

Gabrielle Hecht, “Uranium from Africa,” *Chimurenga 14: Everybody has their Indian.* Cluster B: 13-21.

In 2002, then-US president George W. Bush claimed that Saddam Hussein had “recently sought significant quantities of uranium from Africa.” The intelligence, insisted the Bushites, was unequivocal: Iraq had tried to purchase 500 tons of yellowcake from Niger. When CIA rumblings raised doubts about the information, British intelligence services rushed to the rescue: oh yes, it’s all true, though of course we can’t reveal our sources. Trust us—Saddam *is* building “the bomb.” Within a few months, the warmongers had won. Invasion ensued.

If the death toll weren’t so huge, the suffering so vast, the next part of the story would be comical. The “evidence” turned out to be forged, peddled by an Italian businessman who said he’d obtained the documents from the Nigérien embassy in Rome. The forgery was so inept that IAEA officials—when they finally saw the documents in March 2003—immediately guessed they were fake, and proved it within hours. By then it was too late, of course. (Not that the Bush administration ever gave much credence to international bodies. Or reality-based evidence. But I digress.)

Want to check out the forgeries for yourself?

Go to:

<http://cryptome.info/0001/niger-docs/niger-docs.htm>

Americans began to realize they’d been hoodwinked in mid-2003. The story leaked out slowly: The CIA had sent former diplomat Joseph Wilson to Niamey the previous year, to investigate whether Niger had indeed concluded a deal with Iraq. Wilson found no trace of the alleged sale. When he heard Bush’s statement a few months later, he initially assumed that the president meant some *other* uranium-producing African nation. Upon realizing that Bush really did mean Niger, an appalled Wilson went public. To discredit him, the administration pulled one of its typical distraction maneuvers and outed Wilson’s wife as a CIA operative.

The distraction worked. “Follow the yellowcake road!” screamed the US media, which promptly did so by focusing on *Americans*: Wilson, his wife, and the official who outed her. Dick Cheney, the man behind the curtain, must have cackled as bickering over personal credibility drowned out the fact that Bush had misled the nation into war.

Not to mention the magic that made this possible: the transmutation of “uranium from Africa” into “atom bomb for Iraq,” an alchemy that—still today—most people don’t question.

And what amazing alchemy.... Think about it. Had Saddam been suspected of approaching Kazakhstan—another major producer—would officials have asserted that he'd sought “uranium from Asia”? Not a chance. In mainstream Western political imagination and media, “Africa” remains the dark continent, mysterious and corrupt—ideally qualified for all matters illicit. And what better candidate for shady dealings than Niger, a nation that most Americans cannot distinguish from Nigeria, let alone find on a map? Joseph Wilson, who even found Niamey on a map, had initially been told that Bush’s infamous statement referred to Gabon, Namibia, or South Africa. But that Wilson accepted the Gabon option for even a second was jaw-dropping: uranium production there had ceased in 1999, and as a former ambassador to Gabon he should’ve known that. This left Namibia or South Africa, extremely unlikely candidates from either a political or a corporate perspective. British intelligence, meanwhile, had claimed to have found “some evidence” that Iraq had signed a purchase agreement with the Democratic Republic of Congo, but the idea that 500 *tons* of *yellowcake* could emerge from the artisanal mining taking place at the old Shinkolobwe shafts (which had supplied uranium to the bomb that flattened Hiroshima) was pretty absurd.

Which brings us to the assumption that acquisition of “uranium” made Iraq into a “nuclear state.” Before “uranium” becomes weapons-usable, it must be mined as ore, processed into yellowcake, converted into uranium hexafluoride, enriched, and pressed into bomb fuel. “Uranium” is as underspecified technologically as “Africa” is underspecified politically.

Finally, consider this. Yellowcake from Niger made Iraq nuclear enough to justify war in 2003. But just 8 years earlier, yellowcake hadn’t sufficed to make Niger itself nuclear. According to a 1995 US government report on nuclear proliferation, neither Niger, nor Gabon, nor Namibia had *any* “nuclear activities”—even though that year, these three nations accounted for about a quarter of the world’s uranium production that year.

So when *does* “uranium” count as a nuclear thing? And what does “Africa” have to do with it?

