liberty.* Retrieved Mar. 25, 2009, from http://www.rferl.org/content/article/1058410.html.

Boland, A. (2000). Feeding Fears: Competing Discourses of Interdependency, sovereignty, and China's Food Security. *Political Geography, 19*(1), 55-76.

Brannstrom, C. (2004). Decentralising Water Resource Management in Brazil. *The European Journal of Development Research,* 16, 214-234.

Braun, B., & Castree, N. (1998). *Remaking Reality: Nature at the Millenium.* London: Routledge.

Brichieri-Colombi, S. (2003). Geopolitics, Water, and Development in South Asia: Cooperative Development in the Ganges-Brahmaputra Delta. *Geographical Journal, 169*(1), 43.

Bronner, R. (1993, Nov 26). Tajik Civil War Fades, but the Brutality Goes On. *The New York Times*, p. 3A. Retrieved Aug. 1, 2009, from http://www.nytimes.com/

Brzezinski, Z. (1997). *The Grand Chessboard: American Primacy and its Geostrategic Imperatives.* New York: Basic Books.

Burbank, J., et al. (2007). *Russian Empire: Space, People, Power, 1700-1930.* Bloomington: Indiana University Press.

Burghart, D. & McKinney, D. (Eds.). (2002). *Cooperative Management of Transboundary Water Resources in Central Asia.* European Security.

Bush, George H. W. (1991). The National Security Strategy of the United States of America, August 1991. http://www.fas.org/man/docs/918015-nss.htm (11 April 2009).

Bush, George W. (2002). The National Security Strategy of the United States of America, September 2002. http://merln.ndu.edu/whitepapers/USnss2002.pdf (12 June 2009).

Campbell, L. (1999). Ecotourism in Rural Developing Communities. *Annals of Tourism Research, 26*(3), 534-553.

Cantalapiedra, D. (2006). *Proceedings of the 47th International Security Affairs Annual Conference: Geopolitics and U.S. Security Policy in Central Asia.* San Diego, CA: I. S. Affairs.

Carius, A., et al. (2003). *Addressing Environmental Risks in Central Asia* (Environmental Governance Series). Berlin: UNDP/Regional Bureau for Europe and the CIS.

Cavanaugh, Cassandra. (2000, Aug. 2). The Iron Hands of Central Asia (Editorial.). *The Washington Post*, p. 31A. Retrieved Feb. 28, 2009, from http://www.washingtonpost.com/

Chivers, C. J. (2008, Feb 3). Cutting Deals in Democracy's Dead End. *The New York Times*, 4WK. Retrieved Feb. 28, 2009, from http://www.nytimes.com

Clinton, W. J. A National Security Strategy for a New Century, October 1998. http://www.fas.org/man/docs/nssr-98.pdf (11 April 2009).

Collier, P., & Hoeffler, A. (2005). Resource Rents, Governance, and Conflict. *Journal of Conflict Resolution 49*(4), 625-633.

Crews, R. D. (2006). *For Prophet and Tsar: Islam and Empire in Russia and Central Asia.* Cambridge: Harvard University Press.

Cronon, W. (Ed.). (1995). *Uncommon Ground: Toward Reinventing Nature.* New York: W.W. Norton & Co.

Crossette, B. (1992, May 31). U.S. Remains Moscowcentric on Once-Soviet Asia. *The New York Times*, p. 16. Retrieved Feb. 28, 2009, from http://www.nytimes.com.

Culcasi, K. (2006). Cartographically Constructing Kurdistan Within Geopolitical and Orientalist Discourses. *Political Geography, 25*(6), 680-706.

D'Souza, R. (2002). At the Confluence of Law and Geography: Contextualising Inter-State Water Disputes in India. *Geoforum*, 33, 255-269.

Dalby, S. (1990). *Creating the Second Cold War: the Discourse of Politics.* London: Pinter Publishers.

Dalby, S. (1996). Reading Rio, Writing the World: *The New York Times* and the Earth Summit. *Political Geography, 15*(6-7), 593-613.

Dalby, S. (2002). *Environmental Security.* Minneapolis: University of Minnesota Press.

Dalby, S. (2004). Ecological Politicss, Violence, and the Theme of Empire. *Global Environmental Politics, 4*(2), 1-11.

Debrix, F. (2008). *Tabloid Terror: War, Culture, and Geopolitics.* London: Routledge.

Debrix, F., & Weber, C. (2003). *Rituals of Meditation: International Politics and Social Meaning.* Minneapolis: University of Minnesota Press.

