

"Where nothing was before": (re)producing population and place in Ghana's Volta River Project

Laura B. Johnson^a, Jordan P. Howell^b and Kyle T. Evered^a*

^aDepartment of Geography, Michigan State University, East Lansing, MI, USA; ^bDepartment of Geography & Environment, Rowan University, Glassboro, NJ, USA

Significant infrastructural projects, and especially large hydroelectric dams, were envisioned and deployed by postcolonial governments to promote particular visions of industrialization, agriculture, democracy, and modernity. Newly independent states sought to annihilate formerly so-called backward and primitive landscapes and populations alike, promising to re-create both places and people as rational, economically productive entities. In this article, we re-examine such narratives as they related to Ghana's Volta River Project (VRP). Relying on archival and media sources between the 1950s and 1960s, we interrogate the Ghanaian state's pursuit of the VRP from a perspective rooted firmly in cultural geography and pay careful attention to the issues of population displacement/resettlement and landscape reconfiguration that permeated all dimensions of the project. We analyze the ways in which Ghanaian leaders used the VRP to translate a particular suite of cultural, economic, and political values into material reality, utilizing the techniques of displacement and population resettlement in efforts to enroll Ghana into a modern, global, industrial economic system. As such, this article augments the body of literature examining the modernist and state-building aspects of the VRP as well as studies critiquing the various processes of development that have unfolded in West Africa since the mid-twentieth century.

Keywords: dams; development; infrastructure; place; resettlement; Volta River Project

Introduction

Major infrastructural projects, perhaps best represented by large-scale hydroelectric dams, were envisioned and employed by many newly independent states as emblems of progress and development; promises of prosperity and postcolonial strength in the era after World War II. Despite official assertions that such projects would reinforce newfound independence, usher in unprecedented wealth, and frequently, become the foundation of strong democratic systems, large dams in particular have come to be identified instead with

^{*}Kyle T. Evered is Associate Professor of Geography at Michigan State University, East Lansing, MI, USA. Email: ktevered@msu.edu

nefarious political motives, social and cultural upheaval, and severe environmental degradation (see Rubin and Warren 1968; Goldsmith and Hildyard 1986; Adams 1992; Bartolome *et al.* 2000; McCully 2001; Khagram 2004; Scudder 2005; Windsor and McVey 2005; Klingensmith 2007; Tilt *et al.* 2009).

In this article we examine the narratives that permeated both the construction of Ghana's Akosombo Dam and the massive resettlement associated with the larger Volta River Project (VRP; Figure 1). These projects were central to Ghanaian citizen- and state-building efforts, and while scholars have addressed previously the developmentalist, modernist, and state-building aspects of the VRP (e.g., Hilton 1966; Obeng 1977; Moxon 1984; Noer 1984; Quaye 1992; Agbemabiese and Byrne 2005; Tsikata 2006; Hove 2013), we offer a novel cultural geographic analysis of the ways in which these projects imposed and sought to translate a particular suite of cultural, economic, and political values into material reality largely through the mechanisms of displacement and resettlement. We argue that the bright promises of progress about the projects

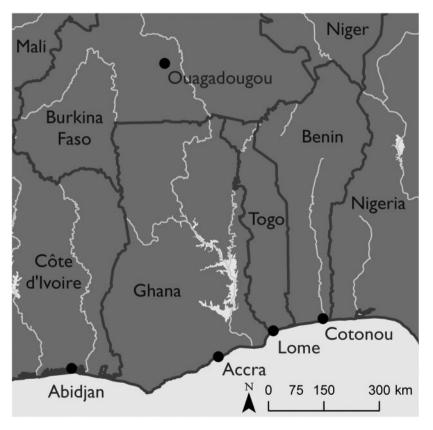


Figure 1. Ghana's location in West Africa, highlighting the spatial extent of Lake Volta in the eastern part of the country. Map by authors.

made by Ghanaian officials and media (and their international backers) obscured the fundamental means by which this progress would be achieved, namely, by enrolling Ghana into a modern, global, industrial economic system premised on the simultaneous annihilation and re-production of both place and population in light of an emerging rational and modern perspective on development. While many scholars have examined the impacts of large infrastructure projects (cf. Chambers 1970; Hart 1978, 1980; Gordon and Amatekpor 1999; Tsikata 2006), this article extends and expands these efforts by interrogating the conduct of states' large infrastructure development schemes from a perspective rooted firmly in cultural geography, adding a new conceptual dimension to prior works on the VRP and associated instances of displacement, resettlement, and the reconfiguration of both places and populations that resulted.

Relying on primary documents and media reports between the 1950s and 1960s, obtained from the National Archives of Ghana during fieldwork in 2012, we explore how the Akosombo Dam project was conceived by state officials, framed and translated to the public, and carried out. We contextualize our study within literature about modernist discourse and post-World War II development, and especially topics of population, place, sub-Saharan Africa, and large-scale hydroelectric dam projects. Next we review our sources and methods before presenting a brief overview of the Akosombo Dam and larger VRP and then offer our analysis of the place- and population-focused modernist narratives surrounding these endeavors. Here, we rely primarily on the notion of place as discursive-material formation (Cresswell 2004; Davis 2005) which allows recognition of multiple conceptualizations of place and pays careful attention to the exercise of power in the production of place. Finally, we present some conclusions and avenues for future research.

Research context

The period after World War II witnessed a "transformation of the political geography of the globe" wherein societies throughout the world were compelled "to rethink how the world was constituted" (Cooper and Packard 1997, p. 1). This rethinking, led by wealthy countries in North America and Western Europe, was guided largely by the logic of industrial capitalism, rapidly expanding global economic exchanges, and the trope of development. Following Foucault (2010), Evered (2010), and Harvey (2005), we understand development as simultaneously outcome, objective, and mission; an operation enabling the perpetuation of imperial relationships in a new geopolitical context that ostensibly eschewed colonialism while also simulating it in the form of "repressive military dictatorships and authoritarian regimes" (Harvey 2005, pp. 27–28; reflecting these Cold War tensions over development in Ghana, note New York Times 1961a, 1961b). Prominent theorizations of development proposed a hierarchical series of transitions toward eventual high mass consumption (Rostow 1960), in which "nations could anticipate their inevitable, if gradual, rise in the global order through a natural process of development" and that if "backward nations' were not modern, in this picture, it was because they were not *yet* modern" (Ferguson 2006, pp. 183 and 177–178). As illustrated by the poem "Creation," which was published in the 22 January 1966 issue of *The Ghanaian Times* and conveyed a heavenly transcendence from nothingness to civilization amid the construction of the Akosombo Dam (i.e., elevating Ghana from the condition of being "Where nothing was before"), this trajectory was described not infrequently in divine terms, identifying mankind as "the Creator's satellite" (diplomat and poet Michael Dei-Anang was the poem's attributed author; NAG NP.4/46). Demonstrations of scientific and technological prowess in manipulating nature were essential to advancement along the development hierarchy, not least because of their apparently self-evident civilizing qualities that could deliver people from darkness and lethargy (Escobar 1995, p. 26). Framed in this way, development could be understood as a force for moral good as well as material progress (e.g., Adams 1992).

