

LANGUAGE AND ORGANIZATIONAL CULTURE IN THE OSWALDO CRUZ INSTITUTE 1900-1930

William F. Hanes*

Universidade Federal de Santa Catarina

Abstract: The medical literature consumed and produced by the Oswaldo Cruz Institute and the circulation of its personnel in foreign institutions from its beginnings in 1900 through the Vargas *coup d'état* in Brazil in 1930 testify to the complex, multilingual and international nature of scientific networking in and beyond the *belle époque* and challenge notions of behavior associated with colonial economic models. To explore the parameters of the Institute's early organizational culture with respect to language, three of its publications from this period will be examined: a 1911 promotional booklet in German, which details the Institute's journal holdings and the publications of its researchers; a 1929 English-language travelogue of leprosy treatment centers worldwide; and the journal *Memórias do Instituto Oswaldo Cruz* (1909-), which published articles in five languages during this period. The results indicate that the Institute's flexible, avidly multilingual language policy, partially the result of Brazil's peripheral, neutral political situation, led to a very strong multilateral position in the scientific community that provided both visibility and recognition as a full peer in the then-internationally emerging field of Tropical Medicine.

Keywords: Language Policy. Multilingualism. Scientific Networking. Oswaldo Cruz Institute. *Belle époque*.

* William Franklin Hanes: PhD in Translation Studies (2016) from the Federal University of Santa Catarina, Brazil. Bachelor of Fine Arts (1996) from the University of North Carolina at Greensboro (UNCG), United States of America. Florianopolis, Santa Catarina, Brazil. E-mail: hanes.wf@gmail.com



LÍNGUA E CULTURA ORGANIZACIONAL NO INSTITUTO OSWALDO CRUZ: 1900-1930

Resumo: A literatura médica consumida e produzida pelo Instituto Oswaldo Cruz e a circulação do seu pessoal por instituições estrangeiras, desde a sua criação em 1900 até o golpe de estado no Brasil, que conduziu Vargas ao poder em 1930, testemunham a natureza complexa, multilingue e internacional do intercâmbio científico durante e para além da *belle époque*, ao mesmo tempo que desafiam noções de comportamento associado a modelos coloniais econômicos. Para explorar os parâmetros da cultura organizacional do Instituto nos seus primórdios no que diz respeito à língua, analisaram-se três das suas publicações referentes ao período em análise: um livretinho promocional em alemão de 1911, que lista as revistas assinadas pelo Instituto e as publicações dos seus investigadores; um *travelogue* de 1929 em língua inglesa sobre os centros de tratamento de lepra que existiam mundialmente; e a revista *Memórias do Instituto Oswaldo Cruz* (1909-), que, durante o período, publicou artigos em cinco línguas. Os resultados indicam que a política linguística do Instituto, flexível e avidamente multilingue, parcialmente devido à situação política periférica do Brasil, conduziu a uma forte posição multilateral na comunidade científica que lhe proporcionou visibilidade e reconhecimento como um igual na então emergente área internacional da Medicina Tropical.

Palavras-chave: Política Linguística. Multilinguismo. Intercâmbio Científico. Instituto Oswaldo Cruz. *Belle époque*.

The language of science and the birth of Tropical Medicine

Scientific communities, like other communities of practice, are dependent upon communication to function, that is, to socially disseminate and advance their sphere of investigation. In that the nature of the exact sciences is experimental and technology-based, and thus (relatively) non-culture-specific, they more easily lend themselves to international collaboration, which necessarily involves multilingualism and, thus, some type of language strategy or policy. Such policy affects both impersonal communication, such as peer-reviewed journals, and personal interaction, including

correspondence, congresses and the exchange of researchers between laboratories/centers, and will either facilitate or impede a discipline's (or an institution's) development.

From the beginnings of scientific periodicals in the second half of the seventeenth century, evidence of multilingualism is abundant, even in monolingual journals such as *Le Journal des sçavans* and the *Philosophical Transactions* of the Royal Society. Translation, indirect translation, hearsay – any means necessary – were used to present extracts of new work.¹ Since the priority, therefore, was keeping up to date with the latest developments (not unlike the continuous, immediate updating currently entailed in social media: see Lambert & Bruneliere, forthcoming), foreign language was seen as a prerequisite skill rather than an obstacle. Although there is quite a volume of historical evidence for this point, let these two examples from the annals of the Royal Society suffice: (1) a resolution was passed in 1685 that the Royal Society's Clerk “shall be master of the English, French, and Latin tongues”, clearly for the purpose of handling the heavy burden of international correspondence (Weld 1848, 305, 430; Lyons 1940, 121); (2) a key asset of Lord Somers, president of the Society from 1695 to 1700, is described as his being “fluent in seven languages without having left England” (Weld 1848, 346).

As scientific literature became institutionalized and diversified, many new subareas, and thus new disciplines, were defined. One such field appeared during the flower of Victorian-era colonialism. By the late nineteenth century, besides the growing medical burden

¹ For example, in January 1666 *Le Journal des sçavans* is already citing “Monsieur Hensham” [sic] (Thomas Henshaw) and “Monsieur Boile” [sic] (Robert Boyle) from the “*Journal d'Angleterre*” (i.e. *Philosophical Transactions* 1(1), 1(3), March and May 1665, respectively) (scholarly-societies.org). And observe the opening lines from the first article published in *Philosophical Transactions*:

“There came lately from Paris [i.e. the first issue of *Le Journal des sçavans* 1665 1(1): 3] a Relation, concerning the Improvement of Optick Glasses, not long since attempted at Rome by Signor Giuseppe Campani, and by him discoursed of, in a Book, Entitled, Raguaglio di nuove Osservationi, lately printed in the said City, but not yet transmitted into these parts; wherein these following particulars, according to the Intelligence, which was sent hither, are contained.” (*Philosophical Transactions of the Royal Society* 1665 1(1):2)

that accompanied expanding colonial authority, the increased global interaction allowed by the speed, frequency and volume of the great ocean steam liners also began bringing the exotically contaminated back home with far greater regularity, leading to epidemics previously contained in more ‘primitive’ settings (Fleischer 2000, 747; Link 1955, 1). Thus, based on the germ theory of disease recently established by Pasteur and Koch, Tropical Medicine (also referred to as ‘Maritime’ and ‘Colonial Medicine’),² an extension of epidemiology, was developed. Although its ties to European imperialism are clear and strong, as explicitly stated in Patrick Manson’s initial appeal for its creation as a discipline in 1897,³ the field’s rapid development was not limited to the Colonial Center. In fact, major contributions came from what might be considered unlikely sources, especially one place in the periphery – itself a new republic and ex-colony of Portugal – Brazil.