Delaney, D. (2001). Making Nature/Marking Humans: Law as a Site of (Cultural) Production. *Annals of the Association of American Geographers, 91*(3), 487-503.

Delaney, D. (2003). *Law and Nature.* Cambridge: Cambridge University Press.

Delaney, D., & Leitner, H. (1997). The Political Construction of Scale. *Political Geography, 16*(2), 93-97.

Derman, W., & Ferguson, A. (2003). Value of Water: Political Ecology and Water Reform in Southern Africa. *Human Organization, 62*(3), 277-288.

Derrida, J. (1997). *Of Grammatology*. Baltimore: Johns Hopkins University Press.

Deudney, D. (1990). The Case Against Linking Environmental Degradation and National Security. *Millennium-Journal of International Studies, 19*(3), 461-476.

Diamond, J. (2005). *Collapse: How Societies Choose to Succeed or Fail*. New York: Penguin

Dodds, K. (1996). The 1982 Falklands War and a Critical Geopolitical Eye: Steve Bell and the if... cartoons. *Political Geography, 15*(6-7), 571-592.

Dodds, K. (2001). Political Geography III: Critical Geopolitics After Ten Years. *Progress in Human Geography, 25*(3), 469-484.

Dodds, K. (2007). *Geopolitics: A Very Short Introduction*. Oxford: Oxford University Press.

Dryzek, J.S. (1997). *The Politics of the Earth: Environmental Discourses*. New York: Oxford University Press.

Erlanger, S. (1993, Feb. 13). In Nervous Uzbekistan, It's a New Day but with the Same Old Hard Line . *The New York Times*, p. 5. Retrieved Feb. 28, 2009, from http://www.nytimes.com.

Erlanger, S. (1992, June 20). Uzbeks, Free of Soviets, Dethrone Czar Cotton. *The New York Times*, p. 4. Retrieved Feb. 28, 2009, from http://www.nytimes.com

Ervand, A. (1974). Oriental Despotism: The Case of Qajar, Iran. *International Journal of Middle East Studies, 5*(1), 3-31.

Escobar, A. (1995). *Encountering Development: The Making and Unmaking of the Third World*. Princeton, N. J.: Princeton University Press.

Escobar, A. (1996). Construction Nature: Elements for a Post-Structuralist Political Ecology. *Futures, 28*(4), 325-343.

Farmer, A. (2001). Developing Sustainability: Environmental Non-Governmental Organizations in Former Soviet Central Asia. *Sustainable Development, 2001*(9), 136-148.

Ferguson, J. (1990). *The Anti-Politics Machine: Development, Depoliticization, and Bureaucratic Power in Lesotho*. Cambridge: Cambridge University Press.

Filipov, D. (2002, Oct. 27). Fighting Terror, Regional Tensions: Terror Crackdown May Push More to Extremism. *The Boston Globe*, 28A. Retrieved Feb. 28, 2009, from http://www.boston.com.

Finn, Peter. (2007, July 20). Aral Sea's Return Revives Withered Villages; Dam Begins to Diminish Ecological Disaster of Soviet-Era Irrigation. *The Washington Post*, p. 1A. Retrieved Feb. 28, 2009, from http://www.washingtonpost.com

Flint, C. (2003). Political Geography II: Terrorism, Modernity, Governance and Governmentality. *Progress in Human Geography, 27*(1), 97-106.

Forsyth, T. (2001) Critical Realism and Political Ecology. In J. López, & G. Potter (Ed.). *After Postmodernism : an Introduction to Critical Realism.* London: Athlone.

Forsyth, T. (1996). Science, Myth and Knowledge: Testing Himalayan Environmental Degradation in Thailand. *Geoforum 27*(3), 375-392.

Foucault, M. (1972). *The Archaeology of Knowledge.* New York: Pantheon Books.

Foucault, M. (1979). *Discipline and Punish : the Birth of the Prison.* New York: Vintage Books.

Foucault, M., & Gordon, C. (1980). *Power/Knowledge: Selected Interviews and Other Writings, 1972-1977.* New York: Pantheon Books.

Foucault, M., et al. (2007). *Security, Territory, Population : Lectures at the Collège de France, 1977-78.* New York: Palgrave Macmillan.

Frantz, D. (2001, Mar. 4). Despair Looks Like a Seat that Died. *The New York Times*, p. 16. Retrieved Feb. 28, 2009, from http://www.nytimes.com.

Freedman, E. (2005). Coverage of Environmental and Environmental Health News of Central Asia by Independent News Web Sites. In M. Gervers, et al. (Ed.). *History and Society in Central and Inner Asia.* (pp. 297-316). Toronto: University of Toronto.