Scholars concerned with the biopolitical dimensions of development have illustrated how the technological instruments of modernist governance had to be coupled with narratives oriented toward changing populations' values (Escobar 1995; Legg 2005; Foucault 2007, 2008; Li 2007). Accordingly, the modern state sought to influence a range of population characteristics and attitudes in order to both constitute and maintain the loyalties of modern subjects, ranging from physical health to education, communication, and economic productivity (e.g., Evered and Evered 2012). Indeed, in Africa, development frequently entailed a "construction of nation and citizen as much as the reconstruction of the economy" (Diouf 1997, p. 291; Klingensmith 2007).

The politics of place were frequently redefined alongside these efforts to re-figure the populations of emerging modern states, as landscapes were refashioned to aid in modernization and nation-building (Lewis 1979; Lefebvre 1991; Harvey 1996; Soja 1996; Mitchell 2008). We argue that the reconfiguration of populations and places goes hand-in-hand. Redefining and restructuring the physical landscape in order to open up certain opportunities and bar others figured prominently in schemes of nation-building, as states "penetrated, standardized, and incorporated previously independent" people and places as part of a "brutal and disruptive process" (Agnew 1987, p. 37) to erase places' specificity, uniqueness, and affective elements and re-place them with scientific, rational, profitable, and perhaps most significantly, carefully controlled spaces (Scott 1998).

The various problems of place annihilation, reproduction, and homogenization—perhaps acknowledged collectively as placelessness—have long been a concern of cultural geographers, philosophers, and others (cf. Tuan 1975; Relph 1976; Entrikin 1991; Harvey 1996; Duncan 2000; Casey 2001; Cresswell 2004). One recent theorization of place approaches the concept as a discursive-material formation; Davis' (2005) study of Bikini Atoll considered the ways in which representations of place are contested, accepted, and eventually made material. In other words:

Talking about places as discursive-material formations highlights the role of conceptualizations and representations of place in enabling and legitimizing certain versions of place over others. In terms of place reproduction, this perspective emphasizes that places are known, discussed, and represented through language [and it] legitimizes the performance of certain activities in those places as well as directs the social practices that actively shape the landscape. (Davis 2005, p. 610)

While there are multiple conceptualizations of place, population, and progress, the asymmetrical nature of the exercise of power, embedded within a particular discourse, dictates which version is materially produced. In the case of post-World War II development schemes, the discursive framework of modernity mandated a material restructuring of populations and places according to rational notions of progress, even in instances where the outcomes of such action might appear counterintuitive—like dam projects in postcolonial Africa, motivated by decolonization, national liberation, civilizational advancement, and strong anti-imperial reactions against the highly rational western world. Exemplifying this vision of dams, development, and decolonization, an article appearing in the 9 January 1960 issue of The New York Times critiquing Nkrumah's consolidation of political power in Ghana presented the apparent commingling of these imageries. Though Nkrumah justified his actions in light of "a new onslaught by 'the devil of colonialism" in Africa that must be fought, he continued to diligently pursue a realization of the VRP—and the western financing to support its construction (Bigart 1960, p. 7; see also Hove 2013).

Sources and research methods

During the summer of 2012, the first author spent several weeks collecting primary documents and media records in the National Archives of Ghana, located in Accra. Documents were selected for analysis based on their relation to the VRP, associated experiences of resettlement, and the larger state-derived discourse of modernization, industrialization, and economic development within Ghana during the period between 1950 and 1969, along with planning documents, political speeches, and newspaper and magazine articles from New Ghana, Volta Scope, Daily Graphic, The Ghanaian Times, and The Standard. These sources that framed and proclaimed the project to the citizens of Ghana were themselves most often governmental documents, as well. Publications like The Ghanaian Times (established in 1958 and owned and operated by the state ever since) and project-focused publications like Volta River Authority Magazine, as published by the Volta River Authority (established in 1961 under Ghana's Volta River Development Act, and issuing the equivalent quarterly Volta River Authority News), are still in publication to this day. Given the application of an analysis of modernist discourse to the topic of a development project, narratives from those actors and institutions in positions of power were prioritized for this examination and selected from extensive lists of documents provided by archival staff. In this manner, this work may serve as a point of departure for further inquiry into statist perspectives on the project, or as a study in contrast with those prioritizing narratives from below (e.g., as associated with popular oral history approaches, as in Tsey 2011). Though it would be useful to provide some figures as to the actual numbers of people impacted by the Akosombo Dam project who did receive information from these publications, we have no estimates as to the numbers of publications or any figures as to circulation and distribution (e.g., urban, rural, etc.) within Ghana; nonetheless, they were the major sources of information in print media available to the public within the country.

Insofar as we address statist narratives, these texts were examined with the sensibilities of discourse analysis (e.g., see Fairclough 2001), and in particular, the framework of place as discursive-material formation discussed earlier. We did not approach the documents with a pre-conceived understanding of which discourses about population and place we would encounter, but rather we analyzed and interpreted the texts in light of existing research about the underlying motivations and outcomes of the VRP and similar large development schemes in sub-Saharan Africa (e.g., Scott 1998). We paid particular attention to the ways in which the project emerged as the primary focus of Ghana's post-independence development regime and the material outcomes of the project which most directly relied on processes of population and place. In this regard, the themes of displacement and resettlement emerged most clearly as mechanisms by which large infrastructure projects serve to shape the cultural geographies of the people and regions they impact. Additionally, this approach complements current reappraisals of the VRP in terms of modernization as undertaken from other disciplinary perspectives (e.g., Agbemabiese and Byrne 2005; Tsikata 2006) and from perspectives of those parties not in positions of power (e.g., Tsey 2011).