On the geographies of uranium’s nuclearity

From 1945, both cold warriors and their activist opponents in the superpowers and Europe cultivated nuclear exceptionalism. Atomic weapons were portrayed as fundamentally different from any other human creation. “The bomb” appeared as the

ultimate trump card; geopolitical status seemed directly proportional to a nation's number of nukes. "Nuclear" scientists and engineers gained prestige, power, and funding far beyond their colleagues in "conventional" research. Fission meant splitting atoms, and the resulting rupture in nature's very building blocks propelled claims to a corresponding rupture in historical space and time. Anti-nuclear groups, meanwhile, highlighted the unprecedented qualitative and quantitative dangers posed by exposure to radiation. The stakes of exceptionalism were amplified by morality-talk: nuclear things were either sacred or profane. Regardless of political or moral leaning, however, nuclear exceptionalism rested on the sense that an immutable ontology distinguished the nuclear from the non-nuclear. The difference seemed transparent – ultimately a clear-cut matter of fission and radioactivity.

This unreflective reflex—this ontological *certainty* about the universality of nuclearity—made it hard to see that nuclear ontologies had a history, and a political geography. These, in turn, were related to another kind of geopolitical rupture-talk from the cold war period: decolonization discourse.

Less than three months after the US bombed Hiroshima, the United Nations charter became the first document of international law to refer to "the principle of equal rights and self-determination of peoples." In theory (though certainly not in practice), a new world order had emerged built upon a foundation of equality for all. Independence would free Africans and Asians from the shackles of white rule. Formerly colonized people could choose their leaders, pursue economic prosperity, educate their children, and join the global community as peers. New nation-states would serve the interests of their people, who for the first time would be citizens rather than subjects. Like those of nuclearity, these ruptures too were matters of morality: the 1948 Universal Declaration of Human Rights was construed as a moral leap forward for humankind.

Political leaders blended nuclear and post-colonial discourses about rupture and morality in a variety of ways. Postwar French and British leaders not only hoped that the atom bomb would substitute for imperialism as an instrument of global power; they also saw in it a means of preventing their own colonization by the new superpowers. In 1951, Churchill's chief scientific advisor, Lord Cherwell, warned: "If we have to rely entirely on the United States army for this vital weapon, we shall sink to the rank of a second-class nation, only permitted to supply auxiliary troops, like the native levies who were allowed small arms but no artillery." French parliamentary deputy Félix Gaillard that same year: "those nations which [do] not follow a clear path of atomic development [will] be, 25 years hence, as backward relative to the nuclear nations of that time as the primitive peoples of Africa [are] to the industrialized nations of today." Nuclear = colonizer. Non-nuclear = colonized. Africa remained the eternal metonym for backwardness.

For Europeans this act of technopolitical mapping had deep roots, extending the assumptions and practices of the "new imperialism" to the nuclear state and to the

state of being nuclear. Colonial warfare rested on the assumption that different moral structures underlay the rules of war for battles between “civilized” nations and conflicts with “savages.” Aerial bombing followed machine guns as tools of extermination. Its first victims lived in oases outside Tripoli (1911) and villages in Morocco (1913). Even as ecstatic prophets in Europe and America proclaimed the airplane's ability to ensure world peace, the British experimented with strategic bombing in Baghdad (1923) and the French bombarded Damascus (1925). For prescient science fiction writers, it was only a matter of time before atomic energy would follow suit. And in a Pacific war with virulent racial overtones, it did. Several hundred thousand Japanese became the first victims of the “white race's superweapon.” As the Atomic Bomb Casualty Commission industriously erected colonial scientific structures to study the explosions' aftermath in Japan, the US and Britain had already begun to scour African colonies in a desperate bid to monopolize the magic new stuff of geopolitical power: uranium.

The atomic bomb was imagined as white even before it existed. Listen to Swedish writer Sven Lindqvist retell a 1923 German science fiction novel:

Should atomic power remain in the hands of whites? Or should we share our secret with the peoples of the world?...A world conference is convened to settle the question. The dangers that accompanied the invention may be greater than the immediately visible advantages, warns Professor Isenbrandt, atomic physicist. For that reason, licenses should be issued only to dependable people, and only for economic purposes. But immediately voices are raised, accusing Europe of wanting to use atomic power for imperialistic purposes. The conflicts seem endless.

