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**Suggested Reference**
Parsons, M. (2014). Destabilizing Narratives of the "Triumph of the White Man over the Tropics": Scientific Knowledge and the Management of Race in Queensland, 1900-1940. In J. Beattie, E. O'Gorman, & M. Henry (Eds.), *Climate, Science, and Colonization: Histories from Australia and New Zealand* (1st ed., pp. 213-232). New York: Palgrave Macmillan.

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29 October 2013

## Chapter 11:

## Destabilizing narratives of the "triumph of the white man over the tropics"[1]: scientific knowledge and the management of race in Queensland 1900-1940

**Meg Parsons**

**Abstract**

Nineteenth-century European doctors, scientists and geographers held that the tropics were no place for white people to live or work in permanently, and would cause a range of health problems that would eventually lead to death or racial degeneration. Australian federation in 1901 required Queensland to abandon the use of Pacific Island indentured laborers and thus the question emerged, how was Queensland meant to develop its tropical north within jeopardizing white health? This chapter examines how Australian scientists and government officials sought to measure, classify, sanitize, refashion and transform Queensland's people and the environments to accord to the "White Australia" ideal from 1900 to 1940. It examines how Aboriginal and Torres Strait Islanders featured in the discourse of tropical medicine and how such scientific knowledge positioned them outside of the social body and inside spatially segregated reserves and missions.

Introduction

The title of this essay paraphrases the infamous words of Raphael Cilento, an influential Australian doctor, government official and amateur historian, who in 1959 wrote that the history of Queensland was fundamentally a story of how white workers developed, colonized and ultimately triumphed over the tropics, thereby disproving medical theories holding that whites were unsuited to living and working in the torrid zone.[2] This chapter seeks to challenge this narrative—which continues to be rearticulated in many Queensland histories– of white labor triumphing over climatic conditions, and demonstrate how the science of, and connected imaginings about, tropical Queensland were made and remade through a contested process involving the erasure and removal of Indigenous peoples (Aboriginal and Torres Strait Islanders) from the body politic.[3] While other historians have focused on how Australian doctors and scientists sought to ensure the health of the 'white race' in the tropics, I examine how Indigenous peoples featured in the discourse of tropical medicine.[4] In particular, I explore the ways scientific knowledge linked in with successive Queensland government policies to position Indigenous people outside of the social body and inside of spatially segregated reserves.

During the first half of the twentieth century, scientifically informed projects of race were mapped onto the project of Australian nation-building. The need for a racially homogenous society—preferably white and British—became a crucial component for the imagining and establishment of a White Australia.[5] The state of Queensland was at the frontlines of political debates about the status of 'White Australia' due to its tropical climate, close proximity to Asia, large Indigenous population, and widespread usage of non-white labor, both Indigenous and non-Indigenous.[6] Queensland was a colony founded on the violent

dispossession of Indigenous groups and the exploitation of indentured non-white labor in which the management of health increasingly involved the erection of enclosures and boundaries to police bodies, germs, and race relations. While Pacific Islanders were systematically excluded from Queensland through immigration controls from 1901, Indigenous peoples were already located within its borders and consequently represented a problematic presence within the imagined whiteness of the Queensland state.

Beginning with the introduction of the Aboriginals Protection and Restriction of the Sale of Opium Act (1897), the Queensland Government sought to manage the "Aboriginal problem" through spatial segregation and control of Indigenous labor.[7] The 1897 act, and its subsequent amendments , authorized government 'protectors'— police officers and civil servants, magistrates and missionaries–to forcibly remove Aboriginal people, and from 1904, Torres Strait Islanders, to reserves, to separate children from their families, to control Indigenous employment and income, to prohibit Indigenous languages and customs, and to regulate Indigenous movement. Government established a network of state-run reserves and church-run missions (see Figure 12.1) throughout the state in the first three decades of the 1900s. These institutions, which included the government-run reserves of Barambah (later renamed Cherbourg), Palm Island, and Woorabinda, served multiple purposes: as labor-depots, penitentiaries, spaces of training, and places of behavioral reform, as well as "dumping ground[s]" for those too young, old or too sick to work.[8] By the 1930s roughly half of Queensland's Indigenous population was housed in reserves or missions; this rate of institutionalization was not only far higher, but persisted far longer, than in any other Australian state or territory.[9] As I have observed elsewhere, Queensland's system of institutionalization and unfree labor ensured that Indigenous people were subject to a high degree of government surveillance, and yet were largely ignored in the narrative of White Queensland.[10] <PLACE FIGURE 12.1 ABOUT HERE>

Often, as postcolonial scholar Bill Ashcroft has observed, imperial and colonial histories distinguish themselves by ignoring place, climate, and environment, and instead presenting them as “the empty stage on which the theatre of history is enacted” in some sort of teleological narrative of progress, civilization and settlement.[11] Yet neither local places, nor local climates, are neutral spaces for colonization: Different understandings of local environments and climates were central to the creation of colonial identities while scientific knowledges of climate, race, and health were intricately bound up with the emergent systems of colonial governance. Warwick Anderson has outlined how the underlying principles of tropical medicine changed from a focus on medical geography to laboratory medicine in the late-nineteenth and early-twentieth centuries. He suggests that this shift, from climatic etiologies to investigating microbial organisms, prompted a new concern with personal responsibility and hygiene. Tropical medicine, in the Australian context, therefore became “less an environmental discourse and more a vocabulary of modern citizenship … the ending of medical geography and the beginning of medical government”.[12] As developed further in his *The Cultivation of Whiteness* (2002), Anderson positioned bacteriological medicine at the center of the development of the new Australian nation. Germ theories, he summarizes, provided “good news for an immigrant society striving to overcome perceived environmental and social defects, and to merge six colonies into a new nation.” In his view, Australian scientists and medical practitioners, schooled in bacteriological theories, began to commonly refer to Aboriginal and other non-whites (including Chinese, and Pacific Islanders) as tropical disease-carriers and transmitters. Accordingly, non-whites were perceived as a potential danger to the health and wellbeing of tropical Australia’s white residents.[13]

The work of Alison Bashford refines Anderson’s argument by suggesting that the methods by which tropical medicine was investigated in Australia were highly gendered; “that the laboratory-based physiological inquiry was prominent to the study of white *men* (and white

men of a particular class) but that white women *were not* studied in this way".[14] Moreover, Bashford argues, Australian scientists placed stress almost exclusively on white people and whiteness, as well as the tropics as a location, rather than on problematic other races. Indeed, as I will demonstrate in this chapter, far from being pathologized, Indigenous peoples were rendered more or less absent from texts about tropical Queensland's colonization. Where they did appear, it suited Queensland racial politics to render Indigenous people largely a benign rather than dangerous presence due in part to the government's Aboriginal "protection" policies, and the continued importance of Indigenous labor to the Queensland economy. In pursuing these arguments, I begin by outlining the historiography of climate science, tropical medicine, and colonialism. This is followed by an examination of how Indigenous health and ill-health was represented by white doctors, scientists, and government officials, and how such representations differed from narratives of tropical medicine.

