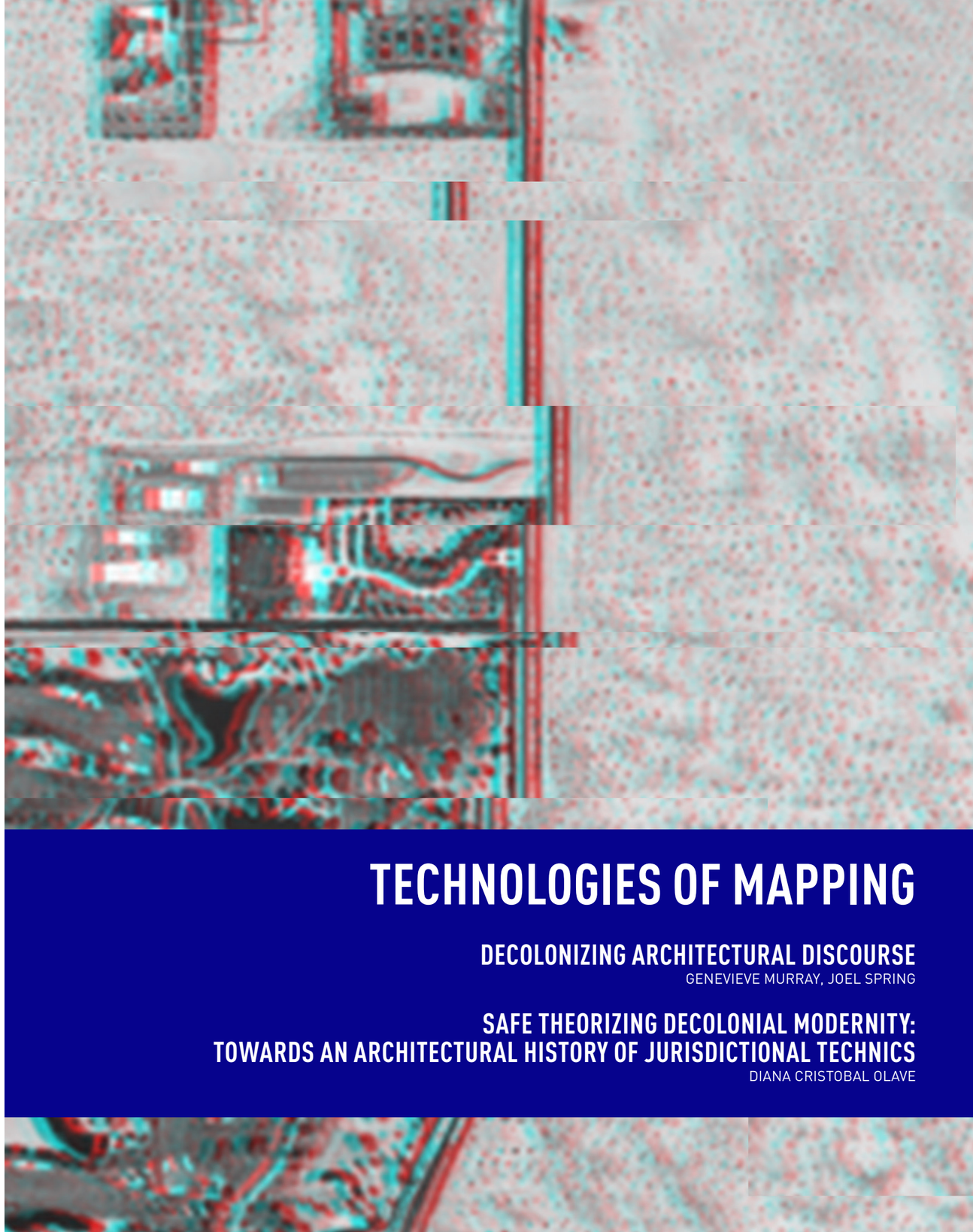

TECHNOLOGIES OF MAPPING

DECOLONIZING ARCHITECTURAL DISCOURSE

GENEVIEVE MURRAY, JOEL SPRING

SAFE THEORIZING DECOLONIAL MODERNITY: TOWARDS AN ARCHITECTURAL HISTORY OF JURISDICTIONAL TECHNICS

DIANA CRISTOBAL OLAVE

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THEORIZING DECOLONIAL MODERNITY: TOWARDS AN ARCHITECTURAL HISTORY OF JURISDICTIONAL TECHNICS