Friedman, T. L. (2005). *The World is Flat: A Brief History of the 20th Century.* New York: Farrar, Straus, and Giroux.

Furlong, K. (2006). Hidden Theories, Troubled Waters: International Relations, the 'Territorial Trap', and the Southern African Development Community's Transboundary Waters. *Political Geography, 25*(4), 438-458.

Giordano, M., & Wolf, A. (2002). The Geography of Water Conflict and Cooperation: Internal Pressures and International Manifestations. *The Geographical Journal, 168*, 293-312.

Gleick, P. H. (1993). Water and Conflict: Fresh Water Resources and International Security. *International Security 18*(1), 79-112.

Gleick, P. H. (1998). *The World's Water: the Biennial Report on Freshwater Resources.* Washington, D.C.: Island Press.

Gleick, P. H., et al. (1991). *The Societal and Environmental Costs of the Continuing California Drought.* Berkeley, CA: Pacific Institute for Studies in Development, Environment, and Security.

Gleick, P. H., et al. (1993). *Water in Crisis : A Guide to the World's Fresh Water Resources.* New York, Oxford University Press.

Greenberg, I. (2006, Sept. 10). Central Asia Pact Frees the Region of Nuclear Arms. *The New York Times*, p. 18. Retrieved Feb. 28, 2009.

Greenberg, I. (2007, May 15). Central Asians Chase Jobs and Endure Exploitations. *The New York Times,* p. 4A. Retrieved Feb. 28, 2009, from http://www.nytimes.com.

Greenwald, I. (1996, Mar. 19). Buffeted by Big Powers, Central Asia Gravitates Closer to Russia's Orbit. *Christian Science Monitor, p.* 1. Retrieved Feb. 28, 2009, from http://www.csmonitor.com.

Haas, P. M. (2002). Constructing Environmental Conflicts from Resource Scarcity. *Global Environmental Politics 2*(1), 1-11.

Halsell, G. (1991, Mar. 21). A Muslim Time Bomb. *Christian Science Monitor* 21, p.19. Retrieved Feb. 28, 2009, from http://www.csmonitor.com.

Hann, C. (2006). *"Not the Horse We Wanted!" Postsocialism, Neoliberalism, and Eurasia.* New Brunswick: Transaction Publishers.

Hardt, M., &. Negri, A. (2001). *Empire.* Boston: Harvard University Press.

Hartmann, B., et al. (Ed.). (2005). *Making Threats: Biofears and Environmental Anxieties.* Oxford: Rowman and Littlefield Publishers.

Harvey, D. (1996). *Justice, Nature and the Geography of Difference.* Cambridge: Blackwell Publishers.

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

Harvey, D. (2006). *Spaces of Global Capital: A Theory of Uneven Geographical Development.* New York: Verso.

Hecht, S. B., & Saatchi, S. S. (2007). Globalization and Forest Resurgence: Changes in Forest Cover in El Salvador. *BioScience, 57*(8), 663-672.

Herod, A. (1991). The Production of Scale in United States Labour Relations. *Area 23*(1): 82-88.

Hill, F. (2004, Apr. 5). Central Asia's Failing State. *Brookings Institution*. Retrieved Feb 28, 29, from http://www.brookings.edu/opinions/2004/0405asia_hill.aspx?p=1

Homer-Dixon, T. F. (1994). Environmental Scarcities and Violent Conflict: Evidence from Cases. *International Security 19*(1), 5-40.

Humphrey, C. (2002). *The Unmaking of Soviet Life : Everyday Economies After Socialism*. Ithaca: Cornell University Press.

Humphrey, C., & Sneath, D. (1996). *Culture and Environment in Inner Asia*. Cambridge: White Horse Press

Humphrey, C., & Sneath, D. (1999). *The End of Nomadism?: Society, State, and the Environment in Inner Asia*. Durham: Duke University Press.

Huntington, S. P. (1993). The Clash of Civilizations? *Foreign Affairs*, (Summer), 22-49.

Johnston, B. R. (2003). The Political Ecology of Water: An Introduction. *Capitalism Nature Socialism 14*, 73-90.

Kaplan, R. (2000). *The Coming Anarchy: Shattering the Dreams of the Post-Cold War*. New York: Random House

Karimov, I. (1997). *Uzbekistan on the Threshold of the Twenty-First Century*. Retrieved Apr. 11, 2009, from http://www.umid.uz/Main/Uzbekistan/President/Books/books.html

Keller, B. (1988, Dec. 20). Developers Turn Aral Sea Into a Catastrophe. *The New York Times*, p. 1C. Retrieved Feb. 28, 2009, from http://www.nytimes.com.