**Climate, medicine and Queensland colonialism**

European scientists have long been concerned with the question of how best to classify different climatic zones and the relationship between climate and human health. Until the eighteenth century, climatic zones were typically arranged and ranked by latitude, with the "equatorial zone more torrid simply because it was more exposed to the sun".[15] During the eighteenth and nineteenth centuries, meteorological studies demonstrated that the precise lines of latitude did not accurately reflect atmospheric circulation and patterns of air pressure, wind or temperature range. This knowledge, partially furnished by European colonial expansion and by the establishment of observation stations throughout the colonies, meant that climatic boundaries were sketched in ever more detail. Although no one disputed the existence of the tropics, finding an exact definition of it—be it through vegetation distribution, parallels of latitude, isotherms, or humidity–remained a topic of ongoing scholarly debate.

By the end of the nineteenth century, the earlier broad climatic classifications were further fragmented by concepts such as global circulation. While most scientists endeavored to identify and sort nature into clear categories, what and how such intangible entities like climate should be measured remained difficult to discern (chapters 2, 9 and 10). “Climate is”, as Anderson states, “after all, an abstraction and not readily identified at any given moment.”[16] Meteorologists could measure precipitation, wind, and temperature, and botanists could survey and classify vegetation distribution, but both were unable to agree on when an area became indisputably tropical. Indeed, as Edward Said’s *Orientalism* and David Arnold’s examination of ‘tropical’ India remind us, the binary of tropical/temperate was only one method by which to a subdivide the globe, and other terms—such as warm climates, equatorial, and equinoctial–were also used.[17]

All the same, white observers commenting on northern Australia generally agreed that the climate was within the tropical zone (chapter 10).[18] Thus, while the new teachings of global circulation, atmospheric pressure and the like challenged much of the established western scientific knowledge about climate, the notion of distinct climatic zones (tropical/torrid, temperate, polar/frigid) continued to be widely used by colonial and later Australian scientists and government officials. When Dr Alexander Rattray visited the “terra-incognita” of north-eastern Australia, he found the climate characteristically “torrid.” The four months that comprise the “hot, rainy season”, he observed, were “both unpleasant and unhealthy” and “apt to induct rheumatism in predisposed subjects and to enervate the weakly, and even the strong.” Although the climate of Cape York Peninsula, he noted, “[is] not only cooler and more pleasant, but also more salubrious that that of many other inter-tropical places in the same latitude” due to geology, wind patterns and the like, “it should not be forgotten that it is a tropical climate … and though comparatively healthy and no active disease prevails, still it is, as with all torrid climates unsuited for prolonged residence of the white races.” “All

tropical climates," he concluded "are debilitating," and that of northern Queensland "is no exception to the rule. Healthy it may be for aborigines born and reared here, and possessing systems adapted for and accustomed to torrid heat, but it is assuredly sickly for the white races of cooler climes."[19] Rattray's comments, reflective of dominant medical and climate science theorizing in the mid-to-late nineteenth century, inextricably linked the science of climate with the science of race.

By the start of the twentieth century, the view that the climate and environment directly affected people's mental and physical health was well established in European and North American medical thought.[20] Certain people were deemed unsuitable for particular climatic conditions—whites for tropical regions, non-whites for temperate regions. Being "out-of place" was understood to induce many physiological and psychological problems that, in turn, produced disease or led to ill-health. Understandings of the relationship between climate and physiology were sufficiently vague to encompass both the potential risk to individuals and the risk to the white race as a whole, represented respectively as an increased susceptibility to diseases and racial decline from successive generations of whites physiologically acclimatized to tropical climates.[21] The experiences of European colonists in other tropical settings, most notably India and Africa, where European morbidity and mortality rates often far exceeded those of the Indigenous populations, were seen as proof of the dangers of white residency in the tropics.[22] Indeed, initial attempts by the New South Wales colonial government to establish three white settlements in what is now the Northern Territory were widely regarded as dismal failures (chapter 10). By the 1840s, all three locations had been abandoned, with contemporary commentators citing "[h]ostilities with the natives [and] the unhealthiness of the climate" as the main reasons the stations failed to facilitate the "colonisation" of the north by the "Anglo-Saxon race".[23] Such historical precedents served to

both inform and re-inscribe scientific knowledge of the tropics as a hostile and disease-ridden space.

Despite initial failures in the Northern Territory and growing medical consensus that tropical living jeopardized white health, immigrants steadily moved into northern Queensland from the 1850s for pastoralism, milling, mining, and fishing.[24] The Kennedy District, for instance, officially opened to white settlement in 1861, and had 86 people recorded on the census; in 1891 it had 18 825.[25] Yet colonial Queensland, particularly its tropical north, was very much a multi-ethnic society. Sizable populations, including Chinese, Ceylonese, Malay, Japanese, Pacific Islander, and, of course, Indigenous lived in both rural and urban areas. Throughout the 1890s, almost 82 per cent of the populations of Thursday Island and Somerset were non-white; in Cairns, the figure was nearer to 39 per cent, and in Cardwell 46 per cent. Even in Bundaberg and Wide Bay, both south of the tropical zone, non-whites made up 14 per cent of the population.[26] Ethnically, Raymond Evans observes, colonial Queensland was remarkably different from the rest of Australia, and north Queensland was fundamentally different again.[27]