² Some examples of ‘Colonial Medicine’ journals: *Medicina Colonial* (Madrid: begun in 1943, became *Medicina Tropical* in 1957); *Bulletin des seances. Academie Royale des Sciences Coloniales* (Brussels: begun in 1955, became *Bulletin des seances. Academie Royale des Sciences d’Outre-Mer* in 1960); *Archivio Italiano di Scienze Mediche Coloniali* (Rome: begun in 1920 became the *Archivio Italiano di Scienze Mediche Tropicali e di Parassitologia* in 1950). This term was not universally used, however: *Tropenhygiene* was the preferred German term and “Tropical Medicine” (e.g. the Liverpool journal) was the only term I found in English. Nevertheless, imperial overtones could not possibly be clearer in the London School of Tropical Medicine’s logo:

LONDON
SCHOOL of
HYGIENE
& TROPICAL
MEDICINE



³ “... the first remark I would make is, that the systematic teaching of tropical medicine, ere many years are over, will be universal in our medical schools. Those who can read the signs of the times and who are best able to judge regard this as inevitable. Why? *Because our country is the centre of a great and growing tropical empire*; and, second, because tropical disease in many respects is widely different from the diseases of temperate climates...” (Manson, 1897; emphasis added).



Figure 1. The birth of Tropical Medicine: dates of the establishment of research centers worldwide.

Brazil's involvement in the movement is both obvious and curious: obvious due to motive, i.e. a large tropical country subject to a number of endemic diseases (where 'tropical medicine' would simply be called 'public health'); curious in that of the 11 initial centers shown here, only four were technically located in the tropics, and among these, only Brazil was not under colonial rule.

That center, the Oswaldo Cruz Institute (IOC), represented the establishment of both empirical science and public health in Brazil (Stepan 1981, 5; Rodrigues, Marinho 2009). The institute's journal, the *Memórias do Instituto Oswaldo Cruz* (1909-), began its trajectory by publishing original articles in four languages – a singular policy among journals in this very international field, especially compared to the state of affairs a century later, in which a sole, monolithic lingua franca overwhelmingly dominates scientific discourse. What were the nature and causes of such an ultra-cosmopolitan organizational culture? How long did it last? What were its effects?

This analysis includes three IOC publications produced between 1909, when the Institute's journal began, and 1930, when Getúlio Vargas assumed dictatorial power and began censoring foreign elements in Brazilian society. Besides the language and translation trajectories in *Memórias*, an undated promotional booklet in

German, presumably for distribution at an international event in 1911, provides a glimpse inside the Institute's strategy, showing the centrality of multilingualism and international networking in its organizational culture. Another volume, in English, details one IOC researcher's 1924-27 world tour of leprosy treatment facilities, highlighting his correspondence, reception, network of contacts, and the not-so-innocent role of language in the construction of an international medical society.

It seems that the IOC's early organizational culture and language policy, developed within a nascent academic field and embedded in a volatile historical juncture (i.e. the intersection of the *belle époque*, World War and global financial crisis), is an exceptional lens through which the dynamics and interrelationship of a number of factors can be studied: the political framework (the colonial system, war and dictatorship), on the one hand, and *la république mondiale de la science* (networking, scientific nationalism and the dissemination of research) on the other (and long before 'Globalization' or 'the Information Society' were coined), although these cannot be touched upon in more than a cursory way here.

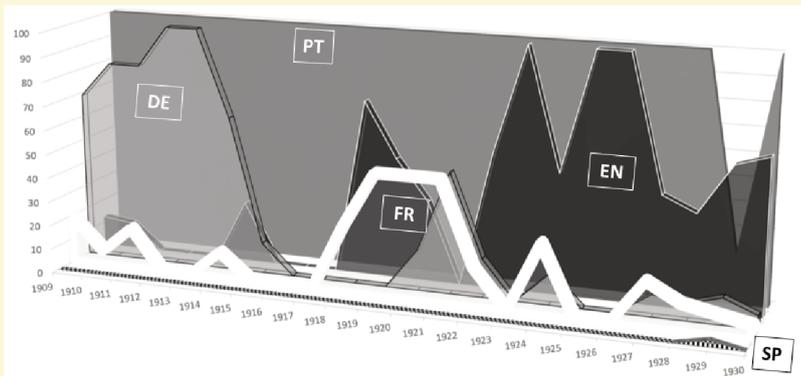
Memórias: casting a broad net

The most obvious place to begin this inquiry would be the IOC's own journal, *Memórias do Instituto Oswaldo Cruz*, since, as the institute's official public face, this is where its language policy would have been most evident. Beginning with the first issue, all articles were presented in a two-column bilingual format, featuring Portuguese and one other colonial tongue (German, French or English), which is certainly not the model found in other early Tropical Medicine journals or, moreover, in current academic journals, even in today's climate of 'diversity'.⁴ It is also important

⁴ A) Re: monolingual journals. Extensive research, including the comprehensive collection of the Institute of Tropical Medicine Antwerp, indicates that the vast majority of TM journals (especially British, US, French and German) were indeed monolingual. B) Re: today's diversity.

to point out that neither German, nor French nor English – the main procedural languages of the European commission a century later (Meylaerts 2012, 543) – were official languages in any South American country (with two small exceptions), as well as the fact that, despite being surrounded by Spanish-speaking neighbors, only a single Spanish-language article appeared in the journal's first 22 years.

However, neither the two-column format nor the 100 % translation policy lasted forever: Portuguese-only articles began appearing in 1915. In fact, 100 % of the production between 1915-18 was in Portuguese (with the exception of a single article translated into German in 1915), which likely indicates that articles in these languages were aimed at foreign – apparently European/North American – readers, whose attention was then occupied with the Great War.⁵



Note: Totals > 100 % occur due to there being two versions of the same article in an issue.

Figure 2. The language of articles published in *Memórias do Instituto Oswaldo Cruz* 1909-1930.

