

The “Golden Rule” of Tropical Medicine:
Brian Maegraith and the Early Emergence of Community-Based Medicine in Thailand

by
Gregory T. Kennedy

JP Adviser:
Professor Katja Guenther
May 16, 2011

This paper represents my own work in accordance with University regulations.

Introduction

On May 10, 1899, nearly four hundred of the most distinguished members of the British aristocracy gathered at the Hotel Cecil for an elaborate dinner promoting the establishment of a school of tropical medicine in London. Joseph Chamberlain, the Colonial Secretary under Lord Salisbury, gave the keynote address to solicit financial support from the wealthy attendees:

My Lords and Gentlemen,--I have now to propose to you the toast of the evening, "The London School of Tropical Medicine." I hope that you will not be alarmed, and that you will not fear that I am about to lead you into the thorny paths of political controversy, when I say that we are met here to-night in order to promote Imperial policy...

I say there is no reason to despair that science may yet do something to lessen the unhealthiness of other settlements, and especially those in Africa, thus remedying the greatest hindrance to the development of that vast continent. My lords and gentlemen, the man who shall...find the cure for malaria and shall make the tropics livable for white men...will do more for the world, more for the British Empire, than the man who adds a new province to the wide dominion of the Queen.¹

Chamberlain was the first Colonial Secretary to recognize the economic benefits of the eradication of tropical disease, and explicitly linked tropical medicine with colonialism and the expansion of the British Empire. Though business and economics were his fields of expertise, Chamberlain was also well acquainted with the latest advancements in medicine, having sat on an 1886 committee evaluating Louis Pasteur's newly developed rabies vaccination.² Viewing tropical disease as "a major natural enemy to the creation of a strong economy," Chamberlain was especially receptive to the lobbying efforts of Patrick Manson, widely recognized as the

¹ "Mr. Chamberlain and the Colonies," *The Times*, May 11, 1899, 8.

I wish to thank Professor Katja Guenther for her willingness to advise me in writing this Junior Paper. Her extensive guidance and constructive criticism were invaluable in every stage of the writing process. I also wish to thank Will Kennedy for his critical proofreading of the later drafts.

² Lise Wilkinson and Anne Hardy, *Prevention and Cure: The London School of Hygiene & Tropical Medicine: A 20th Century Quest for Global Public Health* (London: Kegan Paul International, 2001), 5.

founder of tropical medicine, for increased research and prevention efforts for these particular diseases.³ Manson, like Chamberlain, believed that tropical medicine “[could] cheapen government and make it more efficient...encourage and cheapen commercial enterprise [and] conciliate and foster the native.”⁴ Manson and Chamberlain’s lobbying efforts, coupled with the financial backing of prominent British merchants, led to the establishment of the Liverpool School of Tropical Medicine on April 22, 1899.⁵ Bureaucratic hurdles slowed the development of the London School of Tropical Medicine, which was eventually founded six months later in October of 1899.⁶ The stated mission of the schools was explicitly tied to the colonial enterprise. Both institutions focused on training Colonial Medical Officers to make the colonies habitable for white Britons and to reduce mortality from diseases, thus allowing further economic exploitation of the tropics.⁷

These colonial ties are overwhelmingly reflected in the historical literature on tropical medicine. For the past several decades, John Farley, a former professor of biology at Dalhousie University in Canada, has written and published widely on the subjects of tropical medicine and international health. Farley’s *Bilharzia: A History of Imperial Medicine* traces the history of tropical medicine from the foundation of the London and Liverpool schools to the late 1970s. Upon publication in 1991 and later revision in 2003, the book was widely lauded as a comprehensive and insightful account that would become “an important point of reference for

³ Ibid., 5.

⁴ Quoted in Philip H. Manson-Bahr and A. Alcock, *The Life and Work of Sir Patrick Manson* (New York: William Wood, 1927), 217.

⁵ Ibid., 18.

⁶ Wilkinson and Hardy, *Prevention and Cure*, 10.

⁷ David Baronov, *The African Transformation of Western Medicine and the Dynamics of Global Cultural Exchange* (Philadelphia: Temple University Press, 2008), 100.

many future works in this field.”⁸ Indeed, Farley’s work is still influential and impressive, arguing that “tropical medicine from 1898 to the 1970s was fundamentally imperialistic in its basic assumptions, its methods, its goals, and its priorities; it was the age of imperial tropical medicine.”⁹

Farley studies bilharzia, a common tropical disease, and its treatment as a lens through which to view larger trends in tropical medicine over the course of two centuries, beginning with the foundation of the London and Liverpool schools of tropical medicine. The year 1898 was a most important one in the history of tropical medicine, Farley argues, not only due to the founding of the schools, but also due to the growing acceptance of the germ theory, which held that diseases are caused by germs and not by changes in the climate or poisons in the air, as Hillary and other early scientists believed. This new theory gave Europeans hope that with the elimination of “disease germs,” the tropics could be easily colonized.¹⁰ Farley contends that the emergence of the germ theory fundamentally changed the dynamics of the empire-colony relationship, as the theory was used to “rationalize white race prejudice,” and justify the relegation of “diseased natives . . . in an empire of almost permanent wardship.”¹¹

The germ theory also had a profound role in shaping the respective curricula of the schools of tropical medicine. An intense interest in the vectors that carried the disease-causing germs arose in Britain, and parasitology dominated the instruction and research at the schools.

⁸ David Arnold, review of *Bilharzia: A History of Imperial Tropical Medicine*, by John Farley, *The Journal of Imperial and Commonwealth History* 21, 1 (1993): 196.

For further reading, see: Molly Sutphen, review of *Bilharzia: A History of Imperial Tropical Medicine*, by John Farley, *Isis* 84, 1 (1993): 179-181 and Randall M. Packard, review of *Bilharzia: A History of Imperial Tropical Medicine*, by John Farley, *The Journal of Interdisciplinary History* 23, 4 (1993), 837-838.

⁹ John Farley, *Bilharzia: A History of Imperial Tropical Medicine* (New York: Cambridge University Press, 1991), 3.

¹⁰ *Ibid.*, 14.

¹¹ *Ibid.*, 18.

This narrow focus on parasitology reinforced the erroneous idea that “inhabitants of the tropics appeared to suffer from a different set of diseases than did the British.”¹² The heads of the schools of tropical medicine believed that Europeans suffered from “nontropical” and non-parasitic diseases such as measles or pneumonia, while the Africans were affected exclusively by “tropical” diseases caused by the parasites that thrived in that “limited climatic range.”¹³

This view that Africans suffered from a unique sort of disease further validated the colonialist conception that there were inherent differences between the European and tropical populations, and that Europeans were superior— intellectually, technologically, and socially—to the “diseased natives” of Africa.¹⁴ This Euro-supremacist outlook, backed by medical theory, justified the unilateral planning and implementation of aid by Westerners, as the natives were deemed incapable of meeting their own health needs.¹⁵ Farley argues that the germ theory led to the rise of a technical view of disease eradication that held that “parasitic diseases could be prevented without the involvement of the people with the disease,” and without consideration of the socioeconomic conditions and political circumstances unique to the affected community.¹⁶ He believes that it was this same technical view of disease prevention, avoiding any involvement of local communities, which was the basis of the top-down, imperial approach to tropical medicine from its beginnings in the late 19th century to the end of the 1970s.¹⁷

¹² Ibid., 29.

¹³ Quoted in Farley, *Bilharzia*, 29.

¹⁴ Ibid., 1.

¹⁵ Randall Packard, “Visions of Postwar Health and Development and Their Impact on Public Health Interventions in the Developing World,” in Frederick Cooper and Randall Packard, *International Development and the Social Sciences : Essays on the History and Politics of Knowledge* (Berkeley, University of California Press, 1997), 93.

