

Develop Yourself! Development according to the Rockefeller Foundation (1913 – 2013)



Rockefeller Archive Center, Tarrytown (NY). Photo by the author

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Introduction

The importance of the concept of development – and its practical implications – stems from the fact that it has been widely criticised in both academia and the political arena for its meaning and consequences. Born in the post-war period as the goal to which all nations of the world should aspire, it soon met with opposition. Indeed, the countries receiving the recipes transferred to them by the developed countries had little say in defining how they wanted to develop. As a result, since its inception, the concept has been almost constantly reshaped.¹

From the outset, governmental and non-governmental actors have been involved in this development process. Among the non-state actors, we can highlight philanthropic foundations, whose importance in the development field is now undeniable. However, despite this importance, the way they think about the development concept has received less attention from academia than other aspects of their activities. This is the case for the Rockefeller Foundation,² which has been an essential actor in the creation of international public health,³ the shaping of the discourse and governance of global food and agriculture policies,⁴ the development of various academic disciplines,⁵ as well as the configuration of the international order after WWII.⁶

There have been two attempts, limited to the agricultural sector, to unravel the concept of development held by the Foundation. On the one hand, both attempts reveal that the United States had geopolitical interests behind the façade of wanting to increase agricultural sector productivity. On the other hand, the Foundation's proposed approach to improving productivity did not solely rely on new technologies and production techniques. It aimed to instil a new mindset in those targeted for development. More specifically, it sought to inculcate a mindset focused on self-reliance, social autonomy, and market orientation. However, the development concept in other areas, such as health, education, culture, or social aspects, has not been analysed. This leads us to ask how the Foundation's development concept unfolded over time

¹ Sachs, 'The Archaeology of the Development Idea'.

² From now on referred to as the Foundation

³ Birn and Fee, 'The Rockefeller Foundation and the International Health Agenda'.

⁴ Smith, 'Imaginaries of Development'; Nally and Taylor, 'The Politics of Self-Help'.

⁵ Tournès, 'La fondation Rockefeller et la construction d'une politique des sciences sociales en France (1918-1940)'; Fisher, 'The Role of Philanthropic Foundations in the Reproduction and Production of Hegemony'; Fisher, 'The Rockefeller Foundation and the Development of Scientific Medicine in Great Britain'; Schneider and Picard, 'The Role of the Rockefeller Foundation and the Development of Biomedical Research in Europe'.

⁶ Tournès, 'The Rockefeller Foundation and the Transition from the League of Nations to the UN (1939-1946)'.

in other fields. By addressing this question, we can also trace the role of the self-help ethic and market-oriented mentality in other areas of development. Additionally, we can examine the role assigned by the Foundation to various actors, including the public sector, private sector, and individuals/civil society, in the development process. These two last questions are particularly relevant given Neoliberalism's replacement of the Keynesian paradigm. This paradigm entails a model of society where the State's role is reduced as much as possible in favour of the individual and private initiative.

In order to answer these questions, we will first analyse quantitatively the language used by the Rockefeller Foundation in its annual reports during its first century of existence (1913 – 2013), primarily utilising Structural Topic Modelling. Then, we will examine the activities and institutions in which the Foundation was involved to reconstruct the Foundation's development concept, drawing inspiration from new intellectual history. In this way, we will observe how the meaning of development evolves, acquiring new connotations. Although the concept of development was not coined until 1949, we will begin our analysis at the beginning of the 20th century because the Foundation had from its origins a set of ideas that guided it and which, after the emergence of the concept, would be linked to it. Moreover, as other authors have demonstrated, we will show how self-help has been a central aspect of the Foundation's development approach from the beginning. Finally, we will observe that while initially, the Foundation primarily viewed the state as the critical actor in the development process, new participants such as private companies, communities, and individuals are also involved in this process by the end of the period.

This *mémoire* is structured into four main parts. In the first one, we will briefly introduce the issue of development and the actor through which we will analyse the concept of development, namely the Rockefeller Foundation. Also, we will present the literature review on the Foundation and its development concept. In the second one, we will present the sources and methodology employed. In the third section, we will present the results of the quantitative and qualitative analyses, contextualising and reconstructing the development concept. The *mémoire* will conclude with a final conclusion. Four appendices are included. Appendix Pre-processing, where we present the pre-processing tasks we carried on in depth. Appendix Other Methods, where we present the methodology and results of the other two quantitative methodologies that we did. Furthermore, in Appendix STM, we present complementary STM results. Lastly Appendix Ethics contains the Self-analysis of the ethical dimensions

Evolution of Development

The interest in development problems goes back to the beginnings of the discipline of economics as these problems were, according to Amartya Sen, one of the strongest motivations for studying economics. This placed the concept of development at the heart of the discipline of economics.⁷ However, we will discuss the literature on the subject since the creation of the development concept. As we will see below, this concept has been criticised both from a theoretical and practical point of view.

Before the end of the Second World War, the issues of colonies' development and global poverty were primarily seen through the lens of exploiting the colonies' natural resources. Only after the war ended and colonial empires started dismantling did both issues become recognised as a problem. During the colonial era, there was an awareness of the wealth disparity between the colonising countries and the colonies, but little was done to address the plight of the colonised populations. Poverty in the colonies was not a prominent concern at that time.⁸ Additionally, the colonised populations were not considered fully capable of acquiring the technological skills and mastering the scientific ideas that allowed Western countries to hold a dominant position during that period.⁹

While the substantive “development” is commonly thought of as a process that a person or object undergoes as it develops to its full potential, in the field of international relations and economics, the concept of development – and thus underdevelopment – is considered to have been coined with the speech given by U.S. President Harry Truman on 20 January 1949 on his inauguration as President of the United States. In that speech, Truman called on both the United States and the world to solve the problems of the “underdeveloped areas” of the globe. More precisely, he urged the creation of the necessary conditions that would allow the distinctive attributes of the advanced societies of the time to spread globally. These attributes included high levels of industrialisation and urbanisation, the modernisation of agriculture through technification, accelerated growth in material production and living standards, and the

⁷Sen, ‘The Concept of Development’, 10.

⁸ Sachs, ‘The Archaeology of the Development Idea’, 5.

⁹ Adas, *Machines as the Measure of Men: Science, Technology, and Ideologies of Western Dominance*, 271–72.

widespread adoption of modern education and cultural values.¹⁰ In other words, it entails a long structural transformation of the economies and societies driven by the state.

The Marshall Plan influenced this Western conception of development¹¹ and dominated the early stages of the United Nations (U.N.).¹² Accordingly, the Plan sought – provided there was sufficient human capacity – capital formation through financial aid. Despite the different realities of each country, as non-Western countries were not sufficiently represented in the U.N. due to the progressive process of independence, this conceptualisation of development was uncontested at the international level.¹³ Echoing President Truman's call, the U.N. Economic and Social Council asked the U.N. Secretary-General to appoint a group of experts to study the problem of reducing unemployment and underdevelopment in underdeveloped countries. In the resulting report (1951), these experts stated that rapid economic development would be impossible without painful readjustments. In the view of these experts, the institutions and philosophies of the past impeded development and had to be removed to establish social, economic, legal and political institutions favourable to development. As for socio-political institutions, the expert group points to the need for the population to acquire a scientific mentality. However, this would only happen if education was widespread among the population and if it fostered this mentality. Moreover, to catalyse development, the state needs to be able to enforce the law, and society needs to be meritocratic and egalitarian, with private property. Concerning legal institutions, if they impede innovation, progress will be impeded. As for economic institutions, they pointed to monopolies as a hindrance to economic development.¹⁴

As a result of these ideas, at the time, both in academia and the political sphere, development was seen almost exclusively as economic growth to improve people's living conditions.¹⁵ This conceptualisation translated into the reasoning that if the poor lacked what the rich enjoyed in the developed nations, on a global scale, the poor nations lacked what the developed nations had. That was how average per capita income was installed as the yardstick for measuring development. Thus, if the United States had an average per capita income in 1947 of about

¹⁰ Escobar, *La Invención Del Desarrollo*, 49–50.

¹¹ An initiative launched by the United States after World War II to assist in the reconstruction of Western Europe. It ran from 1948 to 1951 and provided economic and financial assistance to encourage economic recovery and prevent the spread of communism in the region.

¹² The UN was created in 1945.

¹³ Hirai, *The Creation of the Human Development Approach*, 20.

¹⁴ 'Measures for the Economic Development', 13–16.

¹⁵ Sen, 'The Concept of Development', 12.

1400 dollars, more than most of the population had an income of less than 100 dollars, justifying the need to raise their living standards.¹⁶ This initial approach was named the Modernisation approach.

However, a counter to these policies began to be forged by Raúl Prebisch and the Structuralist school towards the end of the 1940s. The importance of this school was such that from the 1950s onwards, it managed to dominate the U.N. Economic Commission for Latin America and the Caribbean (ECLAC). This school conceived development and, therefore, underdevelopment as related processes within the same economic system. In this sense, the underdevelopment of a peripheral country was influenced by its economic relations with the countries of the economic centre. To counteract the negative influence of the economic centre, the state must play an active role in organising available resources to develop local industry by substituting imports with local production (ISI). Thus, it was necessary to support fledgling local industry with protectionist policies, expand the local market and stimulate domestic demand.¹⁷

Parallel to the rise to prominence of the structuralists, the Bandung conference took place in 1955. This conference was the political act by which developing countries protested against the Western vision of development by demanding more agency in constructing their own economic thinking. More precisely, they demanded the creation of new international institutions or the avoidance of development policies¹⁸ created by developed countries, especially by the United States.¹⁹ This critical thrust of the Western-promoted development regime led to the creation of, among others, the United Nations Special Fund (predecessor of the United Nations Development Programme), the United Nations Conference on Trade and Development (UNCTAD), the New International Economic Order (NIEO)²⁰ and the anti-poverty programmes within the World Bank (W.B.).²¹

¹⁶ Sachs, 'The Archaeology of the Development Idea', 5.

¹⁷ Jolly, Emmerij, and Weiss, *UN Ideas That Changed the World*, 84–85.

¹⁸ Development policies focused exclusively on economic development.

¹⁹ Rist, *The History of Development: From Western Origins to Global Faith*, 81–82.

²⁰ The NIEO called for a restructuring of the international economic system to create a more equitable and just global order. It emphasized the need for fairer terms of trade, increased development assistance, transfer of technology, and greater control over natural resources for developing countries.

²¹ Hirai, *The Creation of the Human Development Approach*, 3.

In the 1960s, inspired by U.S. President John F. Kennedy, the U.N. presented the first U.N. Development Decade (1960 - 1970). This plan was obviously strongly influenced by the Western conception of development – the conception of development as the increase of a country’s GDP – and emphasised the importance of economic growth for each country according to its growth stage.²² However, U Thant, the U.N. Secretary-General, presented his Proposal for Action as a preface to this development decade. With this document, U Thant – who had been the secretary of the Bandung Conference – distanced himself from the perspective of economic growth as the result of economic growth alone and emphasised that development should also include improving social conditions and human aspirations.²³

Similarly, parallel to the formerly colonised countries’ independence, debates on North-South relations were institutionalised with the creation of UNCTAD and the progressive participation in the international system of the newly independent nations.²⁴

Until the 1970s, there was a consensus both within and outside the U.N. on the need for some planning by the state to stimulate economic growth in a balanced way.²⁵ Furthermore, the difference between economic growth and development began to become clear from that point onwards,²⁶ and the need for a more comprehensive understanding of development was recognised. This questioning led to the U.N.’s second decade of development (1970 - 1980), with which the U.N. introduced the concept of “human development” to promote more comprehensive development, even though its hardcore remained economic growth.²⁷ This way, the concept of development began to include aspects of the life that people lived, for example, life expectancy or how well a person was nourished.²⁸

²² As conceived by the economist Walt Rostow in his 1960 book “The Stages of Economic Growth: A Non-Communist Manifesto”. These stages of growth are as follows: traditional society, transitional society, take-off, road to technological maturity, high mass consumption. In this theory, the state was the agent in charge of the “economic take-off” which bring development. Harris and Scully, ‘A Hidden Counter-Movement? Precarity, Politics, and Social Protection before and beyond the Neoliberal Era’, 419.

²³ Thant, ‘Foreword to the United Nations Development Decade: Proposals for Action’, 140–45.

²⁴ Hirai, *The Creation of the Human Development Approach*, 4.

²⁵ Jolly, Emmerij, and Weiss, *UN Ideas That Changed the World*, 118.

²⁶ Sen, ‘The Concept of Development’, 13–15.

²⁷ Hirai, *The Creation of the Human Development Approach*, 4.

²⁸ Sen, ‘The Concept of Development’, 15.

In this context in which development lost its purely economic character, Robert McNamara (President of the W.B.) introduced in 1972 the basic needs approach, later adopted by the U.N. as an alternative way of achieving development.²⁹ With this methodology, the aim was to focus directly on fulfilling essential human needs, especially of the poor, and not to expect the satisfaction of these needs as an automatic result of the development process.³⁰ It was, in fact, a try to reconcile economic growth with social justice.³¹ Nonetheless, not all U.N. agencies succumbed to this new approach. The United Nations Educational, Scientific and Cultural Organisation (UNESCO) promoted the concept of endogenous development, which discarded the idea that growth was possible in a linear fashion by imitating the industrialised countries, as Rostow proposed.³²

Since the 1970s, in opposition to the basic needs approach, the Participatory Development movement proposed the involvement of communities and stakeholders in the decision-making process of development projects. In this way, the aim was to empower marginalised groups, promote local ownership and, at the same time, increase the sustainability and effectiveness of development interventions.³³ In the same decade, the Women In Development (WID) approach also emerged, which sought to change the passive role of women in development programmes to one in which they were active agents. Furthermore, this approach sought to value women's activities in the domestic sphere and the productive, social and community work spheres.³⁴

However, in the 1980s, the consensus of the previous decade cracked as the Bretton Woods institutions began to promote the market, privatisation of public services and trade liberalisation as a way to change society.³⁵ Adjustment processes soon followed, and, intending to promote development, countries began to tear down what had been built up to date.³⁶ In the same decade, essential changes around development took place. In 1981, the African Charter on Human and Peoples' Rights recognised the right to development as an individual and collective right. In-kind, the right to development was characterised as belonging to all peoples and encompassing economic as well as social and cultural aspects (The African Charter, 906).

²⁹ Hirai, *The Creation of the Human Development Approach*, 5.

³⁰ Sachs, *The Development Dictionary. A Guide to Knowledge as Power*, 11.

³¹ Rist, *The History of Development: From Western Origins to Global Faith*, 163.

³² Sachs, *The Development Dictionary. A Guide to Knowledge as Power*, 12.

³³ Cornwall, *Beneficiary Consumer Citizen: Perspectives on Participation for Poverty Reduction*, 2:11–13.

³⁴ Coles and Wallace, *Gender, Water and Development*, 5.

³⁵ Jolly, Emmerij, and Weiss, *UN Ideas That Changed the World*, 118.

³⁶ Sachs, *The Development Dictionary. A Guide to Knowledge as Power*, 12.

Then, the United Nations General Assembly in 1986 adopted the Declaration on the Right to Development, de facto adopting the right to development.³⁷ In the preamble to the Declaration, development was defined as a “*comprehensive economic, social, cultural and political process, which aims at the constant improvement of the well-being of the entire population and all individuals, based on their active, free and meaningful participation in development and the fair distribution of benefits resulting from there.*”³⁸ From the outcome of the vote, it is significant that all developing countries and some developed countries supported it, while the United States voted against it and some other developed countries abstained from voting.

As the best catalyst for development, the market paradigm reached a hegemonic position in the international arena during the 1990s.³⁹ At the same time as neoliberal reforms were consolidating, the U.N. was strengthening the Human Development (H.D.) approach to development, a spin-off of the basic needs approach. With the former, this institution sought to promote a more complete development beyond the latter’s proposed economic aspects. In other words, it included an emphasis on the enjoyment of human rights and a more precise target population (the poor).⁴⁰

However, with the advance of climate degradation, the H.D. approach fell short. Therefore, in 1992, the United Nations Conference on Environment and Development (UNCED) took place. It recognised the interdependence of environmental, social and economic aspects of development. In other words, with the new development paradigm that emerged from this conference, from now on, in order to promote development, it was necessary to do so by growing economically in an environmentally friendly way.⁴¹ Despite this new approach to development, post-development approaches to development began to question the suitability of the idea of development due to the multiple adverse effects that it has had on the global south since development plans began to be implemented. In this sense, they criticise the Eurocentricity of the ideas underlying the development concept rather than its

³⁷ 146 states voted in favour, one against (United States), and eight abstained (Denmark, Finland, the Federal Republic of Germany, Iceland, Israel, Japan, Sweden and the United Kingdom of Great Britain and Northern Ireland). See provisional verbatim record of the ninety-seventh meeting A/41/PV.97, page 64

³⁸ Asamblea General de la ONU, ‘Declaración Sobre El Derecho al Desarrollo’, 1.

³⁹ Sachs, *The Development Dictionary. A Guide to Knowledge as Power*, 76–82.

⁴⁰ Hirai, *The Creation of the Human Development Approach*, 14.

⁴¹ Rist, *The History of Development: From Western Origins to Global Faith*, 188–95.

implementation.⁴² They, therefore, support local and non-Western cultural traditions and criticise the definition of modernity that Western development brings.⁴³

Lastly, to tame the complexity of development, the U.N. organised development priorities into eight easily understandable goals while setting measurable targets and deadlines for achieving them.⁴⁴ These goals stipulated in 2000 were called the Millennium Development Goals and sought, among other things, to solve extreme poverty, hunger, disease or discrimination while promoting education, gender equality or environmental sustainability.⁴⁵

In a nutshell, we saw that the development concept evolved over time. Likewise, it has been and continues to be a contested concept because of the ethnocentric and evangelist connotation with which it was born. As the years passed, with the political participation of new actors, new characteristics were added to the concept.

Presentation of the Rockefeller Foundation and related philanthropies

The literature analysing the thinking of philanthropic foundations has not been as abundant as we might expect for such essential actors in the international sphere. These actors are crucial players in this domain for two reasons. Firstly, large-scale philanthropic programs, instead of delivering their objectives – reducing poverty levels, improving the living conditions of the masses, or better educating people – have created an international network that has successfully supported American foreign and economic policies.⁴⁶ Secondly, their relative autonomy and considerable clout as social and political actors. Many foundations significantly influence politics and economics thanks to the vast funding levels. Moreover, this kind of actor has only tax-reporting requirements; beyond it, it is up to them the extent to which they are transparent in their decision-making processes or expenditures.⁴⁷

The Rockefeller Foundation, in particular, is a social actor with more than 100 years of existence. It is, therefore, a good vantage point to study certain aspects of economic thought

⁴² Matthews, 'Postdevelopment Theory', 4–5.