"They will never stop," says Professor Isenbrandt. "The gulf between the races is too great. No bridge can cross it..."

Quite right: one day some black miners in South Africa gang up on a smaller group of whites and drive them away "for a trifling reason." The recently quelled revolt in Morocco blows up again. In Algeria, in Tunisia, wherever blacks are working for European companies, the flag of revolt is raised. The whites are defeated by overwhelming black masses. Then the message arrives that the Chinese are on the move. All the colored races unite under the leadership of the Chinese against the whites,

Then Isenbrandt explodes his superweapon over the Mongolian masses...

"It was wrong," he says sharply, "when our prophets of the past promised the same rights to everyone in the world. Now everywhere on earth the black, brown, and yellow races are calling for freedom...Woe betide us if we grant it! Our power and even our existence would soon be at an end.

The superweapon will be the white race's, and thus humanity's, salvation. For "only the pure white race can fulfill the task it has been given."

The atomic creed did leave space for post-colonial leaders to challenge the technopolitical geography of nuclearity asserted by the West. The Indians stepped in first, when Jawaharlal Nehru proclaimed nuclear development a fundamental building block of Indian national identity. In mid-1950s negotiations over the creation of the

International Atomic Energy Agency, Indian delegates raised a challenge. If representation on the IAEA Board of Governors relied solely on technical achievement and a cold war East-West balance, they charged, the agency would only reproduce immoral global imbalances. Instead, qualification for Board membership should combine nuclear “advancement” with regional distribution. The challenge worked, sort of: the agency’s statute allocated five permanent seats on its Board to states deemed the “most advanced in the technology of atomic energy *including the production of source materials*” globally, and another five according to geographic region. Uranium “producers” in Eastern and Western bloc nations would rotate through another two seats, and “suppliers of technical assistance” would rotate through one seat. The remaining spots were subject to elections.

It was the South African delegate who’d pushed to include “source materials” (*aka* uranium ore) as an indicator of “advancement” in the IAEA statute. By 1956, contracts with the US and Britain had made uranium production vital to the apartheid economy. Anticipating that the IAEA would play a central role in shaping uranium markets, and knowing that its apartheid policies would prevent election to the Board, South Africa desperately sought a statutory seat. At the time, its “nuclear” activities consisted only of uranium ore production underwritten by a very small research program. At the dawn of the Cold War, when the US still thought uranium was rare, its production seemed extremely nuclear. By the mid-1950s, however, geologists had begun to realize that uranium wasn’t rare at all.

Of course the apartheid state represented the antithesis of the postcolonial settlement pursued by India, which wanted to demote South Africa to one of the rotating “producer” seats on the IAEA Board. Prevailing on their British and American customers for support, however, South African delegates insisted that “source materials” should count as an indicator of “advancement.” In a technopolitical geography where the cold war trumped racial inequality and other African producers remained under colonial control, South Africa’s uranium production could serve as the pinnacle of *African* nuclearity.

So in 1956 “source materials” included uranium ore, which in turn seemed nuclear enough to trump the increasingly vocal opposition of postcolonial nations to the apartheid state. But this didn’t compel the nuclearity of uranium ore to remain stable for all time.

Let’s fast-forward to the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT). Under the NPT, “nuclear weapons states” pledged not to transfer atomic weapons or explosive devices to “non-nuclear weapons states,” and to make “good faith” efforts to reduce their atomic arsenals. Other signatories renounced atomic weapons and agreed to IAEA compliance measures. The treaty sought to establish the relationship between states with nuclear weapons and those without by invoking another ontology of global order, that of human rights and “development.” The NPT

referred to “the *inalienable right* of all the Parties to the Treaty to ...nuclear energy for peaceful purposes,” which in turn would be facilitated by international cooperation that would proceed “with due consideration for the needs of the developing areas of the world.”

The NPT codified global nuclearity, but left the IAEA to implement its vision. The agency launched a major “technical assistance” program aimed at developing nations (which has been repeatedly accused of neo-colonialism). It also designed a safeguards system. This was difficult, and the agency’s solution to the problem of which things were nuclear enough to require to safeguards kept changing. South Africa, seeking to minimize external oversight of its uranium industry, now pushed to *exclude* mines and ore-processing plants from official definitions. The effort worked: the IAEA’s 1968 safeguards document defining a “principal nuclear facility” specifically excluded uranium mines and mills from that category. The 1972 version went further, excluding uranium ore from the category of “source material” altogether!