¹⁶ Ibid., 29, 291.

¹⁷ Farley concedes that this imperial approach was broken by a “brief interlude” of social medicine in the 1930s. However, even this social medicine had its roots in the west, emerging “only because Western medicine was at that time flirting with so-called social medicine.”

Farley contends that this technical and parasitic focus continued to dominate the years from World War II to 1979, a period characterized by what he terms the professional approach. This system, still fundamentally imperialistic in its basic assumptions, was driven by an increased emphasis on medical research, leading to an influx of recruited British scientists to direct the health care programs of the newly independent African nations.¹⁸ These scientists endorsed technical solutions to tropical diseases—similar to those trumpeted in the 1920s—believing that cultural differences were irrelevant, and that “what worked in the relatively affluent setting of Britain would necessarily work also in tropical Africa.”¹⁹ Farley points to the efforts of the World Health Organization (WHO) to eliminate bilharzia in Egypt as evidence of the continued dominance of the imperial and technical approach in the 1960s. In the campaign, the WHO’s early prevention efforts in establishing hygienic sanitary habits and providing clean water proved to be impractical. Frustrated and disillusioned, members of the WHO reverted to killing snails and “accepted the Western creed that there were major advantages in imposing solutions that did not require the cooperation of the people involved.”²⁰

Farley argues that this “imperial triad” of tropical medicine—that imperial powers unilaterally defined which diseases were important, and imposed Western solutions without consideration or involvement of the affected communities—persisted until 1979. Only in this year, he contends, did a fundamental shift toward community-based medicine begin to occur with the release of a landmark WHO report. The report, optimistically hoping to ensure “health for all by the year 2000,” urged the abandonment of “imperial-style medicine” in favor of a

Though several prominent medical and scientific bodies rejected the technical approach to tropical disease, Farley contends that this ideology was quickly buried by the professional approach. For further reading, see: Farley, *Bilharzia*, 173-201.

¹⁸ Farley, *Bilharzia*, 219.

¹⁹ *Ibid.*, 219.

²⁰ *Ibid.*, 269.

system based on the indigenous population’s participation “individually and collectively in the planning and implementation of their health care.”²¹

Many historical studies have attempted to uncover the true nature of the relationship between medicine and colonialism, yet there is decidedly less scholarship on the post-colonial dynamics of tropical medicine.²² Indeed, Farley’s work is one of the only comprehensive accounts of tropical medicine beyond 1950, if not the only account.²³ As such, there is a need for further scholarship on this era. One of the few criticisms of Farley’s history is his intense focus on certain geographical areas—namely South Africa—at the expense of other, equally important countries plagued by bilharzia, such as Egypt.²⁴ My criticisms follow a similar line of reasoning. Farley operates entirely within the colonial context, relying heavily upon evidence from colonies in Africa and China to support his interpretation of tropical medicine after World War II. An inclusion—or fuller consideration—of medical aid delivered to Thailand, a country never colonized but with a similarly abysmal state of public health, might yield an alternate narrative.

²¹ Quoted in Farley, *Bilharzia*, 303.

²² Throughout this paper, I mean “post-colonial” to refer to the period of time following the independence of the colonies. This is not to be confused with Warwick Anderson’s use of “postcolonial” in his 1998 article, “Where is the Postcolonial History of Medicine?” Here, Anderson intends “postcolonial” to refer to the entire historiography of tropical medicine in the colonial period.

²³ This historiography is limited due to the dearth of historical scholarship on tropical medicine in the 1960s and beyond. An extensive search of the literature revealed numerous accounts covering the period before World War II, but very few addressing the postwar period. Randall Packard of Johns Hopkins has written two book chapters on postwar tropical medicine. He, like Farley, focuses almost exclusively on African colonies. Packard relies heavily on Farley’s works in his chapters, and comes to very similar conclusions regarding the imposed and imperial nature of tropical medicine in the 1960s and 1970s. For further reading, see: Randall M. Packard, “Post-Colonial Medicine,” in Roger Cooter and John V. Pickstone, *Companion to Medicine in the Twentieth Century* (London: Harwood Academic Publishers, 2003), 97-112. See also: Randall Packard, “Visions of Postwar Health and Development and Their Impact on Public Health Interventions in the Developing World,” 93-116 (cited earlier).

²⁴ Molly Sutphen, review of *Bilharzia: A History of Imperial Tropical Medicine*, by John Farley, *Isis* 84, (1993), 171.

With respect to the 1979 shift in medical aid, Farley's account is largely descriptive, emphasizing *that* the shift occurred, but neglecting to fully explain *why* this shift occurred. He cursorily accounts for the shift by suggesting that the failure of the post-colonial and professional approach on a practical level may have sparked a reevaluation of aid, ultimately leading to the WHO report.²⁵ However, an examination of the philosophy and work of the late Brian Maegraith, former Dean of the Liverpool School of Tropical Medicine, calls into question both Farley's proposed timing of the shift and his requirement of the failure of the post-colonial approach for the rise of community-based medicine. In this paper, I argue that community-based medicine emerged both in theory and in practice more than a decade earlier than the 1979 WHO release. Furthermore, I contend that a consideration of Maegraith's stated philosophy on medical aid, which was validated by his work in Thailand, reveals that the rise of community-based medicine did not require the prior occurrence and failure of a period characterized by the post-colonial approach, as Farley argues. The shift was largely sparked by the radical challenge to the status quo by Maegraith, who rose to prominence outside of the traditional and colonial context, and questioned the long-held medical theory backing the imperial approach. This claim that there is no historical necessity for the post-colonial precondition in the rise of community-based medicine counters the prevailing historiography on the subject. To support my claims, I will rely primarily upon the writings of Brian Maegraith, as well as documents from Mahidol University in Bangkok, Thailand.

Throughout his career, Maegraith was highly skeptical of established practices. In his early work as a malariologist, Maegraith pushed for an extension in the scope of research beyond the parasite to a consideration of wider physiological processes in the body. In his own work,

²⁵ Farley, *Bilharzia*, 301.

Maegraith showed that that the physiological basis of malaria, a common tropical disease, was remarkably similar to that of so-called “Western” diseases. In emphasizing similarities between tropical and Western diseases, Maegraith questioned the validity of the Euro-supremacist view that natives of the tropics were inherently different and inferior to Westerners. Maegraith was a vociferous opponent of the imposed and imperialistic approach, espoused by the vast majority of his colleagues, that natives should not have a voice in the planning and implementation of medical aid. He was convinced that all aid efforts should follow what he termed the “golden rule” of tropical medicine: “In providing aid, the minimum of outside advice and personnel is desirable and local talent should from the beginning carry the major burden.”²⁶

Maegraith called for a movement away from the prevailing theory of bacteriological determinism, or the idea that diseases could be eradicated through the elimination of the infecting parasite alone, independent of any collaboration with the indigenous populations. He voiced these convictions in three influential series of lectures delivered in the United Kingdom and the United States between 1970 and 1972. Maegraith’s theory was not merely rhetoric, but rather found considerable empirical backing in his own experiences in the foundation of the Faculty of Tropical Medicine at Mahidol University in Thailand. Though Thailand was in many ways distinct from other tropical countries in that it was never colonized, the country was still very similar to its neighbors in its abysmal postwar state of public health. Thus, Maegraith’s theory and his aid efforts in Thailand represent an early emergence of community-based medicine in the absence of Farley’s post-colonial precondition.

²⁶ Brian G Maegraith, *Medical Aid in the Emergent World: Being the Eleventh Maurice Bloch Lecture Delivered within the University of Glasgow on 27th February, 1970* (Glasgow: University of Glasgow Press, 1970), 27.