⁴³ Matthews, 3.

⁴⁴ Sachs, 'From Millennium Development Goals to Sustainable Development Goals', 379.

⁴⁵ Sachs and McArthur, 'The Millennium Project: A Plan for Meeting the Millennium Development Goals', 347.

⁴⁶ Parmar, 'Foundations of the American Century'.

⁴⁷ Smith, 'Imaginaries of Development', 479.

and how it was transformed in the 20th century, the century in which Economics became an autonomous discipline. As we shall see below, building on previous literature, we will offer a century-old view of the Foundation's concept of development while considering other areas in which the Foundation was involved.

Although the Rockefeller Foundation was established in 1913, John D. Rockefeller Sr was involved in philanthropic activities from an early age. At the end of the nineteenth century, John D. Rockefeller Sr amassed one of the most enormous fortunes on the face of the earth from the profits he made from his Standard Oil company. He was a fervent Baptist and, since an early age, was involved in charitable giving. As his fortune grew, so did his giving. After J.D. Rockefeller met Frederick T. Gates – then a Baptist minister – Rockefeller hired him as his advisor for his philanthropic activities. The importance of the figure of Gates is critical, as he coined the term “scientific giving”, a term for a strategic approach that sought to address the underlying causes of social problems rather than simply treating their symptoms. In this sense, scientific giving is applying a scientific approach to philanthropic efforts by supporting the work of experts in various fields. This approach emphasises evidence-based practices, research and the use of expertise to maximise the impact of charitable activities. By adopting a scientific approach, philanthropists seek to provide systematic and sustainable solutions to social challenges.

Regarding the funding of various philanthropic activities, adopting the scientific approach established a structured and streamlined system for organisations seeking financial support. This approach moved from individual or “retail” philanthropy towards a more centralised and organised form of giving, often called “wholesale” or top-down giving. This shift was intended to improve effectiveness and efficiency by avoiding duplication of effort and encouraging discipline in philanthropic endeavours.⁴⁸ Thus, JD Rockefeller established several organisations to apply this concept to his philanthropic activities. In 1901, he created the Rockefeller Institute for Medical Research (now known as The Rockefeller University). A pioneering institution in biomedical research, it emphasised scientific discovery and medical breakthroughs, leading to numerous ground-breaking advancements in fields such as immunology, virology, and genetics.⁴⁹

⁴⁸ Parmar, ‘Foundations of the American Century’, 60–61.

⁴⁹ ‘Our History’.

One year later, J.D. Rockefeller Sr. established the General Education Board (GEB) to enhance education and promote economic development across the United States, especially among poor farmers in the South of the U.S. The GEB focused on improving rural schools, training teachers, and developing educational resources. It was pivotal in advancing education for African Americans and other minorities, establishing institutions like Spelman College and Hampton University.

The following philanthropic organisation created was the Rockefeller Sanitary Commission for the Eradication of Hookworm Disease, established in 1909 (and terminated in 1914), which aimed to combat hookworm disease, a widespread health issue in the southern United States. By providing medical assistance, conducting research, and implementing sanitation measures, the commission reduced the prevalence of the disease with mitigated results.⁵⁰

In 1914, one year after the creation of the Foundation, JD Rockefeller launched the China Medical Board as a second major project and endowed it in 1928 as an independent foundation. It aimed to strengthen the medical teaching centres and provide better equipment and more hospital staff (AR 1918, 46).

The last organisation to be presented is the Laura Spelman Rockefeller Memorial, founded in 1918 in honour of JD Rockefeller's late wife. This institution aimed to support philanthropic activities in areas such as the promotion of education, and welfare, among others, and ended up "in its brief but brilliant career, did more than any other agency to promote the social sciences in the United States".⁵¹

Once the Foundation was established, it began to engage in projects related to health, education, agriculture, culture, and research, among others. With the pages of analysis, we will be able to delve deeper into its activities throughout the *mémoire*.

Literature review on the Foundation and its development concept

⁵⁰ Elman, McGuire, and Wittman, 'Extending Public Health'.

⁵¹ White, *The New Social Science*, XVIII:1.

Regarding research on the Foundation R.F., three distinct research streams can be distinguished. The first of these streams analyses the Foundation as a class actor seeking to produce cultural hegemony to preserve a socio-economic system in favour of capital. Here, we find scholars such as the Sociologist Donald Fisher, for example, who studied the relationship between the ideology of the Rockefeller philanthropies (R.P.s) and the policy for the Social sciences that they suggested during the 1910 – 1940 period.⁵² Using correspondence and journals of the R.P.s officials, the author analyses and interprets the factors that produced such policies – namely, R.P.s’ authority structures, the relationships between the Rockefeller family members, the R.P.s’ trustees and officers and the social science community and lastly, the political and economic forces. Fisher explains that the high levels of wealth concentration that characterised the end of the 19th century and the beginning of the 20th century provoked the polarisation of American society.⁵³ In this context, the Rockefeller family needed new solutions to maintain the social order in which they stood at the top. The author argues that the answer the R.P.s arrived at was the development of social sciences as an academic discipline during the interwar period. The R.P.s could control social science policies by funding different research institutions, leaving its practitioners a passive role.⁵⁴ In other words, according to this author, the ground rules used in the social science debates of that time were set by the Foundation.⁵⁵

Similarly, Slaughter and Silva studied the activities of foundations like the Carnegie Endowment, Rockefeller, and Ford foundations – also known as the Big Three – in the conformation and shaping of culture and public policy.⁵⁶ Analysing funding patterns, project expectations and the research output that the Foundation’s grant recipients were able to provide during the Progressive Era (1896 – 1916), the authors conclude that the Big Three acted as social buffers by helping to maintain a socio-economic order which favoured the ruling class, thus preventing any structural change. For example, using the memos of the Foundation’s secretary, Jerome Greene, as a primary source, the authors show how vital the shaping of public opinion for this Foundation was. Economic “research and propaganda” was pointed out by Greene as the solution to shape ideas to foster an ideology which could prop up a socio-economic order favouring the ruling class, thus preventing any structural change. Therefore, it

⁵² Fisher, ‘The Role of Philanthropic Foundations in the Reproduction and Production of Hegemony’.

⁵³ Fisher, 208.

⁵⁴ Fisher, 220.

⁵⁵ Fisher, 220.

⁵⁶ Slaughter and Silva, ‘Philanthropy and Cultural Imperialism’.

was suggested that the R.P.s should provide the public with unbiased scientific analyses of the most controversial issues, such as labour disputes.⁵⁷ These analyses, prepared with the objectivity and impartiality of the scientific method, were intended to “correct popular misinformation” and win over public opinion with their results.⁵⁸

A second group of scholars, primarily using network analysis, on the contrary, questioned the class perspective and sought to qualify the assumed influential power of the Foundation. This second current shows us, especially when compared to the first, the importance of the context in which the Foundation wanted to implement its wishes, at least in the European case. Indeed, although the Foundation had clear objectives, it cannot implement them unilaterally, as it must negotiate with the context and its partners on the ground to be able to put them into practice.

Tournès shows how, with a tight-knit network of researchers, the Foundation was directly or indirectly involved in changing epistemological paradigms in France’s biomedical sciences research environment. He bases his analysis on the use of primary sources such as personal letters between the R.F.’s trustees, documents relating to the programmes, minutes of the Foundation’s executive committee and also analysed the networks created by the Foundation, its trustees and the recipients of its scholarships during the 1920 – 1970 period.⁵⁹ This involvement in the epistemological paradigm shift did not only materialise directly through the financing of funding projects, the active search for young research talent or the preferential financing of projects along the lines that the Foundation wished to favour.⁶⁰ Indirectly, the Foundation influenced this change by having the former researchers it funded occupy decision-making positions in both French universities and the French state.⁶¹

Other authors showed how the Rockefeller Foundation did not intervene freely despite enjoying a favourable balance of power when funding projects. In other words, the local networks of academics and local professionals that it funded were involved in the design of the projects, or the Foundation had to adapt its funding considering the situation of the university environment in the country receiving the funds. This was the case, for example, in the creation

⁵⁷ Slaughter and Silva, 67–68.

⁵⁸ Slaughter and Silva, 70.

⁵⁹ Tournès, ‘Le réseau des boursiers Rockefeller et la recomposition des savoirs biomédicaux en France (1920-1970)’.

⁶⁰ Tournès, 82.

⁶¹ Tournès, 105.

of the nursing school in Lyon (France) in 1920⁶² and the financing of economic research at the London School of Economics (LSE) during the interwar period.⁶³

In the Lyon Nursing School's case, the involvement of the Foundation was not reduced to a one-way exchange of funds or knowledge. Besides the financial help and technical advice the Foundation gave,⁶⁴ this institution also included Lyon's health institutions in an international knowledge network, thanks to which they could share the good practices created there.⁶⁵ In the LSE case, the Foundation was not a *tout puissant* actor who ruled at its will. As Scot shows, the Foundation's funding of the LSE did not depend solely on the LSE's willingness to do so, but the Foundation funded the LSE for numerous contextual reasons. First, the English university environment made the LSE the best-suited university to implement the Foundation's plan. Put bluntly, Oxbridge universities⁶⁶ were judged as too conservative, in contrast with the LSE, seen as focused on the contemporary issues of contemporary economic and political life.⁶⁷ Secondly, an extensive network of contacts facilitated communication between the Foundation and the LSE.⁶⁸ Thirdly, the LSE already had the economic research programmes the Foundation was interested in funding.⁶⁹ Finally, a series of internal struggles and the resulting paradigm shift within the LSE called into question the trust placed in it.⁷⁰ Finding itself lost amid the LSE's internal struggles, the Foundation asked members of the local business community and found that the research that the Foundation preferred to fund at the LSE did not meet with their approval. Indeed, the English business community distrusted social science for its supposed purpose of informing policymaking. This cast doubt on the future viability of the LSE for the Foundation as the latter intended to phase out LSE funding so that local philanthropic foundations would take over future funding.⁷¹

⁶² Saunier and Tournès, 'Rockefeller, Gillet, Lépine and Co.: Une Joint Venture Transatlantique à Lyon (1918–1940)'.

⁶³ Scot, "'Rockefeller's Baby'. La London School of Economics et La Recherche Économique Dans l'Angleterre de l'entre-Deux-Guerres'.

⁶⁴ Saunier and Tournès, 'Rockefeller, Gillet, Lépine and Co.: Une Joint Venture Transatlantique à Lyon (1918–1940)', 69–71.

⁶⁵ Saunier and Tournès, 78–79.

⁶⁶ Term that refers collectively to the University of Oxford and the University of Cambridge

⁶⁷ Scot, "'Rockefeller's Baby'. La London School of Economics et La Recherche Économique Dans l'Angleterre de l'entre-Deux-Guerres', 82–85.

⁶⁸ Scot, 81–86.

⁶⁹ Scot, 90.

⁷⁰ Scot, 92–95.

⁷¹ Scot, 96.

While the two previous streams contributed both methodologically (analysing the institutions and programmes supported by the Foundation to reconstruct the underlying ideas) and in terms of substance (the Foundation acted in dialogue with the socio-economic context and its local partners), the contribution of the third stream is primarily one of content. This last stream studies the Foundation's programmes in the context of North-South relations, showing how the Rockefeller Foundation sought to export its scientific worldview.

Shepherd, for example, analysing the context and development of potato science in Peru between the 1940s and the 1960s, shows the resistance this Foundation encountered in exporting its scientific worldview of agriculture.⁷² By using documentation relating to the Foundation's programmes as well as correspondence from foundation officials and trustees as primary sources, the author shows how the Foundation favoured with its grants local scientist closer to the scientific approach to agriculture that was held in the Foundation while disavowing those who took into account both the scientific method and the native knowledge and practices.⁷³ This native know-how was disavowed on epistemological and methodological grounds, and it was seen as an impediment to developing "a potato science for the world, not just for the Andes".⁷⁴ In other words, the Rockefeller Foundation was looking for a change in the practices and the epistemological grounds on which the Peruvian agricultural field was relying, and it acted according to this desire.

This change in agriculture's know-how has also been studied by Nally and Taylor,⁷⁵ who analysed the agricultural projects in which the Foundation was involved throughout the 20th and early 21st century using programmatic materials from the Rockefeller Foundation, the General Education Board (GEB)⁷⁶ and secondary sources. They argue that the long Green Revolution⁷⁷ was more about instilling societal changes (namely a self-help ethic and market-

⁷² Shepherd, 'Imperial Science'.

⁷³ Shepherd, 126–30.

⁷⁴ Shepherd, 128.

⁷⁵ Nally and Taylor, 'The Politics of Self-Help'.

⁷⁶ Philanthropic organisation funded and created by the Rockefeller family in 1903 to promote the education in the United States no matter the race, sex or creed of the student. 'Without Distinction of Race, Sex, or Creed'.

⁷⁷ The authors extend the Green Revolution backwards until the time where the RPs deployed its activities in the Southern States of the US and forwards until the Gene revolution to better show the social and geographical dimension of it. In this way, the continuity of such a revolution can be better observed, as the strategies put in place to develop the backward US South were a source of inspiration for developing the Global South.

oriented mentality) in the agricultural sector than a new technological change. That is, despite the adoption of new tools and techniques, this revolution's most outstanding characteristic was the attempt to change the subsistence mentality of farmers to one oriented towards commercial exchange in the market.⁷⁸ On top of that, this effort to improve the agricultural sector was seen as a means to appease social tensions, firstly because of the racial conflicts Southern U.S.' states had at the beginning of the 20th century and later because of the risk that different regions of the world of falling under the influence of the USSR.⁷⁹

Within this same current, we also find the political scientist Elta Smith.⁸⁰ With her analysis of the development imaginaries, Smith offers two fundamental features of any imaginary/conceptualisation. First, as a worldview, it is influenced by each context in which it is deployed. Thus, a historical perspective is needed to grasp how the same conception or imaginary changes over time. In this sense, the Foundation's economic ideas have been analysed considering the socio-economic context in which they are deployed. Furthermore, a normative worldview is not only a tool for interpreting reality but also a tool for intervening in that reality.

This author examines the historical transformations of rice-related agricultural research projects funded by the Foundation from the 1960s to the first decade of the 21st century. In doing so, Smith shows how agricultural science and technology were conceived as catalysts for socio-economic progress.⁸¹ To do so, Smiths uses archival materials from the Rockefeller Archive Center, contemporary programmatic materials, and interviews with a key Foundation's director, among others. As a result, Smith depicts Foundation's development imaginaries with two main characteristics. First, the Foundation conceptualised the developing world as something backwards and lacking the scientific knowledge necessary to develop itself. Consequently, it was the burden of the developed world to modernise this former region. Second, the Foundation thought about the developing world as a uniform area where regional

⁷⁸ Nally and Taylor, 'The Politics of Self-Help', 57.

⁷⁹ Nally and Taylor, 61.

⁸⁰ Smith, 'Imaginaries of Development'.

⁸¹ In this sense, as Nally and Taylor author shows the centrality of the change in mentality that was sought with the Foundation's successive agricultural projects. To analyse the historical trajectories of the Rockefeller agricultural projects, Smith employs the terms "conceptions" and "imaginaries" as synonyms, defining them as complex normative worldviews. In this sense, the concept of "imaginary" implies that both the world and how it should be, have been thought of in a certain way in a particular historical period by actors capable of materialising this normative thinking. In other words, these imaginaries specified both what development is, how it is to be achieved, and why. Smith, 462–63.

differences were absent and as an area where developing programs could be applied following the rule of one size fits all. In this sense, the same strategies created for agricultural development in South-East Asia during the 60s through the 80s were implemented in Africa since the late 20th century.⁸²

Additionally, Smith claims, these imaginaries were, in the first place, dependent on the security concerns of the United States during the Cold War and, later, on the Neoliberal worldview. This dependence supposed that during the Cold War, these imaginaries focused on eradicating hunger to support the ideological battle between the two blocs.⁸³ Once the USSR was dissolved, the economic sphere took the lead. From then on, the cost-benefit mentality enjoyed a more significant role in shaping Foundation's economic development.⁸⁴ As the author argues, although science and technology were conceived as essential elements for social transformation from the very beginning of the Foundation's agricultural activities, it is no less important than economic growth and, more precisely, the development of international trade were always perennial objectives in the Foundation's agricultural programmes.⁸⁵

After this literature review, we have verified several things in terms of content and methodology. Concerning the former, we have seen how the Foundation did not act of its own free will. It engaged in dialogue, with varying degrees of success, with the institutional, economic and personal context in which it wanted to become involved to advance its viewpoints. On top of that, as Nally & Taylor showed for the agronomist case, before the creation of the concept of development, one actor, namely the Rockefeller Foundation, was already involved in development activities. In this regard, these authors showed the centrality of the self-help ethic and market mentality in the kind of development the Foundation was trying to promote. Moreover, thanks to these authors and Smith, we have seen how, as far as agricultural development is concerned, the Foundation's development concept depended on the United States' geopolitical needs. On the methodological level, we have seen how the authors of the first current, Nally & Taylor and Smith, used institutional analysis and the activities in which the Foundation was involved to reconstruct the underlying ideas. Thus, we will study the concept of development through the Foundation's conceptualisation. To do so, we will analyse the institutions and activities in which it was involved to reconstruct this concept.

⁸² Smith, 475–78.

⁸³ Smith, 465–66.

⁸⁴ Smith, 471.

