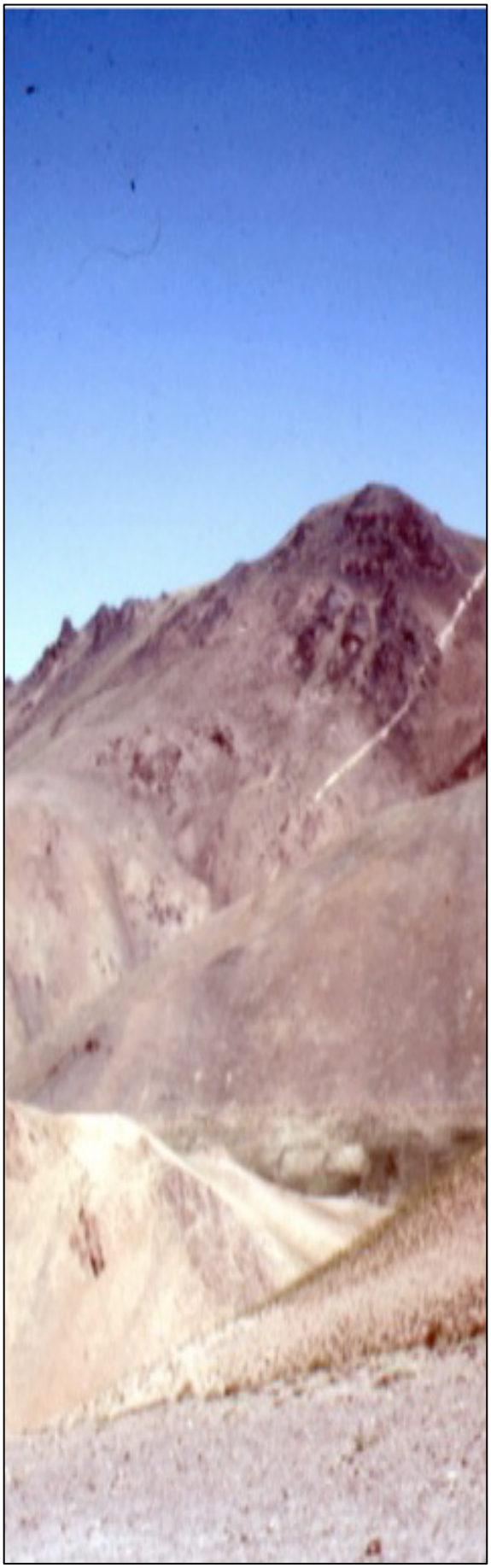

Afghanistan's Mineral Fortune:

Multinational influence and development in a post-war economy

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ABSTRACT

Civil conflict in Afghanistan has frequently been tied to a scramble for apparently limited natural resources. The dominant narrative of the "resource curse" harkens back to the "great game" discourse of a hundred years ago where Central Asia was considered a competitive playing field for colonial Russia and Britain. Contemporary analysts are tempted by historical comparison to frame the analysis in similar terms between the United States and its NATO Allies versus China. This paper argues that resource extraction by multinational interests need not be a source of conflict but can rather be an opportunity for fostering lasting cooperation, peace-building and development. Historical case analysis of the corporate negotiations during the Taliban era on the gas pipeline transit project from Turkmenistan to Pakistan via Afghanistan is compared with the current investment negotiations on the Aynak copper tender (TAP) which was awarded to Chinese corporate interests in 2009. As the US government considers ways to revitalize the pipeline project and reconciles with the Chinese winning the Aynak contract, there are lessons to be learned in terms of the contract conditions on revenue sharing, provisions for transparency and environmental and social impacts of future mineral development. The role of transnational governance structures such as the Extractive Industries Transparency Initiative (which Afghanistan has joined as a candidate country) may provide a mechanism to assure implementation and accountability. We conclude with policy recommendations to move these projects forward most efficiently and equitably and to also use them as a means of effective development and regional cooperation.

KEYWORDS: *Afghanistan, minerals*

Introduction: Afghanistan Natural Resources and Development

The history of development of natural resources in Afghanistan has been fraught with international intrigue for several centuries. At the present time a future in Afghanistan without a continuation of multinational competition does not look likely, although the stakes may seem to have increased. A look back into early resource developments in the country may offer better comprehension of problems to avoid and best possible procedures for success and for the betterment of the beleaguered people of Afghanistan, as well as insights to reduce regional tensions. This paper is about the newly developing role of natural resources in helping heal the divided nation, although the potential for severe failure exists as well, and must be carefully guarded against lest that become an unfortunate alternate reality.

(photo by John Shroder, co-author, of the Hajigak iron deposit region)

The British Empire first initiated resource assessments in Afghanistan in the early nineteenth century as they searched through pioneering exploration and military escapades for countries to dominate as markets and trading partners (Elphinstone, 1815; Shroder, 1983). From the time of their first geological mapping and mineral-resource assessments in Afghanistan (Drummond, 1841; Hutton, 1846; Greisbach, 1881, 1887), and on into the twentieth century (Hayden, 1913; Fox, 1943; Gee and Seth, 1940), the British maintained a comprehensive interest in resources of Afghanistan. This was done while also improving their military intelligence on resources and topographic detail that would be needed in the event of any unrest in the machinations of their Great Game face-off against the Russian Empire, and as long as they could maintain their British Raj (rule) of the Indian subcontinent. A number of other nationalities (German, French, Russian) also looked at geology and resources in the country from time to time but nothing much seemed to come of their explorations.