MANUEL SHVARTZBERG CARRIÓ

ABSTRACT

This paper reflects on the relation between architecture and "jurisdictional technics"—my formulation to describe spatial practices for managing territorial conflict—through a midcentury modern case study from the settler-colonial city of Palm Springs (California), ancestral lands of the Agua Caliente Band of Cahuilla Indians. The Palm Springs Spa (1959) was commissioned by the Agua Caliente and designed by local modernists William Cody, Donald Wexler, and Richard Harrison. This project was built on the tribal grounds of the original natural spring that would give the city its name, and was one of the first formal long-term leases of tribal property for commercial uses in the United States. Through the highly complex coordination of myriad technologies and local, state, and federal agencies—from the US Geological Survey, to the Bureau of Indian Affairs, the Department of the Interior, and the US Congress—Cody and his team effectively produced an allocation of water uses between different geopolitical entities, at an architectural scale. This geopolitical complexity contrasted with other private developments that also used groundwater for their operation, especially for golf courses. Sunnylands, for example, a winter retreat for Walter Annenberg designed by A. Quincy Jones & Frederick Emmons in the early 1960s, was supplied by a privately operated water well. Rather than being technically sophisticated but politically "neutral," these architectures translated complex problems of sovereignty into a neocolonial language of internal geopolitical containment. Architecture was amenable to this because, as a technology of representation, it was able to visualize—and thus translate—landscapes of deeply contested sovereignty as (seemingly) purely geo-metric problems: issues of technical representation and functionality rather than jurisdiction. Apprehending midcentury modern architecture in this way denaturalizes the colonial foundations upon which it was born, showing how it was an effective tool for settler-colonial domination. However, it might also allow us to posit a different perspective on architecture's relation to landscape: less extractive of natural resources like water, and able to represent indigenous modes of sovereignty—predicated on discrete onto-epistemologies—rather than their negation. Drawing on these architectures' mediation of the relation between geo-politics and geo-metrics, this paper theorizes the concept of a "decolonial modernity" to understand the jurisdictional challenges posed by processes of decolonization.

Figure 1: Sunnylands Estate in the Coachella Valley. Imagery ©2021 Google, Imagery ©2021 Maxar Technologies, USDA Farm Service Agency, Map data ©2021
[Falls under fair use policy: https://about.google/brand-resource-center/products-and-services/geo-guidelines/#google-maps-google-earth-and-street-view]

INTRODUCTION

In 2013, the Agua Caliente Band of Cahuilla Indians, ancestral inhabitants of the Palm Springs area, sued for the rights to a large aquifer under their Reservation. This aquifer stretches from Palm Springs to the Salton Sea, supplying almost all the water that allowed the Coachella Valley to become one of largest golf resort areas in the world.[1] Through a discrete infrastructure of private water wells supported by public water pump stations, storage reservoirs, and associated pipework, the aquifer was a key, if largely invisible, component of many midcentury modern projects sited along lush golf fairways—spectacular signs of a rising American hegemony during the Cold War. Famed estates such as Sunnylands, designed in the early 1960s, were constructed with, and are still supplied by, privately operated water wells (Figure 1).