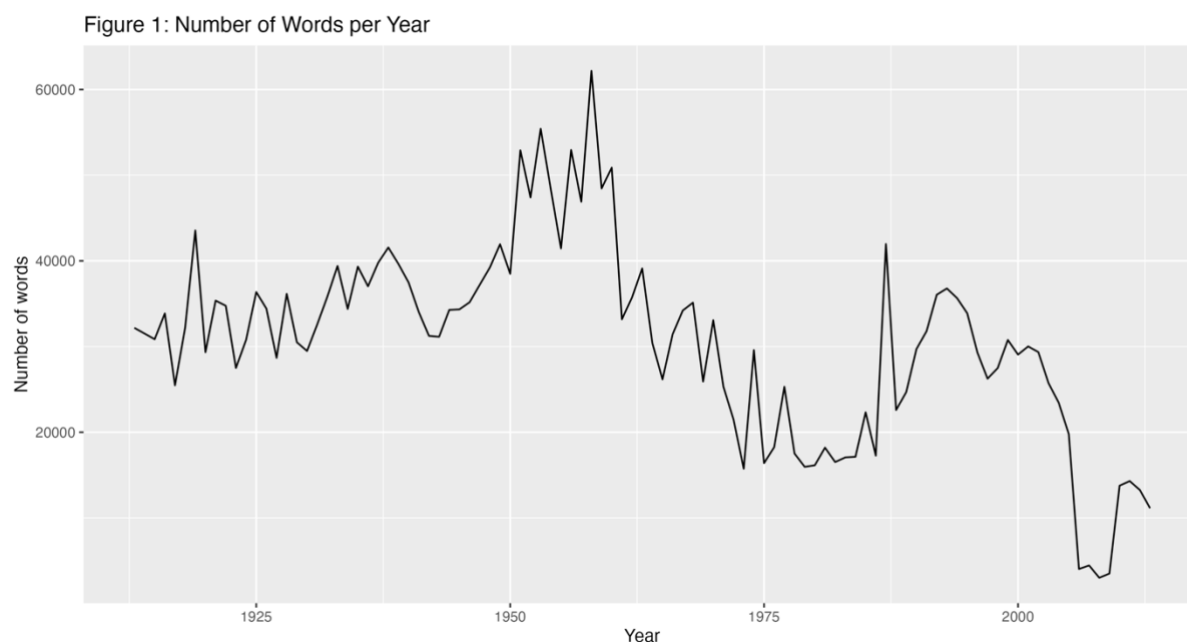
⁸⁵ Smith, 473.

Primary Sources and Methodological Framework

Primary Sources

This study has chosen the Foundation's Annual Reports as primary sources for several reasons. The first one is quantitative. The Annual Reports were published annually from 1915 to 2016, except for 1913 and 1914, which were issued jointly in early 1915. By having all the reports since 1913, the Foundation lends itself as an excellent observatory to study the evolution of the concept of development before and after the emergence of this concept. Traditionally, the Foundation has structured its annual reports in different sections. The name of these sections may change over the years, but the content remains stable over time and organises the reports. The first part, written by the president and or the secretary of the Foundation, not only provides the reader with a more or less brief summary of the activities carried out during the year in question but also with a narrative that seeks to communicate the reasoning and justification behind the Foundation's activities. In this sense, these sections are a showcase in which the Foundation's values are displayed, promoted and justified. This is followed by sections describing in greater depth the activities, objectives and strategies and the people and projects funded. The reports end with financial information and information about the foundation's employees and trustees.

It is necessary to mention the evolution of the word count in the annual reports because the results will be less meaningful if a document contains fewer words when using quantitative techniques that rely on word frequency. Whereas at the beginning of the 20th century, they were around 450 pages long, the latest reports in our corpus do not exceed 100 pages, most of which are taken up by photographs. This reduction in length is accompanied by the shortening of the president's letter from 60 pages to 1 or 2 at the end of our corpus. We see this downward trend regarding the number of words used by the Foundation in its reports in Figure 1 below.



The second reason is qualitative. The main objective of annual reports is to communicate the activities of the Foundation, its financial operations, its priorities, its vision of the issues it faces, and a self-assessment of its own actions in the past and those to be adopted in the future. In addition, these reports are publicly available to a broader audience, thus not limited to the staff and administrators of the Foundation. As these reports are public, they have two functions. The first is purely functional. The reports inform the reader of the activities that the Foundation has carried out during the year in question, the financial state of the institution, and so on. The second function is more symbolic. As Peter Goldmark Jr. (president of the Foundation from 1988 to 1997) said, philanthropic foundations lack the three disciplines American life lacks: the test of the markets, the test of the elections and the press that analyses every move.⁸⁶ In this sense, the Rockefeller Foundation uses the annual reports as a form of self-evaluation and a way to make itself accountable to the public and offer a promotion and justification of the values that guide the Foundation in its activities.⁸⁷

Methodology

So, suppose we want to trace the evolution of the concept of development held by the Foundation. In that case, we will need a methodology to report on the Foundation's economic thought changes over time. In the first place, a variety of quantitative linguistic analyses derived from the Digital Humanities (D.H.) can sort and give us the most representative

⁸⁶ Rockefeller Foundation, 'Annual Report 1997', 3.

⁸⁷ Rockefeller Foundation, 'Annual Report 1954', 3.

elements of the Foundation's language. Subsequently, we will draw on the Cambridge School of intellectual history, knowledge systems and Koselleck's semantic network of concepts to contextualise and interpret the result of the previous quantitative analysis. This analysis will enable us to reconstruct and show how the development concept underlying and guiding the activities evolved according to different historical and socio-economic contexts.

We will start this section by presenting the D.H. and its tools which we will use in the first part of the analysis. We will continue by presenting the methodology used to interpret the quantitative results. More precisely, the Cambridge School of Intellectual History and the semantic network of concepts suggested by Koselleck will be presented. Lastly, we will present the concept of knowledge regime as it is pertinent to characterise the dominant systems, structures and practices thanks to which knowledge is produced in each period.

Emerging in the 1950s with the advent of early computers, Digital Humanities did not fully expand until the late 20th and early 21st centuries, coinciding with the widespread adoption of information and communication technologies. The D.H. combine traditional approaches to the humanities with the potential of digital technology to address research questions innovatively. It aims to use digital tools and methods to examine, analyse and better understand humanistic objects of study. This involves the creation and use of databases, the digitisation of materials, the development of algorithms for textual analysis and the use of interactive visualisations, among other resources.⁸⁸ From a historiographical point of view, D.H. seek to harness the potential of digital technology to enhance historical scholarship, improve historical literacy, and facilitate a deeper understanding and appreciation of the past in the digital age.⁸⁹ In other words, it is a methodology that aims to create a framework using digital technologies, allowing people to experience, read, and follow an argumentation about a historical issue.⁹⁰ In our case, it will enable us to locate linguistic patterns in texts, thus facilitating their interpretation.

Quantitative language analysis or Text mining is a technique belonging to the Digital Humanities that is growing in popularity. To carry it on, we will follow a methodological approach similar to that employed by Moretti and Pestre⁹¹ in their analysis of the language of

⁸⁸ Gaffield, 'Words, Words, Words: How the Digital Humanities Are Integrating Diverse Research Fields to Study People', 120.

⁸⁹ Cohen et al., 'Interchange: The Promise of Digital History', 454.

⁹⁰ Seefeldt and Thomas III, 'What Is Digital History? A Look at Some Exemplar Projects', 2.

⁹¹ Moretti and Pestre, 'Bankspeak: The Language of World Bank Reports'.

the World Bank. Confronted with the same problem as us – dealing with a substantial number of annual reports to be analysed – the solution the authors came up with is using different quantitative linguistic analysis techniques and later interpreting the results obtained. More precisely, these techniques reveal what the most frequent words are, what is the most frequent part of speech (POS), what word clusters are formed, and what are the occurrences of two terms to compare their respective collocates (the words that tend to occur most often in their immediate proximity). Afterwards, they enrich the results produced with these quantitative techniques by analysing nominalisations, acronyms, gerunds and temporal and special adverbs.

These techniques enable the authors to see what are and how to change the semantic and grammatical structures the World Bank (W.B.) uses in its annual reports. After analysing these structures, Pestre & Moretti conclude that there is a discontinuity in these language structures located in the last decade of the 20th century, making it challenging to understand the activities of this institution. The language used in the first stage of the W.B. denotes that the W.B. based its activities in the first stage of its existence on concrete projects and programmes (building roads, helping to increase the production of a type of crop, etc.). From the 1990s onwards, however, the language used instead of informing the reader how the W.B. intervenes – by employing a vague and auto-referential language – makes it difficult to understand what the W.B. does.

We will not use all the techniques used by Pestre & Moretti and will not carry the grammatical analysis of language. Nevertheless, we will use a technique called Structural Topic Modelling (STM) which allows us to show the hidden topics in the corpus and whether they are statistically correlated with any period. In Appendix XY Other Methods, we will present the STM in the following section and the methodology and results of the other two techniques – absolute term frequency and Hierarchical Clustering on Principal Components (HPCP).

Pre-processing of the raw data

Because the data contained in texts (textual data) is highly unstructured, it is necessary to carry out a set of activities called pre-processing on the texts to be analysed. Raw textual data carries a lot of useless “noise”, for instance, document structure (i.e., page number, header and footer text, special characters, etc.) and “stop words”, which are the most used words in a language (redundant and poorly informative). By reducing the size of the data to be analysed, the

efficiency and effectiveness of the analysis are increased.⁹² As part of the pre-processing we have carried out, we have removed words or pseudo-words that were not well recognised by Optical Character Recognition (OCR). We also removed the so-called “stop words” and tokenised the text. Finally, we have performed a Part of Speech Analysis (POS) to create documents with only the nouns used in the Hierarchical Clustering on Principal Components (HCPC) and the STM. We will use only nouns because this part of speech could be more useful than other POS to determine the topics that compose the issue we are interested in, making easier the reconstruction of the concept of development that the Foundation had.⁹³

For this part, we use the package tidytext in R. It forces us to use a “tidy” principle when working with words. In this framework, we are working with a table in which each line represents a 1 and each column information about the document, such as the text content, the year of publication and other “metadata” (See Figure 2 on the right).

Figure 2

	text				Year
	<chr>				<dbl>
1 "	the annual report	tee rokri	...	1913	
2 "	the annual report	i the r	...	1915	
3 "	the annual repor	jii	...	1916	
4 "	the annual report	r lq the...		1917	
5 "	a t y	i t ulii	...	1918	

First of all, we will get rid of all words that, after running the OCR on the annual reports, consist of only one letter, we will remove all digits, and all symbols, we will make all letters lowercase, we will replace misrecognised words with their correct form whenever we noticed it, and we will get rid of specific sets of words that do not contribute anything to the analysis such as “we 2003 The Rockefeller Foundation” or “inc” (see Appendix Pre-processing).

⁹² Gurusamy and Kannan, *Preprocessing Techniques for Text Mining*.

⁹³ Suh, ‘SocialTERM-Extractor: Identifying and Predicting Social-Problem-Specific Key Noun Terms from a Large Number of Online News Articles Using Text Mining and Machine Learning Techniques’, 2.

We then transform the remaining words in each annual report into a table in which there is only one word in each row associated with their document title in the column “doc_id”. We can see this in Figure 3 on the right. This is the tokenisation process.⁹⁴ As we progress in the quantitative analysis, we discover new words that cloud the quantitative analysis, so we gradually build up a list of words that we eliminate (see Appendix Pre-processing). In other words, this is an iterative process. Once the texts to be analysed have been tokenised and cleaned, we will proceed with the quantitative analysis.

Figure 3:

Year	words
1913	the
1913	rokri
1913	library
1913	the
1913	broadway

Inspired by the work of Moretti & Pestre,⁹⁵ we will put in place techniques that will allow us to trace the change in the language used by the Foundation and reconstruct its conception of development. First, we will track the most used words over time in the Foundation’s annual reports in absolute terms. However, since selecting and creating a narrative with the different words from various lists, as we will do in this first step, may lead us to include some biases in our work, we will continue with a couple of techniques of textual data analysis. The first one (HCPC) is an unsupervised technique *per se*, and the second one we will use in its unsupervised declination (STM). Here, the unsupervised adjective means that no *ex-ante* knowledge of the corpus will be used to utilise these techniques.⁹⁶ In plain English, this means that neither for the clustering nor the topic modelling, we will predefine which words belong to which cluster or topic. We will use both techniques because they may seem similar but involve different procedures and interpretations. The first method allows us to map and visualise the proximity between document and word, creating clusters based on this intuitive representation (more details later). This technic not only regroups documents into logical topics but also allows for an in-depth descriptive analysis of the topics’ nature. The second method is very convenient because it allows us to consider given metadata, such as the year of publication, in creating topics. This technique will then enable us to make inferences and test hypotheses.

Moreover, as we can see in Appendix XY Other Methods, although absolute term frequency analysis does not consider time-related data to be performed, documents are distributed almost

⁹⁴ Silge and Robinson, ‘Tidyttext: Text Mining and Analysis Using Tidy Data Principles in R’.

⁹⁵ Moretti and Pestre, ‘Bankspeak: The Language of World Bank Reports’.

⁹⁶ Anandarajan, Hill, and Nolan, ‘Introduction to Text Analytics’, 9.

chronologically (since their lexical structure evolves over time)⁹⁷. In addition, with the HCPC, we can see how the language changes over the years. Nevertheless, as this latter technique does not include time-related metadata, we cannot know the strength of the relationship between time and words used. Therefore, a technique such as STM that considers time-related metadata will allow us to know the strength of the relationship between time and language structure.

STM

Topic modelling seeks to discover latent themes that are assumed to be generated by the corpus to be analysed.⁹⁸ Based on the distributional hypothesis of language, i.e., words with similar meanings tend to occur in similar contexts,⁹⁹ topic modelling techniques use this hypothesis together with the words' frequency to infer the likely meaning of the words.

We will use a topic model that differs from classical ones: the Structural Topic Model. It is a mixed-membership topic model. This method of analysing topics is based on two assumptions. First, this procedure conceives each topic as defined by a combination of words, each with its respective probability of belonging to one or another topic. Second, a document is conceived as a combination of topics, thus allowing each document to be composed of several topics. Therefore, the sum of the probabilities of the words of each topic is one, and the sum of the proportions of each topic in a document is also equal to one.¹⁰⁰ The advantage compared to the HCPC – which uses a hard clustering method (see Appendix Other Methods) – is that we have a more probabilistic and nuanced approach to topics since they have freer relationships with documents. With HCPC, a cluster could have multiple documents, but a document could only have one topic.

⁹⁷ Nevertheless, since the name of the variables in the rows is the year to which the annual reports refer and these rows are distributed in the biplot almost chronologically, which means that their lexical structure evolves over time. This could be seen in the Figure 11 in Appendix Other Methods.

⁹⁸ Roberts et al., 'Structural Topic Models for Open-ended Survey Responses', 1066.

⁹⁹ Turney and Pantel, 'From Frequency to Meaning: Vector Space Models of Semantics', 143.

¹⁰⁰ Roberts, Stewart, and Tingley, 'Stm: An R Package for Structural Topic Models', 2.

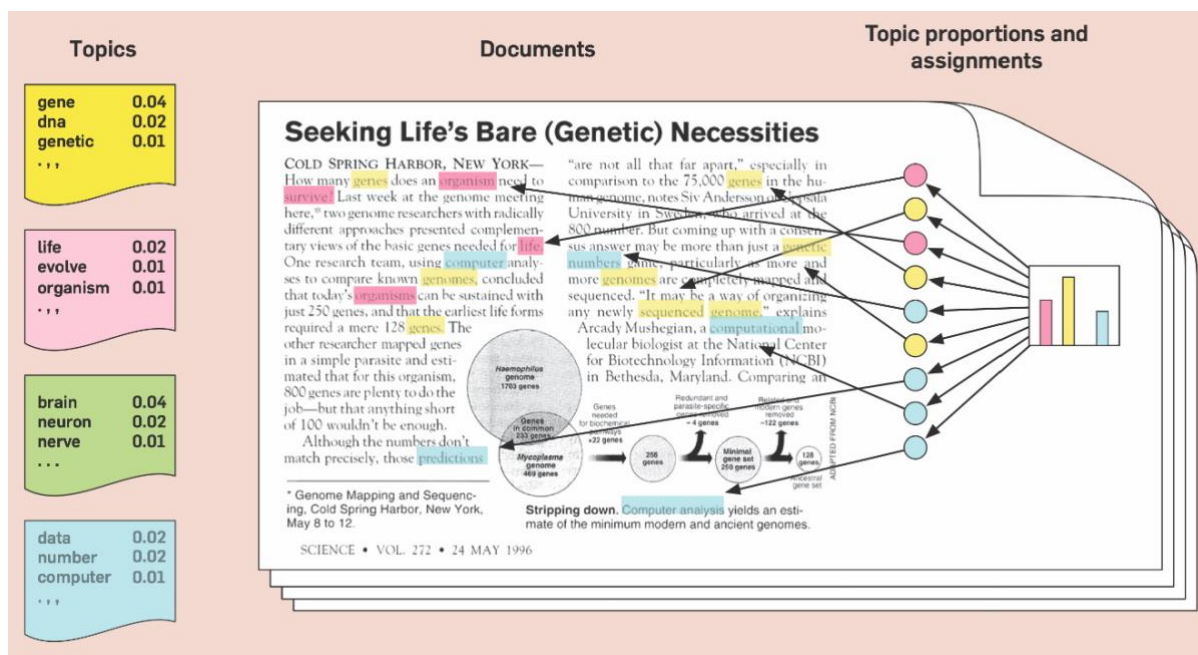


Figure extracted from Blei, David M. "Probabilistic topic models." *Communications of the ACM* 55, no. 4 (2012): 77-84.

To perform the topic modelling, we will run a Structural Topic Modelling (STM) with the `stm` package in R, which will allow us, apart from uncovering the latent topics in our corpus as any other topic modelling algorithm would do, to estimate the relationship of the underlying topics with the metadata of our choice belonging to the documents.¹⁰¹ In our case, the years each report refers to are the metadata. This utilisation of time metadata will enable us to see how a particular topic becomes more or less frequent over time. In this sense, we will have two estimations, topical prevalence and topical content. Topical prevalence is the frequency a topic is discussed, whereas topical content refers to the words used in each topic.¹⁰² Using this procedure requires the completion of five steps.

1. We will link the time metadata to our corpus through a Document Term Matrix (DTM).
2. We will stipulate the number of topics to be estimated. However, considering that the "`stm`" package requires the user to stipulate a fixed number of topics and that there is no "correct" number of topics for a corpus,¹⁰³ we will use the same methodology as Roberts et al. (2014 & 2019). These authors advocate for quantitatively measuring two characteristics of topics: semantic coherence (words more likely to appear in a topic are more likely to appear

¹⁰¹ Roberts et al., 'Structural Topic Models for Open-ended Survey Responses', 1066.