Brian Maegraith: The Man Behind the Medicine

Brian Gilmore Maegraith was in many ways an outsider to traditional British tropical medicine. British Colonial Medical Officers, the medical practitioners in the tropical colonies, were historically born in Britain and educated in tropical disease treatment at the London or Liverpool schools before they joined the ranks of the Colonial Medical Service.^{27,28} Born August 26, 1907 in southern Australia, Maegraith did not receive any of this formal training in tropical diseases, and was thus educated largely outside of the traditional and colonial context. The youngest child of an accountant, he showed promise in the sciences from a young age, and graduated among the top in his class at the University of Adelaide, receiving an MBBS in 1930.²⁹ The following year, he first came to Britain, having been awarded a Rhodes scholarship to Magdalen College, Oxford. Maegraith later received a Beit fellowship for further scientific research, and in 1933, was appointed Fellow of Exeter College and College tutor in physiology.³⁰ Maegraith taught at Oxford until 1940, and spent his last three years there as a lecturer and demonstrator in pathology, as well as the Dean of the Medical School.³¹

The turning point in Maegraith's career came in 1940, as World War II began to escalate. Maegraith was recruited to the Royal Army Medical Corps and was sent to France as the head of

²⁷ Brian G. Maegraith, "History of the Liverpool School of Tropical Medicine," *Medical History* 16 (1972): 354.

²⁸ The Colonial Medical Service, first established in 1838, was the medical branch of the British Colonial Office. Its primary purpose was to achieve "medical colonisation... as one of the fundamental springboards by which to establish political objectives." For further reading, see: Anna Crozier, *Practising Colonial Medicine: The Colonial Medical Service in British East Africa* (London: I.B. Taurus, 2007).

²⁹ H.M. Giles, "Brian Maegraith," *Oxford Database of National Biography* (Oxford, Oxford University Press, 2009).

³⁰ Power, *Tropical Medicine in the Twentieth Century*, 113.

³¹ *Ibid.*, 113.

a mobile pathology unit attached to the Advanced Air Striking Force.³² Following the German occupation of northern France, Maegraith was transferred from his post in Dunkirk to Freetown, Sierra Leone.³³ This was Maegraith's first real experience in the field of tropical medicine. It was this appointment that sparked his interest in malaria and tropical medicine, and radically altered the path of his career.

Upon return to Britain in 1943, Maegraith headed the War Office's Army Malaria Research Unit and quickly established a reputation as an innovative and influential figure in malariology. In 1945, Maegraith was one of several candidates considered to fill the recently vacated position of Dean at the Liverpool School of Tropical Medicine. Maegraith was extremely controversial among committee members, as he was a nontraditional candidate who lacked the conventional training of other candidates brought up through the ranks of the Colonial Medical Service.³⁴ Despite their reservations about his relative inexperience in the field, the committee offered Maegraith the position late in the spring of 1945, citing his exceptional leadership and administrative capabilities as chief motivating factors in their decision.³⁵ It was not long before Maegraith used these qualities to align the school with his personal aims in both his research and his broader views of tropical medicine.

In her history of the Liverpool School of Tropical Medicine, Helen Power suggests that particular individuals have been especially influential in shaping institutional policy throughout the school's history. The Liverpool school, significantly smaller than its London counterpart, provided opportunities for "individual staff members [to] have a disproportionately large effect on determining the research and general direction of the School, if they chose to pursue a

³² H.M. Giles, "Brian Maegraith."

³³ Ibid.

³⁴ Power, *Tropical Medicine in the Twentieth Century*, 114.

³⁵ Ibid., 114.

particular path.”³⁶ Indeed, among these individuals was Maegraith, who, by his “forceful personality,” was able to “ensure that in the postwar era his ambitions and the development of the School were virtually synonymous.”³⁷ Maegraith was appointed chairman of the Professional Committee in 1946, and used this position, as well as his authority as Dean, to consolidate power. Maegraith’s chief obstacle in this quest was Emmanuel Lourie, a prominent chemotherapy researcher who was also a department head at Liverpool. Maegraith feared that Lourie’s recent scientific successes in chemotherapy trials would encourage expansion of his department and thereby limit Maegraith’s control over the School.³⁸ He essentially forced Lourie’s resignation by closing the Department of Chemotherapy, and from 1948 until his retirement in 1975, Maegraith was able to impose his will on the direction of the School’s research and policy in the tropics.

Maegraith’s Research: Refuting the Scientific Foundations of the Imperial Approach

Always a skeptic of established practices, Maegraith’s research was in many ways unconventional. Prior to Maegraith’s entrance into the field, the study of malaria had focused intently on the mosquito vector and infecting protist at the virtual exclusion of other larger physiological processes involved in the disease. This exclusively parasitological approach lent credence to the colonialist conception that Africans suffered from an inherently different set of diseases than the British.³⁹ Brian Maegraith’s work on the physiology of tropical disease revealed significant similarities between tropical and “Western” diseases, and thus undermined

³⁶ Ibid., 4.

³⁷ Ibid., 6.

³⁸ Ibid., 120.

³⁹ Farley, *Bilharzia*, 29.

the prevalent medical theory justifying the fundamentally racist and imperial approach to the delivery of medical aid to the tropics.

Since his appointment in Sierra Leone, Maegraith worked to understand the pathophysiology of malaria. Upon entrance into the field, he was alarmed at the intense focus on the parasite at the exclusion of the physiological processes of the body as a whole. In 1948, Maegraith revolutionized the study of tropical diseases with the publication of his *Pathological Processes in Malaria and Blackwater Fever*, based largely upon his experience and research in Sierra Leone. Maegraith pushed for more research to “present a coherent picture of malaria as a whole,” and to fill in “some of the appalling gaps in our knowledge” that arose from an exclusive focus on the parasite.⁴⁰ This physiological approach that seemed so obvious to Maegraith was revolutionary even outside of the study of tropical disease. Maegraith was still fighting for acceptance of his ideas in 1977, writing, “It is an interesting paradox that we all accept the idea of physiological interdependence in the *healthy* human being, as a unit and in relation to his environment, but the same notion is not usually accepted in relation to the *diseased* individual, in whom the same interrelated activities continue but at a different level and with changed emphasis.”⁴¹

Maegraith further criticized the parasitological approach in a 1951 review article in the *British Medical Bulletin*, arguing, “The parasitological outlook is too narrow, in the sense that it leads to the consideration of malaria as a special problem, whereas, in fact, in many ways it is a

⁴⁰ Brian Maegraith, *Pathological Processes in Malaria and Blackwater Fever* (Oxford: Blackwell Scientific Publishers, 1949), vii.

⁴¹ Brian Maegraith, “Interdependence,” *American Journal of Tropical Medicine and Hygiene* 26 (1977), 344.

general one, and illustrates many pathological features common to other diseases.”⁴² Maegraith advocated for “an extension of the range of inquiry” in malarial research, believing correctly that the parasite initiated various pathological processes that, “having been initiated, are often essentially independent of the presence of the parasite” and identical to many other common diseases.⁴³ Several such examples of Maegraith’s refusal to conform to the exclusively parasitological approach are evident in his 1974 review article “Other pathological processes in malaria”—a reference to his landmark 1948 publication. Maegraith concedes that the pathological process is initiated by the parasite, but stresses that “the physiological chain reaction” of events following initiation is all but independent of the disease vector.⁴⁴ Maegraith demonstrated the fallacy of the exclusively parasitological approach with a discussion of falciparum malaria, sometimes referred to as cerebral malaria.