Since then, however, excessive water pumping and inadequate replenishment have severely depleted the aquifer and led to its progressive contamination—a key reason for the Tribe's lawsuit. This paper explores the governance history of the Coachella aquifer—what the UN calls the necessary "hydrodiplomacy" of "transborder aquifers"—through an exploration of the ways in which midcentury modern architecture made this resource visible and fungible in particular ways, thus producing certain *geopolitical relations* between the Tribe and the United States. Indeed, one of the first modernist projects to explicitly engage the groundwater basin was the Palm Springs Spa, designed by William Cody in collaboration with Donald Wexler, Richard Harrison, and Philip Koenig in the late 1950s, on Agua Caliente lands. This project was the first in the nation to implement a 99-year lease of Native American property for commercial purposes, thus establishing an illustrative precedent for transborder aquifers.[2] Through the designers' protracted coordination between technologies and regulators—including the US Geological Survey, the Bureau of Indian Affairs, the Department of the Interior, and the US Congress—the Palm Springs Spa effectively instantiated an allocation of water uses between different geopolitical entities,

at an architectural scale. To this day, there exists only one recognized transborder aquifer agreement with allocated volumetric water rights, between France and Switzerland.[3]

As hydrodiplomacy experts argue, the main impediment to developing transborder agreements lies in the technical and political challenges of governing a subterranean resource across different jurisdictions. The history of midcentury modernism in the Coachella Valley provides a case study of how these geotechnical and geopolitical relations are crafted—how the relations between territorial and architectural expertise determine the formation of rights to natural resources. Construction requires disclosing and sharing certain types of information among different parties, a process that is fraught with inherent tensions in colonial sites, and that is compounded when projects, such as structures over transborder aquifers, challenge or redraw regimes of jurisdiction. Sovereignty, in other words, must be made both visible and invisible in certain ways for its legitimation and enforcement. This paper argues that architecture is a crucial technology in this process, mediating the mechanics of epistemological closure and disclosure, and thus also of political domination and autonomy.[4]

"FRAGMENTED JURISDICTION"

The conflict over groundwater in the Coachella Valley has its roots in the way the territory was partitioned by the settler colonial state in the 19th century. The seemingly "virgin land" that made midcentury modernist projects so spectacular was due to the existence of the Agua Caliente Reservation, which is intermeshed with U.S. land in a checkerboard pattern[5] (Figure 2). This territorial pattern resulted from the juxtaposition of the Agua Caliente Indian Reservation—established by Executive Order—and the construction of the Southern Pacific Transcontinental Railroad in 1876, which was paid by the U.S. government with a public land grant of alternate square-mile sections. The checkerboard pattern interlocks the city and the reservation, creating an inherently complex and contentious territorial condition, described by Agua Caliente Tribal Chairwoman Vyola Olinger in terms of "fragmented jurisdiction."[6] Reservation land appeared "untouched"—an illusion of emptiness leveraged by developers seeking to build properties with desert views—because tribal development was legally thwarted and hemmed in by the territorial checkerboard. This fragmentation created an economic asymmetry: tribal underdevelopment made possible the existence of Palm Springs as a booming postwar consumer "playground" whose main attraction was its seemingly untamed desert location.[7] As the city grew, private developers constructed leisure amenities and homes by expanding the city horizontally and up to the limits of each non-Indigenous section of the checkerboard, thus entrenching its asymmetries in legal and built forms.

PALM SPRINGS SPA

This jurisdictional and economic conflict was prominently on display with the design of the Palm Springs Spa in the late 1950s. Built by a developer over the Agua Caliente's natural spring, it was the first time in history that the Coachella Valley's groundwater infrastructures were opened to public scrutiny, as the project's construction had to be approved by a plethora of US local, state, and federal agencies. The

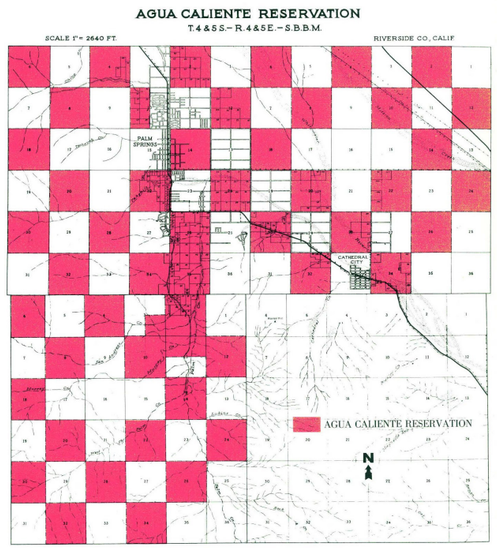

Figure 2: Reservation map, 1962. Progress Report, Agua Caliente Band of Cahuilla Indians. Courtesy: Agua Caliente Cultural Museum.

geo-metrics of the spring's hydrology, coordinated by architect Philip Koenig and carried out by colonial administrators, offered a stark contrast to the settler-colonial development of the Coachella Valley, where water extractions were most often performed by private parties themselves, and were thus strategically removed from public view.