Keller, B. (1988, Feb. 18). Allah and Gorbachev Mixing in Central Asia. *The New York Times*, p. 1A. Retrieved Feb. 28, 2009, from http://www.nytimes.com.

Keller, B. (1988, Nov. 6). Will Czar Cotton Still Reign Across Soviet Central Asia." *The New York Times*, p. 1. Retrieved Feb. 28, 2009, from http://www.nytimes.com.

Khalid, A. (1998). *The Politics of Muslim Cultural Reform: Jadidism in Central Asia*. Berkeley: University of California Press.

Khalid, A. (2007). *Islam after Communism: Religion and politics in Central Asia.* Berkeley: University of California Press.

Kim, Y. (2003). *The Resource Curse in a Post-Communist Regime: Russia in Comparative Perspective.* Aldershot: Ashgate.

Klare, M. (2002). *Resource Wars: The New Landscape of Global Conflict.* New York: Henry Holt and Company.

Klein, C. (2003). *Cold War Orientalism: Asia in the Middlebrow Imagination, 1945-1961.* Berkeley: University of California Press.

Kliot, N., & Shamir, U. (2001). Institutions for Management of Transboundary Water Resources: Their Nature. *Water Policy 3*(3), 229-255.

Kramer, A. E. (2007, Dec. 20). Central Asia on Front Line in Energy Battle. *The New York Times*, p. 1C. Retrieved Feb. 28, 2009, from http://www.nytimes.com.

Kurtz, H. E. (2003). Scale Frames and Counter-Scale Frames: Constructing the Problem of Environmental Injustice. *Political Geography, 22*(8), 887-916.

Latour, B. (1993). *We Have Never Been Modern.* Cambridge: Harvard University Press.

Le Billon, P. (2005). *Geopolitics of Resource Wars: Resource Dependence, Governance, and Violence.* London: Routledge.

Le Billon, P. (2001). The Political Ecology of War: Natural Resources and Armed Conflicts. *Political Geography, 20*(5), 561-584.

Leach, M., et al. (1999). Environmental Entitlements: Dynamics and Institutions in Community-Based Natural Resource Management. *World Development, 27*(2), 225-247.

Leonhardt, David. (2009, Mar. 4). Interview. *Marketplace.* NPR. Ann Arbor: WUOM

Lipschutz, R. D. (1995). *On Security.* New York: Columbia University Press.

Lubin, N. (1992, Nov. 16). Central Asia's Drug Bazaar. *The New York Times*, p. 17A. Retrieved Feb. 28, 2009, from http://www.nytimes.com.

Lubold, G., & LaFranchi, H. (2009, Feb. 6). Air Base Flap Reflects Tension Over U.S. Presence in Central Asia. *Christian Science Monitor*, p. 3. Retrieved Feb. 28, 2009, from http://www.csmonitor.com.

Luke, T. W. (1995). On Environmentality: Geo-Power and Eco-Knowledge in the Discourses of Contemporary Environmentalism. *Cultural Critique*, (31), 57-81.

Luong, P., & Weinthal, E. (2001). Prelude to the Resource Curse: Explaining Oil and Gas Development Strategies in the Soviet Successor States and Beyond. *Comparative Political Studies, 34*(4), 367-399.

MacDonald, K. I. (2005). Global Hunting Grounds: Power, Scale and Ecology in the Negotiation of Conservation." *Cultural Geographies, 12*(3), 259-291.

Mackinder, H. J. (1904). The Geographical Pivot of History. *The Geographical Journal, 23*(4), 421-444.

Mamdani, M. (1996). *Citizen and Subject: Contemporary Africa and the Legacy of Late Colonialism.* Princeton: Princeton University Press.

Mamdani, M. (2004). *Good Muslim, Bad Muslim : America, the Cold War, and the Roots of Terror.* New York: Pantheon Books.

Marsh, G. P. (1864). *Man and Nature; or, Physical Geography as Modified by Human Action.* New York: C. Scribner & Co.

Marx, K., & Engels, F. (1978). *The Marx-Engels Reader.* New York: Norton.

Masaru, S. (2006). The Politics of Civil Society, Mahalla, and NGOs: Uzbekistan. *Slavic Eurasian Studies, 2006*(10), 335-370.