The labor of non-white people was vital to the region's marine, sugar, pastoral, and mining industries.[28] Historians Henry Reynolds and Cathie May suggest that late-nineteenth-century white northern Australian societies evinced a degree of tolerance for, and even appreciation of, 'colored' peoples within the white community.[29] This tolerance, Russell McGregor observes, was firmly based on belief in the hierarchy of races: Whites were at the pinnacle of the tropical order, followed by Asians (Japanese and sometimes Chinese), Pacific Islanders, and so on. Indigenous peoples were located on the bottom rung of this racial hierarchy. Although a degree of mobility was possible between strata, it was not an equitable society. Indeed, the whole viability of the Queensland colonial project depended on its inequality, supported by racial stratification.[30] The heterogeneity of the population of Queensland, which

included roughly 25000-30000 Aboriginal peoples and Torres Strait Islanders, existed in a world where cultures were negatively judged by the degree to which they deviated from the appearance, ideals and norms of Britain.[31] Increasingly, settlers in southern Queensland and the other Australian colonies criticized north Queensland's racial diversity, labeling Queenslanders as: "Queensmongreland", "Piebald-Land", "Leper-Land", and "Kanaka-Land".[32] Some commentators even went so far as to suggest that European immigration would stop because "no man in his senses would come to live in a country the climate of which is [too] hot for him to work in, and where he was to complete in the labor market with cannibals and savages".[33]

The question of whether whites could survive and prosper in tropical environments was therefore of fundamental importance to Queensland administrators, and following federation, Australia as a whole. This anxiety included both apprehension that neurasthenia (a broad term applied to a range of nervous disorders) would overcome whites living in the tropics and concern that white laborers would be unable to undertake manual labor in tropical conditions.[34] In 1901, Doctor Walter Maxwell, Director of Queensland's sugar experiment stations, used international examples to call for the continued employment of Pacific Islanders in Queensland's cane fields:

> The results reached after investigating the economic situation existing in [the Queensland sugar industry], and the relative cost and efficiency of the respective kinds of labour, correspond to the findings of other countries. In Louisiana the negro [sic] is the field labourer in the hot months, and has the highest value; but in the winter months … the Italian labourer goes into the fields for cane harvesting.[35]

Indeed, despite growing awareness of the role of microbes in disease causation, a persistent fear remained that whites living in tropical environments risked degeneration or reversion to some lower racial or moral order. Visitors to North Queensland reported that white residents were already showing signs of moral and physical changes, perhaps even decline, from prolonged exposure to tropical climates.[36] In 1901, Queensland politician Robert Philp declared that science proved that white laborers working in the tropics would "gradually sink below the level of the civilization maintained by [the white race] … and w[ould] approach more and more … the [inferior] level of the [colored races] they … displace[d]."[37] This concern—that whites would abandon the refinements and practices that marked them as modern—reflected persistent anxieties about climate rather than the emergent knowledge of bacteriology and hereditary. New scientific knowledge, be it about germs, parasites or genes, did not necessarily supplant older knowledge about climate affecting physiology, but rather merged uneasily with popular assumptions about adaptability, race, and culture to create inconsistent but nevertheless remarkably durable discourses that positioned the tropics as dangerous. Such concerns complicated the argument that white colonialism and civilization could triumph over the environment.[38]

Tropical medicine in Australia was shaped by the political circumstances of Australia's federation and the emergence of national policies that privileged whites.[39] Federation of the six Australian colonies in 1901 marked the beginning of a new nation based on the presumption that the entire continent would be governed and developed by a working white race. Australian nationalists were particularly alarmed by the so-called menace of color, be it Chinese, Melanesian, Malay, Aboriginal, or a multitude of other nationalities and ethnicities. Accordingly, in its first year, the newly appointed federal government introduced the Immigration Restriction Act instituting a system of restrictions based on a racial hierarchy of desirable (northern European, especially British) and undesirable (Asian, Indians and Pacific

Island) immigrants. In that same year, the federal parliament also passed the Pacific Islander Labourers Act, which prevented Pacific Islanders being employed as laborers in the sugar industry after 31 December 1906 and requiring that almost all Pacific Islanders be deported to their country of origin.[40] Many within the Queensland government vigorous opposed the latter, because Pacific Islanders made up the majority of workforce of Queensland's sugar cane industry. However, support for the legislation increased in Queensland during the 1900s as the sugar-cane industry thrived economically due to a combination of smaller-scale farming and protective tariffs. With the initial exception of Queensland, the widely supported goal of both acts was to ensure a racially homogenous population of white Australians.[41] Drawing on theories of bacteriology and eugenics, Australian doctors and policy-makers repositioned non-whites—most notably the 'Asian peril'—as a public health risk, and sought to establish lines of quarantine around the nation-state. [42] What was rarely discussed in the debates surrounding the policy was that Australia was not entirely "white;" significant numbers of Aboriginal peoples and Torres Strait Islanders lived in the new nation, including an increasing number of people of mixed descent.

The politics of White Australia, evident in the two acts discussed above, drove much of the research into tropical medicine in the first three decades of the twentieth century. Both acts, designed to keep "colored aliens" out of Australia, had potentially severe consequences for the Queensland economy, most notably for the sugar industry, and it became politically imperative to identify through science how white men could work outdoors in the tropics without damaging their health. The question of whether whites could live and work in the tropics was not idle or speculative, but of critical importance to the manner in which Australian colonization proceeded, and the form it was to take. If the climate of Queensland was really unsuitable or unhealthy, then the establishment and maintenance of white settlements was highly problematic, and government officials would be required to establish

some other means of administering and organizing the state. The question of ‘colored’ labor, then, remained unresolved.

In 1905, J. S. C. Elkington, then Tasmania’s Chief Medical Officer and later Queensland’s Commissioner of Public Health and Chief Quarantine Officer, delivered a conference paper to the Royal Society of Tasmania entitled “Tropical Australia: Is it suitable for a working white race?,” in which he declared that tropical Australia was neither “an earthy paradise” nor a “fever smitten jungle”. Elkington argued that further research was needed into the effects of the tropical climate on white bodies “uncomplicated [by] malaria, bad diets and other influences adverse to health and longevity.” He stressed that the experiences of other nations should be taken into consideration by Australian authorities, particularly in regards to racial segregation and the need to ensure the purity of the “white stock.”[43] Yet many Australian scientists continued to dispute Elkington’s views.[44]

Throughout the first three decades of twentieth century, the connections between tropical medicine and the imperative of White Australia existed not only in writings of doctors and politicians, but also in the establishment and functions of scientific institutions. In 1910, the Commonwealth Government officially established the Australian Institute of Tropical Medicine (AITM) in Townsville, Queensland, with the full support of the Queensland Government.[45] Given the Commonwealth Government’s lack of constitutional powers over health policy, and the states’ resistance to other attempts by the Commonwealth to intervene in state affairs, the Queensland Government’s support of the Commonwealth-funded and directed AITM was significant and indicated the widespread importance accorded to the venture–to investigate and promote white health and settlement in Australia’s tropical north.[46] In circumventing the constitution, which restricted the Commonwealth Government’s involvement in health policy to matters of quarantine, the AITM was positioned as part of the nation’s quarantine defenses. Along with quarantine defense, Dr