The design of the new spa engaged the natural vertical water supply of the spring and deployed it horizontally with a sweeping monumental colonnade that thematized this horizontality by recalling the Spanish Colonial Revival architecture that first inaugurated Palm Springs's status as a leisure resort (Figure 3). The project required a different way of visualizing the Tribe's water, thus shifting how it could be managed. Since the first disputes arose in the late 19th century between settlers and the Tribe, the issue of water distribution had been adjudicated upon maps and plans. Ratios of water were apportioned according to use and availability, as the fundamental water sources could be seen by all in the creeks, canyons, and the network of engineered canals, diversion dams, and open ditches that brought it into the Reservation. The mostly horizontal nature of these exchanges and agreements allowed for their direct representation in maps and diagrams. Quantities could be ascertained by simply dipping measurement tools directly into the flow of the stream or at specific gauge points installed directly on the surface ditches and reservoirs. The ensuing political struggles over water were grounded in the techno-politics of visibility enabled by these horizontal water infrastructures.

This changed when the Tribe turned to develop its own natural spring. At first, the Tribe hired Victor Gruen Associates to draw plans for the entire Reservation, who proposed a horizontal distribution of different uses seeking to maximize commercial zoning. The result diagrammed the new status of tribal landowners as individual property holders, while also sharply delimiting the potential futures of tribal development to the reservation's checkerboard section closest to the commercial center of Palm Springs. Zoning, however, was a contentious issue; the city claimed jurisdiction over it even on Indigenous land, which mired the Agua Caliente's plans in the courts. Thus, when the Gruen plan was rejected, the Tribe began to consider a more surgical approach, developing vertically instead of horizontally. Rather than seeking to grow on their land's surface, they turned inwards to develop the natural spring itself into a large commercial venture.

The new approach worked, but while providing new potentials, it also reconfigured the terrain on which sovereignty was being exercised. The turn from land to water was accompanied by a shift from space to time—from the Tribe's own use and operation of the natural spring as a source of Indigenous medicine, physical replenishment, and cultural transmission, to a real estate asset in the form of a short-term lease over the entire spring, assigned to an external developer. Thus, as economic growth via zoning was thwarted by jurisdictional challenges, the Tribe sought to capitalize on the possibility of leasing land as a financial asset. This was more than just a commercial transaction for the Tribe, as it also strategically shifted the development's burden to the developer, who had to

Figure 3: Council Chairwoman Eileen Miguel and developer Sam Banowit outside Palm Springs Spa Hotel entrance colonnade. Cover, "Palm Springs Spa Hotel and Mineral Springs: First Anniversary," c. 1964. Courtesy: Agua Caliente Cultural Museum.

make sure the project was constructed within the short time window allowed by the state before the lease would have to go through another lengthy review and extension by the Department of the Interior.

Given the project's program as a natural spring spa, the critical variable of time was also crucially entangled with quickly obtaining an understanding of the hydrological mechanics of the spring itself. Indeed, as plans took shape for the new spa, it became apparent that *geological* expertise would determine the project's success or failure—a flow of expertise that was mediated by the project's architects. As Sam Banowit, the spa developer, noted in a letter to the Tribe, associate architect Philip Koenig had been charged with "researching the bathhouse and engineering problems [and] coordinating the efforts of the various geologists and engineers required to properly explore the Springs," seeking approval by local authorities as well as "the Department of Indian Affairs."[8] The key issue, Banowit emphasized, was that Koenig's efforts were geared towards achieving knowledge and approvals "by the U.S. Geological Department ... within the time allotted under the lease agreement."[9] The significance of this piece of evidence lies in how Koenig managed to translate, via architectural coordination, Banowit's demand for speed in a way that pushed the otherwise slow colonial technical bureaucracy to the Tribe's ultimate advantage, as it managed to sidestep the jurisdictional problems inherent in horizontal development (zoning) that the city was thwarting.