¹⁰² Roberts et al., 1067–68.

¹⁰³ Roberts et al., 1068–70; Roberts, Stewart, and Tingley, 'Stm: An R Package for Structural Topic Models'.

together within documents) and exclusivity (words more likely to appear in one topic are less likely to appear in another). We look at both characteristics because while semantic coherence is a valuable measure of semantic consistency, it does not penalise repeated words across multiple topics. Therefore, we need a way to capture the extent to which topics are composed of words that are more likely to appear in one and less likely to appear in another. To do this, we will use the exclusiveness of the words belonging to each topic. Then, we generate a set of potential models, each with various topics. We retain models that have between five and twenty topics. We then standardise the exclusivity and semantic coherence values for each model and plot them on a graph to see which model has a good balance of both characteristics, i.e., a model on the frontier between semantic coherence and exclusivity and thus does not dominate other models in both terms.¹⁰⁴ As a result, we have chosen ten topics because, for us, this number of topics offers a good balance between semantic coherence, exclusivity and a number of topics small enough to be at ease working with it. Note that these topics are, by default, different from the previous approach. The graph plotting the semantic coherence and exclusivity standardised scores can be found in Appendix STM, Figure 4.

3. Once the number of topics has been established, we will run the STM with the “stm” function and get the words most linked to a topic with the “labelTopic” function of the same package. Among the types of words that this function provides, we will keep the lists gathering the words with the highest frequency in the topic (Highest Prob) and the words that are both frequent and exclusive (FREX).¹⁰⁵
4. Once we have the topics, we calculate the topic prevalence regression on time metadata with the “estimateEffect” of the “stm” package. This will enable us to estimate the relationship between topics and time.
5. We will calculate the gamma of the topics with the “tidy” function of the “tidytext” package. In other words, we will calculate the probability of a document being in one or more topics.

Once we have the results of these three techniques, we will use them to analyse the institutions and the activities in which the Foundation was involved created to reconstruct the underlying

¹⁰⁴ Roberts et al., ‘Structural Topic Models for Open-ended Survey Responses’, 1070.

¹⁰⁵ Roberts, Stewart, and Tingley, ‘Stm: An R Package for Structural Topic Models’, 13.

concept of development the Foundation had. More precisely, for the STM, we will use the twenty most representative words belonging to the FREX category of each topic statistically related to time. Whereas, for the absolute frequency analysis and the HCPC, we will use the twenty most frequent terms in absolute terms in different periods, the clusters and the overused and underused words in each of them – see Appendix Other Methods.

In addition, the Structural Topic Modelling applied to the Rockefeller Foundation's annual reports will provide us with topics present in these documents where the Foundation presented and justified the areas in which it was involved in promoting development. The words that compose the STM's topics could be classified into three semantic fields. First, the central themes that emerged at the time and to which the Foundation wanted to provide a solution to achieve its ultimate goal "*to promote the well-being throughout the world*". Second, the places where it was involved in each theme. Third, the methods to achieve this objective.

Study of the Development concept

From its creation, the Foundation had the clear objective of – in its own words – promoting "*the well-being throughout the world*".¹⁰⁶ However, over its century-long existence, the meaning of this purpose underwent significant changes in line with conceptual transformations. In this regard, once the concept of development was coined around the middle of the 20th century, the Foundation used the former as a synonym for the latter. Moreover, the Foundation does not define either one or the second. Because of this, we will explore the Foundation's ultimate goal and its relationship with the development issue, tracing its evolution as a concept. While we will not delve into a strictly conceptual historical analysis, we will draw upon the contributions of different currents and authors associated with Intellectual History to shed light on this topic.

The Cambridge School of Intellectual History stressed the importance of context in historical research, especially for understanding the meanings that historical actors gave to their actions and utterances. In this sense, it argued that interpreting historical events without considering the context in which they took place would lead to misunderstandings and misinterpretations. To avoid this, one had to consider the social, cultural, and intellectual context in which the

¹⁰⁶ Rockefeller Foundation, 'Annual Report 1913-1914', 7; Rockefeller Foundation, 'Annual Report 1963', 3; Rockefeller Foundation, 'Annual Report 2013', 3.

actors were situated to understand a historical phenomenon's whole meaning and implications.¹⁰⁷

According to Quentin Skinner, the leading representative of the Cambridge School, when studying texts by considering the context in which they were produced, we reduce the chances of interpreting the text and making four errors. The first error would be, on the one hand, "to convert some scattered or incidental remarks by a classical theorist into his doctrine on one of the expected themes"¹⁰⁸ and, on the other hand in, judging the authors without considering whether they were even interested in doing what they did not do.¹⁰⁹ The second error we could avoid is presupposing that authors coherently produce their texts. Therefore, it is the historian's task to find the coherence mentioned above that the text is supposed to have.¹¹⁰ Third, we will reduce our chances of giving a meaning to a text or action that does not correspond to the true meaning the author wanted. This happens when we are more interested in the retrospective meaning of the element or action than its meaning for the author.¹¹¹ The last error is interpreting history with preconceived paradigms. In other words, when the historian applies his or her culture to analyse, understand and explain the object of study.¹¹²

To assist us in the historical contextualisation of each era, we will also pay particular attention to the different regimes of knowledge in development studies. As Michel Foucault conceived them, knowledge regimes refer to the dominant systems, structures and practices through which knowledge is produced, disseminated and legitimised at a given time.¹¹³ The concept of knowledge regimes is particularly relevant to our case. As we will see below, throughout the period under examination, the concept of development will be influenced by the different economic views, which in turn are shaped by the development of other fields of knowledge that are not limited to the purely economic one.¹¹⁴

Likewise, in addition to the regimes of knowledge, we will follow the methodological proposal by Reinhart Koselleck regarding the networks of meaning. I.e., the idea that concepts and

¹⁰⁷ Gamboa, 'La escuela de Cambridge: historia del pensamiento político. una búsqueda metodológica'.

¹⁰⁸ Skinner, *Visions of Politics. Volume 1: Regarding Method*, 60.

¹⁰⁹ Silva, 'Entre el contextualismo de Skinner y los "Perennial problems"', 161–62.

¹¹⁰ Skinner, *Visions of Politics. Volume 1: Regarding Method*, 67.

¹¹¹ Skinner, 73.

¹¹² Skinner, 74–76.

¹¹³ Campbell and Pedersen, 'Policy Ideas, Knowledge Regimes and Comparative Political Economy'; Fraser, 'Foucault on Modern Power: Empirical Insights and Normative Confusions'.

¹¹⁴ Fraser, 'Foucault on Modern Power: Empirical Insights and Normative Confusions', 274.

words have a history and that their meaning can change over time. In this way, concepts are not static entities but constantly evolving and shaped by the historical and socio-economic context. Therefore, to understand a concept, it is necessary to analyse its historical evolution and explore the different layers of meaning acquired over time. By analysing the web of meanings of the concept of development, we will show the historicity of this concept and see how this concept has helped shape the historical consciousness and the structure of thought in each epoch.¹¹⁵

Simply put, with the words FREX we will reconstruct the activities and institutions in which the Foundation was involved. Later, inspired by the methodological or historiographical renewal brought about by the various currents of so-called Intellectual History, we will contextualise these activities to restore the networks of meaning related to the concept of development.

One methodological clarification is necessary. Throughout the corpus, the Foundation speaks of well-being without ever defining it. What it does do is, once the concept of development is coined around the middle of the 20th century, use the former as a synonym for the latter. Therefore, as the annual reports are the vehicle the Foundation uses to justify the solutions it considers appropriate to achieve well-being, we will reconstruct the activities and institutions that the Foundation created and participated in while considering the socio-economic context and the different knowledge regimes. We will subsequently reconstruct the idea of well-being, ergo development, that guided the Foundation during this period.

Analysis

¹¹⁵ Rivero, 'La Historia de Los Conceptos de Reinhart Koselleck: Conceptos Fundamentales, Sattelzeit, Temporalidad e Histórica', 5–10.

In this section, we will present the results of the STM as this technique provides the most accurate and relevant findings. Similarly, the STM confirms the language patterns identified with the other two techniques. As mentioned earlier, the results of the word frequency analysis and the HCPC can be found in Appendix Other Methods.

STM

The Structural Topic Modelling (STM) allows us to examine the topics in the Foundation's annual reports and determine whether significant temporal relationships are associated with them. Given that the STM is an unsupervised method, the resulting estimates are not a product of our prior beliefs or prior interpretations of the annual reports.¹¹⁶

After performing the STM, we see that eight of the ten topics revealed are statistically correlated over time, corroborating what the HCPC has shown, i.e., that some topics appear in one period and not others. The results of the regressions can be found in Figure 5 in Appendix STM.

Table 1 below displays the list of the estimated topics correlated with time metadata. Two lists of the twenty most characteristic nouns are provided for each topic. The first one ("Highest prob") gathers nouns that have the highest probability of appearing in each topic but are non-exclusive (i.e., could be highly associated with other topics at the same time). The second one ("FREX") collects nouns that are both frequent and exclusive¹¹⁷. We could group the nouns provided by this technique into three groups, the one related to the objectives, the second referring to how the Foundation is engaged, and the third concerning the geographic areas in which it focuses. The results of the HCPC also provided a similar semantic organization, meaning that the most characteristic overused and underused nouns from the HCPC could also be classified into these three semantic groups (see Appendix XY Other Methods).

For the FREX list, we have specified a frequency-to-exclusivity ratio of 0.25 to avoid the appearance of words that only appear once. This has been done with the argument "frexweight" of the "labelTopics" function.¹¹⁸ Next, we will label the topics using high probability and FREX

¹¹⁶ Grajzl and Murrell, 'Toward Understanding 17th Century English Culture: A Structural Topic Model of Francis Bacon's Ideas', 7.

¹¹⁷ Roberts, Stewart, and Tingley, 'Stm: An R Package for Structural Topic Models', 13.

¹¹⁸ Roberts, Stewart, and Tingley, 11.

words (as they provide more semantically intuitive representations of topics¹¹⁹) and by examining the annual reports in which the topics have a probability greater than 0.75 of appearing. Therefore, this way of proceeding is a mixture of the ways to label a topic suggested by Robert et al.¹²⁰ and Grajzl & Murrel.¹²¹

¹¹⁹ Roberts et al., ‘Structural Topic Models for Open-ended Survey Responses’, 1068.

¹²⁰ Roberts et al., 1068.

¹²¹ Grajzl and Murrell, ‘Toward Understanding 17th Century English Culture: A Structural Topic Model of Francis Bacon’s Ideas’, 10.

Table 1: Topics and top words for the estimated 10 topic STM, only visible the topics correlated with the time metadata.

Topic 1: Goal-oriented programmes (1961 – 1973)

Highest Prob: university, research, program, college, development, support, foundation, school, study, place, sciences, center, faculty, year, training, science, state, department, grants, studies

FREX: fmns, hss, orchestra, symphony, valle, khartoum, cooperative, sorghum, scholarships, campus, ghetto, performances, potato, corn, appointment, wheat, players, dar, assignments, negro

Topic 3: Globalisation challenges (1994 – 2006 ; 2010 – 2013)

Highest Prob: costs, university, research, health, development, project, foundation, program, support, center, use, professor, community, study, kenya, policy, communities, director, california, work

FREX: inclusion, lao, multimedia, pdr, manuscript, capacities, tobacco, themes, hanoi, choreographer, creativity, equity, uganda, indicators, portfolio, yorka, ln, crossborder, border

Topic 4: War relief - Insect borne diseases (1913 – 1917)

Highest Prob: work, commission, relief, treatment, health, number, foundation, persons, committee, year, board, disease, war, corporation, company, time, director, members, area, infection

FREX: serbia, clothing, attendance, bylaws, mittee, sugar, gift, uncinariasis, powers, relief, comparison, peters, microscopists, lectures, object, pieces, sons, tables, davison, objects

Topic 5: Population issues (1971 – 1988)

Highest Prob: university, research, program, foundation, development, center, study, sciences, health, population, studies, grants, support, education, world, professor, state, arts, policy, countries

FREX: gadjah, humanists, immunology, conflicts, electric, del, fhs, bell, interaction, minority, conflict, bankers, television, edison, oregon, gains, explorations, editing, objectives, determinants

Topic 6: Insect-borne diseases & Public health education (1916 – 1928)

Highest Prob: health, board, work, hookworm, school, year, control, disease, hospital, years, infection, treatment, college, university, china, malaria, education, county, number, state

FREX: feces, instalment, hookworms, camp, guayaquil, salt, seychelles, capita, worms, nurse, severity, mils, purge, larvae, carriers, peking, room, stools, average, vermifuge

Topic 8: Smart globalisation – Climate change (2006 – 2013)

Highest Prob: support, health, climate, change, impact, resilience, cities, foundation, city, innovation, development, use, world, transportation, director, policy, associate, costs, network, people

FREX: resilience, coverage, disaster, ecosystems, entrepreneurs, jacobs, urbanization, acccrn, landscape, ehealth, summit, emissions, launch, stewardship, humanity, insecurity, trans, economies, informatics, monitor

Topic 9: Post WWII needs (1948 – 1964)

Highest Prob: university, research, study, program, studies, place, foundation, school, professor, medicine, college, institute, sciences, department, health, science, development, equipment, education, travel

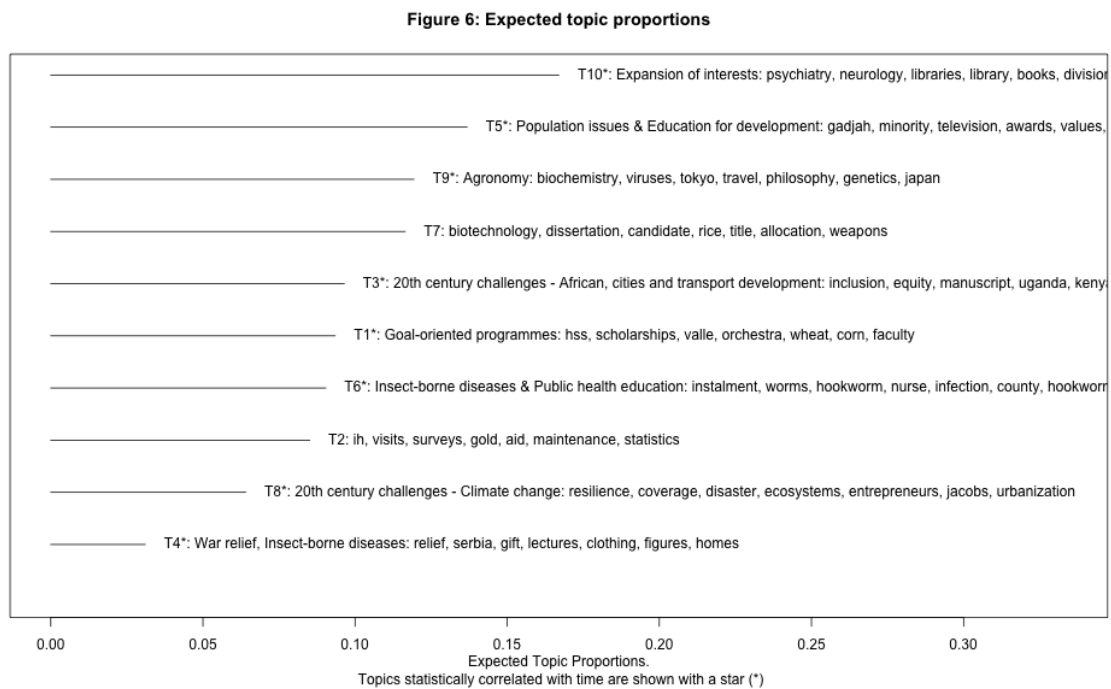
FREX: dmph, tokyo, viruses, biochemistry, japan, philosophy, theory, zoology, travel, dnsa, arthropod, borne, genetics, seminar, microbiology, kyoto, agents, santiago, virology, agronomy

Topic 10: Expansion of interests (1933 – 1954)

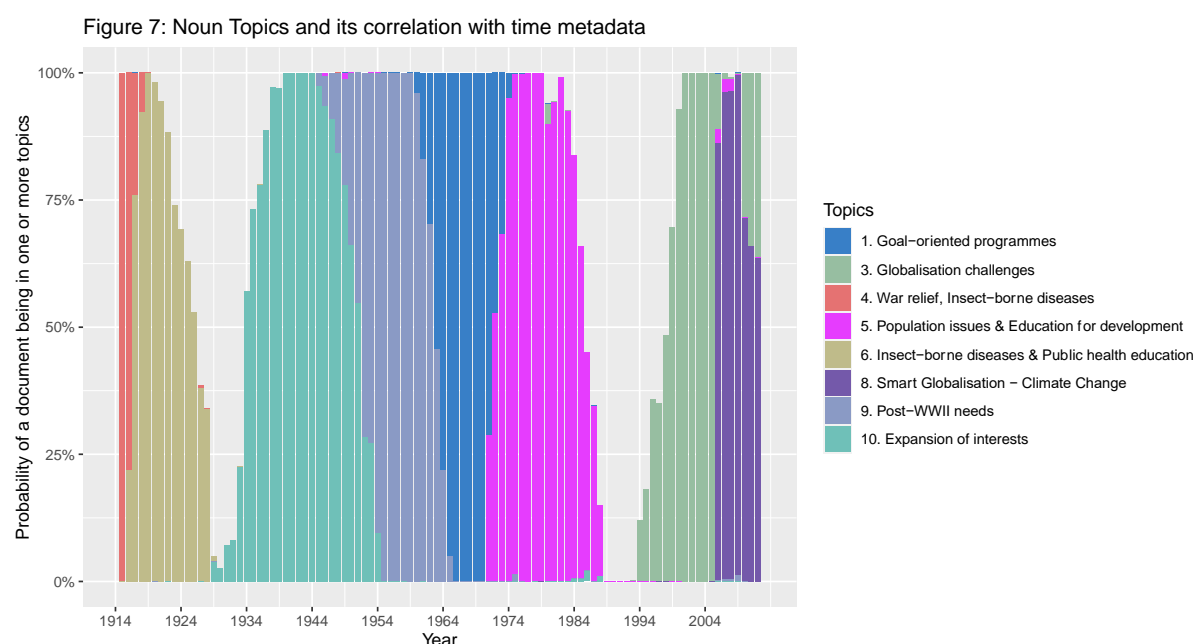
Highest Prob: university, research, health, studies, work, foundation, sciences, program, study, school, division, council, year, years, grants, institute, aid, grant, development, department

FREX: neurology, psychiatry, tissues, motion, syphilis, vitamins, rabies, wartime, brain, substances, influenza, hormones, gambiae, cyclotron, reactions, languages, libraries, proteins, jungle, researches

Figure 6 below gives a corpus-level summary of topic distributions. In other words, the graph shows the relative importance of the ten topics found in our corpus. As we can see, the most common topics include the expansion of interests, the population challenges in the late 20th century, or the one related to the agricultural program. The words that follow the number and name of the topic are the Highest Prob words.