McGlinchey, E. (2005). The Making of Militants: The State and Islam in Central Asia. *Comparative Studies of South Asia, Africa and the Middle East,* (25), 554-566.

McMichael, P. (1997). Rethinking Globalization: The Agrarian Question Revisited. *Review of International Political Economy, 4*(4), 630-662.

Megoran, N. (2004). The Critical Geopolitics of the Uzbekistan-Kyrgyzstan Ferghana Valley Boundary Dispute, 1999-2000. *Political Geography, 23*(6), 731-764.

Megoran, N. (2004). Revisiting the 'Pivot': the Influence of Halford Mackinder on analysis of Uzbekistan's International Relations. *The Geographical Journal,* (170), 347-358.

Megoran, N. (2005). The Critical Geopolitics of Danger in Uzbekistan and Kyrgyzstan. *Environment and Planning D-Society & Space, 23*(4), 555-580.

Megoran, N. (2006). For Ethnography in Political Geography: Experiencing and Re-Imagining Ferghana Valley Boundary Closures. *Political Geography, 25*(6), 622-640.

Megoran, N. (2007). On researching 'ethnic conflict': Epistemology, Politics, and a Central Asian Boundary Dispute. *Europe-Asia Studies, 59*(2), 253-277.

Megoran, N. (2005). Preventing Conflict by Building Civil Society: Post-Development Theory and a Central Asian-UK Policy Success Story. *Central Asian Survey, 24*(1), 83-96.

Meinzen-Dick, R. S., et al. (1997). Gender, Property Rights, and Natural Resources. *World Development, 25*(8), 1303-1315.

Mercille, J. (2008). The Radical Geopolitics of U.S. Foreign Policy: Geopolitical and Geoeconomic Logics of Power. *Political Geography, 27*(5), 570-586.

Metawie, A. (2004). History of Co-Operation in the Nile basin. *International Journal of Water Resources Development,* (20), 47-63.

Micklin, P. (2002). Water in the Aral Sea Basin of Central Asia: Cause of Conflict or Cooperation? *Eurasian Geography and Economics, 43*(7), 505-528.

Micklin, P. P., et al. (1996). *The Aral Sea Basin.* New York: Springer-Verlag.

Mitchell, D. (2000). *Cultural Geography: a Critical Introduction* Oxford: Blackwell Publishers.

Mitchell, D. (2003). *The Right to the City: Social Justice and the Fight for Public Space.* New York: Guilford Press.

Mitchell, T. (1988). *Colonising Egypt.* Cambridge: Cambridge University Press.

Mitchell, T. (2002). Rule of Experts : Egypt, Techno-Politics, Modernity. Berkeley: University of California Press.

Mollinga, P. P. (2001). Water and Politics: Levels, Rational Choice and South Indian Canal Irrigation. *Futures, 33*(8-9), 733-752.

Mollinga, P. P., et al. (2007). Politics, Plurality and Problemsheds: A Strategic Approach for Reform of Agricultural Water Resources Management. *Development Policy Review,* (25), 699-719.

Mouawad, J. (2008, Aug. 14). Conflict Narrows Oil Options for West. *The New York Times,* p. 10A. Retrieved Feb. 28, 2009, from http://www.nytimes.com.

Müller, M. (2008). Reconsidering the Concept of Discourse for the Field of Critical Geopolitics: Towards Discourse as Language and Practice. *Political Geography, 27*(3), 322-338.

Mustafa, D. (2007). Social Constructions of Hydropolitics: The Geographical Scales of Water and Security in the Indus Basin. *Geographical Review, 97*(4), 484.

Myers, G., et al. (1996). The Inscription of Difference: News Coverage of the Conflicts in Rwanda and Bosnia. *Political Geography, 15*(1), 21-46.

Nasar, R. (1989, June 2). How the Soviets Murdered a Sea. *The Washington Post,* p. 3B. Retrieved Feb. 28, 2009, from http://www.washingtonpost.com.

Norton, J. (2002, Feb. 28). Islamic Militancy in Central Asia. *Christian Science Monitor,* p. 15. Retrieved Feb. 28, 2009, from http://www.csmonitor.com.

O'Hara, S. L. (1997). Irrigation and Land Degradation: Implications for Agriculture in Turkmenistan, Central Asia. *Journal of Arid Environments, 37*(1), 165-179.

O'Hara, S. L., & Hannan, T. (1999). Irrigation and Water Management in Turkmenistan: Past Systems, Present Problems and Future Scenarios. *Europe-Asia Studies, 51*(1), 21-41.

O'Lear, S. (2004). Resources and Conflict in the Caspian Sea. *Geopolitics 9*(1), 161-186.

