THE THREE GORGES DAM

AND THE INFLUENCE OF GLOBALIZATION IN CENTRAL CHINA

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In the region of central China, one of the largest engineering endeavors in the world is under construction. The parameters of the Three Gorges Dam exceed those of the current largest dam in the world, the Itaipu in Brazil. Upon its completion, the dam will measure 185 meters high and 2,309 meters wide, and create a 600-kilometer long reservoir along the Yangtze valley north of the dam site (Brouwer 36). The size of this behemoth measures up squarely with the sheer energy required to drive the juggernaut of globalization in central China. This region, like much of China, lacks the electrical power to develop at the pace of the globalized western world. There exists no magic Lance Armstrong on a bicycle in some dark basement room in every house to provide every family with electrical power. The precarious situation presented by creating a functional hydroelectric project offers many potential benefits, like increased energy production in an energy-starved country, as well as numerous drawbacks, such as the displacement of many people from their homes. The influence of environmental factors such as the destruction of populations, both human and animal, on the globalizing world, and examples derived from this unique location in China, abound in a plethora of material on the subject of the Three Gorges Dam. The range of material spans a wide range of positions: some, like Dai Qing in the essay "The Three Gorges Project: A Symbol of Uncontrolled Development in the Late Twentieth Century," Shi Fu in "A Profile of the Dams in China," and a chapter entitled "The River Changed Forever?" from the book Yangtze by Lyman P. Van Slyke, oppose the dam. Others, such as the engineers Ned Paschke and Greg Brouwer, support the dam on behalf of the American Society of Civil Engineers. To assess the information provided within these works, the concepts of "obfuscation" from Jerry Mander's "The Dark Side of Globalization," and "creative destruction" from Thomas Friedman's The Lexus and The Olive Tree provide an appropriate lens through which to view the Three Gorges Dam in terms of globalization, and help to reveal its environmental-political complexities. Thus, the forces of globalization, operating via the processes of "creative destruction" and "obfuscation," will push central China to the completion of the Three Gorges Dam,

regardless of whether the dam constitutes more of a risk than advancement to engineering, the surrounding environment, or its people.

In order to assess the limits and risks presented by the Three Gorges Dam and its correlation with globalization, an analytical frame composed of "obfuscation" and "creative destruction" constitutes an appropriate tool with which to interpret the debate on the dam. "Obfuscation," as defined by Mander, is an operation of the media. In reporting global disasters, Mander argues,

one would expect massive efforts by media and educational institutions to explore all the dimensions of [globalization], yet when the mass media report on some aspect of globalization, rarely does the story express the connections between the specific crisis it describes and the root causes in the globalization process itself. (2-3)

Mander emphasizes how the media reports many important global events, such as oil spills and other environmental tragedies, but fails to connect them to "global economic expansion," with "[0]bfuscation [as] the net result" (3). Mander uses the glaring contradiction between the media's ability to enlighten the public and its apparent track record of not doing so as an example of "obfuscation." According to Mander, the mass media deceives the public by intentionally not utilizing their knowledge about the interconnectedness of the globally important events, wasting the opportunity it possesses to explain the realities of globalization to the general public, and succumbing to the economic pressures of globalization. A second concept for the analytical frame of this paper comes from the term "creative destruction" which represents "the perpetual cycle of destroying the old and less efficient product or service and replacing it with new, more efficient ones" (Friedman 11). The two contradictory words, "creative" and "destruction" imply an ultimately beneficial cycle that will eventually reward the populace for the dismantling of any previously established process in order to conform with the pace of globalization. Any action from increasing the volume of production with machines to new government policies that ease the restrictions on international business can illustrate this cycle. Friedman's concept of "creative destruction" implies a positive outlook on globalization while admitting its present problems. Together, the frame of "obfuscation" and "creative destruction" allow the reader to view the Three Gorges Dam in terms of the driving forces of globalization, obfuscation and creative destruction surrounding it.