In Figure 7 below, we can see the probability of finding a document in a topic, so if we add up the probability of a document being in one or more topics, we get 1. In other words, this graphic shows how the topics are distributed over time. Here we have just plotted the topics statistically correlated with time metadata. In Appendix STM, the distribution of all the topics is available in Figure 8.



Let us analyse the topics statistically correlated with the time metadata. Throughout the following analysis and contextualisation, specific nouns will appear in quotation marks and italics; these are the nouns that appeared in the FREX category of the STM.

Topic 4: War relief - Insect-borne diseases (1913-1917)

As we can see, annual reports from 1913 to 1917 have a probability of more than 0.1 of appearing in the topic “War relief – Insect borne diseases” (topic 4). As can be seen in Table 1 above, most of the nouns that appear (both in the category of the most frequent words and in that of the most frequent and exclusive words) are related to the semantic field of diseases transmitted by insects or parasites, to the aid program for certain European nations affected by the First World War or to the creation of the Foundation.

Topic 6: Insect-borne diseases & Public health education (1916-1928)

After this first topic, the topic referring to Insect-borne diseases & Public health education (Topic 6) follows. In this topic, we can find – with a probability greater than 0.1 – the annual reports between 1916 and 1928. Thus, we see that the STM confirms what both the absolute frequency of the words used and the HCPC result suggested, i.e., that there are topics linked to a specific period (see Appendix Other Methods)

Thus, with STM topics 4 and 6 and clusters 4 and 5, we have seen that from 1913 to 1928, the Foundation focused firstly on the programme to alleviate the consequences of the First World

War and secondly on public health issues such as the fight against diseases like malaria, hookworm, tuberculosis, yellow fever or the promotion of the modernisation of medical sciences (both preventive and therapeutic) and public health.¹²²

As for the war relief programme, it consisted, among other things, of sending “sugar” and “clothing” to Belgium¹²³ or sending a sanitary commission to “Serbia” to help that country fight the epidemics of typhus, polio and scarlet fever.¹²⁴ Related to the fight against insect-borne diseases, a large part of his efforts were concentrated in Brazil, where yellow fever and hookworm or *Uncinaria stenocephala* (causing “*uncinariasis*”) were endemic and in China, a country judged to be in need of the benefits of modern medicine, including public and personal hygiene, as well as the treatment of diseases.¹²⁵ This urgency to intervene in China is illustrated by the following passage from the 1913 annual report: “*There was abundant testimony, based chiefly upon the experience of Christian missionaries, that one of the greatest needs of China was that of the benefits of modern medicine, including public and personal hygiene, as well as the treatment of disease.*”¹²⁶ As a result, the China Medical Board (CMB) of the Rockefeller Foundation was established in 1914 to strengthen the medical teaching centres and provide better equipment and more hospital staff.¹²⁷ The CMB, as would be the case with other projects of the Foundation, received the money transfers in annual “*instalments*”.¹²⁸

On the other hand, inspired by its success in eradicating yellow fever in Cuba and Panama, the Foundation decided to export the efforts to eradicate yellow fever from other endemic areas by using the International Health Commission (IHC) – known as the International Health Board (IHB) since 1916.¹²⁹ This led it to act in “*Guayaquil*” (Ecuador)¹³⁰, where it successfully eradicated the disease in 1919 or in other places such as Mexico, Central America, Peru, Colombia, Brazil and West Africa.¹³¹

¹²² Rockefeller Foundation, ‘Annual Report 1917’, 17.

¹²³ Rockefeller Foundation, ‘Annual Report 1913-1914’, 86.

¹²⁴ Rockefeller Foundation, ‘Annual Report 1915’, 326–28.

¹²⁵ Rockefeller Foundation, ‘Annual Report 1913-1914’, 32.

¹²⁶ Rockefeller Foundation, 32.

¹²⁷ Rockefeller Foundation, ‘Annual Report 1918’, 42.

¹²⁸ Rockefeller Foundation, ‘Annual Report 1920’, 321.

¹²⁹ Rockefeller Foundation, ‘Annual Report 1915’, 18.

¹³⁰ Rockefeller Foundation, ‘Annual Report 1920’, 28.

¹³¹ Rockefeller Foundation, ‘Annual Report 1924’, 32–33.

Regarding its interest in malaria, the Foundation decided to become involved in the fight against this disease, judging it to be the most significant brake on the “*welfare and economic efficiency of the human race*”.¹³² To do so, it used first the IHC and then the IHB. Several internal policies guided the way these organisations acted on the ground. Firstly, both agencies – when invited by the country concerned – acted on the ground in collaboration with agencies that the populations of the countries in which they intervene consider to be their legitimate interlocutor (i.e. their national agencies) and on which ultimate responsibility rests.¹³³ Secondly, by prioritising educating and stimulating the curiosity of the masses about the therapeutic and preventive measures essential to public health, to the detriment of enforcing these same measures by law. Thirdly, demonstrating in each country that the fight against both diseases bears fruit through a demonstration in which all the agencies concerned cooperate. Finally, emphasising the importance of keeping operational costs low so that once the Foundation’s support is exhausted, the programme is viable thanks to public and private funding, and the state in question can take it over.¹³⁴

In addition, in its zeal to promote public health, the Foundation promotes the use of latrines to reduce soil contamination, which is believed to be the cause of the spread of diseases such as typhoid fever, diarrhoea, dysentery, intestinal parasites and other similar illnesses.¹³⁵ For example, hookworm is spread when the “*feces*” of the infected person are deposited in places where the parasite’s eggs can reach the “*larvae*” stage and thus be reintroduced into another human host.¹³⁶ Therefore, to reduce the number of “*infections*” of these diseases caused by soil contamination, the Foundation recommends, on the one hand, the massive use of latrines as a preventive measure. However, its recommendation does not go beyond this, as the Foundation believes it is up to local governments to take care of the practical details of implementing such a measure, such as, for example, what type of latrine to use.¹³⁷ On the other hand, with its “*Dispensary*” Plan for the southern states of the United States, the Foundation intended that mobile dispensaries would visit the most affected regions, offering free treatment and medical examination to those who requested them. To this end, each dispensary would be staffed,

¹³² Rockefeller Foundation, ‘Annual Report 1915’, 17.

¹³³ Rockefeller Foundation, ‘Annual Report 1928’, 29.

¹³⁴ Rockefeller Foundation, ‘Annual Report 1915’, 14.

¹³⁵ Rockefeller Foundation, 60.

¹³⁶ Rockefeller Foundation, ‘Annual Report 1917’, 132.

¹³⁷ Rockefeller Foundation, ‘Annual Report 1915’, 62.

among others, by “*microscopists*” in charge of examining faeces for the presence or absence of parasite eggs.¹³⁸

If throughout the period 1913 – 1928, the fight against the aforementioned diseases, the promotion of the modernisation of medicine and the health systems of the different countries dominated the period, in 1928, the Foundation was reconfigured so that four of the Rockefeller boards would work more closely together and facilitate cooperation between them. This reorganisation led to the merging the Rockefeller Foundation and the Laura Spelman Rockefeller Memorial (LSRM). This reconfiguration also expanded the Foundation’s objectives to encompass not only public health but also the advancement of knowledge in the medical sciences, the natural sciences (by taking over the international programme of the International Education Board), the social sciences (by taking over the programmes of the LSRM) and the humanities.¹³⁹

The Foundation’s interest in diseases such as hookworm and yellow fever, as well as in the modernisation of medicine and its education, can be explained by the strong influence of the hygienist model and its internal debates from the mid-19th and early 20th centuries. Indeed, in European countries and the United States, this model significantly influenced the societies of the time. Driven by positivism, the industrial revolution and scientific progress, hygienism sought to introduce a series of reforms to better cope with the high mortality rates and epidemics that had seriously affected cities since the beginning of the industrial revolution.¹⁴⁰

Like any movement, hygienism had several currents within it in permanent debate. Infectionist theses gained popularity from the mid-19th century to the beginning of the 20th century for various reasons. In particular, the inefficiency of quarantine and isolation measures to combat

¹³⁸ Rockefeller Foundation, ‘Annual Report 1917’, 98–100.

¹³⁹ Another consequence of the reconfiguration is that activities related to public health would henceforth be carried out through a newly created division, the International Health Division (IHD), a division that would be an unofficial organisation in the field of public health, dealing with both research and administrative work. (AR 1928, 27) In addition, the China Medical Board became independent of the Foundation and was set up as an independent body. Finally, the Natural Sciences division is created to support the advancement of knowledge in this area (AR 1928, 2).

¹⁴⁰ González, ‘Las Publicaciones Sobre Higienismo En España Durante El Período 1736-1939. Un Estudio Bibliométrico.’

the cholera epidemic in Paris in 1832 and the experiments of Louis Pasteur gave wings to the infectionist current within hygienism.¹⁴¹

Although contagionist solutions¹⁴² were never abandoned, in this period, the leading voice was carried by the infectionist current, which promoted the control of spaces, the detection and elimination of sources of insalubriousness, or the control of popular dwellings. In this way, the main western cities undertook significant public works projects to create drinking water supply systems and drainage, paving, etc., to improve their sanitation.¹⁴³

The influence of the infectionist current on the Foundation was reflected in what kind of diseases the Foundation became involved in (yellow fever, hookworm, malaria), in how to deal with them and in the Foundation's funding patterns. Illustrative of this is the following passage: *"First comes control of the physical environment through pure water, milk, and food supplies, adequate sewerage and refuse disposal systems, improved housing, heating, and ventilation."*¹⁴⁴ This way of proceeding was not only in line with the prevailing trend in the hygienist movement but also allowed diseases to be attacked directly at their root. In this sense, as the Foundation put it, dealing with problems at their root was the *leitmotiv* of this organisation: *"Through a deliberate policy adopted by its first Trustees, Foundation effort has been directed not to the practice of charity but rather toward the identification of the underlying causes of human suffering and lack of opportunity and toward their gradual removal from areas of the human scene whose boundaries widened as the years went by."*¹⁴⁵ At the same time as this focus on disease prevention was improving the healthiness of cities, the Foundation aimed at the next steps in improving the health of populations. For example, they pointed to *"Income, standard of living, opportunities for social intercourse and recreation, all have important relations to individual and community health"*.¹⁴⁶ Regarding the Foundation's funding patterns, it created numerous schools of hygiene and public health, both in the United

¹⁴¹ Caponi, 'La Generación Espontánea y La Preocupación Higienista Por La Diseminación de Los Gérmenes', 593.

¹⁴² The contagionist current of hygienism proposed cutting the chains of disease transmission by the means known at the time, i.e. isolation and quarantine. Caponi, 595.

¹⁴³ Ruiz, 'Ciudades Latinoamericanas Entre Medios Del Siglo XIX y Principios Del XX: Del Higienismo al Urbanismo', 12.

¹⁴⁴ Rockefeller Foundation, 'Annual Report 1921', 12.

¹⁴⁵ Rockefeller Foundation, 'Annual Report 1962', 3.

¹⁴⁶ Rockefeller Foundation, 'Annual Report 1921', 12.

States and in Europe. An example was the creation of the Johns Hopkins University School of Public Health, which opened in 1918.¹⁴⁷

On top of this, the Foundation is an excellent observatory to watch the evolution of the hygienist movement. As we have seen in the previous pages, the Foundation began by promoting public sanitation measures, and then, as we shall see later, it became involved in the development of microbiology with the study of the vectors of transmission of yellow fever or malaria, and the micro-organisms that produce it.

Similarly, excerpts such as the following show the extent to which positivism also marked the worldview of the Foundation: “*The search for truth and its application to human need is a vast, worldwide co-operative task which demands constant interchange of ideas and more intelligent team-work among workers*”.¹⁴⁸ This quest for truth will lead the Foundation to fund and create research and higher education institutions to contribute to knowledge production, initially on the causes of diseases and, later, on the social sciences and humanities.¹⁴⁹

The dates on which this research interest led to the creation of the LSRM and its subsequent merger with the Foundation are particularly significant as both events happened during the historical period when social science disciplines acquired the status of an academic discipline. Before the emergence of the discipline as such, the study of human and institutional relations was done in the field of moral philosophy.¹⁵⁰ This influence of the “moral” in the study of social questions began to be seen as an impediment to a correct study of the subject in question, especially under the influence of positivism¹⁵¹ in the second half of the 19th century. Consequently, the discipline increasingly searched for a valid and universal knowledge. This search was influenced more precisely by the different sub-disciplines of biology,¹⁵² especially by the new field proposed by Charles Darwin, evolutionary biology.¹⁵³ In his book “*The Origin of Species*” (1859), Darwin defended the thesis that human beings, as animals, were also

¹⁴⁷ Rockefeller Foundation, ‘Annual Report 1918’, 19.

¹⁴⁸ Rockefeller Foundation, ‘Annual Report 1921’, 49.

¹⁴⁹ Rockefeller Foundation, ‘Annual Report 1920’, 64.

¹⁵⁰ Bryson, ‘The Emergence of the Social Sciences from Moral Philosophy’, 304.

¹⁵¹ Let us remember that this philosophical current asserts that knowledge solely originates from sensory experience. Therefore, if social sciences were to truly become sciences, they should embrace methods similar to natural sciences.

¹⁵² Porter, ‘Genres and Objects of Social Inquiry, from the Enlightenment to 1890’, 34.

¹⁵³ Ross, ‘Changing Contours of the Social Science Disciplines’, 210.

adapting to their environment. This influence gave rise to the idea of society as an organism with its own adaptive structures and needs. This view of society legitimised adaptive, organismic, and evolutionary models in psychology, sociology, and anthropology. For example, the comparative method borrowed from biology by social anthropology was used to study peoples and races on an evolutionary plane, assigning each one to a more or less advanced stage of development, thus justifying the imperial logic and the different discriminations within each society.¹⁵⁴

Influenced by biologicist rhetoric, scholars of the various social questions progressively enriched the abstractions, making them more and more specific and leaving aside the “moral” side of the question, thus creating new disciplinary fields increasingly differentiated from one another.¹⁵⁵ One of the first fields of social sciences was governmental science, which was born to create scientific or administrative knowledge to support the expansion of state tasks. After this first discipline, the fields of political science, political economy and statistics were born to meet the increased demand for reliable knowledge about state affairs.¹⁵⁶ Moreover, this growing disciplinary specialisation helped to reduce the pressures on its scholars from the political sphere and to increase their political and scientific authority.¹⁵⁷

In the 20th century, with neo-positivism¹⁵⁸ on the rise, social scientists set themselves the goal of proceeding with a rigorous empirical method to quantify where possible and thus construct a body of universal laws. These methodological debates, along with the *engineering* view of science,¹⁵⁹ methodologically straitjacketed the social sciences, distancing the discipline from the social activism it had been suspected of since it came under the influence of moral philosophy.¹⁶⁰

Topic 10: Expansion of interests (1933 – 1954)

This expansion in the Foundation’s fields of action and modes of intervention is reflected in the words that were over-used in the third cluster (1929-1974) created by the HCPC and is

¹⁵⁴ Ross, 210.

¹⁵⁵ Bryson, ‘The Emergence of the Social Sciences from Moral Philosophy’, 306.

¹⁵⁶ Heilbron, Guilhot, and Jeanpierre, ‘Toward a Transnational History of the Social Sciences’, 146.

¹⁵⁷ Ross, ‘Changing Contours of the Social Science Disciplines’, 209.

¹⁵⁸ This new current sought a renewal of classical positivism by eliminating metaphysical or unverifiable assertions, thus providing it with greater clarity and precision in scientific language. Ross, 215.

¹⁵⁹ Point of view that advocates for a science with practical applications

¹⁶⁰ Ross, ‘Changing Contours of the Social Science Disciplines’, 215–20.

confirmed by the words that make up topic 10 of the STM, a topic relating to the expansion of the Foundation's interests between 1933 and 1954. In this topic, we find annual reports for the period 1933 and 1954 with a probability higher than 0.1. In addition, both the words in cluster n°3 and those in topic 10 reflect not only the expansion of the topics in which it will be involved but also how it will do so and the geographical focus in which it will do so.

If already in previous decades, the Foundation advocated the international scale as the most conducive to “*promote the well-being throughout the world*”, with the acceleration of transport systems and the spread of diseases facilitated by it, the Foundation justified the need for international cooperation to confront diseases such as malaria or “*influenza*”. As it put: “*Public health can no longer be thought of exclusively in national terms. (...) Some kind of regularized international cooperation is essential. In relation to great scourges like malaria and influenza nations today are roped like Alpine climbers crossing a glacier: they survive or perish together.*”¹⁶¹ Indeed, with the increase in transatlantic travel, despite the spraying of planes before take-off and landing, there was a risk of transporting specimens of the *Anopheles “gambiae”* mosquito from West Africa to areas such as Brazil, where it had been successfully eradicated. Thus, “*This newly made world which the airplane has tied together has lost its frontiers. Certainly, in the field of public health they no longer have significance or meaning*”.¹⁶² That is why, from the Foundation's inception, it has conceived of public health on an international scale, taking on yellow fever in Central and South America and malaria in areas as disparate as the West Indies and the Southeast Islands. In addition, the Foundation also became involved in the fight against scarlet fever, tuberculosis, yaws, “*syphilis*”, rabies and the common cold.¹⁶³

Furthermore, with the reconfiguration of 1928, the Foundation certifies its interest in a plurality of themes to promote the well-being throughout the world. Thus, the Foundation describes its function broadly as “*aiding in the process of rationalisation of life*”.¹⁶⁴ Thus, we see how already in the early 1930s, the Foundation was active in various fields, always focusing most of its efforts on increasing knowledge about living beings.¹⁶⁵ Thanks to the Medical Sciences Division (MSD), the Foundation developed the science needed to form a sufficient basis on

¹⁶¹ Rockefeller Foundation, ‘Annual Report 1943’, 19.