Framing the Akosombo Dam and the VRP

Dams as pathways to Ghana's development

Hydroelectric dams fundamentally transform the natural and human environments in which they are built. As Scott (1998) noted, paths to development and modernity have historically embraced dams as a vital infrastructural and technical tool; the industry, technology, and agriculture required for modernization demanded energy, and large dams provided the tool. By the 1950s, the number of large dams had grown globally to 5000, up from about 600 in 1900 (Khagram 2004, p. 5). In virtually every instance, these projects were achieved through top-down initiatives and reflected a post-World War II modernist discourse which prioritized economic growth above all other factors (cf. Fahim 1981; Chetham 2002; Hoag 2006; Klingensmith 2007; Tumbare 2010; Biswas and Tortajada 2011; Sneddon and Fox 2011; Sneddon 2012; Isaacman and Isaacman 2013). Some of the negative impacts on place that these projects generated are typified in Windsor and McVey's (2005) study of

the impacts of dams on Native American populations in Canada. These included increased rates of mortality and mental illness; domicide (the "destruction of *homes* by human agencies whose actions are deliberate in the pursuit of their own goals and whose gain is often cloaked in the mantle of the common good"); memoricide (the "destruction of the memories that people have of place"); and ecocide (the destruction of ecosystems; pp. 148–149). Similar negative impacts can be noted in the context of the Akosombo Dam and the VRP.

Ghana (formerly the Gold Coast) achieved independence from British colonial rule on 6 March 1957—the first African country to do so (cf. Austin 2005). In the year following independence, Prime Minister (and later President) Kwame Nkrumah (1909–1972) was derided in the New York Times as "Moses without a road map, searching for a route to the Promised Land" (Hunt 1958, p. SM23). Despite such criticisms, by the early 1960s Nkrumah had plans in place to intensify Ghana's economic development while advancing the whole of the African continent. According to the state's 1964 Seven-year Development Plan, Ghana would be elevated to the "threshold of a modern State" through an intensive program of agricultural and industrial development (NAG ADM.7/5/89, p. ix). In a speech, he detailed his vision for the country: "I see a State with a strong and virile economy, its agriculture and industry buoyant and prosperous, an industrialized nation serving the needs of its people" (NAG ADM.7/5/89, p. xxii). Nkrumah declared that this development program—rooted in science and technology—would revolutionize the country's industry and agriculture, "designed to provide the basis not only of our national progress and prosperity, but also of our ability to contribute to the advancement of the African continent" (NAG ADM.7/5/89, p. x). Ghana would become a leader among new African states, and indeed "a force for world peace"; but only if Ghana "and other non-aligned nations become economically powerful and through their prosperity help to eliminate those inequalities between men and nations which are the greatest threat to peace in our time" (NAG ADM.7/5/89, p. 1).

The centerpiece of these visions was the VRP (cf. Aryeetey *et al.* 2000; Agyeman-Duah *et al.* 2008; Fosu and Aryeetey 2008). Heralded as "a gateway to Ghana's industrial development" (Gyau-Boakye 2001, p. 28)—the Project promised major new fisheries, large-scale expansions to irrigated agriculture, and a water transport link between northern and southern Ghana, improvements that would make the associated losses "small in comparison" (Easterly 2001, p. 26; also Chambers 1970; Hart 1980; Gordon and Amatekpor 1999; Tsikata 2006). Many of these accomplishments were realized: transportation on manmade Lake Volta increased, fisheries boomed, littoral farming activities intensified, and opportunities for tourism emerged.

The roots of the project extended back into the colonial period, and its principal component, the Akosombo Dam, had been envisioned in various forms by Europeans as early as the 1900s. The Akosombo Dam was heralded in the Gold Coast state's 1951 Revised Draft 10-year Plan for the Economic

and Social Development of the Gold Coast, as a project which would "change the face of the Gold Coast and herald a new era in the economic progress in the country" (NAG ADM.5/4/82, p.8). The project was described as a crucial economic engine, providing "cheap electrical power and ... training ... for industrial labour and skilled operatives" while also stimulating "demand for materials which might be produced locally such as cement, processed timber, and processed agricultural products and canned fish" (NAG ADM.5/4/82, p. 8).

While Ghana's transition to independence delayed the scheme's realization during the mid-1950s, the project remained at the forefront of plans amongst Ghanaian leaders and the international community alike. By April 1959, interests that included the USA (see Noer 1984) and American-based Kaiser Aluminum coalesced to return the project to the spotlight (Brady 1959; see also Decker 2011). By December 1959, aluminum was being cast as a panacea for development woes in Ghana and across West Africa (New York Times 1959). Aluminum emerged as a core concern of the VRP: the Project, requiring an investment of £70 million, demanded £58.6 million in the aluminum smelter component of the project alone, and £7 million in ancillary development; a cost that ranked it among "the largest undertakings of this type so far developed in Africa" (NAG ADM.7/5/89, p. 203). The Ghanaian Government financed the project with support from the USA, the UK, and the World Bank. In preparation, Ghana and its international partners ran display advertisements regarding investment opportunities in western newspapers like the New York Times—with titles like "Ghana's Development Plan Emphasizes Industrialization" and photographs of project models. As one advertisement declared, "American Businessmen are cordially invited to explore the many potentialities of the country and the opportunities that exist for their participation" (Ghana Trade and Information Centre 1960, p. 70). Along with the possibilities for investment, the abundant raw materials of Africa like aluminum—were touted in promotional ads and press coverage.