For comparison, in the current format of the *Bulletin of the World Health Organization*, which is intended for the broadest possible international medical audience, all articles are in English: only in the abstracts for these articles is there a selection of other languages.

⁵ As there were, likewise, only three translations between 1941-45, all in English.

The first monolingual article in a foreign language appeared in 1926 (in French), and in 1929 nine of the 44 articles (20 %) were in a foreign language only, indicating that a certain extent of multilingualism was assumed on the part of the Brazilian readership. The two-column format was permanently discontinued in 1923 in favor of separate, parallel versions within the same issue, which lasted until 1957, when the practice of translating articles was abandoned altogether. Only a single clue regarding this change in format could be found. According to Bertha Lutz, daughter of longtime IOC scientist Adolpho Lutz:

In the first period of the Institute, the prestige of Oswaldo Cruz and the prosperity of the institution made it possible to publish in a foreign language as well as in Portuguese and to illustrate Lutz' taxonomic papers with color plates. During and after the first World War the Institute lost its best illustrators and for fairly long periods the policy of a double text could not be maintained. (Fairchild 1961, 186)

Although the practice of translation was thus apparently linked to financial considerations, it is also clear that the origin of the foreign language articles in *Memórias* was the IOC and not foreign institutions, which is corroborated by the journal corpus: between 1909-1980 only 19 articles were contributed from other institutions (Hanes 2014, 97). Paratext indicates, moreover, that this was not merely habit, but regulation: *Memórias* was “exclusively reserved for original works conducted there” (*MIOC* 15 (1) 1923, my translation). A fully open contributor policy (and call for papers) came only in 1980 (Coura 1980).

Nevertheless, early contributions in German, representing 83 % of total output between 1909-14, were influenced by, and in part produced through, inter-institutional exchange. This exchange was facilitated by Henrique da Rocha Lima, the chief of service at the IOC from 1902 until 1906, when he returned to Germany

to complete his studies. While in Germany, he “played a key role in the preparation of the materials and works exhibited by [the IOC] at the XIV International Hygiene and Demography Congress and the Hygiene Exposition, which took place in Berlin in 1907” (Silva 2011, 29, citing Benchimol 1990, and Cukierman 2001, my translation). The results of this effort were that the IOC won the grand prize for its entry on the eradication of yellow fever in Rio de Janeiro and attracted considerable foreign attention. Silva goes on to explain that:

[The IOC’s] participation in the Berlin Exposition strengthened ties between its scientists and the Germans. Between 1907 and 1908, researchers Antônio Cardoso Fontes, Alcides Godoy and Henrique Aragão were sent to Germany. In return, the Oswaldo Cruz Institute received two researchers from the Hamburg Institute of Tropical Disease: Stanislas von Prowazek, protozoologist, and Gustav Giemsa, chemist. The following year, another protozoologist, Max Hartmann, came from the Berlin Institute of Infectious Disease, as well as the pathologist Hermann Dürck, the professor of Rocha Lima in Germany. (Silva 2011, 30, citing Benchimol 1990, my translation)

This exchange certainly affected the journal: Stanislaus von Prowazek, director of the protozoan laboratory at the recently formed Institute for Maritime and Tropical Diseases in Hamburg (who, together with Rocha Lima, went on to discover the pathogen of epidemic typhus by 1914), authored or co-authored seven *Memórias* articles in its initial two years of publication. The complex network surrounding Prowazek’s activity in Brazil, including an intense intercontinental exchange of correspondence and journal articles, has been described by historians of science (see Kropf, Sá 2009, 17-22).

Thus, although inter-institutional ties, at least to Germany, did affect the language content of *Memórias*, the seemingly random

overall appearance of German, French and English might have been affected by other (e.g. political) factors as well, as was so clearly evident during World War I. It may also have been subject to the individual researchers' language skills or the priorities and strategic planning of the editors (i.e. the determination that specific studies would be better-received or more relevant to specific target audiences).

By far, the most prolific contributor of foreign-language articles to *Memórias* was Adolpho Lutz, son of Swiss immigrants to Brazil. After earning his MD from the University of Bern in 1879 and having pursued further study in London, Leipzig, Vienna, Prague and Paris, he served at the IOC from 1908 to 1940 (*Biblioteca Virtual em Saúde* 2015, Benchimol 2003). A highly important figure at the Institute, who also substituted for Cruz as editor of *Memórias* (Marcolin 2009, 1), he published articles in German, English and French, as well as Portuguese. While any doubts about whether he self-translated his articles could be put to rest on the basis of his correspondence alone, which was carried out in six languages and includes approximately 1000 letters each in German, English and Portuguese (*Biblioteca Virtual em Saúde* 2015), it has also been documented by IOC historians that “the virtually thankless task of translating [the German-language articles in *Memórias*] ... fell to Adolpho Lutz” (Benchimol, Sá 2006, 390). However, Lutz may not have been the sole polyglot at the Institute: Table 1, below, shows that six other IOC scientists also published solo articles in four different languages.

AUTHOR	1ST ART	TOTAL ART	TOTAL FL ART	GERMAN	ENGLISH	FRENCH
#Lutz, A.	1909	62	50	28 [4]	13 [4]	1
#Aragão, H	1909	32	29	12 [2]	10 [3]	2
#Fontes, A	1909	19	18	4 [2]	4	4
Cunha, A	1913	27	17	4 [3]	1 [5]	2 [2]
#Neiva, A	1909	18	16	10 [5]	[1]	
Travassos, L	1913	45	14	3[2]	1	8
Torres, C	1915	23	14		8 [4]	[2]
Magalhães, O	1912	19	12	1	6 [2]	2 [1]
#Faria, G	1909	11	9	5 [1]	3	
Dias, E.C.	1912	15	9	1 [1]	3 [4]	
Pacheco, G	1925	8	7	1	3 [2]	1
Chagas, C	1909	10	7	3 [2]	1 [1]	

Legend: ART = article; FL = foreign language; [] = co-authored; # = $\geq 80\%$ of production in a foreign language. Criteria: first article published before 1930; ≥ 10 foreign language articles or articles in ≥ 2 foreign languages.

Table 1. Top foreign language contributors to *Memórias do Instituto Oswaldo Cruz* active between 1909-1930.