¹⁶² Rockefeller Foundation, 18–19.

¹⁶³ Rockefeller Foundation, ‘Annual Report 1937’, 15–16.

¹⁶⁴ Rockefeller Foundation, ‘Annual Report 1933’, XVII.

¹⁶⁵ Rockefeller Foundation, ‘Annual Report 1958’, 4.

which to advance the “*modern science of man*” and with which to study the problem of mental health.¹⁶⁶

As they argue, mental hygiene is the field of health that lags furthest behind, where progress was most needed at the time and where it could potentially be most fruitful.¹⁶⁷ Consequently, nouns such as “*neurology*”, “*psychiatry*”, or “*brain*”, among others, appear as some of the most frequent and exclusive nouns.¹⁶⁸

This epistemological vacuum concerning human behaviour led the Foundation to take an interest in remedying it on different fronts since “*Man is biological, he is social and political, he is reflective and spiritual*”.¹⁶⁹ To this end, despite recognising that it is difficult to know a priori the importance of a new scientific field, the Foundation, guided by the moral imperative to obtain a better and greater knowledge of the whole nature of man, decided to become involved in the field of experimental biology because of the promising consequences it could unleash.¹⁷⁰ In fact, this field of biology was conceived in 1937 by the Foundation as the one that can contribute most to improving man’s physical and mental health and well-being. For this reason, research related to experimental biology received the vast majority of the Foundation’s funding at this time.^{171 172}

¹⁶⁶ Rockefeller Foundation, ‘Annual Report 1933’, XVIII.

¹⁶⁷ Rockefeller Foundation, ‘Annual Report 1936’, 22.

¹⁶⁸ This lack of knowledge about mental health became evident during the years of the Second World War. On the one hand, with the demands of warfare, countries had to ensure that those sent to the battlefield were emotionally fit for war. On the other hand, the rigours of battle were such a severe shock that one third of the soldiers hospitalised were hospitalised for psychiatric reasons. (AR 1945 103)

¹⁶⁹ Rockefeller Foundation, ‘Annual Report 1954’, 36.

¹⁷⁰ Rockefeller Foundation, ‘Annual Report 1937’, 30–33.

¹⁷¹ “*All but a very small percentage of this amount (the money appropriated by the Foundation for the Natural Sciences division) was given for the support of projects in experimental biology, inasmuch as the Foundation believes that in the field of the natural sciences it can at present best serve the cause of human betterment by assisting investigations through which man acquires the basic knowledge on which his physical and mental health and well-being depend.*” (AR 1937, 187)

¹⁷² Part of the funds were focused on the study of the chemical aspects of both vitamins and hormones resulting in the discovery of growth hormone. (AR 1935, 163). Another part of the funds went to research on the influence of various “*hormones*” on the causes and treatment of dementia praecox was funded at Worcester State Hospital. (AR 1935, 163) Other projects investigating the relationship between hormones and behaviour were those of the University of Zurich interested in the relationship between endocrine glands and mental illness (AR 1950, 93-94) or, for example, research on endocrine aspects of reproduction, on hormones and their interaction with sexual behaviour and, finally, on patterns of sexual behaviour (AR 1954, 108).

Looking at the nouns in the HIGH and FREX categories of topics 4; 6; and 10, one might get the false impression that the Foundation is not involved in either the Social Sciences or the Humanities. Reading its annual reports during the dates covered by these topics gives us another picture. For social progress, the Foundation argues using the words of Raymond B. Fosdick,¹⁷³ *“medical and natural sciences, even when pointed toward a fuller understanding of human behavior, leaves untouched possibilities of fundamental significance in the social realm”*.¹⁷⁴ More precisely, as far as research was concerned, its interest was focused on those areas that could guarantee support from society in applying the findings made by the researchers. Accordingly, he financed projects that investigated social security, economic structure and process to gain knowledge about business cycles as well as those that focused on *“to prevent or mitigate individual suffering in the face of the insecurity resulting from economic and social changes and prevent or diminish individual suffering due to economic downturns”*. Similarly, to facilitate understanding between nations, it funded and developed the discipline of international relations.¹⁷⁵ In fact, facilitating understanding between countries and friendly relations became vital even before the end of the Second World War. Furthermore, we see here how the Foundation was already involved before the creation of the development concept in activities that, after the creation of the development concept, will be considered as activities that catalyse development.

Regarding the humanities, Fosdick justifies the Foundation’s support for this field as follows: *“Even if the social sciences were adequately developed and a substantial measure of intelligent control were, introduced into the complex mechanism which the natural sciences have created, the total result, without the contributions to esthetic and cultural development which the humanities must make, would still be distorted and incomplete.”*¹⁷⁶ Years later, the Foundation came to assert that intellectual, aesthetic and moral values give meaning to man’s struggle with the environment he inhabits and his efforts to create satisfying relationships with his peers.¹⁷⁷ In the latter field, the Foundation was dedicated to promoting international cultural understanding while at the same time promoting the preservation and interpretation of American culture. To this end, the Foundation decided to act on two fronts. On the one hand,

¹⁷³ Director of the Rockefeller Foundation from 1936 to 1948.

¹⁷⁴ Rockefeller Foundation, ‘Annual Report 1936’, 32.

¹⁷⁵ Rockefeller Foundation, 39.

¹⁷⁶ Rockefeller Foundation, 41.

¹⁷⁷ Rockefeller Foundation, ‘Annual Report 1954’, 50.

it funded projects that sought intercultural exchange and understanding.¹⁷⁸ In this sense, the Foundation shared the position of Hu Shih, the Chinese ambassador in Washington, who stated that “*the influence of cultural relations between nations is far more effective and far more lasting than gunboats.*”¹⁷⁹

On the other hand, it funded projects dedicated to the study of foreign languages, for as the following paragraph illustrates, being able to express oneself in a language other than English would be necessary for the United States if it wanted to be able to cooperate with the rest of the nations of the world: “*If America is to cooperate intelligently with the sixty-odd nations that comprise the neighbourhood of the world, far more attention must be paid to the question of language. Particularly as our thoughts and interests turn toward the East we must be able to interpret ideas, traditions, and customs through the medium of tongues other than English.*”¹⁸⁰

This reconfiguration also brought several changes in how the Foundation was involved. For example, it progressively reduced financial support to more general projects favouring specific projects. Thus, once financial support for the general project ran out, it was not renewed. In other words, from now on, the Foundation will favour funding specific projects, as this extract shows: “*In choosing that special field of science (experimental biology) to receive support under the new concentrated program of the Foundation, consideration was given to the natural sources of support of various fields, to the relative degree of present support and of advancement, and more particularly to the practical probability of making a significant and rather direct contribution to the welfare and happiness of mankind.*”¹⁸¹ For example, in public health, because of previous experience in the fight against hookworm, the Foundation progressively focused its efforts on field research that would provide additional helpful knowledge for cheap and effective disease control and advancing health education. This shift was made possible by completing the first stage of IHD’s work: creating, developing and operating technically competent local and national public health services.¹⁸²

¹⁷⁸ Rockefeller Foundation, ‘Annual Report 1935’, 262.

¹⁷⁹ Rockefeller Foundation, ‘Annual Report 1938’, 56.

¹⁸⁰ Rockefeller Foundation, ‘Annual Report 1941’, 49.

¹⁸¹ Rockefeller Foundation, ‘Annual Report 1934’, 125–27.

¹⁸² Rockefeller Foundation, ‘Annual Report 1935’, 19–21.

Later, in 1943, another methodological shift took place. Although the Foundation gradually reduced its interest in operational programmes (those in which Foundation staff operated the programme) in favour of financial and technical assistance, from 1942, it became involved in operational programmes again. Interested in what the agricultural sciences could contribute to improving human nutrition, the Foundation was invited in 1941 by the Mexican government to cooperate in creating the Mexican Agricultural Program. Under it, the Foundation would research maize, wheat, beans and other crops to improve their genetics and research on pest and disease control, soils and fertilisers, and livestock. To justify its involvement in the development of agricultural science, the Foundation quoted Henry A. Wallace, US Secretary of Commerce, as saying: *“if anyone could increase the yield per acre of corn and beans – or of wheat, rice or potatoes – in the countries where nutritional standards are inadequate, he would contribute more effectively to world peace and to the development of the arts of civilization than by any other method that could be devised.”*¹⁸³ In addition to the research part, the programme also sought to train young local scientists with promising careers so that, in the future, they could occupy positions of responsibility in their country.¹⁸⁴ The success of this programme prompted a similar programme to be initiated in Colombia in 1949;¹⁸⁵ in Chile in 1955;¹⁸⁶ and in India in 1957,¹⁸⁷ also at the invitation of the respective governments. In addition, a group of Central American countries asked the Foundation for help setting up the Central American Corn Improvement Project. This cooperative programme sought to study corn, a staple food in those countries, and thus enjoy the benefits the agricultural programmes previously provided.¹⁸⁸

However, with these programs, rice, a staple food for a large portion of the population, was not being researched. As the Foundation highlighted: *“In discussing the problems of rice production with agricultural leaders throughout the world, and especially in Asia, Foundation officers found that rice improvement is a question of real concern everywhere rice is grown, and that there was mutual agreement about the desirability of an international effort directed toward increasing the supplies of this vital food.”*¹⁸⁹ Therefore, in conjunction with the Ford

¹⁸³ Rockefeller Foundation, ‘Annual Report 1945’, 21.

¹⁸⁴ Rockefeller Foundation, ‘Annual Report 1944’, 170.

¹⁸⁵ Rockefeller Foundation, ‘Annual Report 1949’, 30; 228–29.

¹⁸⁶ Rockefeller Foundation, ‘Annual Report 1956’, 184.

¹⁸⁷ Rockefeller Foundation, ‘Annual Report 1956’, 181.

¹⁸⁸ Rockefeller Foundation, ‘Annual Report 1954’, 17.

¹⁸⁹ Rockefeller Foundation, ‘Annual Report 1959’, 23.

Foundation, the Foundation set up an institute dedicated to studying rice to improve its productive capacities. The location considered optimal for establishing such a research centre is the Philippines, and, following an invitation from its government, the activities of the International Rice Research Institute (IRRI) started in 1962.¹⁹⁰ This type of project brought into contact/employed specialists in plant pathology, plant “genetics”, “agronomy”, soil science, entomology and botany.¹⁹¹

As we have seen in this period, the Foundation was already involved in activities that would be considered following the creation of the development concept, such as activities aimed at promoting it. And not only that, we can see how the Foundation already considered that to promote development, health, economic, and social aspects had to be considered in comparison with the initial conceptualization of development by the international community.

Topic 9: Post-WWII needs (1948 – 1964)

Overlapping the last years that appear in the topic related to the expansion of the topics of interest (topic 10) are the annual reports that we find in the topic related to the needs after WWII (topic 9). These annual reports relate to the period 1948 – 1964 and appear in this topic with a probability greater than 0.1. The years in which this topic appears would place it within cluster nº3 formed by the HCPC. Let us see, then, what we find in the years in which both topics overlap and then in the years in which we find it alone.

As the Foundation acknowledged, “*The confusing ferment of opinions with which the daily press, the periodicals and the current output of the book publishers confront us suggests the need of a clear-cut reclassification of the problems of modern society. These problems cannot be met by one-sided solutions or sugar-coated panaceas.*”¹⁹² In its view, these problems were of three different natures. First, demographic developments posed risks to be taken into account. Secondly, the communication problems between nations deserved attention to prevent another escalation of war. Finally, the challenges of cooperation between countries.¹⁹³ Let us now consider what these three problems were.

¹⁹⁰ Rockefeller Foundation, 21–25; Rockefeller Foundation, ‘Annual Report 1963’, 43.

¹⁹¹ Rockefeller Foundation, ‘Annual Report 1948’, 26.

¹⁹² Rockefeller Foundation, 11–12.

¹⁹³ Rockefeller Foundation, 12.

In the years immediately following this war, the Foundation drew attention to the problems that population growth will bring. While previously global demographic levels were controlled by “natural methods” such as conflicts, diseases, and famines, human progress has led to controlling certain conditions, thereby increasing life expectancy.¹⁹⁴ The Foundation characterises these demographic issues with two points. *“The first is that population problems are relative rather than absolute. The world is overpopulated now with respect to our present knowledge, to the present availability of natural resources, to the state of the arts today, to the existing social organization, and to some of the presently held traditional and religious precepts regarding foods.”* (...) *“A second remark is that population problems are not merely quantitative. They are also qualitative. Concretely the question is whether it is better to have twelve children per family, all on the average undernourished, uneducated, over-worked and short-lived, than on the average four per family, adequately nourished, possessed of the tools of ordinary education, not overworked and of reasonable life expectancy.”*¹⁹⁵ As the trends in birth and death rates at the time suggested, it would be necessary to improve agricultural systems to produce more food. Therefore, the Foundation promoted the development of agricultural sciences to increase the primary sector’s productivity to cope with this demographic increase.¹⁹⁶ Furthermore, *“The Foundation, almost by charter optimistic in its approach, is not content with the idea that population will be automatically adjusted to nature through starvation, epidemic, and war. It is prepared to support inquiries into the physiological and psychological aspects of reproduction, into the maximum capabilities for utilizing the natural environment to sustain human life, and the economic arrangements within which the yield of nature can be increased and distributed.”*¹⁹⁷

However, in line with what Nally & Taylor¹⁹⁸ showed, as the Foundation acknowledged, *“The upgrading of a primitive agricultural system is a complex process in which social, economic, and political factors play parts as important as the improvement of technology.”*¹⁹⁹

According to the Foundation, the second problem that deserved to be addressed after WWII was communication (or lack thereof) between countries. Misunderstanding and

¹⁹⁴ Rockefeller Foundation, 12–14.

¹⁹⁵ Rockefeller Foundation, 14.

¹⁹⁶ Rockefeller Foundation, 25.

¹⁹⁷ Rockefeller Foundation, ‘Annual Report 1954’, 43.

¹⁹⁸ Nally and Taylor, ‘The Politics of Self-Help’.

¹⁹⁹ Rockefeller Foundation, ‘Annual Report 1961’, 20–21.

misinterpretation between countries create a breeding ground for fears and hostility between different groups. Although the development of mathematics and other sciences helps create a universal language through the production of scientific knowledge about the ordinary world, this universal language is insufficient to meet the requirements of the communicative act. Hence, to complete this common language, the Foundation proposed the study and teaching of modern languages and the extension of areas that would help to know *what* (in italics) is to be conveyed. In other words, the Foundation was interested in studying and teaching the different languages, cultural anthropology, political science, history and all that the arts convey of human experiences and attitudes.²⁰⁰

The third issue addressed by the Foundation was the challenges posed by cooperation between different countries, which is essential for achieving harmony and peaceful coexistence among them. As the Foundation points out, this is only possible with knowledge of how to collaborate effectively, tolerance towards other parties, and a desire to cooperate with other actors whose beliefs may differ from ours. This last point, concerning moral and ethical aspects, led the Foundation to support projects to understand possible conflicts between different ethical systems to comprehend humankind's diverse ideals and aspirations.²⁰¹

To adapt to the new needs brought about by the conflict, the Foundation decided to re-examine its modes of operation and its programmes. As a result of this introspective exercise, the previously quasi-autonomous International Health Division (IHD) merges with the Medical Sciences Division, creating the Division of Medicine and Public Health (“DMPH”). This merger was justified by the Foundation in the following manner: *“Because of the broadening scope of public health functions, however, the growing necessity for judging major Foundation activities in the light of human ecological considerations, the increasing relevance of social and political factors to the work of the Division, and the continued importance of closely integrating all activities of the Foundation, it seemed desirable to bring directly to the Trustees of the Foundation all major appropriations and matters of policy.”*²⁰²

Similarly, thanks to the previous years' focus of the IHD on the development of material resources and the improvement of healthcare systems, with the DMPH,²⁰³ the Foundation could

²⁰⁰ Rockefeller Foundation, 'Annual Report 1948', 20–21.

²⁰¹ Rockefeller Foundation, 21–23.

²⁰² Rockefeller Foundation, 'Annual Report 1950', 7.

²⁰³ Rockefeller Foundation, 61–63.

prioritize the following objectives. The first objective was advancing local professional health education. This became possible as governments and international agencies increasingly dedicated resources to field operations in public health, allowing the Foundation to redirect its resources towards training future healthcare personnel.²⁰⁴ The second one was studying healthcare delivery. Third, researching and controlling specific diseases. This objective was predominantly achieved through the Foundation's operating program on arthropod-borne viruses established in 1951. Created as both a spin-off of the campaign against yellow and yellow jungle fever, which provided the yellow fever vaccine and in response to the limited attention given to arthropod-borne viruses at the time, this program brought together researchers in the fields of microbiology and biochemistry.²⁰⁵ The fourth and final objective of the Foundation during those years was the development of health sciences.²⁰⁶

Nevertheless, this change is justified by two additional reasons. Firstly, it is perceived as a catalyst for longer-lasting results, even if they emerge later than those achieved by directly combating disease.²⁰⁷ Secondly, the decline in mortality and disability caused by infectious diseases in developed countries significantly alters their demographic composition.²⁰⁸

Another change brought about by the 1950 restructuring is the reconfiguration of the Natural Sciences Division as the Natural Sciences Division and Agriculture (“DNSA”) to better integrate the Foundation's interest in applying the natural sciences to agricultural practice and conducting basic research.²⁰⁹ As illustrated by the Foundation, “*the present interest on the part of The Rockefeller Foundation in agriculture represents a shorter-term phase of its over-all interest in this world-wide problem of the ever increasing number of hungry people.*”²¹⁰ In fact, this new division was an extension of what had been achieved with the Mexican Agricultural Program²¹¹ and became so important that, in 1955, the agricultural section of the DNSA became independent and a division in its own right. It continued in the same way as before, operating its programmes in different countries, its grants programme, appropriations and training

²⁰⁴ Rockefeller Foundation, ‘Annual Report 1953’, 37.

²⁰⁵ Rockefeller Foundation, ‘Annual Report 1955’, 44.

²⁰⁶ Rockefeller Foundation, ‘Annual Report 1951’, 23.

²⁰⁷ Rockefeller Foundation, ‘Annual Report 1953’, 69.

²⁰⁸ Rockefeller Foundation, ‘Annual Report 1955’, 17.