Anton Breinl, the AITM's first director, identified the study of endemic diseases and the physiological response to climate as other key areas of research for the institution. He summarized in 1913:

> Firstly, the careful consideration of the question of how far the insular isolation which Australia has enjoyed up to comparatively recent times with regards to disease will protect Australia in the future; secondly, the study of the existing diseases in tropical Australia, and their prevention; thirdly, a thorough and impartial inquiry into the physiology of the white race living and working under different conditions in tropical Australia.[47]

These three areas of research became defining characteristics of tropical medicine in Australia throughout the first half of the twentieth century.[48]
Queensland-based scientists and medical practitioners agreed that the question of tropical acclimatization was both important and urgent. Whereas other tropical medicine institutes around the world focused on etiology and infectious disease controls, the AITM directed the majority of its resources to the question of the suitability of the tropics for a "working white race."[49] Throughout the 1910s, the AITM reported positive findings indicating the largely healthy state of tropical Australia's white population, and limited signs of disease and climate-induced racial degeneration.[50] Researchers emphasized the uniqueness of tropical Australia, in comparison to "other countries situated in the torrid zone," in terms of the climate (the "dry tropics") and "the sparcity [sic] of the aboriginal population."[51] Indeed, Breinl and his colleagues repeatedly declared that the Australian tropics were healthier than those elsewhere due in part to its small and soon-to-be-extinct Indigenous population. As Breinl and Young wrote in 1920:

> The natural conditions of Northern Australia seem to militate against a large population, and the natives have never evolved by beyond the nomad state and have for an unknown reason never made any attempt beyond the nomad state. … After the arrival of Europeans, the inability of aboriginals to change their nomadic habits has led to a decrease in their number and has prevented them from living alongside the white man. In consequence, in part where a large white population exists, the black man has become extinct.[52]

Similarly, in 1925, Raphael Cilento, who replaced Breinl as Director of the AITM in 1922, declared that the question of whether white people could live successfully in tropical Australia was "infinitely more … a question of preventive medicine than a question of climate" partly because of the absence of a "large resident native population".[53] Far from threatening the health of whites living in tropical Australia, Indigenous people were rendered a scientific footnote to, and proof of, the inevitability of White Australia. Indeed, what is remarkable about tropical medicine and public health more generally in Queensland, was the way in which color was absent from 'mainstream' scientific and government discussions. Official emphasis was placed on the 'white' future of the state rather than its 'black/colored' past. The health of Queensland's Indigenous population was positioned as something largely outside of the parameters of tropical medicine, with all aspects of Indigenous lives and behavior during the first half of the twentieth century seen as the almost exclusive domain of the civil servants of Chief Protector of Aboriginals' Office; an institutional arrangement indicative of the widespread assumption that white bodies (and white health/disease) were fundamentally different from "native" bodies.

**Constructions of Aboriginal health and disease**

Queensland medical scientists and government officials did not link Indigenous ill-health to climatic conditions or even to microbes, but to race. Aboriginal people, in particular, were labeled simultaneously as a benign and potentially threatening pathogenic group. Scientists and government officials, most notably chief protectors Dr Walter Roth and J. W. Bleakley, employed a generalized conceptualization of pre-contact Indigenous peoples as healthy and disease-free. From this perspective, civilization had polluted Indigenous bodies and culture.[54] Officials from the Chief Protector of Aboriginals' Office employed this conception both as a means to critique white society for its failure to protect Aboriginal peoples and Torres Strait Islanders appropriately and as evidence in support of the Queensland Government's Aboriginal reserve system.[55]

At its foundation, Queensland's reserve system centered on the presumption that spatial isolation was the only method to guarantee the survival and "racial integrity" of the Aboriginal population.[56] This rhetoric of Aboriginal protectionism, which drew explicitly on doomed race theories, positioned segregation as a preventive health measure which would protect Aboriginal people from the "demoralising influences of camp life" and contact with "European civilisation and vice."[57] In 1897, the year the Aboriginal reserve system was officially established in the colony, Queensland's Home Secretary Horace Tozer reported on the success of the government's Aboriginal "amelioration" policies and noted that Aboriginal people in far western Queensland were being "kept clean of opium and drink, restored to complete health and gradually initiated to industrious habits." Tozer assured Parliament that Aboriginal reserves not only improved individual ~~Aborigines~~ Aboriginal people but also the entire Aboriginal race.[58] In this way, spatial segregation was situated as the singular solution to Aboriginal ill-health; the importance of living conditions, food provisions, public health

initiatives and access to medical services remained of marginal consideration to government administrators.[59]

From this perspective, Aboriginal people were connected with the wider imagining of Australia as a pure, pristine, “virtually uncontaminated” landscape prior to colonization.[60] In accordance with this widespread view, both the pre-contact Australian continent and its Indigenous peoples were disease-free.[61] John Matthews, an amateur ethnologist and author of *Two Representative Tribes of Queensland*—an ethnological study of the Wakka Wakka and Kabi peoples of the South Burnett district—adhered to this view of ~~Aborigines~~ Aboriginal people as victims of white pollution. In 1910, he declared that: “Before they were tainted with diseases contracted from Europeans, the aborigines were a healthy and hardy race … No epidemics are known to have occurred. Their maladies were such as would arise from accident, exposure, strain and errors of diet.”