Whether or not these authors pooled their language skills for translations into French and English (as they did for German) or self-translated is not as relevant as the overtones of what would appear to be an intentionally-designed multilingual and multilateral organizational culture. However, to confirm this, a closer look at the inner workings of both the organization itself and its networking

is necessary; and that is what the other two publications in this sample will help provide.

“*Institut*” and institutionalization



Figure 3. Page one of the German-language booklet *Institut Oswaldo Cruz* produced, presumably, for the 1911 International Hygiene Exhibition in Dresden.

Institut Oswaldo Cruz is an undated 63-page A5 booklet, written entirely in German, which details the IOC’s history, techniques, publications and library holdings and can, therefore, provide a glimpse inside the organizational framework and strategies of the

Institute. Its expanded title in the WorldCat database,⁶ as well as the endpoint of its publications list, indicate that it was prepared as promotional material for distribution at a major event in which the IOC participated in 1911: the Fifth International Exposition of Hygiene and Demography in Dresden. This event, which was open to the public, was no small proceeding; it was more or less on a par with a World's Fair, attracting up to 30,000 visitors daily during its first two months (Dillon 2007, citing Home 1911, 712-13). As it had done at the Berlin Congress in 1907, the Oswaldo Cruz Institute again took home the grand prize, this time for its display on American trypanosomiasis, or Chagas disease (UNESCO 2007, 10). The results of this recognition were significant:

In 1911, at the Brazilian pavilion of the International Exposition of Hygiene and Demography, staged in Dresden, Germany, Chagas disease was the scope of intense public interest. In 1912, the Brazilian researcher was awarded the Schaudinn Prize for protozoology by the Institute of Maritime and Tropical Diseases in Hamburg. In 1913, he was nominated for the Nobel Prize for Medicine. (Kropf, Sá 2009, 16)

Institut Oswaldo Cruz is important not only for its reach and effects, but also because it highlights the interconnection of two essential parameters: consumption and production.

Consumption: feeding a library, building an outlook

Before being renamed after Oswaldo Cruz in 1908, the IOC was the *Instituto Municipal* (then *Federal*) *Soroterápico*. Due to

⁶ Listed in the WorldCat library system as *Institut Oswaldo Cruz, Manguinhos, Rio de Janeiro (Brazil): Internationale Hygiene-Ausstellung, Dresden 1911* (http://www.worldcat.org/title/institut-oswaldo-cruz-manguinhos-rio-de-janeiro-brazil-internationale-hygiene-ausstellung-dresden-1911/oclc/612057431&referer=brief_results)

the steep cost of imported vaccines, the institute was originally mandated in 1900 by the city government of the Federal District (i.e. Rio de Janeiro) as a vaccine production facility to stem the tide of concurrent epidemics of yellow fever, smallpox and the bubonic plague (Aragão 1950, 1). The fact that the production center quickly evolved under Cruz' management, first into a research facility (the *Instituto de Patologia Experimental* in 1907) and then into an educational institution (the *Curso de Aplicação* in 1908 and the first Brazilian postgraduate school) (Rodrigues, Marinho 2009, 527), could also explain why so many *Memórias* articles were translated: the two-column format looks suspiciously like part of a didactic program (Hanes 2014, 99).

And this suspicion is corroborated by historical evidence: a series of weekly meetings that ran from 1902 to 1908, called the *Mesa de Quartas-Feiras*, was convened by Cruz in a shed beside the Institute's construction site to stimulate discussion of the latest published discoveries and theories in the field. Then-student Henrique Araújo observed:

Oswaldo Cruz had the duty of scheduling, in each journal, the most important articles, assigning the name of the person who was to read and summarize them in the weekly session. He selected the subject according to tendencies and predilections he observed in his disciples. (Aragão 1950, 16; my translation)

Although the library's holdings underwent a "rapid and violent hypertrophy ... in the most varied idioms and subjects" concurrent with Cruz' establishment as federal head of public health and the 1907 congress in Berlin, his appetite for scientific literature was nothing new (Aragão 1950, 16; my translation; Rodrigues, Marinho 2009, 528 citing Bustamante 1958). As early as 1900, Cruz was described as "always carrying a voluminous black leather briefcase full of papers and scientific journals under his arm", in pursuit of

“the grandiose project he brought with him from Europe, to found, one day, in Brazil, a great school of experimental Biology and Medicine” (Aragão 1950, 5, 3, respectively; my translation).

By the time this booklet was printed, the IOC library held 634 journals in at least seven languages of publication (Figure 4, below). From this it seems clear that, first, in the outlook of Oswaldo Cruz, scientific practice was thoroughly intertwined with broad multilingual reading and that, second, such skills were actively cultivated in the institute’s educational structure and organizational culture.

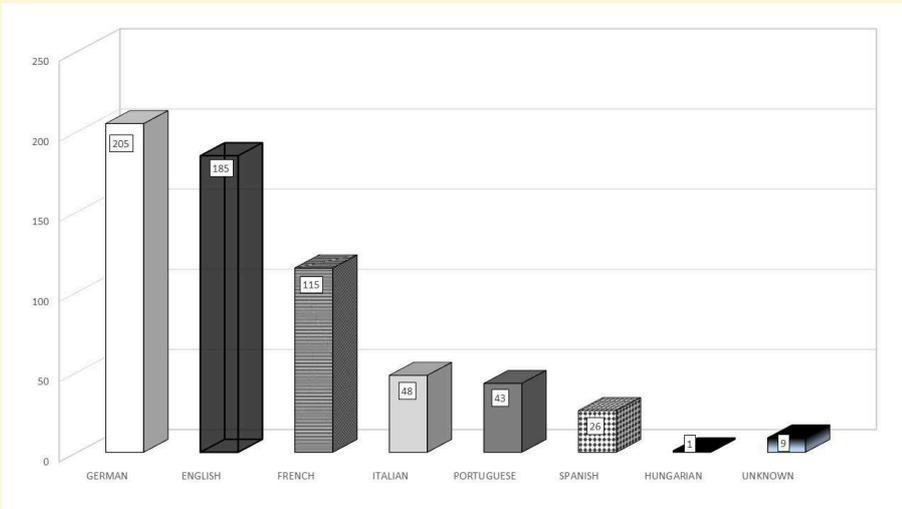


Figure 4. Language breakdown⁷ of the Oswaldo Cruz Institute’s scientific journal collection according to *Institut Oswaldo Cruz* (IOC 1911, 49-62).