²⁰⁹ Rockefeller Foundation, ‘Annual Report 1954’, 127.

²¹⁰ Rockefeller Foundation, 128.

²¹¹ Rockefeller Foundation, ‘Annual Report 1951’, 45.

activities, always focused on improving the world food supply through research and education.²¹²

Moreover, the Division of Social Sciences (DSS) – focused on the understanding of the economy and the factors that favour economic stability and development²¹³ – and the Division of Humanities (DH) – aimed at stimulating cultural production and intercultural dialogue and understanding²¹⁴ – were preserved. Finally, after this reflection, the Foundation decided to develop programmes in which its four divisions would act in coordination to solve the global problem of population growth. (AR 1951, 18).²¹⁵

One aspect that emerges from the analysis of these years' annual reports and is not apparent in either the HCPC or the STM is the emphasis and reasons for the Foundation's involvement in the Humanities. Although, in the topic concerning the expansion of interests (topic 10; 1933-1954), "*languages*" and "*libraries*" appear in the FREX category, in our opinion, these two words do not give a good account of what the Foundation intended by its involvement in the humanities.

As we have seen above, the humanities were conceived as the field of knowledge that would enable the stressed post-World War II world to facilitate not only Americans' understanding of other cultures but also other cultures' knowledge of American culture. This translated into the funding of faculties and research centres that would enable the interpretation and understanding of one culture for members of other cultures.²¹⁶ For example, thanks to the collaboration between The University of "*Tokyo*" and Stanford launched a joint program on American studies which started with a series of "*seminar*"(s) dedicated to developing new bases for intellectual cooperation between the USA and "*Japan*" by providing basic knowledge on the American life and institutions to graduate students, professors and deans.²¹⁷

In addition to this catalytic role for peaceful international relations, the humanities were conceived as the antidote to the distorted and fragmented worldview that purely rational

²¹² Rockefeller Foundation, 'Annual Report 1955', 86.

²¹³ Rockefeller Foundation, 'Annual Report 1953', 231; Rockefeller Foundation, 'Annual Report 1961', 18.

²¹⁴ Rockefeller Foundation, 'Annual Report 1953', 279.

²¹⁵ Rockefeller Foundation, 'Annual Report 1951', 18.

²¹⁶ Rockefeller Foundation, 'Annual Report 1950', 243.

²¹⁷ Rockefeller Foundation, 'Annual Report 1951', 81–82.

knowledge, such as the pure sciences, would bring. After WWII, in the context of the early stages of the Cold War, the Foundation pointed to the need to confront the situation pragmatically. While it would be utopian to disdain the development of military capabilities commensurate with the situation, it would be equally illusory to believe that the crisis could be dealt with by brute force alone.²¹⁸ However, such a response was hampered by the US obsession with merely improving material living standards, which was achieved with very satisfactory results.²¹⁹ Indeed, in the Western camp on both sides of the Atlantic, there was a shared view that the sacralisation of Science that enabled this material influx was not capable of providing civilisation with the set of values and purposes, as well as the social and moral intelligence on which peace and successful government depend. That kind of knowledge will only be provided from a social and ethical plane.²²⁰

The transformation of the Foundation continued, and the mid-1950s marked a turning point for this actor. With the independence processes that began at the end of WWII, more and more people would inhabit new sovereign nations and their weight in international relations would consequently increase. This process was seen by the Foundation as follows: *“In long perspective, this means that the ideas of national revolution and self-determination, born in the West and spread from there into other regions along with trade and empire, have borne their fruit and that the non-Western world is rapidly becoming responsible for its own affairs under its own leadership.”*²²¹ However, the process of decolonisation was seen by the Foundation as a potential source of instability for two reasons. First, the Foundation judged that the newly independent countries had neither the necessary experience of self-government nor the material resources to provide basic services. Second, as the Foundation describes, the alliances that led to independence began to crack.²²² Moreover, we see to what extent the Foundation saw the West as the model for newly independent countries to follow, both in terms of development and political organisation.

The Foundation, therefore, decided to increase its support for development programmes in underdeveloped countries and progressively decrease its support for research projects in

²¹⁸ Rockefeller Foundation, ‘Annual Report 1947’, 6.

²¹⁹ Rockefeller Foundation, 7.

²²⁰ Rockefeller Foundation, 6–11.

²²¹ Rockefeller Foundation, ‘Annual Report 1956’, 4.

²²² Rockefeller Foundation, 5.

Europe.²²³ Furthermore, it should be remembered that with the creation of the concept of development in 1949, the need to help underdeveloped countries to follow the path of development was also created. Related to this obligation to help developing countries, several researchers pointed to these efforts to promote development as a subtle way to prevent any revolutionary movement in developing countries from taking root that would bring them closer to the Soviet Union's sphere of influence. To this extent, US officials and Foundation staff used military metaphors to address humanitarian issues. Examples of this would be the name of the programme "The Conquest of Hunger" or the concept of "food security", among others.

The political changes of the 1950s and 1960s were reflected in the Foundation's development concept, in its programmes and how they were implemented. As we have seen in the previous pages, until the creation of the concept of development, the Foundation explained that its actions were focused on promoting well-being. As we will see in the following pages, after the creation of this concept, the Foundation continued to be involved in the same type of activities with the same objective. The activities in which the Foundation was involved were those that outside the Foundation were considered to be activities to promote development.

However, at no point did our actor put in black and white that it was involved in activities to promote development, nor did it define well-being or development. What he does do is mention that the Foundation was created for the purpose of "*promote the well-being of mankind throughout the world*" and, therefore, it "*has been involved in effort to improve social and economic conditions since its founding in 1913.*"²²⁴ In addition, it pointed out that: "*The notion of well-being is not confined to material needs. It is in the nature of man that he attempt to understand his experience*"²²⁵ In a similar vein, as we see in the following excerpt, it implicitly mentions that these activities to improve economic and social conditions could be described as development programs: "*The enormous expansion of development programs which has occurred since the war as a response to the revolution of rising expectations has forced The Rockefeller Foundation, as a private organization with limited funds, to consider carefully where it can make its best contribution.*"²²⁶

²²³ Rockefeller Foundation, 'Annual Report 1971', 5.

²²⁴ Rockefeller Foundation, 'Annual Report 1958', 128.

²²⁵ Rockefeller Foundation, 'Annual Report 1957', 26.

²²⁶ Rockefeller Foundation, 'Annual Report 1958', 129.

Similarly, in 1958, he made several relevant allusions to the development concept. First, it echoed how the notion of development as exclusively economic development (a conception of the first years after 1949) was gradually joined by aspects relating to health and education. In effect, *“the prospect is that development is unlikely to move very far by means of lunges at narrow sectors of the national life; enduring progress requires advance on a broad front, including education, health, productivity, law, political processes, and public understanding.”*²²⁷ In other words, to the first conceptualisation of development as economic development, the Foundation reflected how, at the end of the 1950s, the conceptualisation of development took on aspects of improvement in education or health. Moreover, these developments would depend exclusively on competent native leaders capable of piloting the demands imposed by the Revolution of rising expectations to meet the needs of the population’s everyday life.

Secondly, due to its limited funds, the Foundation did not devote this aid to major development programmes requiring significant investments. In addition, it points out that *“Significant social and economic advances are wholly dependent upon trained leadership and that large development programs will be severely limited by the lack of qualified people. What has been true in the West in this regard is an imperative in the developing non-West.”*²²⁸

As the Foundation pointed out, in order to help developing countries, the industrialised countries helped them with money, material and manpower, *“but it has quickly become apparent that of the three, manpower is the most difficult to supply, and that its lack will longest retard progress toward national goals.”*²²⁹ This commitment to developing human potential at the Foundation is unsurprising for several reasons.

First, this interest in training the native workforce to be self-reliant goes back a long way in the galaxy of Rockefeller family philanthropies. Recall that the GEB already used this approach in its attempts to modernise the agricultural sector in the southern United States to avoid social tensions, as well as in the projects to modernise the health sector in China with the CMB.

Secondly, it aligns with its longstanding policy of only getting involved in a country if it finances and pilots the project after the Foundation’s withdrawal. To this end, the Foundation provided practical training for local staff involved in the project.

²²⁷ Rockefeller Foundation, ‘Annual Report 1956’, 47.

²²⁸ Rockefeller Foundation, ‘Annual Report 1958’, 129.

²²⁹ Rockefeller Foundation, ‘Annual Report 1961’, 4.

Thirdly, the Foundation judged that *“It is obviously impossible and undesirable for any one nation to satisfy the educational needs of another. Foreign universities cannot and should not have the responsibility for mass education which is always that of the sovereign nation. Believing this, The Rockefeller Foundation has sought to reinforce the educational pattern of developing nations largely through assistance to indigenous institutions of higher education.”*²³⁰ Again, we see how the Foundation emphasises the objective of assisting countries to meet their needs autonomously.

Finally – combined with the needs imposed by the processes of independence – at the end of this decade, the theoretical framework was created with which the promotion of education in developing countries would be scientifically justified. This conceptual framework is that of human capital, introduced by the economists Theodore Schultz and Gary Becker. Broadly speaking, human capital is all knowledge and characteristics (both acquired and innate) that increase an individual’s productivity.²³¹ This theory is derived from the neoclassical school of economics. Ergo assumes that individuals are agents who seek to maximise their economic interests, and thus, with training, economic agents seek higher wages in the future.²³²

For these four reasons, the 1950s were the starting signal for the Foundation to become much more involved than before in training in developing countries. Consequently, the Foundation initially supported the education of political and academic leaders to guide their respective countries in the development process. In the second stage, as we will see in the following pages, it promoted the education of the general population. This way, countries would achieve the Foundation’s goal of helping countries that require it to become self-sufficient. In this sense, the Foundation claimed: *“The governed must now learn to govern. Imposed discipline must be replaced by self-discipline.”*²³³

In addition, the 1950s and 1960s were a watershed for development as the funds to support developing countries grew exponentially, and states began to increase their competencies in this area. As a result, *“private philanthropy is now permitted to focus attention upon problems of growing future significance. Flexibility and prompt action in the most effective use of modest*

²³⁰ Rockefeller Foundation, ‘Annual Report 1963’, 12–13.

²³¹ Garibaldi, *Personnel Economics in Imperfect Labour Markets*, 152.

²³² Tan, ‘Human Capital Theory: A Holistic Criticism’, 412.

²³³ Rockefeller Foundation, ‘Annual Report 1961’, 4.

resources are the forces which private philanthropy can bring to bear on human needs.”²³⁴ This flexibility, which according to the Foundation, characterises philanthropic organisations, will become a more recurrent feature from the 1950s onwards.

Indeed, in contrast to the state, the Foundation describes foundations as flexible and able to sustain commitments over extended periods in isolation from political pressures, thanks to a lack of accountability to a constituency to which they are accountable.²³⁵ Therefore, its tasks should be as follow: “1) *The support of the Foundation should be directed to purposes for which it is otherwise difficult to secure funds.* 2) *The support should be of an initial or catalytic character, with the idea that what has been demonstrated to be useful should then be carried on by other means.*”²³⁶ In other words, the Foundation seeks to make an initial investment to develop an innovative solution to a problem that impedes development. Thus, once the project showed its usefulness and viability, the management and financing would be the exclusive responsibility of the state in question. Therefore, to manage the project, the Foundation trained future leaders who would take charge of the project and govern the country.

Let us remember that, in this period, Keynesian theses were hegemonic and,²³⁷ therefore, the state occupied a central place in the development field, so this division of labour is not surprising. Similarly, during the period covered in this topic (1948 - 1964), we have seen how the concept of development moved from being focused on economic development to begin to add layers of meaning, in line with what was suggested by the U.N. Secretary-General in his Proposal for Action for the first Development Decade. Moreover, this was the period of greatest tension during the Cold War, so it is not unexpected that this, coupled with the increasing presence of newly independent nations in international political life, made it easier to add the meanings suggested by developing countries to the concept of development.

Topic 1: Goal-oriented Programmes (1961 – 1973)

The next topic is the one related to goal-oriented programmes, which is found with a probability greater than 0.1 in the annual reports for the period 1961-1973 (topic 1). The FREX words in this theme show the centrality of the humanities and the problems linked to the increase in

²³⁴ Rockefeller Foundation, 8.

²³⁵ Rockefeller Foundation, ‘Annual Report 1953’, 37.

²³⁶ Rockefeller Foundation, ‘Annual Report 1948’, 8–9.

²³⁷ Blinder, ‘The Fall and Rise of Keynesian Economics’, 278.

world population. Let us see how both are articulated throughout the period. This topic could be found within cluster n°3 of the HCPC.

The first noun in the list is “*fmns*”, which refers to people who received financial support from the Foundation and worked in the medical and natural sciences (Fellow-Medical and Natural Sciences). The second word – “*hss*” – refers to projects supported in the Humanities and Social Sciences field.

The 1960s began with another methodological shift. They discarded the old way of proceeding, favouring goal-oriented programs while emphasising the interdependence between academic disciplines and adopting an ecological approach to the problems they wanted to address. This approach was “*Predicated on the concept that a given society, whatever its stage of development, stands in intimate relation to all aspects of its environment and that a change in one necessarily affects the others, an ecological approach would seek to assist advances simultaneously on several important fronts. Hopefully, this approach would avoid some of the internal torques and tensions induced by rapid development in one sector, such as the industrial, and slow advance in others, such as the agricultural or educational.*”²³⁸ As we can see, this approach was inspired by the Proposal for Action proposed by U Thant - Secretary of the United Nations. With his proposal, Thant tried to promote a development which, while seeking economic development, would also improve social conditions and consider the people’s aspirations.²³⁹ Nevertheless, Rostow’s influence is still marked, as this previous reference to the stages of development illustrates.

The Foundation created the following programmes to operationalise this approach in the following years. Towards the Conquest of Hunger, the Population Problem; Strengthening Emerging Centers of Learning; Towards Equal Opportunity for All and Aiding our Cultural Development.²⁴⁰ As it will be developed in the following pages, these programmes have been well captured by the nouns of the FREX category. In addition, two new programmes (Quality of the Environment and Conflict in International Relations) were included during the last years of this period to respond to perceived needs on the part of the Foundation.

²³⁸ Rockefeller Foundation, ‘Annual Report 1962’, 16.

²³⁹ Thant, ‘Foreword to the United Nations Development Decade: Proposals for Action’, 140–45.

²⁴⁰ Rockefeller Foundation, ‘Annual Report 1962’, 4–5.

The Towards the Conquest of Hunger programme was born out of the recurrence and ubiquity of malnutrition worldwide, despite all the technological advances to date. The Foundation points the finger at the leaders of countries whose people live in poor health and well-being as the main culprits. However, nations that are more fortunate in this respect can, out of understanding and goodwill, help by aiding to develop the local resources of each country. Therefore, given the limited resources of the Foundation and of philanthropic foundations in general, the Foundation advocated continuing to focus its efforts on strengthening education in the social, medical, agricultural and basic sciences in order to provide the respective nations with more scientists and qualified personnel to serve them.²⁴¹ However, as the Foundation recognised, societies were changing so rapidly that it was no longer necessary only to support the education of the best individuals.

On the contrary, training at all levels of education had to be supported.²⁴² This was especially evident at the intersection of education, population and agriculture, for only with an educated population can traditional agricultural systems be modernised to match food supply and demand. This modernisation will only be possible if there are both skilled agricultural workers and people ensuring that government structures and private entities are in place to help disseminate knowledge and educate future generations.²⁴³

In addition to the above efforts, due to the importance of the potato in human nutrition, the Foundation decided to support the creation of the Inter-American “*Potato*” Improvement Project in 1961. This was intended to establish research institutions throughout Latin America where local scientists could work.²⁴⁴

In addition to education, the Foundation became involved in rural health programmes to promote better health in farming communities and the fight against schistosomiasis.²⁴⁵ In this respect, the study of the immunology of schistosomiasis was the field that received the most support from the Foundation.²⁴⁶ Finally, as the Foundation recalls, cooperative efforts should

²⁴¹ Rockefeller Foundation, ‘Annual Report 1963’, 5.

²⁴² Rockefeller Foundation, ‘Annual Report 1961’, 5.

²⁴³ Rockefeller Foundation, ‘Annual Report 1963’, 38.

²⁴⁴ Rockefeller Foundation, ‘Annual Report 1961’, 114.

²⁴⁵ Rockefeller Foundation, ‘Annual Report 1967’, 48–49.

²⁴⁶ Rockefeller Foundation, ‘Annual Report 1988’, 25.

always be adapted to the local culture and environment based on mutual understanding and a desire to work together to achieve the humanitarian objectives set.²⁴⁷

To support the fight against hunger and as a result of the long history of cooperation between the Foundation and the Mexican Government, the Centro Internacional de Mejoramiento de Maíz Y Trigo (MIMMYT) (International Maize and “*Wheat*” Improvement Center) was established in 1966 by the Rockefeller and Ford foundations²⁴⁸ to carry out the basic research necessary to increase the productivity of wheat and maize and to develop the material necessary to adapt these crops to other parts of the world.²⁴⁹ A year later, in 1967, two new research institutes were established to fill the blind spot of those already created, i.e. the lack of study of agriculture in tropical climates. In Colombia, the Centro Internacional de Agricultura Tropical (CIAT; International Centre of Tropical Agriculture) was co-funded with the Ford Foundation, while the International Institute of Tropical Agriculture (IITA) was established in Nigeria.²⁵⁰ The progress and results achieved by these four institutes were evaluated by the Consultative Group on International Agricultural Research (CGIAR), a group composed of representatives of national and international cooperation organisations. After two and a half years of evaluations, the group concluded that global agricultural technology is fragile except for rice grown at low altitudes in the tropics and spring bread wheat. Furthermore, foods that are or could be helpful in the tropics and subtropics, such as sorghum or millet, do not have institutions that carry out comprehensive studies to improve their production and adaptability.²⁵¹ As is commonly accepted in academia, these efforts to improve the productivity of the agricultural sector led to the third agricultural revolution, also known as the Green Revolution, in the 1960s.²⁵²

As other scholars have noted, the efforts to promote development in developing countries were a subtle way to prevent any revolutionary movement in the developing countries from taking root that would bring them closer to the Soviet Union’s sphere of influence. It was to this extent that US officials and Foundation staff used military metaphors to address humanitarian

²⁴⁷ Rockefeller Foundation, ‘Annual Report 1963’, 6.