Matthews explained the deterioration of Aboriginal health following colonization resulted not from introduced diseases, but rather because of ~~Aborigines’~~ Aboriginal people’s incomplete social assimilation–their “partial adoption of European habits”–which aggravated illnesses to which they were “naturally liable and induced others of a more serious nature, such as syphilis and phthisis.”[62] Bleakley, Chief Protector of Aboriginals (1914-1942), expressed similar sentiments to Matthews and positioned Aboriginal people’s ill-health as being principally caused by their interactions with white culture.[63] This idea that Indigenous ill-health resulted from incomplete social assimilation served to justify the Queensland government’s policy of racial exclusion, which contrasted with the assimilationist policies favored by the other Australian states.[64] Furthermore, the perceived inability of Indigenous people to adopt white ways without jeopardizing their health, tied in with doomed race theories which dominated late-nineteenth and early twentieth-century scientific thinking in the British colonial world.[65] In the context of British colonial Africa, Megan Vaughan shows

that medical experts and many colonialists constructed African ill health as a consequence of African people leaving their traditional tribal lifestyles and moving to urban areas.[66] More recently, Mark Harrison and Michael Worboys highlight how colonial medical officials, especially those in Africa, constructed tuberculosis, leprosy and syphilis as “diseases of civilization,” and evidence that “primitive” people were being exposed to the “rigours of high levels of ‘civilisation’ too early.”[67] Although Queensland government officials did not identify specific diseases with those of ‘civilization,’ they employed a more general conceptualization of civilization as a pollutant of Indigenous bodies and culture, which paralleled the African discourse in many ways. However, the representation of pre-colonial Australian Aboriginal peoples as healthy and disease-free differed substantially from the representation of Indigenous peoples in other colonial settings, and from the depiction of Chinese and Pacific Islanders in Australia, who were held responsible for the introduction of many infectious diseases into the continent.[68]

In contrast, colonists depict Aboriginal people as neither dangerous, nor culpable in spreading diseases, but rather as “innocently” diseased.[69] High mortality and morbidity rates on reserves and missions were explained away by government officials as evidence of Aboriginal inability to cope with the modern world. Even in cases where microbes were clearly identified as causing illness, officials were profoundly unwilling to relinquish race-based thinking that positioned Indigenous people as lesser than whites. For example, government reports of the 315 Aboriginal people who died from the 1918-19 influenza pandemic represented 30 per cent of the state’s total deaths of 1030.[70] Despite compelling evidence to the contrary, Bleakley officially recorded that the majority of Indigenous deaths were due to “sheer superstitious fright” rather than viral infection.[71] Although he acknowledged that the influenza pandemic “caused the loss [of] many natives” in Queensland, on the government-run reserve of Barambah, he declared that the “panic-

stricken" inmates simply "bolt[ed] into the bush" at the first sign of disease where they consequently "succumbed to superstitious panic."[72] Aboriginal peoples' "fatalistic fear," Bleakley maintained, meant that government officials and medical practitioners could do nothing to prevent Aboriginal deaths. More generally, Bleakley noted that medical professionals treating Indigenous patients found Indigenous patients "superstitious fear a serious obstacle" to the effective treatment of diseases.[73]

A decade prior to the influenza pandemic, a journalist observed that "[w]hen a blackfellow says he is going to die he means business, and [he is] … doomed to inevitably death."[74] Such representations of Indigenous people, especially Aboriginal, willing themselves to death was both derivative and supportive of doomed race theories, which regarded the extinction of Indigenous people as an "inescapable destiny, decreed by God and nature."[75] Indigenous people were positioned as both physically and mentally incapable of managing their own affairs, including their health, well-being, and labor. No distinction was made between Indigenous people living in Queensland's tropical north or its sub-tropical south; disease and death was simply an outcome of racial primitivism rather than environmental conditions. Even when Indigenous people were forcibly removed to institutions in different climatic zones, as was frequently the case with the government-run reserves of Barambah, Woorabinda and Palm Island, government officials and medical professionals cited "Aboriginal fatalism" (which included their inability to practice self-care) as the primary driver of Indigenous ill health both on and off the reserves.[76] By constantly linking Indigenous ill-health to racial weakness, white officials created a powerful and pervasive discourse of Aboriginal incapacity that justified the increasingly interventionist strategies adopted by the Chief Protector of Aboriginals' Office from the 1930s onwards.[77] It also exculpated the climatic effects on health of the region, lest it be seen to threaten the White Australia policy.

Notable government officials, medical practitioners and scientists, including Bleakley, Cilento, Cleland, and Roth, all drew on this construct of Aboriginal ill-health resulting from colonization. Cilento played a pivotal role in the maintenance and alteration of the Queensland Government's Indigenous leprosy management strategies during the 1930s and the extension of medical surveillance practices on Aboriginal reserves.[78] In 1928, he was appointed the Commonwealth Health Department's Director of Tropical Hygiene and Chief Quarantine Officer (based in Brisbane) and it was through this role that he undertook research into Indigenous health (and leprosy incidence) in the North Queensland Aboriginal population. [79] In 1931-32, Cilento conducted several medical surveys of North Queensland's Aboriginal population in which he linked Aboriginal disease to nutritional deficiencies. He reported in 1932 that:

> the care of the native is essentially a matter of constant medical supervision – a supervision that goes all the way from actual disease control to adequate food supplies … and suitable working conditions, and the methods of recreation and educational improvement.[80]

Cilento's ideas for a more holistic approach to Aboriginal health in some ways paralleled his writings about the health of whites in tropics.[81] In his so-called "tropical hygiene" papers, Cilento emphasized that white Queenslanders needed to regulate and reform their behavior through specific "[h]abits of life … suited to the environment" including exercise, diet, leisure, mental activities and hygiene.[82] Yet, while he called for whites to take responsibility for their own health and institute a system of consistent self-monitoring and regulation, he deemed Indigenous people and those of mixed descent incapable of such action.

Cilento's research into Indigenous health was explicitly related to his racial ideology. For him, the regulation of race and the management of health were one and the same, with racial purity and the prevention of miscegenation a crucial part of his understanding of health. Accordingly, the poor health of Queensland Indigenous peoples was a "shame and reflection on the whites that disposed them" and a signifier that they were too "sufficiently low in the scale" to have "consciousness and independence of thought and action."[83] He called for the complete segregation of Indigenous people on reserves and an end to the state's Indigenous contract labor scheme, warning that unless all "natives were transferred to compounds … they are merely doomed to extinction in a way that reflects little credit upon the white community."[84] Yet white demand for cheap Indigenous labor ensured that complete racial separation as advocated by Cilento and various other commentators throughout this period was never an economically attractive option for the Queensland government, or the general public. Young Indigenous men and women continued to be contracted out to work as laborers and domestic servants for white employers until the late 1960s.