Thus, while the local press noted the new building's "eye-filling manse of artistic décor crafted by the Southland's best artisans"[10]—including Italian glass, ceramics, and terrazzo—the real challenge, they pointed out, lay in the complex engineering beneath the structure.[11] Before construction, Koenig organized a number of hydrological and geological investigations. The water's origin appeared to lie in a deep splinter of the San Andreas earthquake fault, requiring sophisticated geological mapping to determine its precise nature.[12] The challenges of coordinating matters of subsurface measurement, testing, and administration would prove to be inseparable from the putatively "political" issue of Native development.[13] Reporters were ecstatic about what they called the "giant jigsaw" of the spa's geotechnical coordination.[14]

This jigsaw was simultaneously legal, geological, political, economic, and architectural. Not only was it imperative that any construction tread lightly over the spring, but also the neat, geometric sovereign boundary of the checkerboard—a simple line in plan upon which the spring was located—was much more fuzzy and complex underground (Figs. 4 & 5).

Indeed, the vertical view opened up by the spa clarified that the tribe's "fragmented jurisdiction" was not just about horizontal distributions of property, but about the particular kinds of expertise that were available politically and jurisdictionally to begin extracting an economic surplus from their land. The Agua Caliente's history and culture, always centered around the spring, suddenly depended on the spring's particular geophysics—internal dynamics and morphology—while, in turn, jurisdiction over such knowledge was monopolized by a patchwork of U.S. colonial agencies that threatened to undo the tepid native gains over short-term leases.[15]

The result of this coordination, displacing and fragmenting the jurisdictional issue of zoning into the realms of geology and real estate, was a veritable architectural machine for accelerating the controlled extraction of the aquifer's waters. Once the spring was cleared and its basic natural components were inspected and documented, "it was agreed that a large water-collecting tank should be installed in the ground in a carefully excavated hole at the spring orifice."[16] Set directly atop this "orifice," the new tank collected the entire flow of the spring. Once the rest of the facilities were completed, the tank would allow for specific pressure regulation as desired, providing water supply at higher speeds of flow than the natural spring itself.[17] The tank, in other words, was designed as the beating heart of the new spa, an apparatus to modulate, regulate, and administer water therapy and relaxation to Palm Springs' growing numbers of tourists. But even more than a machine, the new spa, located in the center of Palm Springs, also became an architectural symbol of the Agua Caliente's successful maneuvering around the development blockages imposed by the colonial checkerboard and the settler-colonial technologies that enforced it, such as the city's zoning plans.

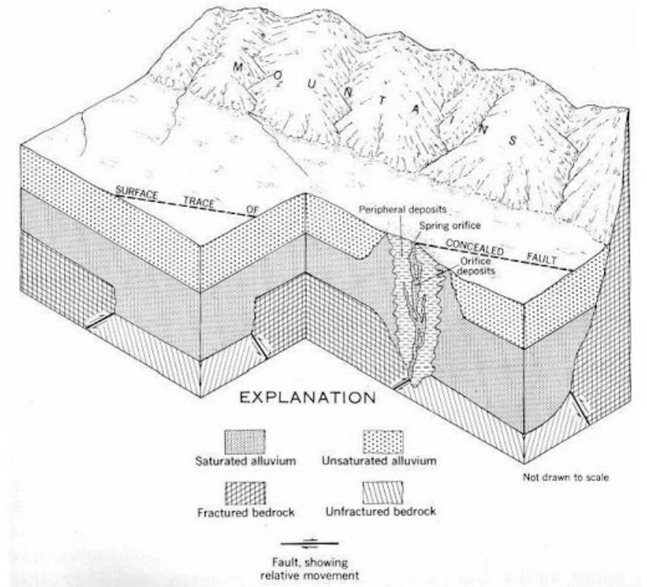

Figure 4: "Generalized sketch showing possible relation of spring to geology." L. C. Dutcher and J. S. Bader, *Geology and Hydrology of Agua Caliente Spring, Palm Springs, California*. Washington, U.S. Govt. Print. Off., 1961.