Naturally, the force of obfuscation alone cannot construct or prevent the construction of the world's largest dam. Writers such as Brouwer or Qing can produce volumes of material either supporting or challenging the Three Gorges Dam as a legitimate undertaking; however, in the end the power to construct the dam lies with the Chinese government. Thus, the force of creative destruction, due to its drive to replace the old and possibly accrue benefits in the future, concentrates itself around governments, which comprise of entities that possess a large amount of influence over the physical resources of a region. As in any hydroelectric project, the main goal stated by the Chinese government behind the construction of the Three Gorges Dam is to help the people of central China by producing an enormous amount of electricity, 17,680 Megawatts (Qing 6). In addition to power, the dam would provide the region with flood control and improve the navigability of the upper stretches of the Yangtze by increasing the depth of the river, as stated by both its supporters and critics. This would alleviate problems that have plagued the people of central China for years, avoiding tragedies such as the "'30-year flood' in the summer of 1931 [which] inundated 8.5 million acres of farmland and cost 150,000 lives; millions were left homeless" (Van Slyke 183). Thus, through the eyes of Van Slyke, one can imagine that a dam that would prevent catastrophic floods such as "the '30-year' flood" will certainly ease the suffering of the people of China. The government itself calls the Three Gorges Dam, "a crucial mechanism for navigation and flood control" (Brouwer 37). In this instance, creative destruction, acting through the strong arm of the Chinese government, strives to erect the dam, despite the subsequent loss of riverside communities to the reservoir it creates, in order to prevent the continued natural and unproductive destruction of riverside communities during floods. Likewise, Van Slyke argues that the dam will spur the riverside economy: "Hunan and Hupei, are strongly in favor since they appear to be the principal beneficiaries [of the produced power, and] . . . Chungking municipality favors the dam but only if it raises water levels sufficiently so that 10,000-ton barges can reach the city" (187). The speculative effects of the improved commerce have already taken effect, as the city of Chongging changes for the better in anticipation of the project with, "[mazes] of small shops, brand new towers, 10-story gray concrete apartment buildings, busy streets . . . and people everywhere" (Paschke 31). Aside from the problems within the Szechwan province, which Van Slyke notes include the management of relocated individuals and little benefit from the power production of the dam, the Three

Gorges Dam helps carry goods through the once turbulent waters and bring energy to where it is needed. Therefore, in terms of the physical human environment and economy, creative destruction, which entices the Chinese government with hopes of erecting the dam, generally intends to help the people of central China.

However, focusing on the rewards from the construction of the Three Gorges Dam does not fully capture creative destruction, nor do the rewards mandate obfuscation as a complement to creative destruction. There exists another variant of creative destruction: the creative destruction of people, which few Chinese would accept willingly and therefore the government needs obfuscation. To cite an instance of this type of creative destruction, Shi Fu reveal this dangerous side to the productive hand of globalization by providing a stirring account of the history of dams in China, and the possible future of the Three Gorges Dam. By 1973, 40 percent or 4,501 of the 10,000 Chinese reservoirs with capacities between 10,000 and one million cubic meters were found to have been built below project specifications and unable to control floods effectively. Even more dams had problems relating to the geology of the dam site, and to sedimentation. Most serious, however, were the numerous dam collapses. By 1980, 2,976 dams had collapsed, including the Shimatan and Banqiao dams: "On average China witnessed 110 collapses per year, with the worst year being 1973, when 554 dams collapsed. The official death toll (not including the Banqiao and Shimatan collapses*) resulting from dam failures came to 9,937... By 1981, the number of formally recognized dam collapses had risen to 3,200, or roughly 3.7 percent of all dams (Fu 22-23). Fu then lists the estimated "true" death toll for the Shimatan and Banqiao dams as 230,000 (Fu 23). The numbers presented in the article strongly oppose any benefits derived from the Three Gorges Dam. Furthermore, their magnitude, even at the lowest listed "official" death toll of 9,937, make the power and impetus of creative destruction evident. This sacrifice of life shows that progress, in terms of economy, power production, and bringing China on pace with the globalized world, outweighs the life of Chinese citizens. In the case of the Three Gorges Dam, the creative destruction of aquatic life with the filling of the 600-kilometer long reservoir will occur inevitably, while the high risk of killing many innocent Chinese in the case of an unforeseen accident will come to loom from behind the 175-meter high dam. Even engineers such as Ned Paschke, who writes for the journal Leadership and Management in Engineering, express concern about the "safety" of the dam in and area notorious for frequent earthquakes (31). The disparity of death toll

estimates, above, embodies obfuscation. From 9,937 to 230,000, Fu and the government distinguish between different death tolls, each calling their own "official" or "true" (Fu 22-23). Although the inconsistencies in statistics exposed by analyzing them through the concept of obfuscation detract from the internal validity of both Fu and the Chinese government, Fu mitigates the possible advantages seen within the completion of the dam by revealing the most valuable commodity at stake downriver from the towering walls of the Three Gorges Dam: human life. The importance of increasing navigation along the Yangtze in the pursuit of a measly yen fades when the possibility exists that the Three Gorges Dam could eliminate downstream settlements such as Yichang, Jiangling, and Shashi, harming hundreds of thousands of innocent Chinese citizens. Thus, obfuscation by the Chinese government supporting the Three Gorges Dam, along with opposing obfuscation against the construction of the dam, becomes a necessity in order to muddy the information al waters around the dam amidst which construction can proceed freely.