As the project moved forward, Nkrumah declared to Ghana's parliament on 24 August 1965, that "This area will be replanned, landscaped, floodlit and provided with modern recreational facilities and tourist attractions, including shops, motels, parks, gardens and foundations for the enjoyment of the residents, tourists and visitors alike" (NAG ADM.5/4/334, p. 14). Hydroelectricity lay at the core of the project, which entailed the construction of a dam across the Volta River at Akosombo and installation of a hydroelectric power station that would provide cheap electricity both for an aluminum smelter and for an electric grid that would power large towns, mining areas, and areas of irrigation (on the heavy prioritization of aluminum, see Davison 1954). Initially estimated in the state's 1951 Revised Draft 10-year Plan for the Economic and Social Development of the Gold Coast, 1950–1960 that the power plant would annually generate 575,000 kW of electricity, of which nearly 500,000 kW were allotted for the annual production of 210,000 tons of aluminum (NAG ADM.7/17/12). Thirteen years later, Ghana's 1964 Seven-

year Development Plan declared that the VRP would increase the electrical capacity of the country by 500%, half of which would power the aluminum smelter in the harbor city of Tema (Hilling 1966; Kirchherr 1968). Nkrumah assured Ghanaians, however, that there would be "an ample reserve of power for other users" (NAG ADM.7/16/89, p. xvi). The provision of electricity was forecast to transform "social life in many small towns and villages, while transport, agriculture and fishery should all benefit from the project" (NAG ADM.7/5/89, p. 208).

The scheme resulted in a reservoir 250 miles in length with a surface area of 3275 miles (NAG ADM.7/5/89), the largest man-made lake in the world (recall Figure 1; NAG ADM.5/4/82). It would cover more than 3% of the entire country's surface. Declared in 1964 "the biggest single step that has been taken in the economic and industrial development of Ghana" (NAG ADM.7/5/89, p. 203), the project required the construction of a new harbor and an extensive network of railways and roads in the southern coastal region, infrastructural extensions which were intended to eventually disseminate the electrification, irrigation, and other industrial and commercial benefits of the project to the rest of the country.

News media portrayed the Akosombo Dam project in terms of the great promises it offered to the country: development, progress, hope, and prosperity. Connecting the project to individual citizens, *The Ghanaian Times* publicized a story with the bold headline, "How You Will Benefit from the Giant Project"; it followed with headers to its various sections that made promises, like "25,000 Tons of Fish Annually" and "River Diseases Removed" (NAG NP.4/46, p. 7). Lauded as a "symbol of international cooperation" in the February 1965 initial issue of Ghana's *Volta River Authority Magazine* (NAG ADM.5/4/96, p. 8), the project was celebrated in 22 January 1966 articles appearing of *The Ghanaian Times* as an "expression of unity" and as a "dream come true" (NAG NP.4/46, p. 3 and 1). As the first issue of the *Volta River Authority Magazine* proclaimed proudly, citizens were encouraged to:

join in one of the most thrilling adventures of our country's march forward to full economic independence. Fittingly our first issue comes out at the beginning of a new year, a year which marks the start of yet a new era, the era of consolidating the gains of the past and paving the way for a glorious future. Our Government can take justifiable pride in successfully fathering what already stands out clearly as a major constructional effort not only in Africa but in the whole world. (NAG ADM.5/4/96, p. 1)

Portrayals in newspapers and magazines as well as propaganda films (e.g., A River Creates an Industry [1955], Volta River Exhibition [1956], Progress at Akosombo [1965], Volta Dam and After [1965], and The Great Lake [1966]; see doctoral student Jennifer Blaylock's (2011) website that chronicles and analyzes such films, Mobile Cinema: African Politics in Transit) represented the VRP as the prime symbol of Ghana's independence and emerging national strength. When the dam was opened on 22 January 1966,

a photograph of the "thousands of people" who gathered to witness the "inauguration of the flow of power" was featured in *The Ghanaian Times* supplement (NAG NP.4/46, p. 6). At the opening festivities, several speeches highlighted the role of Ghanaian citizens in the success of this national project. Completion of the project indicated the ultimate achievement of "the primary goal of Ghana's independence" (NAG NP.4/46, p. 6), "A dream [unfolding] into reality, like an endless array of captivating corolla flooding a garden in magnificent bloom. This is the Volta" (NAG NP.4/46, p. 1).

Representing displacement and resettlement

While one Ghanaian Times article from 24 January 1966 proclaimed that the "Volta Dam means better life for all," (NAG NP.4/46, p. 3) another from 22 January 1966 (and indeed the only one) addressed the resettlement of some 80,000 displaced people with a headline proclaiming "The Success of Settling the People in Communities" (NAG NP.4/46, p. 12). While this article declared the as-yet-unfinished mission conveniently resolved and a foregone success, the question of displacement and resettlement had actually simmered for years and was not as neatly managed as planners would claim (though largely overlooked by scholars at the time, according to Brokensha 1964). In fact, the region experienced a number of detrimental sociocultural and environmental outcomes as a result of the Project, many of which had been de-emphasized by the state in its communications to citizens. Apart from the area Lake Volta submerged, it also contributed to weather changes, reservoir-induced seismicity, and an expansion of aquatic flora that created both health risks and economic problems (de Graft-Johnson 1999; Derban 1999). Furthermore, over 80,000 people from more than 700 villages were displaced; resettled into just 52 villages with the promise of housing and the foundations for productive agriculture. In the process, land resources and local economic vitality were lost, to say nothing of the populations' traditional identities and cultural practices (cf. Diaw and Schmidt-Kallert 1990; Tamakloe 1994; Chamlee-Wright 1997; Gyau-Boakye 2001).

Discussions in the 1950s about the VRP and the promise it held for national development rarely considered the people living in the affected villages, preferring a wait-and-see approach hinging on the science of flooding the area:

The problem of resettling and housing of the inhabitants and villages which would be submerged is receiving consideration by Government. But no final decision will be taken until the limits of the lake are known and the extent of the townships to be submerged and the sites of proposed townships or villages can be accurately ascertained. (NAG ADM.5/4/96, p. 7)

Once the international aluminum industry became involved, the question of displacement was re-cast as an administrative problem and described in a 1961 assessment of the project's development as the "major task of happily resettling approximately 67,000 persons now living in the area which will be

flooded" (NAG ADM.5/4/191, p. 15). Despite a miscalculation—the actual number was roughly 80,000 (NAG NP.4/46, p. 12)—Ghana's 1964 Seven-year Development Plan claimed that:

the resettlement is being treated as an exercise in positive economic development on a regional basis designed to transform the areas and the lives of the people involved. ... The organization of settlements, the types and standards of housing, and access to public services will all be modernized in the long range resettlement scheme. (NAG ADM.7/5/89, p. 210)

This positive re-framing of displacement as an unmitigated improvement in the lives of displaced citizens represents most clearly the attempts to annihilate and subsequently re-produce both place and population in light of an emerging rational and modern perspective on development. The 1 July 1965 edition of the *Daily Graphic* described evacuated families as people "who look to the future with renewed confidence and greater determination" and affirmed that "modern methods of arable farming and stock raising are among the facilities being provided at the resettlement areas to better the lot of the evacuees" (NAG NP.1/82, p. 20). Such sentiments were echoed by the country's leadership: a 24 August 1965 speech by Nkrumah to the parliament assured officials that that "the resettled people will not only command [a] higher living standard than before, but they have the tools and the opportunity to develop scientific, mixed agriculture and healthy community living" (NAG ADM.5/4/334, p. 12).