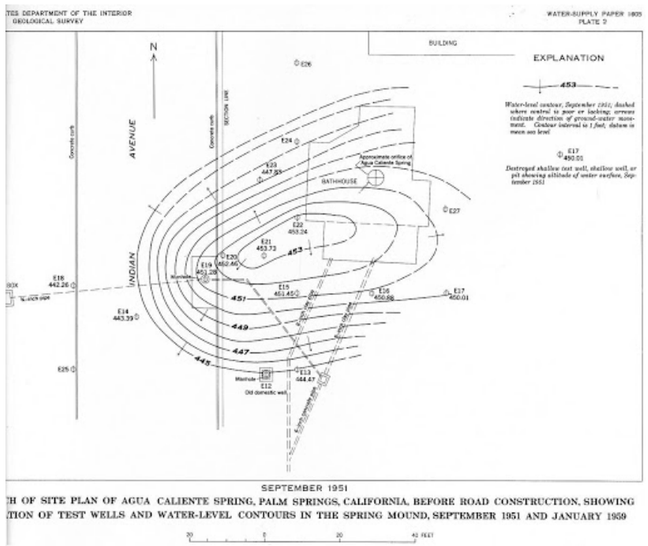

Figure 5: Topography and water supply infrastructure around Agua Caliente hot springs, 1951. L. C. Dutcher and J. S. Bader, *Geology and Hydrology of Agua Caliente Spring, Palm Springs, California*. Washington, U.S. Govt. Print. Off., 1961.

JURISDICTIONAL TECHNICS

These technologies, however, could not ultimately be contained within the state's own apparatuses, and could thus be subverted. For example, the spa's hydrological coordination and design overseen by Koenig had resulted in a special report by the US Geological Survey, comparing the spring to the artificially constructed wells managed by the privately owned Palm Springs Water Company.[18] Although ostensibly only a geotechnical report, its findings were also deeply geopolitical—publicly exposing, for the first time, the private water wells that fed the growing desert resort (Fig. 6).

By leveraging the problem of short-term leases to their advantage, the Agua Caliente had managed to turn the colonial water infrastructure into a weapon for its own financial empowerment. This was a cunning reversal of the burdens of colonial oversight and technological monopolization that were at the root of tribal underdevelopment. If Karl Wittfogel had argued that the control of large-scale irrigation infrastructures was the key condition of possibility for a certain type of empire governed through bureaucracy, in the settler colonial context of the Coachella Valley, small-scale and discontinuous infrastructures of extraction suggested a different kind of empire altogether.[19] Instead of a single ruling bureaucracy, this type presented a vertical version of Olinger's "fragmented jurisdiction"—a multiplicity of public agencies with extreme oversight and control over horizontally-mapped social groups, but barely any oversight over those who operated vertically, drilling their own private water wells while depleting the aquifer as a common resource. The power emanating from private wells did not require camouflage; its achievements were celebrated and shared in the open, through conspicuous leisure in golf clubs and luscious midcentury modern estates.

Where large-scale water projects were undertaken, such as with the Boulder Dam and its subsidiary system that fed the Imperial Valley through the All-American Canal, governmental intervention was conceived from above, over a particular surface of territory to be geometrically apportioned between a set of recognized claimants—states, companies,

Figure 6: "Geologic map of the Agua Caliente spring area, Palm Springs, California, showing location of wells, and water-level contours for 1958." L. C. Dutcher and J. S. Bader, *Geology and Hydrology of Agua Caliente Spring, Palm Springs, California.* Washington, U.S. Govt. Print. Off., 1961.

and consumers—with Tribes and other marginalized social groups having to work against the grain of these interventions. When the issue was enclosing a surface resource, like a forest or river, public agencies—from the Bureau of Indian Affairs to the Bureau of Reclamation—were deployed to publicly handle the task, allowing for a certain degree of political discourse (and maybe struggle) to occur in the process.[20] By contrast, the vertical geopolitics of extracting aquifer water precluded political questions as, for the state, settlers occupied non-contested lands. Thus, their supervision required "only" technical, not political, expertise—the seemingly universal scientific functions of the U.S. Geological Survey and of private civil engineers—in order to ensure the desired amount of water flow and quality.