Following the third Anglo-Afghan War in 1919, Afghanistan won its independence from diplomatic domination by the British and it was not long after that a Soviet publication on mineral "riches" first appeared (Obruchev, 1927), published by a man who later came to be revered as an early Russian 'father' of geologic studies. Nevertheless, in spite of early attempts by the government of Afghanistan to entice Americans to become engaged in resource discovery and extraction in the country (Anonymous, 1937; Clapp, 1939) , distance from market, economic concerns, and looming worries about World War II caused rejection of the overtures, much to the discomfiture of the government of Afghanistan. In spite of a number of discoveries by the American geologist Fox (1943) and others, post-war assessment by an American geographer (Michel, 1959) concluded shortsightedly that there were no useful resources in Afghanistan about which there should be any diplomatic concern.[1] With its attention on resources accordingly diverted elsewhere for decades to come, the US Department of State thus quite missed the resource ball when in the 1960s and 1970s, as many as ~250 Soviet geoscientists went to work mapping geology in the country while only one American geologist (co-author of this paper, John Shroder) was in the country, plus a few visiting geology attachés from the US Embassy and USGS seismic specialists who visited from time to time (Shroder, 1983; Shroder and Asifi, 1987; Shroder and Watrel, 1992). The resulting Soviet collaboration with the Afghanistan Geological Survey detailed a wide store of mineral resources in the country (Abdullah et al., 1980).

[1] Michel worked for the National Academy of Sciences – National Research Council on a grant from the Office of Naval Research, which association apparently lent a high degree of authority to his determination even though in hindsight his skill with detecting geological resources was rather limited.

The result of this Cold-War confrontation between the USA and the USSR in Afghanistan was that the neighboring USSR was able to fairly easily sidestep or ignore developing resources in Afghanistan until conditions were more to its liking as it consolidated its preeminent position in the country, ultimately leading to its invasion in 1979. With its already dominant roles in the Afghanistan Cartographic Institute, the Afghanistan Geological Survey, and many other ministries, the USSR was in a position in the early 1980s to completely take over all resource extraction in Afghanistan. Indeed they did pump much natural gas across the northern border of the Amu Darya into the USSR where the gauges to measure delivered volumes were located, and plans were made for development of other resources (Shroder, 1983; Shroder and Assifi, 1987; Shroder and Watrel, 1992). In addition, the Aynak copper deposit near Kabul was investigated in detail and a smelter scheduled for installation in the mid 1980s.

In an interesting sidelight of these times in the early 1980s, a Soviet-Afghan convoy from Aynak was assaulted by the Mujahideen and the captured documents that were sent to co-author Shroder by British sources (Shroder and Asifi, 1987) proved that the Aynak copper lode was one of the largest in the world, as proved out by a plethora of kilometer-deep boreholes that allowed the Soviets to sample the deposit extensively. The increasing resistance of the Afghan people and the Mujahideen, however, together with significant assistance from the USA to the resistance in the final cumulative battles of the Cold War, precluded significant further development of any resources at that time. Instead the Soviet withdrawal in defeat occurred in 1988-89, and the first Bush presidency initiated the closing of the US Embassy in Kabul a few years thereafter.

Subsequently, the willful ignorance and depredations of the Taliban began in the 1990s, and Osama bin Laden, who had learned enough of the Afghanistan culture during the Soviet-Afghan War to highjack its hospitality for the benefit of Al Qaeda, initiated the 9/11 horror against the USA. The subsequent invasion of Afghanistan by the USA and coalition troops in 2001 began a new phase in the history of Afghanistan, as many old resource projects were assessed again, and new ones were initiated (Shroder, 2003, 2004, 2007, 2009).

(map by CIA, 2007, WikiMedia Commons)

Interdependence and the demise of hegemony?

The military dominance of the United States in world affairs following the demise of the Soviet Union has become a geopolitical reality for the past 20 years. However, military dominance has not necessarily translated into a classical self-serving hegemonic influence that one might expect from a "hyperpower." As Amy Chua has argued in *Days of Empire* (2009), the United States' willingness to develop a more global system of trade and opportunities has defined it very differently from past powers. Thus America's exercise of power may be considered "posthegemonic," insofar that that it has also allowed the development of erstwhile enemies such as China and Japan in their global reach. Thus one can argue that without America's opening trade flows for Japanese and Chinese consumer goods the development of these Asian economies would not have been possible. Yet there are forces at play within the United States that detract from this more pluralistic vision of exercising power. Protectionism and an attempt to blithely support American corporate interests in battlegrounds such as Afghanistan are nevertheless a looming threat to this positive exercise of power.[2]

Furthermore, it can be argued that America's approach to globalization has been confined by particular rules of the game, which can also constrain development. Alice Amsden has made this claim in her work *Escape from Empire* (2008), where she argues that the imposition of particular structures on development investment in accordance

[2] There is a plethora of literature that attempts to link America's military intervention itself to such corporate interests such as Chomsky, 2004 or Klare, 2006

with American priorities has led to distorted development and an entrenchment of corrupt elites in developing countries. Countries that resisted these structures, such as the BRIC (Brazil, Russia, India and China) countries, have flourished more productively. Yet, the mere fact that the United States has continued to partner with all the "renegade" countries that did not exactly follow their prescribed model suggests that we may be moving beyond any hegemonic imperative.[3] As the case of Afghanistan's mineral investment shows, even where the US has direct military involvement in a country, it has allowed China and India to both gain influence, often to the chagrin of other allies like Pakistan.