In contrast to others, Cilento criticized all migrants, whether European, Chinese or Pacific Islander, for the introduction of "disease to [the] virtually virgin land" and the associated decline in Aboriginal health.[85] The arrival of colonists, he argued, "disrupted the life pattern and upset the health balance" of Aboriginal people who, because of their geographical isolation, had no opportunity to develop immunity and "contact with Europeans disastrously affected native life."[86] In contrast to Bleakley and Matthews, Cilento did not consider Aboriginal ill-health a consequence of incomplete assimilation, but instead viewed Aboriginal sickness as a result of introduced diseases and limited native food resources. While Cilento's observation about the devastating impact infectious diseases had on Indigenous populations was correct, his depiction of Aborigines' inability to resist pathogens, like those of Bleakley and Matthews, fed into doomed race theorizing and the wider

mythology of Aboriginal people not resisting white colonization. Such constructions of Aboriginal passivity to both invading people and pathogens, in turn, justified the continuation of the Queensland government's reserve policies under various guises until the 1970s. Indeed, this convergence of scientific and popular representations of Indigenous people as incapable of engaging in the modern rituals of health and hygiene served to reinforce and justify the Queensland government's decision to place the Indigenous population outside of the social body and inside reserves for a large portion of the twentieth century.[87]

## Conclusion

The rhetoric of paternalistic Indigenous protectionism held sway in the Queensland government and public dialogue for much of the twentieth century. Government officials continued to position racial segregation as a preventive health measure designed to simultaneously protect Indigenous people from "European civilisation and vice," and white people from the "possible danger" of non-white diseases.[88] Indeed, it was precisely such vague understandings of racial degeneration, encompassing a plethora of potential sources of degeneration—from climate and conduct, to racial mixing and microbes—that rendered both the native reserve system and the fiction of White Queensland and White Australia, as durable organizing principles of the Queensland government. New scientific knowledge, including the teachings of germ theory and climatology, did not necessarily result in the wholehearted abandonment of older understandings of climate, health, and biological difference, but rather the saw the emergence of inconsistent and contested explanations for health- and disease-causation all the while emphasizing European superiority and Indigenous inferiority. As scholar Randall Albury has suggested, in the history of medicine, "changing social concerns reflected in changing notions of which contributing factor to a disease or disability is blameworthy."[89] Thus, while countless white scientists and politicians

proclaimed the ‘success’ of the working white race in tropical Queensland and declared Indigenous peoples’ to be ‘doomed’ to extinction, Aboriginal and Torres Strait Islanders remained not only a persistent presence in the state but also served to underpin many of the economic success stories of tropical Queensland emphasized in continuing narratives of white men ‘triumphing’ over the tropics.

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[1] Paraphrasing Raphael Cilento’s words from his Foreword in *Triumph in the Tropics: An Historical Sketch of Queensland* (Brisbane: Smith and Paterson, 1959), xv.

[2] Cilento, *Triumph*, xv.

[3] Meg Parsons, “Made in Queensland,” review of *Made in Queensland: A New History,* Lyndon Megarrity, Ross Fitzgerald, and David Symons, *Melbourne Historical Journal* 37 (2009): 162.

[4] Warwick Anderson, “Geography, Race and Nation: Remapping: ‘Tropical’ Australia, 1890-1930,” *Historical Records of Australian Science* 11, 4 (1997): 457-468.

[5] Philippa Levine, “Anthropology, Colonialism, and Eugenics,” in *The Oxford handbook of the history of eugenics*, eds. Alison Bashford and Levine (New York: Oxford University Press, 2010), Kindle Edition.

[6] Raymond Evans, *A History of Queensland* (Port Melbourne: Cambridge University Press, 2007); Evans, Susan Saunders and Kathryn Cronin, eds., *Race Relations in Colonial Queensland* (St Lucia: University of Queensland Press, 1993); Dawn May, *Aboriginal Labour and the Cattle Industry: Queensland from White Settlement to Present* (Cambridge: Cambridge University Press, 1994); Ann Curthoys and Clive Moore, “Working for the White People: An Historiographical Essay on Aboriginal and Torres Strait Islander Labour,” *Labour History* 69 (1995): 1-29.

[7] Parsons, “Constructing hygienic subjects: the regulation and reformation of Aboriginal bodies,” in *Bodily Subjects: Essays on Gender and Health 1800-2000,* ed. Tracy Penny Light,

Barbara Brookes, and Wendy Mitchinson (Montreal: McGill-Queen's University Press, 2013), forthcoming.

[8] J.W. Bleakley, "Annual Report of the Chief Protector of Aboriginals," *Queensland Parliamentary Papers* (hereafter *QPP*), 3 (1914): 1028.

[9] In 1964, for example, 56% of Indigenous Queenslanders were recorded as "state wards." Annual Report of the Director of Native Affairs, 1964, A/59295, Series 18154, Item 337281, QSA, Brisbane; Mark Copland, "Calculating lives: The numbers and narratives of forced removals in Queensland 1859-1972" (PhD diss., Griffith University, 2005), 349.

[10] Parsons, "Spaces of Disease: The Creation and Management of Aboriginal Health and Disease in Queensland 1900-1970" (PhD diss.: University of Sydney, 2009).

[11] Bill Ashcroft, *Post-Colonial Transformation* (New York: Routledge, 2001), 157.

[12] Anderson, "Geography, Race and Nation," 458.

[13] Anderson, *Cultivation of Whiteness*, 99 (quotation, 45).

[14] Bashford, "'Is White Australia possible?' Race, colonialism and tropical medicine," *Ethnic and Racial Studies*, 23(2) (2000): 250.

[15] Anderson, "The Natures of Culture: Environment and Race in the Colonial Tropics," in *Nature in the Global South: Environmental Projects in South and Southeast Asia*, edited by Paul Greenough and Anna Lowenhaupt Tsing (Durham: Duke University Press, 2003), Kindle Edition.

[16] Anderson, "Natures of Culture."

[17] Edward W. Said, *Orientialism* (London: Vintage, 1978); David Arnold, "India's place in the tropical world, 1770-1930," *The Journal of Imperial and Commonwealth History* 26, no. 1 (1998): 1-21.

[18] "Telegraph to London: The Australian Section Geographically Considered," *Empire*, 30 August 1859, 2; "Climate and Character," *The Brisbane Courier*, 8 February 1896, 4.

[19] Alexander Rattray, "Notes on the Physical Geography, Climate and Capabilities of Somerset and the Cape York Peninsula, Australia," *Journal of the Royal Geographical Society of London*, 38 (1 January 1868): 409-11.