A hallmark of this most deadly form of malaria is the blockage of capillaries in the brain, liver, and kidneys. Before Maegraith’s work, malariologists thought that the blood vessels of the brain were “plugged” by red blood cells swollen with the progeny of the parasite. These cells, it was believed, adhered to one another, and thus interrupted the flow of blood in the capillaries.⁴⁵ Maegraith showed that this narrow-minded focus on the parasite was wrong in that “the obstruction of cerebral circulation occurs before the ‘packing’ with parasitized erythrocytes takes place and ... the processes involved in slowing the circulation rate are primarily dependent not on the parasitized erythrocytes but on the presence of pharmacologically active substances that

⁴² Brian Maegraith, “The Physiological Approach to the Problems of Malaria,” *British Medical Bulletin* 8 (1951): 28.

⁴³ *Ibid.*, 28.

⁴⁴ Brian G. Maegraith, “Other Pathological Processes in Malaria,” *Bulletin of the World Health Organization* 50 (1974): 187.

⁴⁵ *Ibid.*, 188.

lead to inflammatory stasis.”⁴⁶ Maegraith maintained that the inflammatory reactions in malaria are, in fact, quite similar to other bacterial infections.⁴⁷ He further established broad similarities between malaria and “Western” diseases in the induction of circulatory shock, anoxemia, and changes in chemical constituents of the blood.⁴⁸ In his 1949 publication, Maegraith compared the physiological effects of malaria to those experienced following the administration of a typhoid vaccine widely provided in Britain.⁴⁹ He emphasized, “This physiological picture [of malaria] occurs in many acute medical conditions.”⁵⁰

Maegraith’s ideas have continued to shape his field. In a 2000 review article, Australian researchers praised Maegraith’s visionary observations, writing, “For all [falciparum malaria’s] dramatic manifestations, the disease is remarkably similar to many other conditions ... [caused] by a systemic inflammatory state, precisely the terminology used by Brian Maegraith in 1948 to describe his then revolutionary views of severe falciparum malaria.”⁵¹ It was not until three decades later that Maegraith’s ideas were confirmed on a cellular level with the discovery of pro-inflammatory cytokines.⁵²

As much as his scientific ideas have revolutionized malariology, Maegraith’s philosophy of tropical medicine brought about an even greater transformation in that discipline. The conclusions of Maegraith’s research necessitated a radical reconsideration of the prevailing theories of how aid should be delivered to the tropics. After Maegraith convincingly refuted the

⁴⁶ Ibid., 188.

⁴⁷ Ibid., 191.

⁴⁸ Brian Maegraith, *Pathological Processes in Malaria and Blackwater Fever*, 345-379.

⁴⁹ Ibid., 345.

⁵⁰ Brian G. Maegraith, “Complications of Falciparum Malaria,” *Bulletin of the New York Academy of Medicine* 45 (1969): 1062.

⁵¹ Ian A. Clark and Louis Schofield, “Pathogenesis of Malaria,” *Parasitology Today* 16 (2000): 451.

⁵² Ibid., 452.

common idea that tropical natives suffered from a fundamentally different set of diseases than the British, there was no longer sound scientific support for the racist and imperial theories of aid to the tropics. Just as Maegraith was highly critical of malariology's myopic focus on the parasite at the exclusion of larger physiological processes, he was also an outspoken opponent of the prevailing, imperialistic idea that the successful eradication of tropical disease was based solely upon exterminating parasites, without participation or consideration of the affected communities. Maegraith wrote, "This narrow concept [of disease control] is unacceptable," believing that the approach "[left] out the vital concepts of community and delivery of medical care to the periphery."⁵³ Brian Maegraith was a firm believer in tropical medicine that was community-centered in both its planning and delivery—an idea that Farley claims did not emerge until the 1979 WHO bulletin.

Maegraith's Lectures: Outlining the Theory

Maegraith's revolutionary emphasis on community involvement arose not from a consideration of the practical failure of the post-colonial approach as Farley claims, but rather from a recognition of the equality and capability of the native populations. To voice his criticisms of the field and present his revolutionary vision of community-based medicine, Maegraith gave a series of lectures over the course of two years at prominent Western centers of tropical medicine. The most celebrated of his lectures outlining this approach were his "One World" lectures, delivered as a multipart series throughout 1970 at the London School of Tropical Medicine. Later in 1970, Maegraith gave a similarly themed lecture at the University of Glasgow in Scotland and, in 1972, Maegraith traveled to New York City to present his

⁵³ Brian G. Maegraith, "Tropical Medicine: What It Is Not, What It Is," *Bulletin of the New York Academy of Medicine* 48 (1972): 1215.

philosophy of community-based medicine before the New York Academy of Medicine. The lectures were positively reviewed by much of the academic community. Journals in Britain and the United States, the two major donors of aid to developing nations, lauded Maegraith's work. One assessment described the lectures as a "mine of information" that provided compelling accounts of developing countries "solving their problems mainly if not entirely through their own enterprise and resource."⁵⁴ Another review hoped that "the book [would] provide valuable reference material for those involved in planning aid programmes."⁵⁵ Still another commended Maegraith on his impressive and instructive work that established effective aid as entirely without "any trace of patronage."⁵⁶ This warm reception of Maegraith's radical theory was perhaps more of an acknowledgment of his prominent standing in the field than a true acceptance of his ideas, as many continued to practice the imperial-style tropical medicine of which Maegraith was so critical.

There was much overlap among these three lecture series, with the central themes being: the definition of aid, how and to what extent developed countries should administer aid, and how this aid should function in the developing recipient countries. Maegraith began all three lectures with criticisms of the prevailing, Eurocentric ideas in tropical medicine. In his two 1970 lecture series, Maegraith emphasized that there were in the tropics "far greater problems of human ecology, economic administration and political situations" than the "technical difficulties...in

⁵⁴ Joseph V. Walker, "One World, by Brian Maegraith," *Journal of the Royal Society of Health* 3 (1974): 149.

⁵⁵ "One World - Maegraith, B," *International Journal of Epidemiology* 3 (1974): 361.

⁵⁶ Graham Wilson, "Health Needs of Developing Countries," *British Medical Journal* 1 (1974): 125.

relation to the behaviour of vector mosquitoes and the parasites.”⁵⁷ He warned against the common institutional approach of “adoption,” in which schools in the developed countries imposed a model of medicine on the developing countries that was identical to that practiced in the West.⁵⁸ Maegraith maintained that adoption encouraged the “[creation of] a doctor in the image of the European or the American graduate rather than [the production of] one who is...capable of dealing with the specific ills and difficulties of the local population.”⁵⁹ He was somewhat gentle in his early criticisms, remarking, “The parent institutions, with the best will in the world, are not the best people for the job.”^{60,61}

In his 1972 New York lecture, Maegraith was decidedly more aggressive in his denunciation of the imposed, imperial approach. Maegraith eagerly hoped that “the great political changes with the advent of independence [and] new nationalization” would spur a reevaluation of the traditional approach to medicine in the tropics.⁶² Early in his talk, Maegraith railed against the “indefensible proposition” that tropical medicine was nothing more than Western medicine exported to the tropics—an idea he claimed had “received widespread if ill-considered support from...the medical establishment.”⁶³ This idea that “what is good for the West must be equally good for everyone else” was misguided at best, and “positively dangerous”

⁵⁷ Brian G Maegraith, *Medical Aid in the Emergent World: Being the Eleventh Maurice Bloch Lecture Delivered within the University of Glasgow on 27th February, 1970* (Glasgow: University of Glasgow Press, 1970), 11.

⁵⁸ Brian G. Maegraith, *One World* (London: Athlone Press, 1970), 6.

⁵⁹ Maegraith, *Medical Aid in the Emergent World*, 24.