E.A.K. Kalitsi, head of the Volta River Authority's Resettlement Department, argued in a 1965 essay titled "Volta River Settlement" that:

The problem of organising the resettlement of these people was approached as a problem of creating conditions satisfactory to the people and yet in which they would have opportunity to participate much more than they have done in the past in the development of the country for their own benefit and for the progress of the country. (NAG ADM.5/4/248, p. 4)

The fundamental justification for displacement and resettlement, according to the state, was that people would clearly be better off. The 22 January 1966 issue of *The Ghanaian Times* explained that the roughly 80,000 citizens uprooted from their traditional villages and moved to modern structures (model nuclear houses) would have greater opportunities for modern education, sanitation, and livelihoods and emerge as the project's "early beneficiaries" with "improved" lives (NAG NP.4/46, p. 12; see also Kalitsi 1999).

The theme of reframing resettlement as an opportunity permeates all aspects of the Resettlement Department's activities. According to Kalitsi, the aims of resettlement were to (1) "enhance the social, economic and physical conditions of the people"; (2) "improve their system of Agriculture [sic] to enable them to effect the transition from subsistence to cash economy"; and (3) "plan and locate the settlements in a rational manner so the flood victims as well as others in the Volta Basin area can derive maximum benefits from

the changes involved" (NAG ADM.5/4/248, p. 6). In this way, official justifications of the VRP extended to wholesale re-production of landscapes and the populations that lived on them.

A subsequent tactic designed to support the transformations of both landscape and populations was to depict those who would be displaced as primitive farmers clinging to outdated techniques:

... these people live in dry savannah county covered with scanty vegetation where they eke out a precarious existence as primitive farmers ... around their traditional rulers. Fortunately, the only resources of some value which are being flooded are limestone deposits on the Afram and in Salaga, timber around the Afram and clay deposits around Kpandu. (Kalitsi, *Advance*, NAG ADM.5/4/248, p. 4)

Simultaneous transformation of the displaced population into advanced, modern farmers were part and parcel of the VRP's agenda to transform a significant swath of Ghana's physical landscape. The traditional lifeways of the displaced —or in the words of state planners, the "wasteful, fragmented, and shifting system of agriculture"—were to be sacrificed as contribution to the Ghanaian state's much-touted goals of modernity; the agricultural output necessary for this new state could not "be achieved with the hoe and cutlass in a system lacking in the use of insecticides, fertilizers, better seed and improved cultural practices" (NAG ADM.5/4/248, p. 27).

Both Nkrumah and Kalitsi wrote of the necessity of displaced people to sacrifice their "traditional homes in the interests of the nation" (*Ghanaian Times*, 22 January 1966, see also NAG NP.4/46, p. 5). To convince Ghanaian citizens, Kalitsi deployed "mass education assistants" and the Social Welfare Resettlement Unit "to sell the idea of the VRP to the people and also to educate and persuade them to accept evacuation happily" (*Advance*, NAG ADM.5/4/248, p. 21). Specifically, this re-education emphasized the transformation of both population and landscape, conveying a core message "that resettlement [implied] an improvement of the physical, social and economic circumstances of the persons being resettled" (NAG ADM.5/4/248, p. 21).

The actual process of resettlement afforded none of these benefits to the affected populations, however. The displaced people from 739 villages, 600 of which had a population of 100 people or less, were resettled into 52 new settlements. The immediate process of transporting everyone and their belongings proved "no mean job":

Most of the villages were situated along the edges of the Volta and the only means of reaching them was to go by water. ... The people had to be transported with their chattels, their freshly harvested products, their domestic animals and salvaged materials. They had 173,000 domestic animals of various types including 3000 herds of cattle, owned 19,000 birds, 53 chairs, 18,000 tables, 3000 cupboards 600 chests of drawers and 68,000 boxes of various types. Several thousand tons of food also had to be transported with them. (NAG ADM.5/4/248, p. 11)

The journey within Ghana took up to three days, and difficulties emerged in providing food, water, and medical aid despite assistance from the World Food Program (NAG ADM.5/4/248, pp. 11 and 38).

Upon arrival, displaced people were resettled in modern houses of about 120 square feet each. However, officials did not construct enough dwellings, and as a result families of up to eight people were crowded into a single structure (NAG ADM.5/4/248, p. 38). Though clearly unpleasant in its own right, the psychological challenges of resettlement proved to be equally daunting. The Volta River Resettlement document described poor personal and community health, including "psychological trauma caused by sudden removal from familiar environments to strange surroundings." Social cohesion and order were an issue, particularly when two or more traditional authorities were resettled in the same space. In some cases dwellings and farming spaces were not ready when displaced people arrived in the resettlement communities, resulting in "people are getting idle and some have started drinking and reports of acts of hooliganism are drifting in from some places" (NAG ADM.5/4/248, pp. 38 and 25). While opposition to displacement and resettlement was described by Kalitsi at first as a problem of, and an opportunity for, effective education (NAG ADM.5/4/248, p. 22), other officials in the Volta River Authority acknowledged that:

[T]he changed environment imposes strains on the people. They have lost their lands which have been their means of survival and some have as yet not got replacements. In the old village the old and the infirm were insured against starvation because relations in the same compound took care of them. Now everybody is on his own in a nuclear house or a separate plot and they even do not produce a surplus for their own immediate dependents let alone for other people living in other houses. (NAG ADM.5/4/248, p. 26)