In the situation of the Three Gorges Dam, the effects of widespread failures of these past dams underscore the ecological consequences of dam building in China. Although the many dam failures cited above occurred well before the onset of globalization, they provide a justification to question the idea of perpetual progress, or creative destruction, where sacrifices such as the death of aquatic animals need to occur in order to achieve the goal of heightened energy production. The past dams have yielded many prodigious problems, and with these failures, the Chinese government felt the need to push forward and propagate the cycle of creative destruction in order to conform with the concept of destroying, albeit unwillingly, the old and replacing it with the new and hopefully, more efficient. Fu writes, "In 1958, more than 100 dams were built in Henan; by 1966 half of them had collapsed" (Fu 23). Thus, when faced with a lackluster past, obfuscation must accompany the construction of such a behemoth as the Three Gorges Dam in order to divert attention from precedent. In one case, the government states that, "protection efforts. . . involving land animals and the rescuing of flooded species both animals and plants in the area, will be finished by 2010" (www.china-embassy.org). Despite the noble intentions of the Chinese government, engineers plan to complete the dam by 2009 (Brouwer 36). Consequently, the lag between these two events will inescapably destroy much of the wildlife present in the 600-kilometer stretch of valley flooded by the reservoir. The obfuscation employed by the Chinese government confuses the

opinion of the Chinese citizens on the effects of the Three Gorges Dam, giving the government more leeway with its construction. In another example, as Oing writes, "when the Three Gorges project was awaiting approval from the NPC [National People's Congress], the national press was mobilized to write only positive reports about it. Meanwhile, even before the NPC convened for its vote, the chair made it clear that its approval was not in question. During the course of the session itself, the microphones on the floor of the NPC were turned off to prevent the dam's opponents among the delegates from voicing their views and generating collective opposition" (Qing 14). Here, the Chinese government obfuscates by concealing the debate from the people of China. Once again, the government conveniently correlates the dam with the positive consequences of a profitable electrical energy market and forcefully omits the awareness of the environmental and social consequences of the Three Gorges Dam. Although it facilitates creative destruction, this overt obfuscation from the side of the government, a characteristic of communist regimes, withholds vital information from the Chinese public and creates and intellectually stratified society that risks the futures of the unknowing public. Nevertheless, communism does not cause the obfuscation in this instance, it merely applies it much more directly than a globalized western democracy would in order for the government to accomplish the goal of finishing the construction of the Three Gorges Dam to gain fiscal and technological ground in the globalized world. Without the help of obfuscation, the forces of globalization in central China could not utilize creative destruction and its supposed advantages.

To counterbalance the obfuscation of the government, certain authors strive to express a poignant, and statistically supported, but biased and opposing opinion of the Three Gorges Dam. In every facet of their writing, these authors pepper their personal opinion onto the information surrounding the Three Gorges Dam, indirectly tainting the Chinese government and the benefits of globalization in central China. For example, from the start of her essay, Qing mixes her information with a strong opposing perspective of the Three Gorges Dam. Even her title, "The Three Gorges Project: A symbol of Uncontrolled Development in the Late Twentieth Century," contains indicative words such as "Uncontrolled"—defined as "subjective and describes someone who consciously fails to control his/her behavior"—that reveal her opposition to the Three Gorges Dam (Qing3). Therefore, before any objective picture of The Three Gorges Project presents itself, Qing slights it and immediately infuses