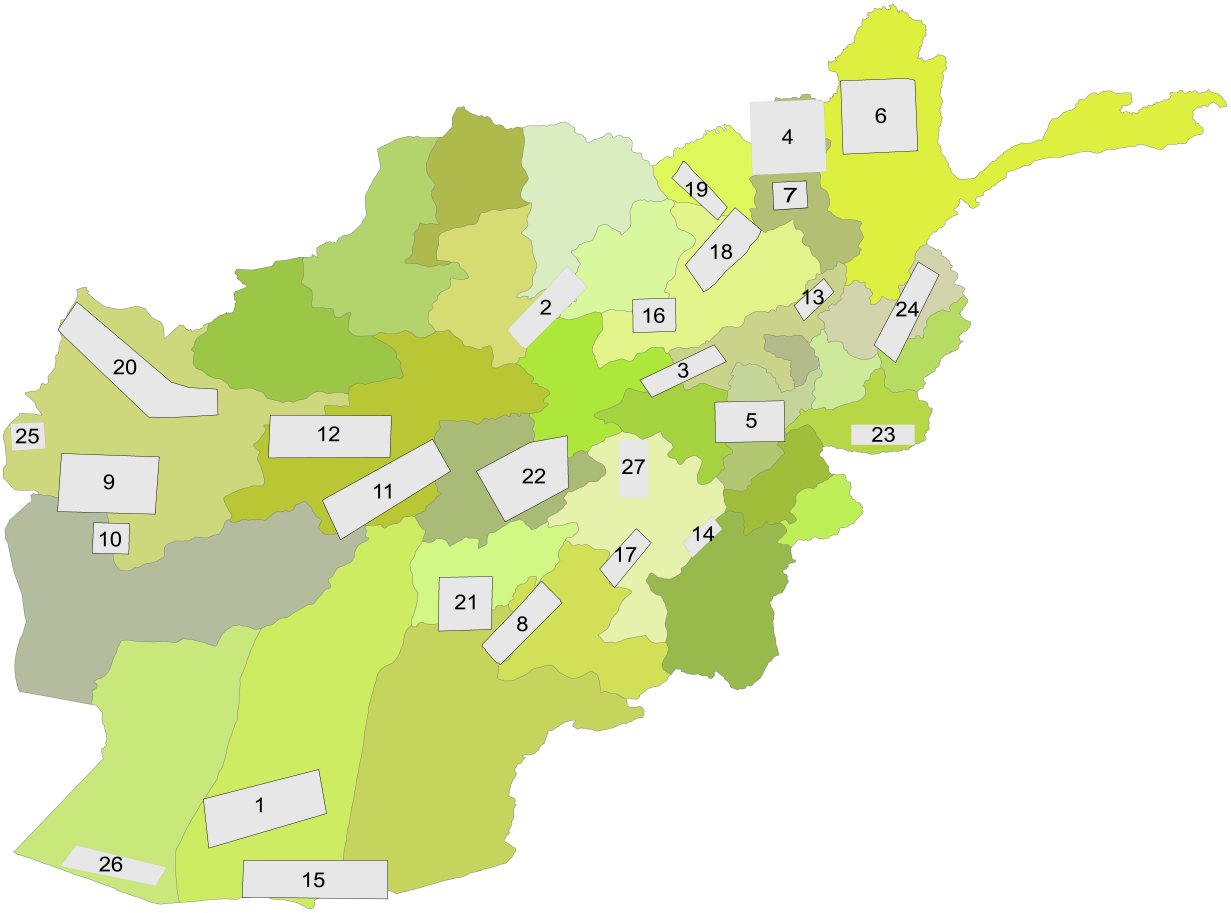
Parag Khanna (2008) has acknowledged the competition between the U.S., China and Europe for economic dominance in Asia, but concludes that the old world of hyperpower influence can no longer be functional even if one of these powers wanted to exercise that influence. China has emerged as a development agent with few strings attached for developing countries to partner with. This is clearly empowering for the developing world in terms of postcolonial shifts of power back to the colonized. However, given the lack of political freedoms in China, the power that the country can wield leaves some cause for concern. Amartya Sen's warning about decoupling development from freedom needs to be better appreciated: "when things go well, the protective power of democracy may be less missed, but dangers can lie around the corner."[4] Fortunately, the interconnections between all the major economic and military powers have now made unilateral misconduct more difficult. However, such interconnections and leverage is only useful when it is exercised effectively. Without suitable leadership and a willingness to engage with tenets of global performance on issues such as environmental and social indicators, there can be a tendency towards "negative cooperation."