Summary and conclusion

While some officials maintained that such matters were simply the growing pains of a new nation, whose future had been guaranteed by completion of the massive VRP (NAG ADM.5/4/248, p. 14), just a month after the dam's inauguration Nkrumah was ousted as Ghana's leader and the country was bankrupt (see Esseks 1971). Subsequently, officials acknowledged that resettlement efforts had been unrealistic, and poorly planned. Resettled citizens suffered economic and cultural losses, health problems (Derban 1999), and the deterioration of intergroup relations, while one of the central promises of economic development associated with the VRP washed out: mechanized agriculture proved unviable at many resettlement sites (Lumsden 1973a, 1973b). Lake Volta spurred weather changes, reservoir-induced seismicity, and a proliferation of aquatic weeds linked to health risks and impeded economic activities (Gyau-Boakye 2001, pp. 21–25, see also de Graft-Johnson 1999). This adversity prompted additional human consequences, including a predominantly male rural out migration from villages along the Volta River.

And while the Akosombo Dam continues to provide power to the country, other problems associated with the country's economic growth have limited the installation and extension of electricity infrastructure, leaving many of Ghana's cities and villages riddled with blackouts. More broadly, there has been little evidence of the greater promised benefits like advancements in democratization or poverty alleviation at the time or in the 50 years since its completion (e.g., Esseks 1971; Agbemabiese and Byrne 2005).

In this paper we argued that the promises of progress made by the Ghanaian state obscured the means by which this progress would be achieved, and in particular via enrollment into a modern, global, industrial economic system premised on the simultaneous annihilation and re-production of both place and population of the Volta River Basin. In this instance discursive frameworks emphasizing science and technological development were literally translated into the material landscape; according to officials, awakening Ghana from its "lethargic past" and setting it on the path to salvation through spatial reorganization and the reproduction of place, citizen, and nation (Escobar 1995, p. 26). To justify the project, affected places were described as devoid of value and resident people as backward. As such, these displaced people would be among the first to benefit from resettlement amidst new, scientific, and modern productive systems where they would contribute to Ghana's bright future. A new landscape and a new population would be produced to bring Ghana and the African continent into line with the wealthy and powerful countries of the world, but only if the old places were submerged and erased.

Place-based notions of identity, memory, attachment, and meaning were dismissed by the state in its efforts to reproduce the image of Ghana, even as displaced people insisted that they were not "chickens to be driven into already built 'coops' or 'cassava trees' to be uprooted and planted" elsewhere (NAG ADM.5/4/248, p. 18). Villagers cited their loss of rights to ancestral lands, their feelings of being strangers on other people's lands as evidence of their newfound status as people with no homeland. Further ethnographic and archival work, following the example of Tsey (2011) will help to elucidate popular responses to the trauma of resettlement and enhance our understanding of the role of place in instances of forced migration.

Such work is crucial as additional dams with similar plans to the VRP are currently proposed or under construction globally. The annihilation of place that ensues—accompanied by severe societal and environmental impacts—offers just one example of how development initiatives unleash processes with extreme cultural repercussions. In this article, we demonstrated how conceptions of place amid claims of progress are "historically contingent, political, exploitative, and dependent on its being seen by people as legitimate" (Davis 2005, p. 622). The outcomes are not trivial: as Shiva (2005, pp. 50–51) has argued:

By universalizing the measure of progress and development, enclosures are hidden, and benefits accruing to the powerful are falsely represented as benefiting the displaced and the dispensable. Development as dispensability is thus sold as development of well-being and welfare. This is what happened when dams displaced people. This is what is happening as highways and river diversion—the infrastructure of globalization—are rendering people dispensable.

Acknowledgments

The authors would like to acknowledge the staff of The National Archives of Ghana for their access and hospitality; Bernard Woma for his assistance in obtaining archival access; and Praise Atikpui Djabeng for revealing the lingering impacts of the Akosombo Dam. The authors also would like to thank the anonymous reviewers of this manuscript and editor Alyson Greiner for their time and input.

Funding

Research contributing to this publication was supported by various sources from Michigan State University, including the Department of Geography, the College of Social Sciences, and centers of International Studies and Programs.

Note

 Documents analyzed included those from the Industrial Development Corporation; Economic Planning Commission; Development of the Volta River Basin; *Volta River Authority Magazine*; the VRP: Statement by the Government of Ghana; Volta River Resettlement; State Opening of Parliament 1965 Session Address by Osagyefo Dr. Kwame Nkrumah to the National Assembly; Ghana Seven-year Plan (1963/64–1969/70); and revised draft 10-year plan for the economic and social development of the Gold Coast 1950–1960.

References

- Adams, W.M., 1992. Wasting the rain: rivers, people, and planning in Africa. Minneapolis, MN: University of Minnesota Press.
- Agbemabiese, L. and Byrne, J., 2005. Commodification of Ghana's Volta River: an example of Ellul's autonomy of technique. *Bulletin of Science, Technology & Society*, 33 (5–6), 17–25.
- Agnew, J.A., 1987. Place and politics: the geographical meditation of state and society. Boston, MA: Allen and Unwin.
- Agyeman-Duah, I., Kelly, C., and Soyinka, W., eds., 2008. *An economic history of Ghana: reflections on a half-century of challenges and progress*. Oxfordshire: Ayebia Clarke Publishing.
- Aryeetey, E., Harrigan, J., and Nissanke, M., eds., 2000. *Economic reforms in Ghana:* the miracle and the mirage. Trenton: Africa World Press.
- Austin, G., 2005. Labour, land, and capital in Ghana: from slavery to free labour in Asante, 1807–1956. Rochester: University of Rochester Press.
- Bartolome, L.J., et al., 2000. Displacement, resettlement, rehabilitation, reparation, and development. WCD Thematic Review, Social Issues I.3. Paper prepared at the World Commission on Dams, Secretariat of the World Commission on Dams, Cape Town.
- Bigart, H., 1960. Ghana's premier tightens his rule. New York Times, 9 January, p. 7.