Uranium ore was thus de-nuclearized for the purposes of profits. Mines and yellowcake plants could do legitimate business without undergoing direct IAEA inspections. This particularly suited producers in southern Africa (Namibia as well as South Africa), whose profits increasingly appeared under threat from mounting international opposition to apartheid, and whose influence on legal global nuclear order-making waned after 1977, when the Group of 77 (“developing” nations) finally succeeded in kicking South Africa off the IAEA Board. But let’s be very clear: the inspection exemption, by eliminating “outside interference” and inconvenient paperwork, suited uranium production companies everywhere. Most often, this benefited those who already dominated the global nuclear order and worked to marginalize countries like Gabon, Niger, and Namibia as non-nuclear.

But sometimes, things got a bit more complicated.

On Yellowcake in Niger

Soon after Hamani Diori became Niger’s first president in August 1960, he learned about the potential for enormous uranium deposits in the Sahara. How might such a resource shape the Nigérien economy? Diori and his advisers bargained with the French Commissariat à l’Energie Atomique (CEA) to derive maximum advantage from these deposits, securing 20% of the capital for the first mining company, and 32% for the second.

As he waited for Niger’s mines to become operational, Diori followed from afar institutional battles over the shape of France’s nuclear power program. He fully grasped how France’s will to *national* exceptionalism saturated its *nuclear* dreams, and how the two fused together. How could he not? In his country, the French wanted to translate

nuclear exceptionalism into fiscal exemptions by minimizing their tax burden. Niger, of course, sought to maximize tax and other revenues.

A 1961 defense treaty specified that Niger would give France priority access to uranium and other strategic materials. For Diori, this meant that uranium negotiations should proceed at the state level. He insisted on direct talks with French presidents, who in turn acknowledged the uniqueness of uranium-related negotiations in diplomatic correspondence. In 1968, Georges Pompidou signed off on the creation of a “Commission franco-nigérienne de l’uranium” (CFNU), which provided a forum for negotiating price, profits, security of supply, development, cooperation, and fiscal revenues. These were complicated conversations, not the least because there was no worldwide referent for the “value” of uranium, no universal mechanism to establish a “fair price” for a given transaction. Prices took into account customers’ capital investments, diplomatic links between states, the total quantity sold, and time span; they could be wildly different from one contract or place to the next.

Unhappy with the outcome of these discussions, in 1973 Diori decided to take his cue from OPEC. He called for meetings between France, Niger, and Gabon in order to negotiate over price and profits. He placed these discussions under the rubric of nuclear exceptionalism, arguing that “the content of uranium transcended commercialism.” He reasoned that if Niger could contribute to the exceptional nuclearity of France, then surely France could make exceptional contributions to the economic development of Niger. (Gabonese delegates supported Diori on this, but for them the stakes weren’t as high: Niger had little to sell besides uranium, while Gabon derived most of its revenues from oil.)

In response, the French delegation attempted to *de-nuclearize* uranium by making claims about the *banality* of the market. They insisted that the only possible way to determine the value of uranium was to treat it like an “ordinary” market commodity. Revenues to African states could conceivably increase, but only if pegged to the international “revalorization” of uranium. The Nigérien and Gabonese delegations countered that uranium transcended ordinary commercial calculations:

Outside of the calculable parameters, there are other more significant ones that are not a function of calculation, such as the economic independence of France, the guaranteed satisfaction of its energy needs, a substantial savings in foreign currency and the reinforcement of the franc zone, and finally the solidarity of the three countries which could together represent 15% of the world uranium market if they coordinated [their efforts].

They thus appealed to France’s particular breed of nuclear exceptionalism. Referring to the “planetary dimensions” of uranium-related problems, they insisted that this exceptionalism itself had a value.

In April 1974, two months after the big meeting, Diori was overthrown in a military coup by Lieutenant-Colonel Seyni Kountché. The new regime accused Diori of pandering to French capital and allowing deplorable living conditions for Nigérien mineworkers. They dismissed his efforts to stand up to the French on matters nuclear, characterizing these as no more than “demagogic declarations aimed at international opinion.” Rather than pushing for greater revenues from sales that would in the end still be conducted by the French, Kountché negotiated an agreement that entitled Niger to sell – directly and independently – a proportion of yellowcake output equal to the percentage of its capital holdings in the mining companies.