[20] Richard Eves, "Unsettling settler colonialism: Debates over climate and colonization in New Guinea, 1875-1914," *Ethnic and Racial Studies* 28 no. 2 (2005): 304-30; Anderson, "Immunities of empire: race, disease, and the new tropical medicine, 1900-1920," *Bulletin of the History of Medicine* 70, no. 1 (1996): 94-118.

[21] Jo Robertson, "In a State of Corruption: Loathsome Disease and the Body Politic" (PhD diss, University of Queensland, 1999), 140.

[22] James Beattie, *Empire and Environmental Anxiety: Health, Science, Art and Conservation in South Asia and Australasia, 1800-1920* (Basingstoke: Palgrave Macmillan, 2011), 39-71

[23] Rattray, "Notes on the Physical Geography:" 370-71.

[24] Loos, *Invasion and Resistance*; Evans, *History of Queensland*, 78-107.

[25] L. J. Colwell, *Lectures on North Queensland History* (Townsville: James Cook University, 1974), 74; Population figures from Queensland Treasury, Historical Tables, Demography, 1859-2008 (Q150 Release), (2009) [http://www.oesr.qld.gov.au/products/tables/historical-tables-demography/index.php]; The Queensland census, like other censuses in Australia, deliberately excluded Indigenous people from data collection until after the 1967 referendum.

[26] Evans, *History of Queensland*, 131; Briscoe, *Counting, Health and Identity*, 50-53.

[27] Evans, *History of Queensland*, 131-32.

[28] Evans, *History of Queensland*, 128-32.

[29] Henry Reynolds, *North Of Capricorn: The Untold Story of Australia's North* (Sydney: Allen and Unwin, 2003); Cathie May, *Topsawyers: The Chinese in Cairns, 1870-1920* (Townsville: James Cook University, 1984).

[30] Russell McGregor, "The White Man in the Tropics," (lecture presented by Dr McGregor at CitiLibraries-Thuringowa, Sir Robert Philp Lecture Series, Number 5, 6 October 2008).

[31] Briscoe, *Counting, Health and Identity*, 50-53.

[32] Evans, *History of Queensland*, 128-132; Robertson, "In a State of Corruption," 140-41.

[33] Robert Short, "White Versus Colored Labor in Queensland," *The Queenslander*, 26 January 1868: 6.

[34] Deborah J. Neill, "Creating the Cadre, Teachers, and the Culture of Tropical Medicine," *Internationalism, Colonialism, and the Rise of a Medical Speciality, 1890-1930* (Stanford: Stanford University Press, 2012): 44-72.

[35] Walter Maxwell, "A Report Upon Some Factors Related to the Cane Sugar Industry of Australia, by Walter Maxwell, Director of the Sugar Experiment Stations of Queensland," *CPP*, 2 (1901-1902): 975.

[36] "Impressions of Cooktown, By The Vagabond," *The Argus*, Saturday 29 December 1877: 4; "Tropical Queensland: How the English Type Degenerates," *Western Star and Roma Advertiser*, Saturday 25 October 1890: 4; Robert W. Felkin, "On acclimatisation," *Scottish Geographical Magazine*, 7 (1891): 647-656; "Climatic Effects on Races: The Tropics and White Men," *Freeman's Journal*, Saturday 29 September 1900: 26-27.

[37] Philp to Barton, 3 December 1901, "Pacific Island Labourers Act", CRS A8 1901/272/1, National Archives of Australia (hereafter NAA). Canberra.

[38] Levine, "Anthropology."

[39] Note also, Bashford, "'Is White Australia possible?'," 248-71; Anderson, *Cultivation of Whiteness*, 80-165.

[40] Lyndon Megarrity, "'White Queensland': The Queensland Government's Ideological Position on the Use of Pacific Island Labourers in the Sugar Sector 1880-1901," *Australian*

*Journal of Politics and History* 52 (2006): 1-12; Ralph Shlomowitz, "Markets for Indentured and Time-expired in Queensland," *Australian Economic History Review* 22, no. 1 (March 1982): 49-67;  Patricia Mercer, *White Australia Defied: Pacific Islander Settlement in North Queensland* (Townsville: James Cook University, 1995).

[41] Megarrity, "'White Queensland'," 10.

[42] Bashford, *Imperial Hygiene: A Critical History of Colonialism, Nationalism and Public Health* (New York: Palgrave Macmillan, 2004).

[43] Presented to the Royal Society of Tasmania, it was later published as a Commonwealth Government paper. J. S. C. Elkington, *Tropical Australia: Is it suitable for a working white race?* (Melbourne: Government Printer, 1905), 1-8.

[44] Matthew MacFie, *How can tropical and subtropical Australia be effectively developed?* (Adelaide: Government Printer, 1907); Griffith Taylor, "The Settlement of Tropical Australia," *Geographical Review*, 8 (1919): 84-115.

[45] Establishment reported in the BMJ: See "The Australian Institute Of Tropical Medicine Source," *The British Medical Journal*, 1 (2568) (19 March 1910): 715-16.

[46] James Gillespie, *The Price of Health: Australian Governments and Medical Politics 1919-1960* (Cambridge: Cambridge University Press, 1991), 41.

[47] Anton Breinl, "The Object and Scope of Tropical Medicine in Australia," *Australasian Medical Congress Transactions*, 1 (1911): 526.

[48] Parry, "Tropical Medicine":  103-24.

[49] As a protozoologist, Breinl was eager to survey tropical regions for new protozoan diseases and cures. See Harole, "Anton Breinl", 40-41; The Commonwealth Government seriously under-funded the AITM to the extent that, by 1920, Breinl was the only medical member of staff at the Institute. "The Australian Institute of Tropical Medicine," *Commonwealth Parliamentary Papers* (hereinafter *CPP*) 3 (1917-1918): 1220-23.

[50] Breinl, "Report on Health and Disease in the Northern Territory," *Bulletin of the Northern Territory*, 1 (March 1912): 32-54; F. H. Taylor and W. J. Young, "The Coastal Climate of Queensland: Meteorological Observations Taken in Townsville," *The Journal of Tropical Medicine and Hygiene*, 15 (August 1914): 225-27; Young, "The Metabolism of the White Races Living in the Tropics," *Annals of Tropical Medicine and Parasitology* (1915): 91-108.

[51] Breinl and Young, "Tropical Australia and Its Settlement," *Annals of Tropical Medicine and Parasitology* 13 (1920): 351-412 (quote from 398).

[52] Breinl and Young, "Tropical Australia," 398.