⁶⁰ *Ibid.*, 28.

⁶¹ Maegraith knew his audience well, and was thus careful in articulating his criticisms. The London School of Tropical Medicine based much of its work in the tropics on the adoption model. For further reading, see: Farley, *Bilharzia*, 224-227.

⁶² Maegraith, “Tropical Medicine: What It Is Not, What It Is,” 1210.

⁶³ *Ibid.*, 1210.

at worst.⁶⁴ Imperial-style medicine created a vicious cycle, Maegraith contended, in which the first generation Western-educated nationals trained the future set of doctors on the same principles they learned, in effect “ignoring the major disease problems” of the local community.⁶⁵

Instead of the unilateral imposition of Western methods of training, Maegraith was adamant that the design and implementation of aid should—and indeed must—be collaborative from the start. Plans for aid, Maegraith declared, “must be based on completely free discussions between the two sides [and] must be acceptable to the people on the spot.”⁶⁶ If the aid was imposed, it was destined to fail, as it neglected to provide “what is most needed and acceptable locally for the maximum benefit of most people.”⁶⁷ The most effective aid could only be designed after a careful consideration of local conditions and economic limitations—a knowledge only acquired by listening to and collaborating with the recipient community. Maegraith condemned the colonialist conception of aid as a way for donor countries to “[fight] for their own influence...in the recipient countries.”⁶⁸ He repeatedly argued that the ultimate goal of aid should be to empower the recipient, so that it would “reach the point where external support is no longer needed,” and could eventually offer aid of its own to its less developed neighbors.⁶⁹ Furthermore, Maegraith asserted, the success of the aid efforts should be defined not on the donor’s terms—as was common practice—but rather on the terms of the recipient. He affirmed, “Final success of aid can only be measured as an improvement of living conditions

⁶⁴ Ibid., 1212.

⁶⁵ Ibid., 1212.

⁶⁶ Ibid., 1226.

⁶⁷ Maegraith, *One World*, 4.

⁶⁸ Maegraith, “Tropical Medicine: What It Is Not, What It Is,” 1211.

⁶⁹ Maegraith, *Medical Aid in the Emergent World*, 5.

which is satisfactory and acceptable within the recipient country and which involves the whole population.”⁷⁰

Maegraith went on to detail the ways that the donor country could work to bring about this recipient-defined success. He was adamant that the donor country should not impose its methods upon the recipient, but instead act as “a capital of knowledge...which is available to help the developing world deal with community health.”⁷¹ One of the chief functions of this capital was to provide resources in medical school curriculum development both at home and abroad. Within the developing countries, Maegraith declared, donor and recipient should cooperate to ensure that curricula were not identical to those of Western schools, and thus avoid producing “[copies] of the Western doctor whose primary function has been solely that of the personal physician.”⁷² To avoid this “phenomenon of imitation,” Maegraith held that schools in developed countries should offer short courses in endemic diseases and preventative medicine as a resource for developing countries. These courses, tailored to those needs defined in collaboration with the developing country, would be designed to “fill the gaps in the usual undergraduate curriculum.”⁷³ Once similar resources became available in the emergent countries, Maegraith contended, the courses would cease in the developed countries. Thus, the ultimate goal for developed countries was to “teach themselves out of this particular business.”⁷⁴

At the Liverpool School of Tropical Medicine, these courses took the form of the Diploma in Tropical Medicine and Hygiene and the Diploma in Tropical Child Health. Maegraith pushed for the establishment of these Liverpool diploma programs in reaction to the

⁷⁰ Ibid., 4.

⁷¹ Maegraith, “Tropical Medicine: What It Is Not, What It Is,” 1217.

⁷² Ibid., 1212.

⁷³ Maegraith, *Medical Aid in the Emergent World*, 24.

⁷⁴ Maegraith, “Tropical Medicine: What It Is Not, What It Is,” 1219.

courses offered at the London school, which he deemed “unsuitable for providing the training needed for the third world.”⁷⁵ The London programs were primarily focused on child health in Britain, and forced participants to complete extensive general training at the conclusion of the diploma program. This long general residency effectively produced a physician “well trained in general medicine [that had] probably forgotten about children.”⁷⁶ Maegraith understood the necessity of a multidisciplinary and community-centered approach to training programs. In contrast to his London colleagues who only trained foreign physicians, Maegraith extended offers for all health professionals, including auxiliaries and nurses from developing countries, to study in Liverpool.

If developing countries could not afford to send some medical students abroad for training, Maegraith believed that developed countries should send professors directly to the recipient country, if it so desired. This “technical assistance” was readily available at Maegraith’s home institution in the form of the Lecturer-At-Large Program. Maegraith designed this lecturer program to provide a knowledge base for the developing countries, which could “second [a British lecturer] when [they] perceived a need.”⁷⁷ However, Maegraith ensured that lecturer appointments were Liverpool-based, complete with tenure and pension, to avoid the imposition of lecturers on countries that did not request them.⁷⁸

In the developing countries, Maegraith contended that medical care should be almost entirely locally administered. He declared, “Local talent should from the beginning carry the major burden [in the teaching and delivery of health care].”⁷⁹ Locals, he believed, had the

⁷⁵ Ibid., 1221.

⁷⁶ Ibid., 1222.

⁷⁷ Power, *Tropical Medicine in the Twentieth Century*, 140.

⁷⁸ Ibid., 140.

⁷⁹ Maegraith, *Medical Aid in the Emergent World*, 27.

experience and knowledge necessary to design a sustainable and efficient health care system that could adapt to the financial and cultural conditions unique to the community. This system of health care was based on the auxiliary, a nonprofessional native with specific training in preventative and community-based medicine. While doctors were still important, these auxiliaries, Maegraith argued, were “the essential building blocks” in the health care system, as they could “take the available medical care to the periphery where professionals [could] seldom operate.”⁸⁰ Maegraith believed that it was essential that the West provide only the bare minimum of support in training these paramedical personnel. They were to be instructed primarily in their home country, he asserted, where the training curriculum could be adjusted to local needs.

This community-centered approach required consideration of the socioeconomic factors in the tropics that exacerbated the effects of communicable diseases. Maegraith was unwavering in his conviction that tropical medicine required a special “balance of curative and preventative medicine” designed to “[take] into account social, economic, and environmental factors which influence the whole pattern of disease in the community.”⁸¹ If it was to be sustainable, this balance had to be achieved within the financial means of the affected community. Expensive medical technology purchased by outside countries would be “difficult or impossible to maintain [in the recipient countries]” and would most certainly “distract attention...from the real problems of the community.”⁸² Auxiliaries, he concluded, were best suited to achieve the unique balance of curative and preventative medicine in the developing countries.

Not only was the auxiliary model more affordable than its Western counterpart, the system was significantly more effective in delivering adequate care to the most rural villagers,

⁸⁰ Maegraith, “Tropical Medicine: What It Is Not, What It Is,” 1228.

⁸¹ *Ibid.*, 1214.

⁸² *Ibid.*, 1213.

who accepted the auxiliaries “much more readily than a doctor or professional nurse.”⁸³ This sense of trust fostered between the auxiliary and villagers was vital, Maegraith argued.

Auxiliaries “become part of the village life,” he emphasized, “and are invaluable in holding the health service together in normal times or in emergencies such as an epidemic.”⁸⁴ Maegraith was convinced that Western countries had much to learn from the auxiliary system, as “these ideas fostered...in the developing world, especially within the community approach to medicine, are becoming more and more relevant to the developed world.”^{85,86} This belief in the value of the reverse flow of ideas from recipient to donor is wholly incompatible with the imposed and imperial approach that Farley argues characterized the postwar period until 1979.