Such cooperation can perpetuate the status quo in terms of exploitation of the less powerful by an acquiescence of nation states in the misconduct of one cooperative agent. An example of this phenomenon is the reluctance of the United States and the European Union to exercise more influence on China with regard to the deteriorating human rights situation in Myanmar (Burma).

Twenty years ago Robert Keohane presciently argued in his classic work *After Hegemony,* that cooperation was indeed possible in a posthegemonic world. Yet this cooperation can also be at an elite level to empower each other's interests at the expense of a broader global agenda. It was conceivable for regimes and institutions to emerge that bridged the polarization between Idealist and Realist notions of world affairs. Even if their original formation was in the context of regional consolidation of power to act as a foil against the perception of American "hyperpower," institutions are

[3] Such a line of argumentation that suggests a voluntary but begrudging sharing of authority by the United States to other world players is also presented by Fareed Zakaria in the *Post-American World* (2009)
[4] Sen, 1999, p. 42

reinventing themselves to benefit from post-hegemonic cooperation. An important example of such an institution that has great relevance to the struggle for mineral resources in Afghanistan is the Shanghai Cooperation Organization. Originally conceived as a means of fostering demilitarization between the borders of the former Soviet Republics and China, the organization has evolved to have broader economic and security goals. Afghanistan has been allowed to attend some of the recent meetings of the organization along with strategic neighbors Pakistan, Iran and India. Russia and China are the major players in SCO and it remains to be seen whether the institution will move beyond aspirations of regional hegemony. Mineral development in Afghanistan as exemplified in the following two case analyses may provide an important opportunity to test the validity of the post-hegemonic hypothesis for the SCO countries as well as the United States.



Map of Afghanistan showing provincial boundaries with numbered mineral resource target areas as defined by the U.S. Geological Survey – Afghanistan Geological Survey Joint Mineral Resource Assessment Team (2010), as well as information from the U.S. Department of Defense Task Force for Business and Stability Operations (TFBSO) (2011)

TFBSO Project Areas – 2010-2011

1. Khanneshin carbonatite
2. Balkhab copper
3. Hajigak iron
4. Takhar placer gold
5. Anyak copper
6. Badakshan load gold
7. Takhar evaporite
8. Kundalyan gold and copper
9. Dusar-Shaida copper and tin
10. Tourmaline tin
11. Karnak-Kanjar mercury
12. Nalbandon lead and zinc
13. Panshir Valley emerald
14. Katawaz gold
15. Chagai Hills travertine, copper and gold
16. Baghlan clay and gypsum
17. Zarkashan gold and copper
18. Dudkash industrial minerals
19. Kunduz celestite
20. Herat barite and limestone
21. Bakhud fluorite
22. Uruzgan tin and tungsten
23. Ghunday Achin magnesite and talc
24. Nuristan pegmatites
25. Namaksar lithium salts
26. Godzareh (Gaudi Zireh) lithium salts
27. Dashti Nawar lithium salts

Case Analyses

Afghan geology and geography are both consequential in terms of mineral development prospects (TFBSO, 2011), with reliable estimations of $1-3 trillion of extractable resources. Extraction potential remains strong for geological reasons, while the country's geographic location, between the rich oil and gas fields of Central and Western Asia and the high demand centers of India and China, makes it a vital transit country for energy commerce. We provide a comparison in this segment of projects in both these arenas that are being considered. Both have a tortured history and continue to be a source of some concern in terms of physical security, environmental and social impacts and their contribution to economic development. There are lessons from the historical trajectory of each that can be applied more broadly to Afghan mineral development policy in a post-hegemonic context of foreign assistance.

Afghanistan and natural gas transit[5]

The ambivalence with which the United States has approached Central Asian natural resources as a compass for policy direction further confounded the prospects for pipeline development. The U.S. had two primary motives for involvement in these ventures: to hinder international commerce with Iran, which it considered a rogue state, and to help individual U.S. oil companies find alternative sources of investment. Afghanistan was potentially considered a foil against Shia Iran since the rise of a Sunni militia, The Taliban during the late nineteen nineties. In his notable book on the rise of

[5] This section of the paper was research while the primary author, Saleem Ali, was on sabbatical at the Brookings Doha Center, 2009.

the Taliban, Ahmed Rashid has painstakingly documented the ambivalence of U.S. policy in this context.

Initially, when the Taliban captured Kabul in September 1996, Chris Teggert, an executive for the U.S. oil firm, Unocal told wire agencies that the long-awaited gas pipeline project[6] from Turkmenistan to Pakistan would now be easier to implement.[7] The company was admonished by various interests within the United States for this approach of negotiating with the Taliban and quickly retracted the statement. Even the U.S. State spokesman Glyn Davies initially also stated that they found "nothing objectionable" in the steps taken by the Taliban to impose Islamic Shariah describing them as "anti-modern" rather than "anti-Western." However, the U.S. embassy in Islamabad, which was far more familiar with the dangers of such an endorsement, quickly contacted Washington to retract these statements. Women's rights activists also further lobbied against U.S. involvement with the Taliban but the full impact of such activism was not felt until at least two years later.