In the late 1970s, Niger’s customers under this agreement included Libya, Iraq, and Pakistan. Kountché thus sought to reconfigure the technopolitical geography of Niger’s uranium, in ways that many Western governments found increasingly dangerous. Yet Niger—like France—didn’t accede to the NPT until 1992. Local and regional issues mattered far more to its leaders than cold war superpower politics. For example, Kountché threatened to cut off supplies to Qaddafi in January 1981, after Libya attempted to annex Chad. But he apparently changed his mind a few months later, famously declaring that Niger needed the funds so badly that “if the devil asks me to sell him uranium today, I will sell it to him.” In the end, however, there were limits to how much uranium Niger could sell on its own. In the early 1980s uranium prices began to decline. Producers elsewhere could respond by stockpiling uranium in the hope of later price increases, but the Nigérien state could not afford that strategy. After several more rough years, it remanded marketing back to the French.

Today, transnational and regional technopolitical geographies continue to shape the power of nuclear things in Niger. Uranium prices skyrocketed in 2005-07, precipitating worldwide interest in Nigérien reserves. In 2007, president Mamadou Tandja successfully demanded that France increase the price paid for yellowcake, and that it (once again) make some available for Niger to sell on its own. Within Niger, the Mouvement des Nigériens pour la Justice (MNJ) began demanding a greater part of uranium revenue and jobs for the Touaregs who inhabit the desert near the mines. Tandja has refused to meet its demands, calling the group a terrorist organization. This conflict has a long history reaching back in many, non-uranic directions, of course. But uranium—with all its ambiguous, fluctuating nuclearity—has certainly helped the MNJ attract international attention to its demands.

How did Nigériens react to Bush's claims? Detailing the saga of how forged documents led up to the Iraq war, Touareg writer and activist Moustapha Kadi concluded in February 2007:

Faced with all this irrefutable proof, George Bush could do no better than present a hypocritical verbal apology to our impoverished, bruised nation. The damages suffered by Niger and its 13 million Nigériens were not on the order of the day! For this enormous lie, which destroyed the image and credibility of our country, it would be normal to press charges against the USA...in order to obtain at least 1000 billion CFA francs (about 2 billion dollars) of compensation for Niger. But despite everything, history will show that Nigérien politicians and heads of state kept their traps shut at a moment when the dignity and honor of their country was gratuitously dragged in the mud by a global superpower!

The significance of uranium's shapeshifting nuclearity extends into biopolitics. Whether or not uranium mining counts as a nuclear activity matters for the regulation of occupational health and environmental pollution. Treating uranium extraction like any other mining activity can mean that occupational exposures to radon¹ don't get monitored or limited, as was the case in apartheid South Africa. It can mean that mine tailings and irradiated debris get dumped in the desert only to be recuperated by people in search of building materials, as NGOs have accused mining operators in Niger of doing. Africans are not alone in these experiences—in the 1950s and 1960s, US uranium workers also inhaled deadly quantities of radon, and some American towns near mining sites also had houses made from tailings. Nor is uranium mining the only extractive industry with potentially devastating health and environmental consequences. But the stakes of African nuclearity—or lack thereof—are only now becoming visible, even as they continue to accumulate. The specific ways in which the (non-, or fragile, or ambiguous) nuclearity of uranium production play out in particular African contexts matter hugely for the technopolitics *and* the biopolitics of its extraction. In the expansion of uranium extraction in Niger and Namibia, as well as in new operations currently underway in Malawi, Zambia, the Central African Republic, and elsewhere on the African continent, mine operators and state officials pit the immediate urgency of "development" against the long-term uncertainties of exposure. Workers and their families are thus left to find and use their own nuclearity.

¹ a radioactive gas present in mine shafts whose inhalation, over time, leads to lung cancer

Parts of this essay were drawn from Gabrielle Hecht, "Nuclear Ontologies," *Constellations* 13:3 (September 2006): 320-331 and G. Hecht, "Quelques mots coloniaux à propos de la nucléarité exceptionnelle de la France, et de la banalité du nucléaire français," *Cosmopolitiques* n°16 (September 2007): 181-195.

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