To support his revolutionary ideas, Maegraith referenced several countries that had thrived following the implementation of the community-centered approach. He devoted significant consideration to the development of the Cali Medical School in Colombia throughout the 1950s and 1960s. Originally designed as an “experiment in health care,” the Cali emphasis on community medicine spread throughout the country and, Maegraith claimed, was remarkably successful in “finding the best ways of improving the health status of the local community within the very limited available resources.”⁸⁷ Maegraith also wrote of the Medical School of Makerere in Uganda as another successful experiment in “producing doctors and orienting them to

⁸³ Maegraith, *One World*, 105.

⁸⁴ *Ibid.*, 105.

⁸⁵ *Ibid.*, 4.

⁸⁶ The inclusion of an auxiliary-like figure in the Western model of health care has recently gained much support. In a January 2011 article in *The New Yorker* magazine, Atul Gawande argues for the incorporation of nonprofessional community health workers into the U.S. health care system. He describes the enormous impact of one such system—inspired by the observation of Dominican *promotoras*—in urban areas of New Jersey. For further reading, see: Gawande, Atul. “The Hot Spotters.” *The New Yorker*, January 24, 2011.

⁸⁷ Maegraith, *One World*, 50.

community medicine.”⁸⁸ However, the country that Maeraith repeatedly presented as the exemplar of the community-based approach was Thailand, a nation with which he worked closely for the better part of two decades.

Thailand: The Theory in Practice

Though similar in climate and postwar public health conditions, Thailand was—and still is—in many ways unique compared to its tropical neighbors, especially with regard to colonial history. Thailand, known to its inhabitants as *prahet Thai* (“the land of the free”), was never colonized despite the forceful Western intrusion into virtually all other Southeast Asian countries.⁸⁹ Thailand’s continued independence through the height of the colonial period was due in part to its geographical location, but also to the shrewd diplomacy of its leaders. Following the Third Anglo-Burmese War in 1885, the majority of Southeast Asia was held by European powers. Thailand remained independent, sandwiched between French-controlled Indochina and British Burma. In the period immediately following the Anglo-Burmese War, the British and French were content to leave Thailand as a “buffer state” between their respective territories.⁹⁰ However, throughout the course of the next several decades, it was the skillful diplomacy of the Thai king Chulalongkorn that “exploited the Anglo-French rivalry” and curbed their expansionist desires by ceding relatively small and unimportant territories to preserve the independence of the country as a whole.⁹¹ Thailand’s international standing continued to grow throughout the first

⁸⁸ *Ibid.*, 64.

⁸⁹ Chris Baker and Pasuk Phongpaichit, *A History of Thailand* (Cambridge: Cambridge University Press, 2009), 64.

⁹⁰ Nigel J. Brailey, *Imperial Amnesia: Britain, France and “The Question of Siam”* (Dordrecht: The Republic of Letters Publishing, 2009), 49.

⁹¹ Patit Paban Mishra, *The History of Thailand* (Santa Barbara: Greenwood Publishers, 2010), 90.

half of the twentieth century aided by strategic alliances with Japan and the United States. Thailand's unique place among tropical nations was recognized in 1946, when it became the first Southeast Asian country admitted into the United Nations. Throughout the late 19th and early 20th centuries, Thailand incorporated certain aspects of Western culture into its own, while “[adding] to that its own nuances and shades of meaning.”⁹² The Thai government adopted a similar approach with regard to medical aid. Thailand's postwar medical history is one of collaboration between donor and recipient that calls into question the necessity of Farley's post-colonial precondition for the rise of community-based medicine.

The absence of the imposed, Western approach in the development of Thai community-based medicine is apparent in Brian Maegraith's description of the founding of the Faculty of Tropical Medicine of Mahidol University:

The idea of having a Faculty of Tropical Medicine in Bangkok was first mooted in 1951 when Dr Chamlong [Harinasuta] joined me in Liverpool. During the many talks we had as he developed his work on amoebiasis it became clear that research in communicable diseases in Thailand was very limited. Furthermore, there was a clear need to orient the ordinary medical undergraduate training towards rural and urban community health and to provide trained scientists to work in the field problems. We decided that the best solution would be to create an Institute in Thailand in which such research and teaching could be promoted.

In 1954 a plan was prepared and offered to the Thai government, but this plan was apparently (indeed, literally) put away in a drawer. It was not until 1958 that it received serious consideration, thanks to the interest of the then Rector of the University of Medical Sciences, Dr Svasti Daengsvang, who agreed at a meeting in Liverpool to back a scheme for founding a Department of Tropical Medicine...

The Faculty was born at a meeting with the Prime Minister, Field-Marshal Srisdi Dhanarajata, attended by Dr Svasti, Dr Chamlong and me. The interview was tough because we had to state a clear case, based on the then inadequate undergraduate curriculum and the almost complete lack of interest in training doctors in community health. The Prime Minister finally gave the scheme his blessing and we went to work planning the new Faculty.⁹³

⁹² Ibid., xi.

⁹³ Maegraith, *One World*, 154-156.

Maegraith clearly practiced what he preached in his 1970 lecture series. His emphasis on the involvement of the developing countries in the planning and delivery of aid was evident in his description of the founding of the Bangkok Faculty. Maegraith fully collaborated with the Thai delegation in the identification of national health priorities. His respect for and deference to the Thai people, particularly Harinasuta, were very apparent. Maegraith believed that Harinasuta was the “right man” to lead the Thai endeavor. Without such a man, “the measure of success would be restricted; with the right man the limits are set only by the local resources.”⁹⁴

The initiative in creating the Faculty was clearly Thai. It was Harinasuta who took the lead in first defining priorities for Thai community medicine in his early discussions with Maegraith, and four years later, it was Daengsvang who reinitiated consideration of the project following the initial rejection of the plan. The role of Maegraith—and by extension, the West—was limited throughout the development of the Faculty. Unlike those instances of imperial imposition that Farley describes, the Liverpool school could not unilaterally institute its will upon Thailand, but instead needed to work collaboratively with the Thai population to gain its collective support and trust. The initial dismissal of the plan in 1954 provides powerful evidence that the imposed and imperial model of tropical medicine failed to hold for Thailand in the postwar period. The burden was unquestionably on Maegraith and the Thai delegation to convince the local population of the merits of the Faculty. It was only after enduring a grueling interview and presenting a compelling case that Maegraith and his Thai partners were granted the blessing of the Prime Minister to proceed.

In the years following its founding, the Faculty of Tropical Medicine continued to practice the community-based approach that Maegraith called for in his lectures. In naming the

⁹⁴ Ibid., 154.

Faculty, Maegraith asked the Thai leaders to consider calling it the “Faculty of Endemic Diseases and Community Health.” However, Maegraith recalled, “They would not have it because, they said, everyone would know what tropical medicine meant.”⁹⁵ The Faculty’s approach to health care was so fundamentally community-centered that its planners found it unnecessary, and even redundant, to include this label. In its first years, the Faculty relied heavily upon the resources of the Liverpool to train its graduates in the community-based model. However, just as Maegraith hoped, the Liverpool school eventually “taught itself out of existence” with regard to Thailand, when “[in] 1963, the Faculty was in full operation in its own premises and the third D.T.M. & H. was being taught.”⁹⁶ The continuing mission of these courses has been to produce community-oriented doctors dedicated to serving their local communities. Since 1961, the Faculty, in collaboration with several Bangkok hospitals, has provided “mobile public-health services for underserved populations in rural areas.”⁹⁷ This is only one of the many locally focused approaches the Faculty took and has continued to take in its home country.