her opinion about the actions of the Chinese government. After such an opening, one can foresee the negative tone of the article written by Qing; consequently, reaching a conclusion independent of that first impression becomes harder. Another instance occurs when Van Slyke opens his chapter dealing with the Three Gorges Dam with the title "The River Changed Forever?" (181). Much like Qing, Van Slyke obfuscates his audience with the word "Forever" in his title. With this small addition, Van Slyke suggests that the change occurring to the Yangtze River in the form of the Three Gorges Dam does not present China with a better situation, The exact terms that define this lack of improvement remain absent, because this instance of obfuscation occurs in the title. However, reminiscent of Qing, Van Slyke imposes his opinions before presenting material that explains why the situation in China after the construction of the dam is not necessarily better. Through its analytical application, obfuscation downplays the titular negativity of Qing and Van Slyke toward the Three Gorges Dam. With obfuscation clouding the opinions of the Three Gorges Dam and globalization, the physical process of creative destruction remains as the executor of the will of globalization. With the implicit connotations that the authors place on the subject of the Three Gorges Dam, one cannot avoid coming to conclusions based on the opinions of the authors before the facts present themselves.

Obfuscation is not limited to the titular expressions of these writers' arguments. It permeates into the material the authors use to support their negative views on the Three Gorges Dam. To cite an instance, both Van Slyke and Fu oppose the dam; however, Fu takes a much more radical approach. Within the essay, Fu spends a liberal amount of time criticizing the communist government of China and the Great and Small Leaps Forward, which consisted of campaigns to increase iron and steel production along with a large-scale water conservancy campaign. Fu refers to "[t]he crap from that era [the Great Leap Forward that] has not yet been cleaned up" (Fu 23). When referring to "crap" from the Great Leap Forward, Fu speaks of the many smaller hydropower projects constructed curing that time, half of which fell. In an effort to enlighten readers about the significant problems with dams in China, Fu employs a form of obfuscation in heaping all of the blame on to the government and essentially criticizing a political system instead of the engineering and the dams in China. Much of the creative destruction that the construction of the Three Gorges Dam brings fades in the squalor of this political attack. This obfuscation on the part of Fu leads the reader to believe that the benefits coming from the Three Gorges dam,

mainly in the form of electrical power, do not help the Chinese people because of the damages that the people may incur. Fu possesses an utopian understanding of globalization and would like the profits from creative destruction directly benefit the entire populace of China. However, in the case of the Three Gorges Dam, the circumstances point to an alternate, more realistic, perception where the benefits concentrate themselves and then diffuse to the general public. While likewise opposing the dam, Van Slyke employs a much more subtle approach to his criticism. To cite an instance, Van Slyke uses a passage from A Single Pebble by John Hersey where the main character, a young American engineer, states the following about creating a dam at the Three Gorges on the Yangtze River:

How could I... have a part in persuading these people to tolerate the building of a great modern dam that would take the waters of Tibet and inner China, with their age old furies, on its back, there to grow lax and benign? How could I span a gap of a thousand year—a millennium in a day?... [I began to] wonder whether a dam was the right thing with which to start closing the gap. (Van Slyke 182)

The young American engineer represents the perspective of a person who has already experienced the advent of globalization through creative destruction. He realizes that in order to build the dam he would sacrifice the gains he has reaped, whereas the Chinese forced to live with the Three Gorges Dam must entirely forfeit their livelihood and ancestry in hope of an inkling of the benefits experienced by the engineer. With such passages, Van Slyke craftily implies his opposition to the dam without obfuscation of the Chinese government. Thus, in order to gain a full sense of the environmental and political dangers associated with the Three Gorges Dam, obfuscation and creative destruction play an important role in attributing the problems associated with the building the dam to the historically faulty engineering of dams in China, and not wholly to the Chinese government.

Although there exists a predominance of sound negative information about the Three Gorges Dam, some positive support, too, appears from credible sources. For example, the articles "Dams: Second Phase completed at Three Gorges Dam," by Greg Brouwer, and "A Visit to the Yangtze River and the Three Gorges Dam: Reflections From a People to People Ambassador Program in China," by Ned Paschke both view the Three Gorges Dam as a great project that will help the people of China. Brouwer takes the standard route of most Three Gorges Dam proponents by

advocating the large power production of the dam, which according to him constitutes about 10 percent of the nation's power supply (Brouwer 37). As a complement to the support Brouwer offers the Three Gorges Dam, Paschke offers the reader a first hand account of the improvements in the region. "Chongqing, like many of China's large cities, is being transformed by new construction. Central China has historically lagged behind such eastern cities such as Shanghai and Beijing. But this is now changing for Chongqing in anticipation of the Three Gorges Project. Located at the upstream end of the future reservoir, increased navigation and commerce is expected to significantly benefit the city" (Paschke 31-32). Although the picture seems bright for central China, in his obfuscation Paschke fails to do more than mention the relocation of the villages flooded by the reservoir or the distribution of electrical power amongst provinces. Thus, the need for the Three Gorges Dam from Brouwer and Paschke's supportive point of view bases itself on an improvement of the power supply and overall navigability of the river, and falls under the paradigm of creative destruction defined by Friedman. However, once again, due to the selectiveness of the benefits produced by the dam, the damage it inflicts to those who lose their homes, the provinces that accept them, and the towns that will continue to live without electricity unfortunately must be obfuscated by authors such as Brouwer, Paschke, and the Chinese government.