- Biswas, A.K. and Tortajada, C., 2011. Impacts of the high Aswan Dam. In: A.K. Biswas, D. Altinbilek, and C. Tortajada, eds. Impacts of large dams: a global assessment. Berlin: Springer, 379–397.
- Blaylock, J. 2011 Mobile cinema: African politics in transit [online]. Available from: http://cinemaintransit.wordpress.com/ [Accessed 12 July 2014].
- Brady, T.F., 1959. Big power project is revived in Ghana. *New York Times*, 15 April, p. 43.
- Brokensha, D., 1964. Volta resettlement and anthropological research. Human Organization, 22 (4), 286–290.
- Casey, E., 2001. Between geography and philosophy: what does it mean to be in the place-world? *Annals of the Association of American Geographers*, 91 (4), 683–693.
- Chambers, R., ed., 1970. The Volta resettlement experience: proceedings of a symposium held at the University of Science and Technology, Kumasi, March 21 to 27, 1965. London: Pall Mall Press.
- Chamlee-Wright, E., 1997. The cultural foundations of economic development: urban female entrepreneurship in Ghana. London: Routledge.
- Chetham, D., 2002. Before the deluge: the vanishing world of the Yangtze's Three Gorges. New York: Palgrave Macmillan.
- Cooper, F. and Packard, R.M., eds., 1997. International development and the social sciences: essays on the history and politics of knowledge. Berkeley, CA: University of California Press.
- Cresswell, T., 2004. *Place: a short introduction*. Malden, MA: Blackwell Publishers. Davis, J.S., 2005. Representing place: "deserted isles" and the reproduction of Bikini Atoll. *Annals of the Association of American Geographers*, 95 (3), 607–625.
- Davison, R.B., 1954. The Volta River aluminum scheme. *The Political Quarterly*, 25 (1), 55–66.
- de Graft-Johnson, K.A.A., 1999. Overview of the weed problems in the Volta Basin. In: C. Gordon and J.K. Amatekpor, eds. The sustainable integrated development of the Volta Basin in Ghana. Legon: Volta Basin Research Project, University of Ghana, 55–62.
- Decker, S., 2011. Corporate political activity in less developed countries: the Volta River Project in Ghana, 1958–66. Business History, 53 (7), 993–1017.
- Derban, L.K.A., 1999. Public health aspects of the Volta Lake. In: C. Gordon and J.K. Amatekpor, eds. The sustainable integrated development of the Volta Basin in Ghana. Legon: Volta Basin Research Project, University of Ghana, 25–32.
- Diaw, K. and Schmidt-Kallert, E., 1990. Effects of Volta Lake resettlement in Ghana: a reappraisal after 25 years. Hamburg: Institut f\u00fcr Afrika-Kunde.
- Diouf, M., 1997. Senegalese development: from mass mobilization to technocratic elitism. *In*: F. Cooper and R.M. Packard, eds. *International development and the social sciences: essays on the history and politics of knowledge*. Berkeley, CA: University of California Press, 291–319.
- Duncan, J., 2000. Place. In: R.J. Johnston, D. Gregory, G. Pratt, and M. Watts, eds. The dictionary of human geography. 4th ed. Oxford: Blackwell Publishers, 582–584.
- Easterly, W., 2001. The elusive quest for growth: economists' adventures and misadventures in the tropics. Cambridge: MIT Press.
- Entrikin, J.N., 1991. The betweenness of place: towards a geography of modernity. Baltimore, MD: Johns Hopkins University Press.
- Escobar, A., 1995. Encountering development: the making and unmaking of the Third World. Princeton, NJ: Princeton University Press.

- Esseks, J.D., 1971. Political independence and economic decolonization: the case of Ghana under Nkrumah. The Western Political Quarterly, 24 (1), 59–64.
- Evered, K.T., 2010. The Truman Doctrine in Greece and Turkey: America's cold war fusion of development and security. *The Arab World Geographer*, 13 (1), 50–66.
- Evered, K.T. and Evered, E.Ö., 2012. State, peasant, mosquito: the biopolitics of public health education and malaria in early republican Turkey. *Political Geography*, 31 (5), 311–323.
- Fahim, H.M., 1981. Dams, people, and development: the Aswan High Dam case. New York: Pergamon Press.
- Fairclough, N., 2001. Language and power. 2nd ed. London: Longman.
- Ferguson, J., 2006. *Global shadows: Africa in the neoliberal world order*. Durham, NC: Duke University Press.
- Fosu, A. and Aryeetey, E., 2008. Ghana's post-independence economic growth. *In*: E. Aryeetey and S.M.R. Kanbur, eds. *The economy of Ghana: analytical perspectives on stability, growth, and poverty.* Oxford: James Currey, 36–77.
- Foucault, M., 2010. What is enlightenment? In: P. Rabinow, ed. The Foucault reader. New York: Vintage Books, 32–50.
- Foucault, M., 2008. The birth of biopolitics: lectures at the Collège de France, 1978–79.
 M. Senellart, ed., G. Burchell, trans. Basingstoke: Palgrave Macmillan.
- Foucault, M., 2007. Security, territory, population: lectures at the Collège de France, 1977–78. M. Senellart, ed., G. Burchell, trans. Basingstoke: Palgrave Macmillan.
- Ghana Trade and Information Centre, 1960. Ghana's development plan emphasizes industrialisation [a display advertisement]. *New York Times*, 12 January, p. 70.
- Goldsmith, E. and Hildyard, N., 1986. The social and environmental effects of large dams. San Francisco, CA: Sierra Club Books.
- Gordon, C. and Amatekpor, J.K., eds., 1999. The sustainable integrated development of the Volta Basin in Ghana. Legon: Volta Basin Research Project, University of Ghana.
- Gyau-Boakye, P., 2001. Environmental impacts of the Akosombo Dam and effects of climate change on the lake levels. *Environment, Development, and Sustainability*, 3 (1), 17–29.
- Hart, D., 1980. The Volta River Project: a case study in politics and technology. Edinburgh: Edinburgh University Press.
- Hart, D., 1978. The political economy of a development scheme: the Volta River Project. *International Relations*, 6 (1), 245–256.
- Harvey, D., 2005. A brief history of neoliberalism. Oxford: Oxford University Press.
- Harvey, D., 1996. *Justice, nature, and the geography of difference*. Cambridge: Blackwell.
- Hilling, D., 1966. Tema—the geography of a new port. Geography, 51 (2), 111–125.
 Hilton, T.E., 1966. Akosombo Dam and the Volta River Project. Geography, 51 (3), 251–254.
- Hoag, H.J., 2006. Transplanting the TVA? International contributions to postwar river development in Tanzania. Comparative Technology Transfer and Society, 4 (3), 247–267.
- Hove, J.O., 2013. The Volta River Project and decolonization, 1945–57: the rise and fall of an integrated aluminum project. *In*: R.S. Gendron, M. Ingulstad, and E. Storli, eds. *Aluminum ore: the political economy of the global bauxite industry*. Vancouver: University of British Columbia Press, 185–210.
- Hunt, R.P., 1958. "The Ghana experiment"—after a year. New York Times, 16 February, p. SM23.