Production: target practice

The other side of this coin is publication, which leads us to the next section featured in *Institut Oswaldo Cruz*. Following a list of the

⁷ The predominant/sole language was presumed from title (and location, where given). Internet search was used for ambiguous or Latin titles vague titles such as *Ion* or *Janus* were counted as unknown.

contents of *Memórias* in 1909 and 1910 (*Institut*: 40-44), a record of external publications by IOC researchers (45-48) is presented. However, for 17 of the 32 listed authors there is only a thesis, indicating they were recent IOC graduates (i.e. their listing may have been to showcase the depth of the IOC graduate school). Only the other 15 (most of whom are listed on page 4 as ‘personnel’) had actually published articles in other journals; of these, only six had published internationally. Thus, by 1911, there was still a heavy trend toward publishing nationally. Figure 5, below, shows that 71 % of all non-*MIOC* articles were published in Brazil. Of the 63 total publications, 36 appeared in a single Brazilian journal called *Brasil-Médico* (on whose board Oswaldo Cruz served). In fact, according to one study, 84 % of all production by IOC staff between 1900-17 was published in either *Brasil-Médico* or *MIOC* (Weltman 2002).

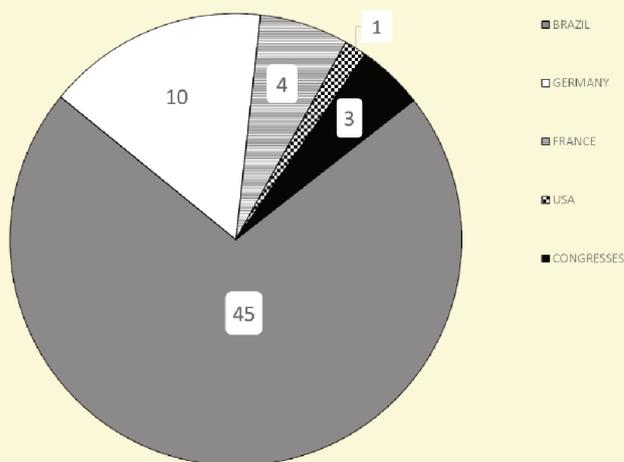


Figure 5. Distribution of journals in which Oswaldo Cruz Institute scientists published between 1903 and 1911 according to *Institut Oswaldo Cruz*.

The figure also demonstrates that German journals were by far the preferred international destination, possibly due to contacts

acquired through inter-institutional exchange. Thus, although consumption (i.e. journal subscriptions) was overwhelmingly foreign, production was mostly national at this point, which could be due to the developmental phase of the IOC, i.e. the more urgent need to establish credibility in its home territory. It could also indicate that its national connections were actually much better developed than its international ones, bearing in mind that the discipline was still young at this point, or that it could simply have been a general characteristic of Tropical Medicine institutions worldwide, or even that such a distribution is simply the norm for this or other academic institutions.

Leprosy: isolation, language, cooperation

The final item in this sample is the English version of a 1929 volume by IOC scientist Heraclides de Souza-Araujo (1886-1962: editor of *Memórias* from 1941-56) entitled *Leprosy: Survey Made in Fourty [sic] Countries (1924-1927)*, which was also released the same year in Portuguese as *A Lepra: Estudos Realizados em 40 Países*. The 400-page book details Souza-Araujo's 30-month global tour of medical and leprosy treatment facilities, including, besides a condensed travel narrative and a state of the art for each visited country, an open-ended postlude on his efforts to organize a *Société Internationale de Leprologie*, the results of which can only be identified in subsequent sources.

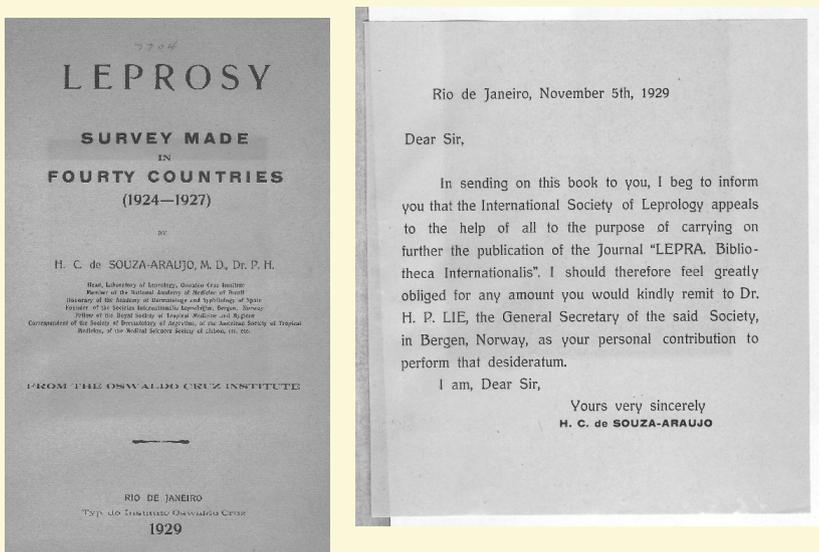


Figure 6. Title page of *Leprosy: Survey Made in Fourty Countries (1924-1927)* and an appended fundraising note for the journal *Leprosy: Bibliotheca Internationalis*.

Although terse, the travel narrative provides some interesting details about the structure and nature of the public health community worldwide. His reception was quite warm in a number of places – in the US, for example, he was given letters of introduction from, among others, the surgeon generals of the United States, the Navy, and the Army. Of the many national directors of public health he met and the events he participated in, perhaps the most conspicuous was a meeting in Switzerland with the medical director of the League of Nations, who asked him to produce “a memorandum – ‘Leprosy as a world sanitary problem’ – for the health committee of the League of Nations” (Souza-Araujo 1929, 16). This connection was significant since Souza-Araujo would go on to sit on the WHO’s expert panel on leprosy from its creation until his death in 1962 (*Guia* 2015, 136; Peterson, Skinsnes 1973, 166).



Figure 7. Points visited by H.C. de Souza-Araujo in his tour of leprosy treatment facilities between 1924 and 1927 (Souza Araujo, 1929, 7-19).

Leprology or Léprologie: whose international society is it?