In the case of central China, globalization has acted as an extremely powerful social norm that constantly shaped the perceptions of the globalizing world in terms of what central China must sacrifice in order to maintain pace with everyone else in the world in reaping its benefits. The confused, or obfuscated, information surrounding the Three Gorges Dam works as insurance for the inevitable completion of the creatively destructive dam. Due to the creative destruction brought by the Three Gorges Dam, the hard-to-swallow pill of globalization must come with obfuscation. The construction of the Three Gorges Dam places very high demands on the public without truly sufficient justification, but completion is essential in order to provide electrical energy for globalization to feed on. The Three Gorges Dam appears to pose a greater threat than benefit to the Chinese people; the concepts of obfuscation and creative destruction give the evidence from all sources clarity and independently point it against the dam. The history of dams in China, the imprudence of the government, and the possibilities of further senseless casualties outweigh the benefits of energy production, an improved river economy and even

flood control. The building of the Three Gorges Dam, undertaken by the Chinese government, makes a hasty gamble with technology while wagering lives. One can only hope that the future will turn out much brighter than the past in China so that the cost of the Three Gorges Dam does not linger amongst families like the water from the reservoir will.

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 COMMENTARY: "THE THREE GORGES DAM"

 Amanda Smith

The juggernaut of globalization, with the often dramatic economic and political transformations it catalyzes, becomes an increasingly important policy issue as the world population enters the 21st century. As the spread of capitalism necessitates greater exploitation of both human labor and natural resources, critical assessments of the costs and benefits and the political and economic stakes involved are imperative. Boleslaw Czachor's essay, "The Three Gorges Dam and the Influence of Globalization," provides such an assessment, inventively employing the

theoretical concepts "obfuscation" and "creative destruction" to explore the nuances of the globalization process via the case study of China's Three Gorges Dam project. As Czachor shows, these nuances include not only the potential environmental damage wrought by technological interventions such as the Dam, but also the rhetorical manipulations of opponents and proponents of the project.

Starting from a pessimistic (but perhaps realistic) assumption regarding the inevitability of globalization, Czachor develops his thesis by using the analytic frame to expose the motivations of Chinese government officials who have manufactured half-truths in order to preempt resistance to the Dam. The government, Czachor advances, views the Dam's potentially detrimental impact on both the human and wildlife population as being worth the resultant possibility of an increased supply of electricity. This "creative" aspect of the "destruction," thus, justifies, in the government's estimation, "obfuscating" the evidence of past disasters which otherwise might (pardon the pun) damn the Three Gorges Dam project. Though at times it is slightly unclear whether Czachor's use of "creative destruction" is sardonic—as might be apt given the death toll statistics he cites—or sincere, generally his two-part analytical frame serves this portion of his analysis well, enabling the reader to understand both what motivates the government and what means officials utilize to achieve their desired ends.

The second part of Czachor's project is a critique of the existent literature written on the Three Gorges Dam project—a literature including voices that support and oppose the Dam. As Czachor shows in this portion of his essay, Chinese government officials are not the only agents of "obfuscation." Engineers with a financial interest in the realization of the Dam project, Czachor notes, conveniently minimize the potential damage the Dam will inflict, while activists opposing the Dam, by contrast, exaggerate the negative impact to the same "obfuscating" effect. In exposing the distortions of both sides of the debate, Czachor ultimately hopes to empower the populace to sift through the layers of "obfuscation" and act in their own interests. Czachor is perhaps a bit naïve in assuming that his theoretical concepts can elucidate, with finality, the "true" account of the Dam project—a flaw which leads him to resolve the conflicts and contradictions surrounding the Dam project a bit too facilely in his conclusion. Nonetheless, his essay is on the whole an engagingly written, cogently argued contribution to the conversation on one of the 21st century's most pressing policy issues.