O'Lear, S., & Diehl, P. (2007). Not Drawn to Scale: Research on Resource and Environmental Conflicts. *Geopolitics, 12*(1), 166-182.

Ó Tuathail, G. (1996). *Critical Geopolitics: the Politics of Writing Global Space.* Minneapolis: University of Minnesota Press.

Ó Tuathail, G., et al. (1998). The Geopolitics Reader. London: Routledge.

Olcott, M. B. (1990, Jan. 29). Soviet Central Asia: Next to Erupt? *Christian Science Monitor,* p. 18. Retrieved Feb. 28, 2009, from http://www.csmonitor.com.

Oliker. O., & Shlapak, D. A. (2005). *U.S. Interests in Central Asia: Policy Priorities and Military Roles.* Santa Monica: Rand Project Air Force.

The Organization for Security and Co-operation in Europe (1999, Nov.). *OSCE Istanbul Summit Declaration.* Retrieved Apr. 11, 2009, from http://www.fas.org/nuke/control/osce/text/summit_declaration.htm

Parshin, K. (2008) Central Asia: Agreement on Regional Water-Management Pact Remains Elusive. *Eurasianet.* Retrieved Apr. 11, 2009, from http://www.eurasianet.org

Pascoe, B. L. (2002, Aug. 30). *U.S. Policy in Central Asia and the War on Terrorism.* Washington, DC: The Heritage Foundation. Retrieved Apr. 11, 2009, from http://www.heritage.org/research/russiaandeurasia/wm140.cfm?renderforprint=1.

Peet, R., & Watts, M. (2004). *Liberation Ecologies: Environment, Development, Social Movements.* London: Routledge.

Peluso, N. L., & Watts, M. (2001). Violent Environments. Ithaca: Cornell University Press.

Purcell, M., & Brown, J. C. (2005). Against the Local Trap: Scale and the Study of Environment and Development. *Progress in Development Studies, 5*(4), 279-297.

Radcliffe, S. A. (2005). Development and Geography: Towards a Postcolonial Development Geography?" *Progress in Human Geography, 29*(3), 291-298.

Rakhimov, S. (2005). Regional Experience in Solving Problems of Water Resources in Uzbekistan. *Transboundary Water Resouces: Strategies for Regional Security and Ecological Stability.* Uzbekistan

Rashid, A. (1994). *The Resurgence of Central Asia: Islam or Nationalism?* London: Oxford University Press

Rashid, A. (2002). *Jihad: the Rise of Militant Islam in Central Asia.* New Haven: Yale University Press.

Richardson, L. (2001). Reflections on Foucauldian Discourse Analysis in Planning and Environmental Policy Research. *J. Environ. Policy Planning, 2001*(3), 193-209.

Robbins, P. (1998). Authority and Environment: Institutional Landscapes in Rajasthan, India. *Annals of the Association of American Geographers, 88*(3), 410-435.

Robbins, P. (2000). The Practical Politics of Knowing: State Environmental Knowledge and Local Political Economy." *Economic Geography, 76*(2), 126-144.

Robbins, P. (2003). Political ecology in political geography. *Political Geography, 22*(6), 641-645.

Robbins, P. (2004). *Political Ecology: a Critical Introduction.* Malden: Blackwell

Robbins, P. (2007). *Lawn People: How Grasses, Weeds, and Chemicals Make Us Who We Are.* Philadelphia: Temple University Press.

Robinson, N. A. (1988). Perestroika and Priroda: Environmental Protection in the USSR. *Pace Environmental Law Review,* (5), 351-423.

Rumer, E. (2000, Aug. 2). Fear and Loathing in the 'Stans'. *Christian Science Monitor*, p. 11. Retrieved Feb. 28, 2009, from http://www.csmonitor.com

Sachs, J. D., & Warner, A. M. (2001). The Curse of Natural Resources. *European Economic Review, 45*(4-6), 827-838.

Sahadeo, J., & Zanca, R. (2007). *Everyday Life in Central Asia: Past and Present.* Bloomington: Indiana University Press

Said, E W. (1979). *Orientalism.* New York: Vintage Books.

Sauer, C. O. (1983). *Land and Life: A Selection from the Writings of Carl O. Sauer.* Berkeley: UC-Berkeley Press.

Schlingemann, F., et al. (2005). *Environment and Security: Transforming Risks into Cooperation - Central Asia.* UNEP-UNDP-OSCE-NATO. Retrieved Feb. 28, 2009, from http://www.envsec.org/

Schmidle, N. (2006, Jan. 29). In Central Asia, New Players, Same Game. *The Washington Post*, p. 2B. Retrieved Feb. 28, 2009, from http://www.washingtonpost.com.