The Faculty worked from its inception to establish the auxiliary as an essential part of its community-centered health care system. Since 1960, it has offered short courses tailored to “health officers from countries located in the tropics” that primarily focus on effective strategies for “diagnosis, treatment, management, prevention, and control.”⁹⁸ Apart from training these paramedical health workers, the Faculty conducted extensive research as to the effectiveness of auxiliaries in delivering medical care to the periphery. One such study, published in 1974, argued

⁹⁵ Maegraith, “Tropical Medicine: What It Is Not, What It Is,” 1216.

⁹⁶ Maegraith, *One World*, 157.

⁹⁷ Waranya Wongwit, *50th Anniversary: Faculty of Tropical Medicine, Mahidol University* (Bangkok, Mahidol University, 2010), 54.

⁹⁸ *Ibid.*, 36.

for even greater incorporation of the auxiliary into the Thai health care system. The Mahidol University researchers declared, “The question in Thailand is not whether or not to have paramedics, nor whether or not they will be accepted- - they exist, and they are as well accepted as, or better accepted than, the M.D.’s [*sic*].”⁹⁹ This study and others encouraged the Ministry of Health’s acceptance and funding of greater training and employment of auxiliaries in the 1970s and beyond.

Other research conducted by the Faculty was similarly community-centered in its focus. In 1964, the Faculty embarked upon a wide research program to examine the “health hazards of extensive socio-economic developments” of the Mekong River Scheme, a decades-long damming project of the major river in Thailand.¹⁰⁰ In the populations affected by the damming, the Faculty repeatedly found higher incidences of the endemic diseases hookworm, *Opisthorchis* infection, and leptospirosis, leading them to “[realize] that these changes in social and economic life might well affect the growth and health of the children coming from the flooded valleys and of those born in the new resettlement villages.”¹⁰¹ Later studies in the same year evaluated the effects of nutritional status on infection of local children with a variety of diseases. The results of these two studies played a pivotal role in local efforts to eradicate hookworm and other tropical diseases in rural Thailand.¹⁰²

As Maegraith hoped, once the Faculty became self-supporting, it offered aid to other institutions within Thailand and beyond the nation’s borders. The Ramathibodi Community Health Program was established in 1966, based largely on the model of the Mahidol University

⁹⁹ James N. Riley and Santhat Sermsri, *The Variegated Thai Medical System as a Context for Birth Control Services* (Bangkok: Mahidol University, 1974), 59.

¹⁰⁰ Maegraith, *One World*, 157.

¹⁰¹ *Ibid.*, 158.

¹⁰² *Ibid.*, 162.

Faculty of Tropical Medicine.¹⁰³ The two Bangkok institutions worked collaboratively to train auxiliaries and to achieve their mutual goal of improving medical care to the periphery of the country. These rural health programs brought about marked improvements in the collective public health of the country. The institutions greatly improved rural access to medical care, and brought about drastic reductions in the incidence of yaws, malaria, smallpox, and cholera in certain targeted areas.¹⁰⁴ Similar programs were developed in other areas of Thailand to address the health problems of the country using the community-centered model. In Northern Thailand, Chiang Mai University responded to the success of the Mahidol and Ramathibodi programs in the 1970s by tailoring its curriculum “to reflect the major health problems of the surrounding communities.”¹⁰⁵ The medical school required its students to carry out an independent project that addressed some aspect of a local health problem. The projects were quite successful in both improving rural health care and orienting graduating physicians to local health problems.¹⁰⁶

In 1966, the Faculty of Tropical Medicine reached out beyond national borders to offer aid to its Southeast Asian neighbors. In that year, Chamlong Harinasuta, dean of the Faculty, cofounded the Tropical Medicine and Public Health Project (TROPMED) of the Southeast Asia Ministers of Education Organization (SEAMEO), a regional policymaking board.¹⁰⁷ The Faculty acted as the regional center of the TROPMED project, which focused on the improvement of medical care in some of the region’s less developed countries.¹⁰⁸ The project allowed these less

¹⁰³ Maegraith, *Medical Aid in the Emergent World*, 37.

¹⁰⁴ Prem Buri *et al*, “The Ramathibodi Community Health Program,” *Journal of Medical Education* 49 (1974), 266.

¹⁰⁵ Theodore Doege and Hacha Na Bangxang, “The Laboratory in Community Medicine: Examples from Northern Thailand,” *Journal of Medical Education* 46 (1971), 989.

¹⁰⁶ *Ibid.*, 993.

¹⁰⁷ Waranya Wongwit, *50th Anniversary: Faculty of Tropical Medicine, Mahidol University* (Bangkok, Mahidol University, 2010), 70.

¹⁰⁸ *Ibid.*, 22.

developed countries to draw on the resources of the Thailand Faculty—much as the Faculty had once drawn on the resources of the Liverpool School of Tropical Medicine and Hygiene.

Neighboring countries could send students to take the D.M.T. & H. and other courses at Mahidol University.¹⁰⁹ Another of the chief aims of the TROPMED project was to provide personnel to augment the resources in the less developed countries.¹¹⁰ This project, similar to Liverpool's Lecturer-at-Large program, promoted the exchange of ideas in both medical curricula and research. Recognizing that medical problems were different in each country despite their geographical similarities, Harinasuta and the other TROPMED board members organized conferences several times a year to promote regional collaboration in tackling the public health problems of each member country.¹¹¹

Thus, the foundation and subsequent work of the Faculty of Tropical Medicine of Mahidol University represent clear departures from the imposed, professional, and Western model of health care described by Farley. Relying on auxiliaries, and focusing research and prevention efforts on socioeconomic factors rather than parasites, the Thai Faculty effectively responded to local problems as defined by members of the native population. When its work expanded beyond Thailand, the Faculty continued to work with each individual community on locally defined health issues. It effectively acted as a capital of knowledge very similar to that capital that first helped them: Maegraith's Liverpool School of Tropical Medicine and Hygiene.

¹⁰⁹ Maegraith, *One World*, 146.

¹¹⁰ *Ibid.*, 148.

¹¹¹ *Ibid.*, 145.

Conclusions

Using evidence from the lectures of Brian Maegraith and his efforts in the foundation of the Faculty of Tropical Medicine of Mahidol University in Bangkok, Thailand, I have shown that the rise of community-based medicine occurred much earlier than 1979, and did not necessitate the prior occurrence and failure of a post-colonial period characterized by the imperial approach, as Farley argues for in his history. Instead, community-centered health care emerged from the radical challenge of the status quo by an individual who brought a healthy skepticism of established conventions to all of his endeavors. Brian Maegraith, an outsider to the traditional British system of tropical medicine, effectively aligned the work of the Liverpool School of Tropical Medicine and Hygiene with his own aims throughout his long tenure as Dean. In his work in the field of malariology, he advocated for an extension of the range of research beyond the parasite to a consideration of the larger physiological processes in the body. By convincingly establishing broad similarities between malaria and the so-called “Western” diseases, Maegraith refuted the widely held medical theory used to justify the imperial and racist practice of tropical medicine. Maegraith’s laboratory research profoundly shaped his political stance relating to the delivery of medical aid in the tropics. He fiercely criticized the technical view of disease prevention, arguing that local socioeconomic conditions must be considered in any eradication efforts. Furthermore, Maegraith was adamant that the success of aid was entirely contingent upon extensive local involvement in both the planning and delivery of health care. Locals, he argued, were best suited to design and implement a sustainable and effective system of health care delivery that would take into account factors unique to their own community.