The Agua Caliente had sought to transform their spring to achieve this type of technological fungibility, and turning the problem of "fragmented jurisdiction" to the vertical plane, they ultimately succeeded. In pushing ahead with long-term leases and a new infrastructure for the natural spring, they managed to gain enough financial muscle to begin challenging structural conditions, such as jurisdiction over their own planning. Throughout the 1960s and 70s, the Tribe and city were locked in court over who had authority over zoning Indigenous land, a struggle eventually settled by the Supreme Court in 1977 when it ruled that tribes could zone their own lands for the first time. That same year, the Agua Caliente and Palm Springs signed the first land use contract between a city and Tribe in the US, outlining a set of shared decision-making protocols and other terms on a nation-to-nation basis.[21]

While Palm Springs's midcentury modern architectures claimed a quasi-universal jurisdiction over space and matter—falsely presenting Indigenous land as "empty" desert—this actively masked the insidious jurisdictional containment performed by the territorial checkerboard. The "hydrodiplomacy" involved in each case, as witnessed in the Palm Springs Spa project,pointed to radical asymmetries that in many ways anticipated contemporary debates surrounding transborder aquifers—less the result of "diplomacy" than of territorial power politics.[22] In all these cases, architectural expertise was required to coordinate the different elements involved to patch over these asymmetries, conceal them, or exploit them—technically commensurating problems of jurisdiction into the more politically manageable terms of economic production and consumption.[23]

The Agua Caliente's struggles to harness their natural spring waters, involving a turn from zoning to leasing, and using architectural coordination as a weapon against the slowness of colonial bureaucracy, suggests a need for detailed analyses of the relations between Indigenous epistemologies and modern architecture. The Palm Springs Spa project was "modern" in the sense that it involved a series of techno-political reassignments between things and social roles—from an aquifer, to property leases, to knowledge transfers across colonial and capitalist divisions of labor. But it was also "decolonial" in the way it actively reconfigured relations with and through the territory to articulate relative degrees of Indigenous self-determination. Whether or not Indigenous sovereignty can be preserved without assimilation into the dialectics of capitalist-colonial rule is a question that continues to haunt and mobilize radical activists throughout the world. But such a question cannot afford to ignore the specific jurisdictional technics that underpin it and which architecture so intimately constructs. ▪

ENDNOTES

1. One hundred twenty (120) golf courses carpet this area of the Colorado Desert, consuming 37 billions gallons of water annually. Matt Stevens, "Tribe Fights Coachella Valley Water Agencies for Aquifer Rights," *Los Angeles Times*, March 31, 2015.

2. Native American property leases were restricted to five years until 1955, when they were extended to twenty-five years. The Agua Caliente Tribal Council was key in lobbying Congress to pass an act in September 1959 that extended leases to 99 years. Spa History Project Collection. Agua Caliente Band of Cahuilla Indians, History Background Summary, 2. Box 1, Folder 7. Agua Caliente Cultural Museum Archive.

3. Kirstin I. Conti, *Factors Enabling Transboundary Aquifer Cooperation: A Global Analysis.* International Groundwater Resources Assessment Center, 2014, 8; UNESCO, International Hydrologic Programme, *Hydrodiplomacy: Legal and Institutional Aspects of Water Resources Governance* (2016): 37-8.

4. Processes of closure and disclosure also structure Indigenous self-determination, such as the protection of certain cultural rituals. See, for example, Sechaba Maape's paper in this issue.

5. For a detailed account, see: Manuel Shvartzberg Carrió, *Designing "Post-Industrial Society": Settler Colonialism and Modern Architecture in Palm Springs, California*, 1876-1977, Ph.D. dissertation, Columbia University, 2019.

6. Vyola J. Ortner and Diana C. du Pont. *You Can't Eat Dirt: Leading America's First All-Women Tribal Council and How We Changed Palm Springs.* Santa Barbara, California: Fan Palm Research Project, 2011: 57, fn. 142.