In the meantime, the Taliban continued to pursue their negotiations on the Turkmenistan pipeline with Unocal as well as the Argentine company Bridas that had initially courted Turkmen gas (Coll, 2004). Two separate delegations of Taliban visited Argentina and the United States simultaneously in February 1997.[8] The Taliban did not make any particular commitment in these visits and the delegations returned home via Saudi Arabia, where they also met with Saudi intelligence chief Prince Turki Al-Faisal. Saudi Arabia had initially supported the Taliban as well as a foil against Iran but the growing strength of Al-Qaeda within the country began to make this tenuous alliance weaker. Pakistan continued to press forward with the TAP project, which was their highest priority. In October 1997, a consortium called the Central Asia Gas Pipeline Ltd. (Cent-Gas) was established with shares of 46.5% for Unocal(US); 15% for Delta Oil(Saudi Arabia); 7% for Turkmenistan; 6.5% for Japan's Itochu Oil; 6.5% for Indonesia Petroleum (Inpex); 5% for Hyundai Corporation of Korea and 3.5% for Pakistan-based Crescent Group.

However, the U.S. State department became increasingly concerned about the draconian reign of the Taliban, following reports of human rights abuses in their domain. The final blow to the project came in August 1998 when the U.S. embassies in Kenya

[6] (TAP) Trans-Afghanistan pipeline, or Turkmenistan-Afghanistan-Pakistan pipeline (TAPI is extension to India)

[7] The Afghanistan Studies Center at the University of Nebraska at Omaha, which coauthor Shroder helped to found in 1972, and its Director, Dean Thomas Gouttierre, were hired by Unocal to establish a job training program in Kandahar that would teach Afghans the technical skills necessary to build a pipeline.

[8] Including one group being supervised by State Department handlers, who watched and listened to a (translated) lecture by coauthor Shroder on the use of remote sensing/GIS technologies to develop the rich natural resources of the country.

were bombed and linkages of the bombers to Al-Qaeda camps in Afghanistan were established. The Clinton administration commenced air strikes in Afghanistan soon thereafter and discouraged Unocal from any further engagement with the Taliban.

The prospects for the TAP pipeline were renewed briefly when the Bush administration came to power in 2000. In general, Republicans have been more sympathetic to business interests and the Bush family had particularly good connections in the oil sector. As documented by French journalists Jean-Charles Brisard and Guillaume Dasquie, the Bush administration in 2000 and early 2001 started to engage the Taliban on economic terms. Funds were provided for the opium-eradication program while discussions continued on the TAP project. Negotiations finally broke down in August 2001, partly because of the reluctance of the Taliban to bargain on the future of Osama Bin Laden in exchange for economic cooperation.[9] Marty Miller, Unocal's deputy to Afghanistan for the project, would remember the entire effort as "the black hole" of his career.[10]

The interactions between the Bush administration and the Taliban suggest some interesting aspects of how natural resource interests can potentially lead to cooperative behavior not only at a regional level but at a larger international level. The willingness of two conservative militaristic regimes with very different worldviews to converge on natural resources as a means of diplomacy supports the idea of "rational regionalism." However, at the same time there is a darker side to such potential cooperation that can be seen as cooptation of the security agenda by extremists for economic expediency. Such an argument is frequently used also by human rights activists to criticize US support of regimes in countries such as Saudi Arabia and China whose human rights abuses and lack of democratic progress is tolerated on account of stability for energy security or economic trade.

There is now clearly a US preference towards the TAP project as compared to any project involving Iran, since it would enhance Afghan development and hasten the chances of a U.S. troop withdrawal while also isolating the Iranian regime. It would also reduce Russia's dominance on the gas sector's transit across their territory. In a public address at the Johns Hopkins University, Richard Boucher, former U.S. Assistant Secretary of State for South and Central Asian Affairs, said in September 2007: "One of our goals is to stabilize Afghanistan, so it can become a conduit and a hub between South and Central Asia so that energy can flow to the south…and so that the countries of Central Asia are no longer bottled up between two enormous powers of China and

[9] Details of this account from an interview conducted by Nina Burleigh with Jean-Charles Brisard and Guillaume Dasquie on Salon.com, February 8, 2002: "Bush, Oil and the Taliban."

[10] Quoted in LeVine, *The Oil and the Glory: The Pursuit of Empire and Fortune on the Caspian Sea*. Random House (New York: Random House 2007), p. 310

Russia, but rather they have outlets to the south as well as to the north and the east and the west."[11]

Initially, the TAP project would have tapped into >2.83 trillion cubic meters (TCM) of natural gas reserves at Turkmenistan's huge Dauletabad – Donmez field and deliver it across Afghanistan to both Pakistan and, later, India. The pipeline would carry up to 20 billion cubic meters of gas a year, which would generate $100-300 million per year in transit fees for Afghanistan and create thousands of jobs.[12] It is important to note that the Soviet Union had constructed several pipelines in Afghanistan, the first in 1967 to exploit the natural gas of Shibarghan and send it north across the Amu Darya River into the pipelines of Turkmenistan and later during the Soviet – Afghanistan War, the Soviets constructed a small diameter pipeline south to the Bagram military base to provide fuel for their troops. These pipelines are now in disrepair and disuse for a number of years.