Toward the end of his trip, Souza Araujo recounts that: “The greatest part of my time in Paris was employed in the organization of an International Society of Leprology” (Souza-Araujo 1929, 18-19). The final section of the book (366-88) contains a brief on the proposed Society: the formation of Souza-Araujo’s idea, drawn from “the narrow and efficient cooperation between technical people” in Tokyo and the Philippines (366), his attempted motion at a 1926 Brussels conference to create a *Société Internationale de Léprologie*, and paratext for the proposed re-inauguration of the derelict journal (1899-1915) *Lepra: Bibliotheca Internationalis*, to have been published by the Society in Manila, London, New York and Paris: a frontispiece (in Latin) and a page outlining the officers and committees (in French). Following the paratext is a list of “*adhésions reçues*” in the form of correspondence snippets, including responses in French, English, Spanish, Portuguese and German.

Among the pledges and congratulations, however, there seems to have been contention on more than one front:

Availing myself of the Meeting in Brussels, by the end of July, 1926, of the IIIrd Congress of Dermatology for French Speaking Doctors, I intended to make there a lecture on my motion for the creation of the Society [...]. However the confusion that marked the end of the meeting rendered it impossible for me to do [...]. My feeling, as well as that of other tropicalists and colleagues, was that the matter proved to be of little interest to French dermatologists. (366)

An equally problematic matter was the procedural language this Society would use. There was apparent reluctance by Anglophones to submit to a Society organized in Paris and with a French president (Professor Jeanselme was Souza-Araujo's choice: the Society was even "declared to be founded" at his residence on New Year's Eve, 1926) (19). This posture is perhaps best summarized in a letter from Sir Leonard Rogers, who had founded the Calcutta School of Tropical Medicine and wrote on behalf of the British Empire Leprosy Relief Association:

I therefore trust you will be able to see your way to comply with Dr. WADE's suggestions, *as this will enable the English speaking workers to your Association*. I hope you understand that we are in no way antagonistic to your work, which we admire, but it must be remembered that Dr. WADE, myself and others have for long had under consideration the formation of *an English speaking leprosy association*, but are willing to put it on one side and joint [sic] your organization provided Dr. WADE's suggestions are agreed to by you, which I hope will be the case. Failing that we shall probably proceed with our own original scheme, I trust in friendly co-operation with your own association, Etc. (375, emphasis added)

Although the conditions are not named, their results (in italics) rather clearly indicate that they are linguistic in nature. However,

despite the genteel tone and the fig leaf of language access, the longstanding British/French rivalry for (scientific) supremacy seems but thinly concealed, even in the formation of an international humanitarian organization that was proposed, moreover, by a third party (or *proxy*, as it were).⁸

Though the outcome of Souza-Araujo's proposal cannot be gathered from his 1929 book, it can be deduced from the first issue of *The International Journal of Leprosy* (1933-2005). This issue testifies that Rogers made good on his threat to form an English-speaking association, but rather than cooperate with a parallel French-speaking organization (as in the letter above), the international community of leprologists was leveraged into a London-based framework (IJL 1(1): 95), with Dr. Jeanselme removed and Dr. V.G. Heiser of the Rockefeller foundation set in his place as president.

Although the bylaws stated that "the name and title of this organization shall be the INTERNATIONAL LEPROSY ASSOCIATION, with its French equivalent, SOCIÉTÉ INTERNATIONALE DE LA LÈPRE" (IJL 1(1), 101), and the constitution stipulated that "the languages of the publication shall be English, French, and German" and that "the Editor shall arrange for translating into one of these languages, all materials in other languages that are to be published" (IJL 1(1), 108), the practice took an entirely different tone. In the first issue, for example, all of the 21 texts, including articles by a Japanese and an Austrian researcher, are in English except one – an original article in French by Souza-Araujo. The only material not originally produced in English (but, nevertheless, translated into English) are three abstracts from French-language articles out of 23 works reviewed in the 'Current Literature' section (IJL 1(1), 119-128).

In H.W. Wade's opening editorial (Wade 1933, 1-3), Souza-Araujo appears only as a footnote in an acknowledgment for a £180 donation (apparently raised through the leaflet in *Leprosy*, Figure

⁸ The participation of Germany, a third competitor, was somewhat limited at this point due its losses in the war, although it did vie with France to extend scientific-cultural influence in Brazil between the wars (see Sá et al., 2009; Silva 2011, for a detailed description).

6), although his organizational model was retained exactly (simply reshuffling most of the non-British officers) and his extensive list of contacts had been appropriated. Souza-Araujo, nevertheless, served on the organization's council from 1932-56 and was included among the "Contributors of the Century" in a 1973 special issue (*Guia* 2015, 136; Peterson, Skinsnes 1973, 166). If cases like this were multiplied, it would be easy to see how English rose to hegemony as lingua franca.⁹

Closing a chapter

Dictatorship Descends

The government of Getúlio Vargas (1930-1945, 1951-54) was one of a constellation of 'far-right' ultranationalist regimes implanted in South America by military *coup d'état* after a triad of events: the first world war, the Bolshevik revolution and the crash of 1929.¹⁰ Influenced by Comtean Positivism as, ironically, Brazilian medicine had been since the 1860s, censorship became increasingly repressive in his regime. By the 1950s, *Memórias'* foreign language content dwindled to almost zero, despite having the interculturally-minded Souza-Araujo as editor for most of the previous decade. Although no more than a bare indication of this change can be sketched here, it is worth suggesting in passing that the government's anti-foreign turn produced a situation for the IOC not unlike a scaled-up version of Meylaerts' (2012, 542) discussion

⁹ That this was a planned, long-term goal is testified to by the following quote from a Cambridge-published volume during the Second World War: "A new career service is needed, for gentlemen teachers of English with equivalent status to 'the Civil Service, Army, Bar, or Church', an 'army of linguistic missionaries' generated by a 'training centre for postgraduate studies and research', and a 'central office in London, from which teachers radiate all over the world'. The new service must 'lay the foundations of a world language and culture based on our own'" (Phillipson, 2012, citing Routh, 1941).

¹⁰ Altamirano in Chile (1924), Uriburu in Argentina (1930) and Terra in Uruguay (1933), not counting the rest of South or Central America.

of a minority culture seeking linguistic emancipation from an imposed national language, and seeing the use of such language (in this case the languages of the colonial powers) as treachery.