7. Lawrence Culver, *The Frontier of Leisure: Southern California and the Shaping of Modern America.* New York: Oxford University Press, 2010.

8. "Palm Springs Spa, Inc." Letter from Sam Banowit, May 15, 1958, 1-2. Spa History Project Collection. Box 1, Folder 5. Agua Caliente Cultural Museum Archive.

9. "Palm Springs Spa, Inc.", 2.

10. "World's Most Beautiful Spa Opens Today: Spa Construction Like Giant Jigsaw," *The Desert Sun* (January 21, 1960): 2.

11. "World's Most Beautiful Spa Opens Today," 1.

12. George Ringwald, "PS Indian Spa Leased for $Million Resort," *The Daily Enterprise* (February 14, 1958).

13. On the political process for the lease approval, Olinger remarked: "A year ago we spent three weeks in Washington and came away with 16 objections from the Secretary of Interior. We got those cleared up and then had 15 objections from

the local office. Then we had 11 objections from the area office at Sacramento." Ringwald, "PS Indian Spa Leased for $Million Resort."

14. "Spa Construction Like Giant Jigsaw," *The Desert Sun* (January 21, 1960): 2.

15. See letters between associate architect Philip Koenig, developer Sam Banowit, Agua Caliente Tribe, Bureau of Indian Affairs, Department of the Interior, and USGS, in the period 1958-1960. Spa History Project Collection. Box 1, Folder 5. Agua Caliente Cultural Museum Archive.

16. L. C. Dutcher and J. S. Bader. *Geology and Hydrology of Agua Caliente Spring, Palm Springs, California.* Washington, U.S. Govt. Print. Off., 1961. Agua Caliente Cultural Museum Archive, 16.

17. Ibid., 17.

18. Dutcher and Bader. *Geology and Hydrology of Agua Caliente Spring.*

19. Karl August Wittfogel, *Oriental Despotism: A Comparative Study of Total Power.* New Haven: Yale University Press, 1957. See also: Donald Worster, *Rivers of Empire: Water, Aridity, and the American West.* Oxford University Press, 1992.

20. Elizabeth Blackmar, "Appropriating the Commons: the Tragedy of Property Rights Discourse," in *The Politics of Public Space,* Setha Low and Neil Smith, eds. New York: Routledge, 2006, 55.

21. Spa History Project Collection. Agua Caliente Band of Cahuilla Indians, History Background Summary, 3. Box 1, Folder 7. Agua Caliente Cultural Museum Archive.

22. See, for example: Stefano Burchi, "Legal frameworks for the governance of international transboundary aquifers: Pre- and post-ISARM experience," *Journal of Hydrology: Regional Studies* 20 (2018): 15–20; Gonzalo Hatch Kuri, "Groundwater and Interdependent Sovereignty: The Case of the Transborder Aquifer Systems in the Paso del Norte Binational Region," NORTEAMÉRICA 12, no. 2 (July-December 2017); Nadia Sánchez Castillo, "Differentiating between Sovereignty over Exclusive and Shared Resources in the Light of Future Discussions on the Law of Transboundary Aquifers," *Review of European Community and International Environmental Law* 24, no. 1 (2015): 4–15.

23. Elizabeth A. Povinelli, "Radical Worlds: The Anthropology of Incommensurability and Inconceivability." *Annual Review of Anthropology.* 2001. 30: 319–34; Wendy Espeland and Mitchell Stevens, "Commensuration as a Social Process." *Annual Review of Sociology.* 1998. 24: 313–43.

TECHNOLOGIES OF RESILIENCE

RESOURCEFULNESS IN SCARCITY: THE ARCHITECTURE OF KABULI PASTORAL NOMADS

NAREN ANANDH

THE MARGINALIZED CITIZEN AS AN EXPERT: TYPOLOGIES AND BUILDING TECHNIQUES OF SELF-MADE BUILDINGS IN MACASSAR TOWNSHIP, SOUTH AFRICA

CLINT ABRAHAMS