Though Maegraith first widely expressed these revolutionary ideas in a series of lectures between 1970 and 1972, he had long ago begun putting them into practice in his aid to the

Faculty of Tropical Medicine of Mahidol University. Established in 1959, the Faculty was a wholly Thai institute with the stated mission of addressing the needs of the local community in both its research and teaching. While it was initially supported by Maegraith's Liverpool school, the Faculty soon became self-sufficient, and exemplified Maegraith's conviction that the donor country should provide the bare minimum of assistance and allow the developing countries to take the lead in the implementation of their own health care. The Faculty was by all accounts successful in establishing a health care system based upon the auxiliary and tailored to meet local needs. As Maegraith hoped, the Faculty eventually gave aid of its own to other institutions within Thailand and beyond national borders.

While the story of Thailand's success is instructive in providing a local prehistory of the landmark 1979 WHO report and distancing the rise of community-based medicine from the post-colonial precondition that Farley argues for, it may also be helpful in evaluating medical and nonmedical aid programs today. Just as Maegraith's work with falciparum malaria was relevant to malariology long after his death in 1989, so, too, are his theories of community-based aid still relevant to the planning of humanitarian relief programs today. Recently, several scholars have called for a reevaluation of NGO-sponsored aid programs in Africa, and a reorientation toward the local involvement so adamantly defended by Maegraith. Several leading intellectuals in Britain argued that as NGOs have shifted their priorities toward "[delivering] measurable achievements in poverty reduction," they have lost sight of local priorities.¹¹² These imposed standards of success, they contend, have "led NGOs away from relations with social movements," a relationship that has long been the foundation of "the best NGO interventions."¹¹³

¹¹² Diana Mitlin *et al.*, "Reclaiming Development? NGOs and the Challenge of Alternatives," *World Development* 35 (2007): 1709.

¹¹³ *Ibid.*, 1709, 1714.

In a 2005 article, University of Manchester researchers further criticized the movement of NGOs away from the community-centered approach to aid, arguing, “Participatory approaches are most likely to succeed...when they seek to engage with development as an underlying process of social change rather than in the form of discrete technocratic interventions.”¹¹⁴ Indeed, those words are strongly reminiscent of the “golden rule” of tropical medicine outlined by Maegraith in the early 1970s, and illustrate the widespread and continuing impact of Maegraith’s revolutionary work in Thailand.

¹¹⁴ Samuel Hickey and Giles Mohan, “Relocating Participation within a Radical Politics of Development,” *Development and Change* 36 (2005): 237.

Bibliography

- Anderson, Warwick. "Where is the Postcolonial History of Medicine?" *Bulletin of the History of Medicine* 72 (1998): 522-530.
- Arnold, David. Review of *Bilharzia: A History of Imperial Tropical Medicine*, by John Farley. *The Journal of Imperial and Commonwealth History*. 21, 1 (1993): 196-197.
- Baker, Chris and Phongpaichit, Pasuk. *A History of Thailand*. Cambridge: Cambridge University Press, 2009.
- Baronov, David. *The African Transformation of Western Medicine and the Dynamics of Global Cultural Exchange*. Philadelphia: Temple University Press, 2008.
- Brailey, Nigel J. *Imperial Amnesia: Britain, France and "The Question of Siam."* Dordrecht: The Republic of Letters Publishing, 2009.
- Buri, Prem *et al.* "The Ramathibodi Community Health Program." *Journal of Medical Education* 49 (1974): 264-277.
- Clark, Ian A. and Schofield, Louis. "Pathogenesis of Malaria." *Parasitology Today* 16 (2000): 451-454.
- Crozier, Anna. *Practising Colonial Medicine: The Colonial Medical Service in British East Africa*. London: I.B. Taurus, 2007.
- Doege, Theodore and Bangxang, Hacha Na. "The Laboratory in Community Medicine: Examples from Northern Thailand." *Journal of Medical Education* 46 (1971): 989-994.
- Farley, John. *Bilharzia: A History of Imperial Tropical Medicine*. New York: Cambridge University Press, 1991.
- Giles, H.M. "Maegraith, Brian G." *Oxford Dictionary of National Biography*. Oxford: Oxford University Press, 2009.

Hickey, Samuel and Mohan, Giles. "Relocating Participation within a Radical Politics of Development." *Development and Change* 36 (2005): 237-262.

Hillary, William. *Observations on the Changes of the Air and the Concomitant Epidemical Diseases in the Island of Barbados*. London: C. Hitch and L. Hawes, 1759.

Maegraith, Brian G. "Complications of Falciparum Malaria." *Bulletin of the New York Academy of Medicine* 45 (1969): 1061-1064.

Maegraith, Brian G. "History of the Liverpool School of Tropical Medicine," *Medical History* 16 (1972): 354-368.

Maegraith, Brian G. "Interdependence." *American Journal of Tropical Medicine and Hygiene* 26 (1977): 344-355.

Maegraith, Brian G. *Medical Aid in the Emergent World: Being the Eleventh Maurice Bloch Lecture Delivered within the University of Glasgow on 27th February, 1970*. Glasgow: University of Glasgow Press, 1970.

Maegraith, Brian G. *One World*. London: Athlone Press, 1970.

Maegraith, Brian G. "Other Pathological Processes in Malaria." *Bulletin of the World Health Organization* 50 (1974): 187-193.

Maegraith, Brian G. *Pathological Processes in Malaria and Blackwater Fever*. Oxford: Blackwell Scientific Publishers, 1949.

Maegraith, Brian G. "The Physiological Approach to the Problems of Malaria." *British Medical Bulletin* 8 (1951): 28-32.

Maegraith, Brian G. "Tropical Medicine: What It Is Not, What It Is." *Bulletin of the New York Academy of Medicine* 48 (1972): 1210-1230.

Manson-Bahr, Philip H. and Alcock, A. *The Life and Work of Sir Patrick Manson*. New York: William Wood, 1927.

Mishra, Patit Paban. *The History of Thailand*. Santa Barbara: Greenwood Publishers, 2010.

“One World - Maegraith, B.” *International Journal of Epidemiology* 3 (1974): 361.

Mitlin, Diana *et al.* “Reclaiming Development? NGOs and the Challenge of Alternatives.” *World Development* 35 (2007): 1699-1720.

“Mr. Chamberlain and the Colonies,” *The Times*, May 11, 1899, 8.

Packard, Randall M. “Post-Colonial Medicine.” In Roger Cooter and John V. Pickstone, *Companion to Medicine in the Twentieth Century*. London: Harwood Academic Publishers, 2003.

Packard, Randall. “Visions of Postwar Health and Development and Their Impact on Public Health Interventions in the Developing World.” In Cooper, Frederick and Packard, Randall, *International Development and the Social Sciences : Essays on the History and Politics of Knowledge*. Berkeley: University of California Press, 1997.

Power, Helen J. *Tropical Medicine in the Twentieth Century: A History of the Liverpool School of Tropical Medicine*. London: Kegan Paul International, 1999.

Riley, James N. and Sermsri, Santhrat. *The Variegated Thai Medical System as a Context for Birth Control Services*. Bangkok: Mahidol University, 1974.

Sutphen, Molly. “Review of *Bilharzia: A History of Imperial Tropical Medicine*, by John Farley.” *Isis* 84 (1993): 179-181.

Walker, Joseph V. “One World, by Brian Maegraith.” *Journal of the Royal Society of Health* 3 (1974): 149.

Wongwit, Waranya. *50th Anniversary: Faculty of Tropical Medicine, Mahidol University*.

Bangkok, Mahidol University, 2010.

Wilkinson, Lise and Hardy, Anne. *Prevention and Cure: The London School of Hygiene &*

Tropical Medicine: A 20th Century Quest for Global Public Health. London: Kegan Paul

International, 2001.

Wilson, Graham. "Health Needs of Developing Countries." *British Medical Journal* 1 (1974):

125.