In perspective

Although a fully Brazilian initiative, the IOC was neither founded nor developed without influence (or in the case of the latter, input) from abroad. An awareness of the state of the art in the international scientific literature (and the multilingual skills that entailed) was all but mandatory under Cruz' organizational leadership and was willingly accepted by the others. Within such a cultural paradigm, individual research was conducted amidst a rich web of contacts – trading samples, ideas, invitations and nominations (as well as setting up international congresses, research stays and expeditions), as can be seen from the correspondence of Adolpho Lutz (*Biblioteca Virtual de Saúde*, 2015) and Souza-Araujo's *Leprosy*. The results were that the IOC's research program, although developed specifically for Brazilian problems (Rodrigues, Marinho 2009, 527), contributed significantly to the development of the global field of Tropical Medicine (Stepan 1981; Benchimol, Teixeira 1993; Worboys 1997; Coutinho 1999; Sá 2005; Kropf, Sá 2009, 17).

However, as was made clear in the case of the International Leprosy Association and its journal, the language question was not at all innocent: scientific nationalism or what has been called Imperial Science since the 1980s (perhaps better renamed *Imperial Science*)¹¹ was also involved (see also Sá et al., 2009; Silva 2013). In this case, it is not at all difficult to see how a language (especially of a colonial power) functions, like a currency, as a form of cultural capital (Bourdieu, Passeron 1990): the same economic laws and

¹¹ This term has been used previously by Kathleen Renk (2012), but with a different intent, i.e. to denote science that "Exaggerates reason over all other approaches to knowledge".

principles of investment would indeed seem to apply (Meylaerts 2012, 542). Language delimits a circle of contact. The language(s) of an organization are especially determinant when its product is information, since it must be disseminated in some language. That is, its impact will be directly affected by the reach of the language(s) in which it is produced: the closer to “hypercentral”, according to de Swaan’s arrangement (de Swaan 2001, 5-6), the greater the impact. However, it is not just the distribution side of the supply chain that is affected: since it could be argued that information (not unlike Pasteur’s law of biogenesis) is produced through the intake of information, the working languages of the producing organization, both the type and depth, will delimit its production, since the type, breadth and quantity of raw material available (through either publications or colleagues) may vary by language.

And such pragmatic considerations were likely never far back in the minds of the early IOC leadership. Was the Institute’s language policy simply (1) a tool for solving urgent domestic public health crises, (2) a manifestation of Brazilian scientific nationalism, or (3) a manifestation of belief in international cooperation with a view to constructing a new discipline and global “order and progress”? We suspect this is hardly an either/or dilemma or even a diachronic progression, although it is clear that such a policy was much more likely due to Brazil’s relatively neutral political stance – it had no empire other than its own very large and undomesticated backyard (and the effects of its joining both wars against Germany are obvious in *Memórias*), its permeable immigrant culture (Adolpho Lutz as an example of this), and its developmental and cultural ‘debtor’ status (for example, *Leprosy* documents Souza-Araujo’s United States of Brazil passport, which is entirely in French), i.e. Brazil (and other South American republics emerging from colonialism) ‘flogged one knave with another’ by trading Portuguese (or Spanish) influence for French... or German... or British... or American... or all of them eclectically.

Thus the IOC’s development and networking confounded, to a certain extent, the classic colonial model, in that it, being from

an ‘undeveloped’ non-empire, maintained worldwide contacts and networked simultaneously with science institutions (and sometimes governments) of at least three competing colonial powers: Germany, France & the USA. This was due, to a great extent, to the freedom that its multilingual policy provided. That is, translation and multilingualism allowed the circulation of the Institute’s personnel and texts. And the reception they (generally) received, such as the international prizes, and the treatment of Souza Araujo on his voyage corroborates the success of this policy.

Acknowledgements

This study was supported with funding from the Brazilian Ministry of Education (CAPES).

References

Corpus

Coura, José R. “Editorial.” *Memórias do Instituto Oswaldo Cruz* 75 (1980):1-5.

Instituto Oswaldo Cruz. *Instituto Oswaldo Cruz*. Rio de Janeiro: Manguinhos, 1911 (presumed)

Instituto Oswaldo Cruz. *Memórias do Instituto Oswaldo Cruz (1909-1930)*. Rio de Janeiro: Fundação Oswaldo Cruz. 1-22 (fornecer a data ou do artigo, ou de acesso à info)

Souza-Araujo, Heraclides de. *Leprosy: Survey Made in Fourty [sic] Countries (1924-1927)*. Rio de Janeiro: Instituto Oswaldo Cruz, 1929.

_____. *A lepra: estudos realizados em 40 países*. Rio de Janeiro: Instituto Oswaldo Cruz , 1929.

General

Aragão, Henrique de Beaurepaire. “Notícia histórica sôbre a fundação do Instituto Oswaldo Cruz (Instituto de Manguinhos).” *Memórias do Instituto Oswaldo Cruz* 48 (1950): 1-50.

Benchimol, Jaime L. *Manguinhos do sonho à vida: a ciência na Belle Époque*. Rio de Janeiro: Fiocruz/ Casa de Oswaldo Cruz, 1990.

_____. “Adolpho Lutz: um esboço biográfico.” *História, Ciências, Saúde – Manguinhos* 10.1 (2003): 13-83.

Benchimol, Jaime L. and Sá, Magali R. (Eds.). *Adolpho Lutz e a Entomologia Médica no Brasil (apresentação histórica)*. Rio de Janeiro: Editora Fiocruz, 2.3 (2006). [Adolpho Lutz: Obra Completa]

Benchimol, Jaime L. and Teixeira, Luiz A. *Cobras, lagartos & outros bichos: uma história comparada dos institutos Oswaldo Cruz e Butantan*. Rio de Janeiro: Editora UFRJ, 1993.

Bustamante, Emília Machado de. *As bibliotecas especializadas como fontes de orientação na pesquisa científica*. Rio de Janeiro: Instituto Oswaldo Cruz, 1958.

Calcutta School of Tropical Medicine. The Institution. Available at <http://www.stmkolkata.org/history.html> . Retrieved on March 10, 2015.

_____. *History of CSTM*. Available at <[stmkolkata.org](http://www.stmkolkata.org)> . Retrieved on March 10, 2015.

Casa de Oswaldo Cruz: Departamento de Arquivo e Documentação. *Guia do acervo da Casa de Oswaldo Cruz / Casa de Oswaldo Cruz*. 2nd ed. Rio de Janeiro: Fiocruz, 2009.