Shanker, T., & Oppel, R. A. (2008, Dec. 31). U.S. to Widen Supply Routes in Afghan War. *The New York Times*, p. 1A. Retrieved Feb. 28, 2009, from http://www.nytimes.com.

Sharp, J. P. (2008). *Geographies of Postcolonialism.* London: SAGE Publications Ltd.

Sharp, J. P. (2006). Postcolonialism and Development: New Dialogue? *The Geographical Journal, 172*(1), 6-9.

Sharp, J. P. (1996). Hegemony, Popular Culture and Geopolitics: the Reader's Digest and the Construction of Danger. *Political Geography, 15*(6-7), 557-570.

Sharp, J. P. (2000). *Condensing the Cold War: Reader's Digest and American Identity.* Minneapolis: University of Minnesota Press.

Sidaway, J. D. (2000). Postcolonial Geographies: an Exploratory Essay. *Progress in Human Geography, 24*(4), 591-612.

Sievers, E. (2003). *The Post-Soviet Decline of Central Asia: Sustainable Development and Comprehensive Capital.* London: Routledge

Simon, D., & Mackenzie, F. (1997). Reconceptualising Local Community: Environment, Identity and Threat. *Area, 29*(2), 99-108.

Smith, C. P. (1992). *Motivation and Personality: Handbook of Thematic Content Analysis*. Cambridge: Cambridge University Press.

Smith, N., & Dennis, W. (1987). The Restructuring of Geographical Scale: Coalescence and Fragmentation of the Northern Core Region. *Economic Geography, 63*(2), 160-182.

Sneddon, C., & Fox, C. (2006). Rethinking Transboundary Waters: A Critical Hydropolitics of the Mekong Basin. *Political Geography, 25*(2), 181-202.

Sonnett, J., et al. (2006). Drought and Declining Reservoirs: Comparing Media Discourse in Arizona and New Mexico, 2002-2004. *Global Environmental Change, 16*(1), 95-113.

Soroos, M. S. (1995). Environmental Security. *Phi Kappa Phi Journal,* (Winter), 20-24.

Sparke, M. (2000). Graphing the Geo in Geo-Political: Critical Geopolitics and the Re-Visioning of Responsibility. *Political Geography, 19*(3), 373-380.

Specter, M. (1994, Dec 31). Agony of Chechen Conflict is Felt Across Border. *The New York Times,* p. 2 section 1. Retrieved Aug. 1, 2009, from http://www.nytimes.com

Specter, M. (1995, May 7). The World, Meet Stan, and Stan, and... *The New York Times,* p. 3. Retrieved Feb. 28, 2009, from http://www.nytimes.com.

Stern, D. L. (2008, Sept. 1). Fragile Tajikistan Hopes Water Will Power it's Ambitions. *The New York Times,* p, 5A. Retrieved Feb. 28, 2009, from http://www.nytimes.com.

Stone, R. (1999). Coming to Grips with the Aral Sea's Grim Legacy. *Science,* 284, 30. Retrieved Mar. 13, 2008, from://www.sciencemag.org.

Tavernise, S. (2008). After '05 Uzbek Uprising, Issues Linger for West. *The New York Times Online Edition.* Retrieved Feb. 28, 2009, from http://www.nytimes.com.

Tavernise, S., & Stern, D. L. (2008, June 15). Old Farming Habits Leave Uzbekistan a Legacy of Salt. *The New York Times,* p. 6A. Retrieved Feb. 28, 2009, from http://www.nytimes.com.

Teclaff, L. A. (1991). Fiat or Custom: The Checkered Development of International Water Law. *Natural Resources Journal, 1991*(31), 45-73.

Tookey, D. L. (2007). The Environment, Security and Regional Cooperation in Central Asia. *Communist and Post-Communist Studies, 40*(2), 191-208.

Tsing, A., et al. (1999). Assessing Community-Based Natural-Resource Management. *Ambio, 28*(2), 197-198.

Tynan, D. (2008). Uzbekistan: How the Uzbek Government Maintains a Choke-Hold Over the Internet. *Eurasianet.* Retrieved Feb. 28, 2009, from http://www.eurasianet.org.

Uitto, J. I. (2002). Management of Transboundary Water Resources: Lessons from International Cooperation for Conflict Prevention. *Geographical Journal, 168*(4), 365.