[53] Cilento, *The White Man in The Tropics: With Especial Reference to Australia and its Dependencies* (Melbourne: H. J. Green Government Printer, 1925), 5.

[54] Bashford, "Is White Australia Possible?": 248-71.

[55] Although some Torres Strait islanders were moved to reserves, the reserves and missions specifically targeted Aboriginal peoples, rather than Torres Strait Islanders. Parsons, "Defining disease, segregating race: Sir Raphael Cilento, Aboriginal health and leprosy management in twentieth century Queensland," *Aboriginal History* (2010): 85-114.

[56] Kidd, *Way We Civilise*, 45.

[57] Matthews, *Two Representative Tribes*, 80-82; The rhetoric of Aboriginal protection is most clearly articulated in the work of Archibald Meston, "Report on the Aboriginals of Queensland," *Queensland Votes and Proceedings*, 4 (1896), 723-38.

[58] Tozer, "Measures Recently Adopted", 723-38.

[59] Yet white demand for cheap Indigenous labor ensured that complete racial separation of Indigenous from white was never an economically attractive option for the Queensland government nor the general public, and thus generations of young Indigenous men and

women were contracted out to work as laborers and domestic servants for white employers throughout the twentieth century.

[60] Bashford, "Quarantine and the imagining of the Australian nation," *Health & History* 2, no. 4 (1998): 387-402.

[61] Cilento, "Australia's Heritage: uncorrected draft," undated, Box 14, UQFL44, Cilento Collection, Fryer Library, University of Queensland.

[62] Matthews, *Two Representative*, 110.

[63] Bleakley, *The Aborigines of Australia* (Brisbane: Jacaranda Press, 1961), 147.

[64] McGregor, "Wards, words and citizens: AP Elkin and Paul Hasluck on assimilation," *Oceania* 69, 4 (1999): 243-259.

[65] McGregor, *Imagined Destinies: Aboriginal Australians and the Doomed Race Theory 1880-1939* (Melbourne: Melbourne University Press, 1997).

[66] There was also a competing discourse which positioned Africans as innately diseased. Megan Vaughan, *Curing Their Ills: Colonial Power and African Illness* (California: Stanford University Press, 1991), 203.

[67] Mark Harrison and Michael Worboys, "A Disease of Civilization: Tuberculosis in Britain, Africa and India 1900-1939," in *Migrants, Minorities and Health*, ed. Michael Worboys and Lara Marks (London: Routledge, 1997), 108.

[68] Note, for example, Bashford, "Is White Australia Possible?," 248-71; Hattori, *Colonial Dis-ease: US Navy Health Policies and the Chamorros of Guam, 1894-1941* (Honolulu: University of Hawaii Press, 2004); Lenore Manderson, *Sickness and the State: Health and Illness in Colonial Malaya, 1870-1940* (New York: Cambridge University Press, 1996); Lux, *Medicine That Walks: Disease, Medicine, and Canadian Plains Native People, 1880-1940* (Toronto: University of Toronto Press, 2001), 115-17. For a more general overview of white representations of Chinese people in Australia, see Andrew Markus, *Australian Race*

*Relations, 1788-1993* (Sydney: Allen & Unwin, 1994); John Fitzgerald, *Big White Lie: Chinese Australians in White Australia* (Sydney: New South Wales University Press, 2007).

[69] Bashford, "Is White Australia Possible?": 258; Harrison and Worboys, "A Disease of Civilisation," 93-124.

[70] *Maryborough Courier*, 6 June 1919, 3; Briscoe, *Counting, Health and Identity*, 268-69.

[71] "Annual Report of the Chief Protector of Aboriginals' Office for the Year 1919," *QPP,* 2 (1919-1920), 537-47.

[72] Bleakley, *Aborigines of Australia*, 174; Parsons, "Spaces of Disease," 120-78.

[73] Bleakley, *Aborigines of Australia*, 58-59.

[74] *Maryborough Courier*, 18 March 1908, 2.

[75] McGregor, *Imagined Destinies,* ix.

[76] In 1918, the visiting medical officer (Dr Junk) to Barmabah Aboriginal Settlement did acknowledge that poor housing may have been partly to blame for high mortality and morbidity rates, but later referred to Aboriginal fatalism as the cause of deaths. See "Statement of Dr Junk," Barambah Inquiry Nov 1918, A/69778, Item 716263, Series 4354, QSA, Brisbane; Dr Junk quoted in "Fatalism amongst the Blacks," *The Mail*, 7 June 1919, 2.

[77] Parsons, "Creating a Hygienic Dorm: The Refashioning of Aboriginal Women and Children and the Politics of Racial Classification in Queensland 1920s–40s," *Health and History* 14, no. 2 (2012), 112-39; Parsons, "Constructing hygienic subjects."

[78] Parsons, "Defining disease, segregating race"; Mark Finnane, "Cilento, Sir Raphael West (1893-1985)", in *Australian Dictionary of Biography: Volume 17*, (Melbourne: Melbourne University of Press, 2007), 215-16.

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[79] A. T. Yarwood, "Sir Raphael Cilento and The White Men in the Tropics," in *Health and Healing in Tropical Australia and Papua New Guinea*, eds. Roy MacLeod and Donald Denoon (Townsville: James Cook University Press, 1991), 49-51.

[80] *NAA*, Survey of Aboriginals, Series 1928/1, Control 4/5, Barcode 141738, "Raphael Cilento, Partial Survey of Aboriginal Natives of North Queensland October-November 1932," 1932.

[81] "Partial Survey."

[82] Cilento and Phyllis Cilento, "The Mother and the Child in the Tropics of Austral-Pacific Zone," undated, Box 11, Folder 44/137, Cilento Collection, Fryer Library, University of Queensland (CCFL).

[83] "Partial Survey."

[84] "Partial Survey."

[85] Cilento, "Australia's Heritage: Health and Building in Tropical Australia Themes," undated, CCFL, Box 14, Folder 44/45, UQFL/44.

[86] Cilento, "Problems in the integration of Stone Age Man," October 10, 1972, CCFL, Box 17, Folder 44/86, UQFL/44.

[87] Bashford, *Imperial Hygiene*, 3.

[88] Matthews 1910, 80-82; Cilento to Phyllis Cilento, September 25, 1932, Cilento Papers, UQFL 44/21, CCFL.

[89] Randall Albury, "Cause, Responsibility and Blame in Disease and Disability," *Black Cockatoo* 1, no. 2 (1993): 19 (18-30).