For an additional US$500 million TAP could be extended to Fazilka on the Pakistan-India border and hence provide gas to India as well. The pipeline could also be expanded further to connect fields in Central Asia to Gwadar, turning Pakistan's new port into one of the world's most important energy hubs. From an energy security standpoint TAP could provide Pakistan with 3,350 million meters cubic feet per day (mm cfpd) of gas, more than the 2,230 mm cfpd the competing project from Iran (IPI).

In late April 2009, the TAP project got a positive boost when Turkmenistan officially provided gas reserves certification from the Yasrak field instead of the Daulatabad field. The certification claims a potential reserve of four to 14 trillion cubic feet of gas. A new route for the pipeline has now been proposed which would only involve a small portion of Afghanistan's territory and enter Balochistan near Gwadar to avoid conflict in southwestern Afghanistan. In essence this route would merge the TAP and IPI (Iran-Pakistan-India) pipeline projects within Pakistan. Turkmenistan would provide 3.2 billion cubic feet gas to Afghanistan and Pakistan and India. Afghanistan would receive $1 per MMBTU as transit fees under the new proposal.[13]

The biggest challenge to the viability of the TAP project remains the ongoing conflict in Afghanistan. While pipelines have existed in conflict zones such as Eastern Turkey, the level of armed combat in Afghanistan remains at a critical level and pipeline construction over vast expanses of territory would require a far greater security. On the other hand, mining projects within a confined space are far easier to secure and

[11] Quoted in John Foster, "A pipeline through a troubled land: Afghanistan, Canada and the new great energy game." Canadian Centre for Policy Alternatives, Vol. 3, No. 1, June 19, 2008.
[12] John Shroder, "Afghanistan's development and functionality: renewing a collapsed state," *Geojournal* 70, 2008:91-107
[13] Khalid Mustafa, "Turkmenistan to supply gas from Yasrak field," *The News International* (Islamabad), April 29, 2009

manage even in times of conflict. Hence the foreign investment in solid mineral projects remains far more active than the pipeline prospects at this stage. Of particular note is the copper deposit at Aynak whose tender negotiation and outcome provides important insights regarding the role of regional powers in the development trajectory of this war-torn nation.

(photo near Ghazni, by US Department of State, 2010. WikiMedia Commons)

The Anyak Tender: Terms of Oriental Endearment

Following the invasion of Afghanistan by the USA in the fall of 2001, the U.S. Geological Survey (USGS) was tasked with the job of investigating the geology and resources of Afghanistan, and a chief problem was to access and translate all of the old Soviet geology documents, maps and drill-core data, which was accomplished by striking a deal in Moscow (Orris and Bliss, 2002). In addition to this work, when the USGS-requested budget of $75 million was reduced to $5 million by the White House in 2002 (Shroder, 2003, 2004, 2007), the USGS sought help from one of their coalition partners. Consequently the British Geological Survey (BGS) was brought in to assist, and the Aynak copper prospect 35 km south of Kabul was its chief task. With access to the extensive Soviet-era translations and data (150 km-deep boreholes, 70 trenches, nine adits), BGS was able to construct a first rate, three-dimensional, Vulcan™ computer

model of the Aynak ore body underground, as well as to build a modern picture of the way the ore had been emplaced.

The original resource estimations at Aynak made by the Soviet geologists indicated several large copper ore bodies, with a number of smaller ones extending a total of some 4 km m along strike on the ground surface and extending approximately 2.5 km m down-dip underground, with an overall thickness of about 210 m. This defines an ore body of some 240 M tons at a grade of ~2.3% Cu, which is equivalent to about 13 million tons of the metal (Shalizi, 2007), although Afghanistan Mining Minister Ibrahim Adel estimated that the deposit could go to 20 million tons. This is a substantial deposit that could clearly affect world market in copper, a fact that had been recognized early on by the World Bank and the United Nations (ESCAP, 1995). Furthermore, Aynak is part of a SW – NE trending copper zone that extends from the Saindak copper mine in western Balochistan Province, Pakistan, all along through a mineralized zone running past Kabul. Others have estimated as much as $88 billion of metal is in the ground in this region, which augers exceptionally well for Afghanistan, providing the multinational and personal greed that has been seen running rampant is not allowed to succeed in destroying the opportunity to make things better.

By 2005 new mining law had been prepared by the Ministry of Mines in Afghanistan through assistance from the World Bank and the BGS in order to facilitate effective and efficient management of an emerging mining industry that was expected to generate at least $300 million a year in revenue.[14] In late 2006 bidding tenders were let for the Aynak deposit, with considerable interest and bids from companies in Australia, Canada, China, India, Kazakhstan, Russia and USA. Bids came in from such companies as the Strikeforce part of Russia's Basic Elements Group, the London-based Kazakhmys Consortium, Hunter Dickinson of Canada, and the Phelps Dodge Co. of the USA.