Uitto, J. I., & Duda, A. M. (2002). Management of Transboundary Water Resources: Lessons from International Cooperation for Conflict Prevention. *The Geographical Journal, 168*(4), 365-378.

Unger, R. M. (1983). The Critical Legal Studies Movement. *Harvard Law Review, 96*(3), 561-675.

United States Department of State. (2002, Mar. 12). *Declaration on the Strategic Partnership and Cooperation Framework Between the United States of America and the Republic of Uzbkeistan.* Washington, DC: U.S. Government Printing Office. Retrieved Apr. 11, 2009, from http://www.fas.org/terrorism/at/docs/2002/US-UzbekPartnership.htm.

Verdery, K., & Humphrey, C. (2004). *Property in Question: Value Transformation in the Global Economy.* Oxford: Berg.

Walker, P., & Fortmann, L. (2003). Whose Landscape? A Political Ecology of the 'Exurban' Sierra. *Cultural Geographies, 10*(4), 469-491.

Walker, P. (2006). Political Ecology: Where is the Policy?" *Progress in Human Geography, 30*(3), 382-395.

Watts, M. (2003). Development and Governmentality. *Singapore Journal of Tropical Geography,* (24), 6-34.

Watts, M. (2004). Resource Curse? Governmentality, Oil and Power in the Niger Delta, Nigeria. *Geopolitics,* (9), 50-80.

Wegerich, K. (2008). Hydro-Hegemony in the Amu Darya Basin. *Water Policy, 10*(S2), 71-88.

Weir, F. (2005, July 19). Islamist Gambit in Central Asia. *Christian Science Monitor,* p. 6. Retrieved Feb. 28, 2009, from http://www.csmonitor.com.

Wescoat, J. L. (1984). *Integrated Water Development: Water Use and Conservation Practice in Western Colorado.* Chicago: University of Chicago

Wines, M. (2002, Dec. 9). Grand Soviet Scheme for Sharing Water in Central Asia is Foundering. *The New York Times*, p. 14A. Retrieved Feb. 28, 2009, from http://www.nytimes.com.

Wishnick, E. (2004). *Strategic Consequences of the Iraq War: U.S. Security Interests in Central Asia Reassessed.* Washington, DC: U.S. Army War College Strategic Studies Institute.

Wittfogel, K. A. (1953). The Ruling Bureaucracy of Oriental Despotism: A Phenomenon That Paralyzed Marx. *The Review of Politics, 15*(3), 350-359.

Wittfogel, K. A. (1960). A Stronger Oriental Despotism. *The China Quarterly,* (1), 29-34.

Wolf, A. (1989). *A Purity of Arms : an American in the Israeli Army.* New York: Doubleday.

Wolf, A. (1995). *Hydropolitics Along the Jordan River: Scarce Water and its Impact on the Arab-Israeli Conflict.* New York: United Nations University Press.

Wolf, A. (1996). *Middle East Water Conflicts and Directions for Conflict Resolution.* Washington, DC: International Food Policy Research Institute.

Wolf, A., et al. (2002). *Atlas of International Freshwater Agreements.* Nairobi: UNEP.

Worster, D. (1992). *Rivers of Empire: Water, Aridity, and the Growth of the American West.* Oxford: Oxford University.

Wright, R. (2005, Oct. 11). Rice, On Way to Central Asia, Reprimands Uzbekistan. *The Washington Post*, 13A. Retrieved Feb. 28, 2009, from http://www.nytimes.com.

Yoffe, H., et al. (2003). Conflict and Cooperation over International Freshwater Resources: Indicators of Basins at Risk. *Journal of the American Water Resources Association,* (October), 1109-1126.

Zavgorodnyaya, D., et al. (2002). *Organisational Efficiency of Water Users' Associations in Uzbekistan. Challenges to Organic Farming and Sustainable Land Use in the Tropics and Subtropics.* Kassel-Witzenhausen, Germany.

Zimmerer, K. (1993). Soil Erosion and Social (Dis)Courses in Cochabamba, Bolivia: Perceiving the Nature of Environmental Degradation. *Economic Geography, 69*(3), 312-327.

Zimmerer, K. (2007). Agriculture, Livelihoods, and Globalization: The Analysis of New Trajectories (and Avoidance of Just-So Stories) of Human-Environment Change and Conservation. *Agriculture and Human Values, 24*(1), 9-16.

(1993, May 27). Armenia and Azerbaijan Agree on a Peace Plan. *The New York Times,* p. 14A. Retrieved Aug. 1, 2009, from http://www.nytimes.com.