Casa de Oswaldo Cruz/Fiocruz, BIREME/ PAHO/ WHO, Museu Nacional, Instituto Adolfo Lutz (2015). *Biblioteca Virtual em Saúde: Adolpho Lutz*. Available at <<http://www.bvsalutz.coc.fiocruz.br/html/pt/static/correspondencia.php>> . Retrieved on March 14, 2015.

Coutinho, M., Freire, O. and Pinto-Dias, J.C. "The noble enigma: Chagas and nominations for the Nobel Prize." *Memórias do Instituto Oswaldo Cruz* 94.1(1999):123-129.

De Swaan, Abram. *Words of the World: the global language system*. Malden, MA: Polity Press, 2001.

Dillon, Jennifer Reed. *Modernity, sanitation and the Public Bath: Berlin, 1896-1930, as archetype*. Doctoral Thesis, Department of Art and Art History, Graduate School of Duke University, Durham, United States, 2007.

Fleischer, Bernhard. "A century of research in tropical medicine in Hamburg: the early history and present state of the Bernhard Nocht Institute." *Tropical Medicine and International Health* 5.10 (2000) : 747-751.

Home, W. E. "The International Exhibition of Hygiene at Dresden, by a special correspondent." *The Lancet* 178 (1911) : 712-713.

Lambert, José; Bruneliere, Jean F. "From Translation to Organization to International Business: an Academic No Man's Land". *Cadernos de Tradução* 36.2 (2016) : 15-45.

Link, Vernon B. "A History of Plague in the United States of America." *Public Health Monograph* 26 (1955) : 1-11.

London School of Hygiene and Tropical Medicine. Official Website. Available at <<http://www.lshtm.ac.uk/>>. Retrieved on February 27, 2015.

De Sallo, Denis. "Observations et experiences faites sur la Rosée de May, extradites du Journal d'Angleterre & traduites de l'Anglois en François." *Le Journal des Sçavans* XI (1666) : 27.

_____. "Extrait du Journal d'Angleterre & traduites de l'Anglois en François." *Le Journal des Sçavans* XVIII (1666): 40.

Lyons, H. G. "The Officers of the Society (1662-1860)". *Notes & Records of the Royal Society of London* (1940):116-140.

Marcolin, Neldson (2009). "Going Strong At 100." *Revista Pesquisa FAPESP* 165:11. Available at <<http://revistapesquisa.fapesp.br/en/2009/11/01/going-strong-at-100/>>. Retrieved on March 14, 2015.

Meylaerts, Reine. "Multilingualism as a challenge for translation studies." *Routledge Handbook of Translation Studies*. Eds. Millan-Varela C. and Bartrina F. London: Routledge (2012): 537-551.

Peterson, Linda and Skinsnes, Olaf. "Photographic gallery of contributors of the century." *International Journal of Leprosy* 41.2 (1973):156-176.

Phillipson, Robert. "TESOL expertise in the empire of English" Presentation at ACTA International TESOL, *TESOL as a global trade- ethics, equity and ecology*. Cairns, 2012.

Rodrigues, Jeorgina G. and Marinho, Sandra M.O.X. "A trajetória do periódico científico na Fundação Oswaldo Cruz: perspectiva da Biblioteca de Ciências Biomédicas." *História, Ciências, Saúde - Manguinhos*. Rio de Janeiro: 16.2 (2009): 523-532.

Routh, R.V. *The diffusion of British culture outside England. A problem of post-war reconstruction*. Cambridge: Cambridge University Press, 1941.

Royal Society. "Philosophical Transactions of the Royal Society", *The Royal Society Publishing* 1.1 (1665): 2.

Sá, Magali R. "The history of tropical medicine in Brazil: the discovery of *Trypanosoma cruzi* by Carlos Chagas and the German school of protozoology." *Parassitologia* (Rome), 47.3-4 (2005): 309-317.

Sá, Magali R., et al. "Medicine, science and power: relations between France, Germany and Brazil in the period 1919-1942." *História, Ciências, Saúde-Manguinhos* 16.1 (2009): 247-261.

Stepan, Nancy. *Beginnings of Brazilian science: Oswaldo Cruz, Medical Research and Policy 1890-1920*. New York: Science History Publications, 1981.

Silva, André F.C. da. *A trajetória científica de Henrique da Rocha Lima e as relações Brasil-Alemanha (1901-1956)*. Doctoral Thesis, Postgraduate Program in the History of Science and Health, Fiocruz/Casa de Oswaldo Cruz, Rio de Janeiro, Brazil, 2011.

_____. “Um brasileiro no Reich de Guilherme II: Henrique da Rocha Lima, as relações Brasil-Alemanha e o Instituto Oswaldo Cruz, 1901-1909”. *História, Ciências, Saúde-Manguinhos* 20.1 (2013): 93-117.

UNESCO & Casa de Oswaldo Cruz (2007). “Arquivo Oswaldo Cruz”. *Programa Memória Do Mundo da Unesco Comitê Nacional do Brasil Registro Nacional*. Available at <<http://www.google.com.br/url?sa=t&rct=j&q=&esrc=s&source=web&cd=4&ved=0CCgQFjAD&url=http%3A%2F%2Fwww.portal.arquivonacional.gov.br%2FMedia%2FArquivo%2520Oswaldo%2520Cruz%2520Completo.f&ei=8sfuVPiNMYrLsATtjID4DQ&usg=AFQjCNH45UdvLEHngfrETjkcWPM0KCIeZQ>> . Retrieved on February 26, 2015.

Wade, H.W. “An Editorial Statement.” *International Journal of Leprosy* 1.1 (1933): 1-3. London: International Leprosy Association.

Weld, Charles R. *History of the Royal Society*. London: J. W. Parker 1 (1848).

Weltman, Wanda. “A produção científica publicada pelo Instituto Oswaldo Cruz no período 1900-1917: Um estudo exploratório”. *História, Ciências, Saúde-Manguinhos* 9 (2002): 159-186.

Worboys, Michael. “Tropical diseases”. *Companion encyclopedia of the history of medicine*. Bynum, W.F.; Porter, R. (Ed.). London: Routledge 1 (1997) : 512-536.

Recebido em: 07/06/2016

Aceito em: 17/10/2016

Publicado em janeiro de 2017