The China Metallurgical Group (MCC), however, won the Aynak bid, participating also with several other companies in their consortium. These include Jiangxi Copper, the largest copper producer in China, as well as the Zijin Mining Group, which is the largest gold producer in China. MCC is known to have international holdings that are worth only a little over a billion dollars, but with the resources of the Chinese state behind it as well, its financial situation should not be underestimated (Metz, 2007) and its capabilities would seem to be quite large. Thus the Chinese company is reported to be investing $2.9 billion into the project, which has a number of ancillary additions in a massive collateral development scheme that seem to require the backing of the Chinese government. Such additional elements in the successful bid included provision of an onsite copper smelter, a coal mine for power production, a 400-megawatt, coal-fired power plant that would also augment the Kabul electric supply, a ground-water

[14] Economic Future of Afghanistan Grounded In Copper, *Science Daily,* March 20, 2007

system, roads, homes, schools, hospitals, the building of a freight railroad from western China, through Tajikistan to Afghanistan and Pakistan, help for Kabul University, and thousands of new jobs (Synovitz, 2007). Such additions to the bid were beyond the capabilities of the competitor companies, with the result that the MCC bid was successful. Additional reports by people directly involved in the bidding process (Yaeger, 2009), however, also indicate that there was "a perfect storm of tender events," in which the Minister of Mines, Ibrahim Adel, was able to manipulate an exceptionally flawed bidding process to the advantage of MCC. Partlow (2009) also reported that Adel had accepted a $30 million dollar bribe given to him in about December of 2007 in Dubai to ensure the success of the MCC bid which led to his subsequent imprisonment.

Smelting of any ore is commonly done as close as possible to the mine to minimize transportation costs of what becomes useless slag left over after processing. In cases, however, where the ore is a rich enough tenor or construction of the smelter is too expensive, then longer transport to smelting may be tolerable. Generally lower grade copper ores such as Aynak may thus need to be smelted in Afghanistan, whereas higher grade Hajigak iron might be transported as far as the Karachi steel mills in Pakistan, although a new effort is underway in Afghanistan to produce steel close to Kabul using local chromite.[15] Ore smelting also requires considerable energy to melt the ore to metal; energy sources can be varied, of course, but in Afghanistan the use of more easily available coal may trump other energy sources such as hydroelectricity that is yet only weakly developed. The plentiful coal in northern Afghanistan could be brought south to Aynak by truck or new rail for smelting, while the return journey north would be of refined metal for delivery to market. Plentiful coking is also available in the north. Alternatively, new coal resources might be developed in the Katawaz Basin along the border with Pakistan to the south, where such resources are expected to be found (SanFilipo, 2005), but this would presumably not involve favorable round-trip transport economics unless combined in some fashion with delivery of Hajigak iron ore into Pakistan. However, until Pakistan's energy crisis is resolved there is little hope for further smelting in the country.

It is important to note that China exerts considerable influence in Pakistan and has also invested widely in infrastructure development in Balochistan. The existing Saindak copper-gold mine in the Chaghai district of Balochistan, bordering Iran and Afghanistan, is also operated by the Chinese Metallurgical Construction Corporation (MCC). The Reko Diq copper project nearby which was initially being offered to a joint-venture between a Chinese company and a Canadian company may also end up falling under Chinese management following negotiations with the Baloch provincial government in

[15] Political pressure in Kabul is rising to force iron/steel smelting to remain inside Afghanistan.

2010.[16] Despite the strong separatist movement in the province and the ongoing rift between the provincial and federal government, there is an opportunity for engagement of China in positive development across borders. Notwithstanding the attacks on Chinese engineers working in Gwadar and the withdrawal of China from the oil refinery project in Gwadar, there is a recognition by Baloch separatists of the strategic importance of China. In one communiqué, following the Chinese decision to withdraw, a Baloch separatist publication stated: "Balochistan needs China as it's one of the permanent members of UN Security Council. China needs Balochistan in future as its international competitiveness depends on steady landline supply of fuel from Balochistani refineries and storage tanks."[17]

China's role as a regional power broker and potential mediator in conflict resolution remains strong. The opportunities accorded by Chinese involvement in the Aynak project, their investment in neighboring Iran and their leadership role in the Shanghai Cooperation Organization, deserves greater attention by the United States and Europe. The initial negative reaction from the Aynak tender as well as the outcome from the United States needs to be reevaluated. The terms of the contract according to most international development experts familiar with such contracts are very favorable to Afghanistan in terms of financial arrangements. While there may be some concerns about post-facto environmental and social performance, these can be assuaged by engagement with the Afghan government in monitoring and enforcement of standards. The prospect of Afghanistan being compliant with international efforts at accountability and transparency, such as the Extractive Industries Transparency Initiative[18] will also further strengthen the chances of positive enforcement and monitoring that can strengthen the "social contract" between corporations, foreign investors and the community. The confluence of complementary international interests in mineral development thus has the potential to build trust rather than increasing tensions.

[16] Maha Atal, "China's Pakistan Corridor." *Forbes Asia,* May 10, 2010. The author suggests that the Chinese have astutely negotiated with Baloch tribesman and offered them senior management positions within various projects.