- Isaacman, A.F. and Isaacman, B., 2013. Dams, displacement, and the delusion of development: Cahora Bassa and its legacies in Mozambique, 1965–2007. Athens, OH: Ohio University Press.
- Kalitsi, E.A.K., 1999. The role of Volta River authority in the development of the Volta Basin. In: C. Gordon and J.K. Amatekpor, eds. The sustainable integrated development of the Volta Basin in Ghana. Legon: Volta Basin Research Project, University of Ghana, 13–24.
- Khagram, S., 2004. Dams and development: transnational struggles for water and power. Ithaca, NY: Cornell University Press.
- Kirchherr, E.C., 1968. Tema 1951–1962: the evolution of a planned city in West Africa. *Urban Studies*, 5 (2), 207–217.
- Klingensmith, D., 2007. "One valley and a thousand": dams, nationalism, and development. Oxford: Oxford University Press.
- Lefebvre, H., 1991. The production of space. Oxford: Blackwell.
- Legg, S., 2005. Foucault's population geographies: classifications, biopolitics and governmental spaces. *Population, Space and Place*, 11 (3), 137–156.
- Lewis, P., 1979. Axioms for reading the landscape: some guides to the American scene. In: D. Meinig, ed. The interpretation of ordinary landscape: geographical essays. Oxford: Oxford University Press, 11–32.
- Li, T., 2007. The will to improve: governmentality, development, and the practice of politics. Durham, NC: Duke University Press.
- Lumsden, D.P., 1973a. The Volta River Project: village resettlement and attempted rural animation. *Canadian Journal of African Studies*, 7 (1), 115–132.
- Lumsden, D.P., 1973b. Nchumuru social organization and the impact of the Volta River Project. Thesis (PhD). University of Cambridge.
- McCully, P., 2001. Silenced rivers: the ecology and politics of large dams. London: Zed Books.
- Mitchell, D., 2008. New axioms for reading the landscape: paying attention to political economy and social justice. *In*: J.L. Wescoat, Jr. and D.M. Johnston, eds. *Political economies of landscape change: places of integrative power*. Guildford: Springer, 29–50.
- Moxon, J., 1984. Volta, man's greatest lake. London: A. Deutsch.
- NAG-National Archives of Ghana, Accra.
- New York Times, 1961a. The politics of aid. New York Times, 26 December, p. 24.
- New York Times, 1961b. U.S. assures Ghana of loan for dam. *New York Times*, 6 July, p. 8.
- New York Times, 1959. Africa brightened by aluminum. New York Times, 28 December, p. 30.
- Noer, T.J., 1984. The new frontier and African neutralism: Kennedy, Nkrumah, and the Volta River Project. *Diplomatic History*, 8 (1), 61–79.
- Obeng, L., 1977. Should dams be built? The Volta Lake example. Ambio, 6 (1), 46-50.
- Quaye, R., 1992. State and development in Ghana: lessons from the Volta River Project. *International Journal of Moral and Social Studies*, 7 (2), 173–179.
- Relph, E.C., 1976. Place and placelessness. London: Pion.
- Rostow, W.W., 1960. *The stages of economic growth: a non-communist manifesto*. Cambridge: Cambridge University Press.
- Rubin, N.N. and Warren, W.M., eds., 1968. Dams in Africa: an inter-disciplinary study of man-made lakes in Africa. New York: A.M. Kelley.

- Scott, J.C., 1998. Seeing like a state: how certain schemes to improve the human condition have failed. New Haven, CT: Yale University Press.
- Scudder, T., 2005. The future of large dams: dealing with social, environmental, institutional, and political costs. London: Earthscan.
- Shiva, V., 2005. Earth democracy: justice, sustainability, and peace. Cambridge: South End Press.
- Sneddon, C., 2012. The "sinew of development": cold war geopolitics, technical expertise, and water resource development in Southeast Asia, 1954–1975. Social Studies of Science, 42 (4), 564–590.
- Sneddon, C. and Fox, C., 2011. The cold war, the US Bureau of Reclamation, and the technopolitics of river basin development, 1950–1970. *Political Geography*, 30 (8), 450–460.
- Soja, E.W., 1996. Thirdspace: journeys to Los Angeles and other real and imagined places. Malden, MA: Blackwell.
- Tamakloe, M.A., 1994. Long-term impacts of resettlement: the Akosombo Dam experience. In: C.C. Cook, ed. Involuntary resettlement in Africa: selected papers from a conference on environment and settlement issues in Africa. Washington, DC: The World Bank, World Bank Technical Paper, Number 227, 99–110.
- Tilt, B., Braun, Y., and He, D., 2009. Social impacts of large dam projects: a comparison of international case studies and implications for best practice. *Journal* of Environmental Management, 90 (Suppl. 3), S249–S257.
- Tsey, K., 2011. Re-thinking development in Africa: an oral history approach from Botoku, rural Ghana. Bamenda: Langaa RPCIG.
- Tsikata, D., 2006. Living in the shadow of the large dams: long term responses of downstream and lakeside communities of Ghana's Volta River Project. Leiden: Brill.
- Tuan, Y., 1975. Place: an experiential perspective. Geographical Review, 64 (2), 151–165.
- Tumbare, M.J., 2010. The management of the Zambezi River Basin and Kariba Dam. Lusaka: Bookworld Publishers.
- Windsor, J.E. and Mcvey, J.A., 2005. Annihilation of both place and sense of place: the experience of the Cheslatta T'En Canadian First Nation within the context of large-scale environmental projects. *The Geographical Journal*, 171 (1), 146–165.