[17] "Victory for Balochistan" www.friendsofbalochistan.com (Web post on August 14, 2009)

[18] Afghanistan became an EITI Candidate country 10 February 2010. It has until 9 February 2012 to undergo EITI Validation. Details of the process for validation can be found at: http://www.eitransparency.org

(photo of the Helmand, by US DOD, 2004. WikiMedia Commons)

Previews of Coming Attractions

The pending Hajigak tender offer and the international machinations afoot to gain access to the rich prospects such as the ores of rare earth elements (REE), niobium (Nb), and lithium (Li), in Afghanistan bear watching as attempts are made to gain access to these materials that are so vital to high technology and modern communications (TFBSO, 2011; Becatoros, 2011; Najafizada, 2011). The extinct carbonatite volcano of Kohi Khanneshin in southern Helmand Province is already reliably estimated at a mined value production of some $89 billion, although more precise data from two new field sampling efforts by the U.S. Geological Survey will not be available until fall 2011 to better enable tender offerings. Similarly among a number of other rich resource possibilities in Afghanistan, lithium salts in five dry lake basins scattered throughout the country are estimated at being worth over $60 billion when extracted.

To overcome the myriad problems faced by the Afghanistan Ministry of Mines (AMOM) (incompetent and corrupt officials, lack of mining regulations, untrained inspectorate department, antiquated and corrupt cadastral survey of land ownerships, absence of effective environmental regulations or post-mining restoration, lack of effective communication with tribal populations affected by mining), Afghanistan has hired SRK Consulting to undertake the facilitation of this project. In addition, the international law firm of Mayer Brown has been retained, whose core business area is the mining industry, and who will provide, with help from the Canadian legal firm of Heenan Blaikie, day-to-day advice on legal, financial, and operational issues faced by mineral producers, governments, and mineral-industry financiers (Keil, 2011). With the credibility, transparency, and accountability of such partners, the resource extraction industries in Afghanistan have a real chance of success, although the struggle to overcome the greedy and mendacious bureaucracy will be monumental.

Policy Recommendations and Conclusion

Moving beyond the trust deficit that theories of hegemonic influence have provided during the past several decades will take policy leadership. No doubt, during the Cold War such theories gained plausible currency and were empirically evident. However, there has been a major shift in the role of the United States and China as two major global powers, which should lead us to challenge old assumptions about hegemony. Other regional states that have recently been considered pariahs, such as Iran, may also be brought into the specter of regional cooperation. However, such policy shifts must also be calibrated with changes in corporate behavior donor assistance and monitoring provisions to ensure environmental and other compliance assurance. Given the historical and contemporary analysis of geopolitics surrounding Afghanistan's mineral development, the international community should consider the following four policy recommendations in this regard:

a) The Aynak contract's terms should be considered as a benchmark for revenue sharing, collateral development along with the ore extraction, and accountability, but international financial institutions should ensure that the terms of the agreement are kept as the project develops. The World Bank's program of providing assistance in monitoring this process should be supported by the United States, Japan and the European Union.

b) The United States should encourage the development of the TAP pipeline by involving the SCO countries in partnership so Russia and China do not see this as an effort to undermine Russian influence in Turkmenistan. Extending the project to India (TAPI pipeline) would also provide an additional opportunity for Indo-Pak rapprochement.

c) Afghanistan's accession to the EITI should be expedited to ensure that before the Aynak and TAPI projects commence, protocols for revenue transparency can be implemented. Donors should provide targeted assistance to allow for such institutional capacity to develop.

d) China's role in the Aynak project, as well as the copper-gold projects in neighboring Pakistan, should be supported by the international community so long as the terms of reference remain transparent and there is ongoing regional engagement. Chinese involvement would also help in cementing Pakistani political support for multinational donor investment in Afghanistan and potentially open opportunities for their role in regional conflict resolution.

e) The truly vast mineral wealth of Afghanistan is so potentially "neo-great-game-changing" through potential revenue production and development as to overcome the war with the Taliban and its safe havens in Pakistan. The White House should commit to a major development effort while restraining the Congressionally generated wrangling with the Department of Defense over a handover to USAID (Chandrasekaran, 2011)[19]

At a speech in 1997, Strobe Talbot, the U.S. Deputy Secretary of State, and currently the President of the Brookings Institution stated that while it has been "fashionable to proclaim or at least to predict, a replay of the 'Great Game' in the Caucasus and Central Asia…our goal is to avoid and to actively discourage that atavistic outcome. The Great Game, which starred Kipling's Kim and Fraser's Flashman, was very much of the zero-sum variety. What we want to help bring about is just the opposite, we want to see all responsible players in the Caucasus and Central Asia be winners." [20] Mr. Talbot's statement from over a decade ago reflects the kind of rational regionalism that has been argued for in this paper. While such sentiments have not been realized in the context of South and Central Asia, the overall potential for pipelines as a source of conflict resolution remains promising and deserves greater attention by scholars of international relations and policy-makers alike.

[19] Paul A. Brinkley, Deputy Undersecretary of Defense and Director of the Task Force for Business and Stability Operations in the Pentagon, has decided to quit on June 30, 2010 because his effective task force, which sought to help Afghanistan exploit its mineral wealth and expand private-sector employment has been impacted by resignations led Congressional demand that its operations be folded into the US Agency for International Development.

[20] Strobe Talbott, speech at the School of Advanced International Studies, Johns Hopkins University, Washington, DC, July 1997.

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