²⁴⁸ In consultation with the Ford Foundation (AR 1971, 26))

²⁴⁹ Rockefeller Foundation, ‘Annual Report 1966’, 9.

²⁵⁰ Rockefeller Foundation, ‘Annual Report 1967’, 47.

²⁵¹ Rockefeller Foundation, ‘Annual Report 1971’, 27.

²⁵² Evenson and Gollin, ‘Assessing the Impact of the Green Revolution, 1960 to 2000’.

issues.²⁵³ Examples of this would be the name of the programme “The Conquest of Hunger” or the concept of “food security”.

The Foundation echoed the neo-Malthusian trend that was gaining ground in the 1960s and 1970s and which saw population growth as the greatest challenge of the time.²⁵⁴ For this reason, it created the goal-oriented programme “The Population Problem”. As the Foundation pointed out, the population was previously controlled naturally by major catastrophes such as wars, epidemics, famines and floods. However, advances to improve health or to increase food production have been described as running counter to the urgent need to stabilise the population. Indeed, this global population growth was seen as “*an immense burden to the alleviation of distress, to the production of sufficient food supplies, and to the provision of essential services*”.²⁵⁵ This situation, added to modern societies’ ethical and humanitarian values, demanded a solution to balance population increase with technological advances to achieve a better balance between resources, services and human beings.²⁵⁶

Furthermore, the Foundation pointed to the different societies as those driving the stabilisation process, i.e., the decision-making to stabilise the population must be made in consensus between research and educational institutions, religious bodies, governments and civil society groups. However, before any solution to the problem could be expected, the Foundation judged it necessary for all groups involved in this process to share the idea that no ethically guided society could survive the burden of large numbers of disadvantaged people. This prediction was because, as soon as the needs of a growing population exceed the resources that the land and the social system can provide, life will become less and less meaningful.²⁵⁷ In other words, only when the population stabilises, (it) “*will it be possible for the peoples of the free world to enjoy the benefits of constitutional government and the fruits of modern technology*.”²⁵⁸

To attack this problem, the Foundation adopted a multidisciplinary approach by supporting projects that seek to understand the demographic problem in its entirety and that catalyse

²⁵³ Essex, ‘Idle Hands Are the Devil’s Tools: The Geopolitics and Geoeconomics of Hunger’, 193; Sommerville, Essex, and Le Billon, ‘The “Global Food Crisis” and the Geopolitics of Food Security’, 256.

²⁵⁴ Frey, ‘Neo-Malthusianism and Development: Shifting Interpretations of a Contested Paradigm’, 78–79.

²⁵⁵ Rockefeller Foundation, ‘Annual Report 1963’, 9.

²⁵⁶ Rockefeller Foundation, 9.

²⁵⁷ Rockefeller Foundation, 9–10.

²⁵⁸ Rockefeller Foundation, 10.

acceptable solutions leading to the desired population balance. To this end, this institution financed research projects on human fertility from multiple perspectives, such as endocrinology, genetics or biochemistry; others related to human demography and cultural attitudes. Finally, it financed pilot projects to halt the demographic advance wherever it poses serious problems.²⁵⁹

On the other hand, the state of education systems in developing countries shaped the goal-oriented programme called Emerging Centres of Learning (called from 1964 onwards University Development). The Foundation paid so much attention to tertiary education because universities were the primary source of knowledge, researchers and trained leaders and because they were conceived as a *sine qua non*-catalyst for progress. In this sense, the foundation asserted: *“Today in many new and revitalized countries, sound social and economic development depends to a critical degree on structuring educational systems that culminate in universities able to perform two broad tasks. First, they must be able to train men and women to carry out government functions, staff the professions, and manage commerce. Second, they must possess research resources and personnel capable of contributing to the theoretical and practical bases on which a viable society can be built”*.²⁶⁰ With passages such as this one, we see once again the centrality of fostering indigenous human capital in developing countries to the Foundation, as well as its desire that these countries can one day become self-reliant in providing scientists and leaders to meet the country's needs. To this end, the Foundation financed the salaries of qualified personnel who were sent to help organise and set up departments in the chosen universities and to train people who could assume full responsibility for running them later.²⁶¹

An example is the Universidad del “*Valle*”, which, thanks to the Foundation’s support, became an international reference in the medical field, or the University of East Africa, an educational federation of three colleges in Kenya, Uganda and Tanganyika (now Tanzania). The latter country participated in the federation with its University College in “*Dar*” es Salaam, which focused on law, arts and basic sciences. Moreover, one of the long-term objectives of this university was to focus its activities on the most pressing needs of the newly constituted

²⁵⁹ Rockefeller Foundation, 10.

²⁶⁰ Rockefeller Foundation, ‘Annual Report 1964’, 44.

²⁶¹ Rockefeller Foundation, ‘Annual Report 1963’, 12–14.

countries in East Africa.²⁶² Putting it bluntly, African Education must be related to the needs of the African people.

If with the previous three programmes the Foundation focused mostly on issues that concerned countries or regions other than the United States (except for the programme The Population Problem), with the programme Towards equal opportunity for all²⁶³ the Foundation re-engaged with a structural problem in the United States. As we saw earlier, various organisations in the philanthropic constellation of the Rockefeller family became interested in the issue of the inequality of opportunity that various minorities had to face in the United States. Despite progress in this area, the Foundation recalls that the black minority has been persistently excluded from this progress. For this reason, the Foundation decided to make the fight for equal opportunities one of its main programmes.

As the Foundation had been involved since its conception in promoting education to fight for the equality of the black community in the United States, it decided to focus – without forgetting the other educational levels – its efforts on higher education. It did this in multiple ways. On the one hand, the Foundation began by financially supporting institutions attended primarily by the black community to improve the quality of education and, on the other hand, institutions attended primarily by whites to make them more ethnically diverse. In addition, at the secondary level of education, the Foundation sought out talented but deprived students to offer them scholarships to pay for their future higher education and funded counselling services in the high schools to guide promising students to higher education.²⁶⁴

Years later, in 1968, the Foundation decided to concentrate on the growing social problems arising from urbanisation for two reasons. Firstly, because of the influx of government funds into the educational system to fight racial discrimination due to the abolition of racial segregation in the United States,²⁶⁵ and secondly, as a result of the events known as the “long hot summer of 1967”.²⁶⁶ The next area where it became involved was in leadership development to give a voice to minorities and other disadvantaged sectors and thus catalyse

²⁶² Rockefeller Foundation, 53–56.

²⁶³ Rockefeller Foundation, 17.

²⁶⁴ Rockefeller Foundation, 17–18.

²⁶⁵ Rockefeller Foundation, ‘Annual Report 1970’, 106.

²⁶⁶ Rockefeller Foundation, ‘Annual Report 1971’, 58.

their participation in policymaking. Finally, given the difficulty of improving urban living conditions because of ignorance about the possible causes and consequences of poverty, racial discrimination and illiteracy, the Foundation funded research programmes aimed at gathering the necessary information with which to create public policies to remedy ghetto problems and to understand the causes and implications of poverty and thus increase the effectiveness of public agencies in their fight against it.²⁶⁷

Again, we see how people's education is seen as a critical pillar to improve the situation of people, this time, minority people in the United States. Here, however, we see yet another added aspect to promoting development. If before this development process was a process in which the state and philanthropic foundations were involved, from this point onwards, these two actors will be joined in the process by civil society through communities. That is to say, if before people were trained to improve the situation by acting as state officials, as we will see in the following pages, from now on, people will be trained to improve the situation of the community to which they belong by giving it greater political representativeness and letting them create and pilot their own projects.

The next goal-oriented program, Cultural Development, sought to promote the cultural development of the United States, as its name suggests and builds on the efforts made previously through the Foundation's Humanities division. This programme was created when cultural creation was experiencing a sweet moment. On the one hand, the improvement in production techniques allowed people more free time so that not only the better-off could seek entertainment in music production. In other words, it was the beginning of the democratisation of culture. On the other hand, while the cultural world had previously received no support from the federal government, thanks to two pieces of legislation passed in 1965, the federal government began to fund the arts, albeit timidly indirectly.²⁶⁸

With these federal funds, schools and colleges could purchase equipment necessary for cultural production and hire "*symphony orchestras*", theatre companies and others to train and entertain students. In addition, the federal government granted funds dedicated to creating a national theatre company, opera company, ballet company, national film institute, etc.²⁶⁹ Since the

²⁶⁷ Rockefeller Foundation, 'Annual Report 1970', 106–10.

²⁶⁸ Rockefeller Foundation, 'Annual Report 1964', 72.

²⁶⁹ Rockefeller Foundation, 'Annual Report 1965', 5.

Foundation believed that the more culture was available, the more people would be interested in it, it decided to get involved in financially helping cultural activities to take root more deeply in the country's communities, thus attracting more people into the field either for pleasure or to engage in the cultural world professionally.²⁷⁰ It, therefore, concentrated on supporting the production of theatre, contemporary music and creative writing. With this support, the Foundation sought to achieve three objectives: to bring culture to more people, to involve more people in cultural creation, and to promote the exploration of new artistic media, styles and techniques. As the organisation acknowledged a posteriori, the most efficient ways of achieving these objectives had been to support the creative person and to create places where they could create, i.e. strategies similar to those used in other areas in which it was involved.²⁷¹

The first of the programmes created towards the end of the period where we find the topic concerning XXX is the one that crystallised at the time the Foundation's growing concern about the accelerated environmental degradation for which mankind is responsible. With the Quality of the Environment programme created in 1969, the Foundation sought to support environment conservation significantly. In doing so, they proceeded in the same way as when starting in a new field. Initially, they sought to build institutional capacities capable of addressing the issue, as well as to create research centres to produce knowledge with which to understand the phenomenon of environmental degradation better.²⁷²

The other new programme, Conflict in International Relations, was created in 1973. As the Foundation emphasised, the world was moving towards greater interdependence, and achieving the Foundation's various objectives would, therefore, increasingly depend on a stable world order. Consequently, the Foundation sought with this programme to contribute to stabilising international relations by funding institutions, organisations and individuals that could contribute to anticipating, controlling and resolving international conflicts.²⁷³ In other words, it followed the ecological approach installed in the previous decade to consider the interdependence between nations and between global problems conveniently.²⁷⁴

²⁷⁰ Rockefeller Foundation, 'Annual Report 1963', 20–22.

²⁷¹ Rockefeller Foundation, 'Annual Report 1971', 68.

²⁷² Rockefeller Foundation, 'Annual Report 1973', 12.

²⁷³ Rockefeller Foundation, 10.

²⁷⁴ Rockefeller Foundation, 32.

As we have seen, development takes on new layers of meaning throughout this period. In-kind, the connotations acquired in the previous period were consolidated and expanded to all the fields in which the Foundation was active. Thus, the entire population had to be trained to achieve agricultural development, as this was the only way to modernise traditional farming methods. During this period, there was also a great deal of activity in this area, as numerous international centres were set up to improve the cultivation of crops. In addition, the area in which they worked was expanded to include the tropics in their agricultural programme. By the 1970s, with the UN's Second Development Decade, the concept of human development was created to promote the development of other aspects of people's lives. We see how this was translated in the Foundation's programmes into a greater awareness of promoting development in the areas of health, education and culture. However, considering health, education, or cultural aspects was already something the Foundation was doing "*to promote the well-being of mankind throughout the world*" – ergo development – before the concept of development was coined in 1949.

In addition, a significant change in American society led the Foundation to become involved in a new area. Indeed in 1964, the Civil Rights Act of 1964 was enacted, prohibiting racial discrimination and segregation. For its part, the Foundation created the Equal Opportunity for All programme, which sought to help achieve equal opportunities for the entire American population. To this end, it sought to improve the education of minorities discriminated against in that country so that they could stand up for themselves and claim their rights. We see, then, how the Foundation begins to encourage the different communities that make up the country to fight for their rights when the state has failed to protect them. As we will see below, this mode of action will become increasingly frequent for the Foundation sought to transfer this ethic of self-help and self-sufficiency to other areas.

This loss of confidence in the State as a guarantor of rights began in the 1970s, and with the oil crises, we see how the Keynesian paradigm – in which the state plays a central role – is progressively replaced by the new hegemonic paradigm, the neoliberal one.

Topic 5: Population Issues & Education for Development (1971 – 1988)

As before, two topics overlap, and during the transition from one topic to the other, another review of the policies and programs of the Foundation took place. In this case, during the last years of the Goal-Oriented programmes (Topic 1), the topic focused on demographic and education in developing countries issues (topic 5) gained in popularity. In this topic, we find, with a probability greater than 0.1, the annual reports from 1971 to 1988. This topic would correspond to cluster 1 of the HCPC.

With the erosion of the Foundation's purchasing power due to inflation, the rising costs of problem-solving, and the emergence of large amounts of public money, the Foundation had to rethink how to act. To continue its activities, the Foundation decided to emphasise its entrepreneurial function. That is, to finance the first stages of the projects that seek solutions to those problems that impede the promotion of the well-being of mankind while simultaneously creating public awareness and financial support from other bodies.²⁷⁵ In addition to this consideration, the preceding programmes were updated to account for progress in achieving their various objectives.

For example, concerning The Population Problem programme, the Foundation's efforts to promote public awareness of the risks posed by the population problem resulted in a significant increase in funding for family planning and public education programmes. As a result, the Foundation was able to focus on funding research in several areas of knowledge that were underfunded at the time. Firstly, considering that demographic stabilisation would only be possible if economic and social aspects were taken into account, it was decided to fund social science research projects in the field of demography. Finally, funding was also given to research projects in reproductive biology or applied research in contraceptive technology, such as those carried out at The Research and Training Centre in Immunology, which focused on the "*immunology*" of reproduction.²⁷⁶

This shift in research themes was also accompanied by an increase in funding for researchers from developing countries on these topics because, compared to scientists from developed countries, they receive more attention from their countries' politicians when it comes to public

²⁷⁵ Rockefeller Foundation, 'Annual Report 1974', 16.

²⁷⁶ Rockefeller Foundation, 'Annual Report 1981', 80–81.

policy making.²⁷⁷ The programme was thus renamed Population and Health. Exceptionally, such activities were to be carried out mainly by the Education for Development programme.²⁷⁸

Years later, the Foundation reinvigorated its interest in diseases transmitted by parasites, especially those endemic to the tropics, judged to be a brake on these areas' economic and social development.²⁷⁹ This interest, in conjunction with the success of its programme against schistosomiasis created in 1967, led the Foundation to create in 1977 a network of researchers interested in the Great Neglected Diseases of Mankind.²⁸⁰

This revitalisation of the Foundation's interest in people's health culminated in 1978 when the Health Program was spun off from the Population and Health programme and formed as an independent programme with three sub-programmes. The first sub-programme focused on the Great Neglected Diseases of Mankind. As these diseases were endemic to developing countries, they received much less attention from the research community to eliminate them. However, the Foundation decided to promote a network of researchers to apply the knowledge and cutting-edge techniques of the time to fight diseases such as schistosomiasis, hookworm, malaria, and sleeping sickness, among others. The second sub-programme focused on clinical epidemiology. It was intended to support research and education in epidemiology and on factors affecting the distribution of health within a population. The third and final one focused on health information systems. Due to the explosion of health-related data at the time, the Foundation aimed to support creating information systems to rationalise and streamline the flow of biomedical and health information.²⁸¹

The University Development programme, created to strengthen certain universities in developing countries, was transformed in 1974 into the Education for Development programme to reflect the Foundation's new focus on indigenous capacity building in tertiary education. As they point out, this change reflected "*reflects the desirability to mesh more closely the resources of the university with the planning and executive functions of other public agencies and institutions. Of particular interest today is the university's potential in research, planning, and*

²⁷⁷ Rockefeller Foundation, 'Annual Report 1974', 47–48.

²⁷⁸ Rockefeller Foundation, 55.

²⁷⁹ Rockefeller Foundation, 'Annual Report 1976', 33.

²⁸⁰ Rockefeller Foundation, 'Annual Report 1977', 16–17.

²⁸¹ Rockefeller Foundation, 'Annual Report 1978', 48–52.

training for elementary and secondary education, and for rural development.”²⁸² In other words, it sought to strengthen the power of universities to catalyse economic and social development by making them listen to and meet the needs of their respective societies. Following the universities supported during the first phase of the programme, in this second phase, it was the universities of “*Gadjha*” Mada in Indonesia and the University of Zaire²⁸³. In kind, it helped these universities develop capacities to produce knowledge and professionals who can respond to the country’s needs.²⁸⁴

Years later, in 1977, the trustees of the Foundation decided to phase out the Education for Development programme as an independent programme, judging that it had achieved its objectives. The programme’s successes point to the fact that the University “*del*” Valle has become a benchmark regarding the quality of health care provision and its locally adapted education. In other words, once the Foundation judged that the universities could provide their countries with leaders to guide them towards development, the Foundation left it to the countries to fully fund them. Other activities carried out at universities in developing countries will be supported by the Foundation’s other programmes. The programmes that took over the baton were asked to make an effort to focus on academic institutions in developing countries and to increase their international outlook.²⁸⁵

La calidad de la atención sanitaria y la educación sanitaria

Another programme that was phased out, this time in 1978, was the Quality of the Environment programme. Moreover, as with the Education for Development programme, the objectives to be achieved by the phased-out programme were integrated into other Foundation programmes. In the case of the environment programme, it was the Conquest of Hunger, International Relations and Population and Health programmes that, from 1978 onwards, would incorporate environmental protection into their day-to-day work.²⁸⁶

The analysis and reconfiguration of the programmes that took place between 1972 and 1974 also impacted the Cultural Development programme. Recall that, in the previous stage of this

²⁸² Rockefeller Foundation, ‘Annual Report 1975’, 31.

²⁸³ Today known as the Democratic Republic of Congo

²⁸⁴ Rockefeller Foundation, ‘Annual Report 1975’, 33–34.

²⁸⁵ Rockefeller Foundation, ‘Annual Report 1977’, 41–43.

²⁸⁶ Rockefeller Foundation, ‘Annual Report 1978’, 45.

programme, the priority was to support artistic production and to root culture in the different communities of the country. However, with the reconfiguration that culminated in 1974, the trustees of the Foundation pointed to the need to prioritise the analysis of the fundamental values and beliefs that underlay the society of the time.²⁸⁷ This, they proposed, should be done by relying on the figures of artists and humanists, “*for they will tell us better than we can ourselves who we are and how we’re doing*”.²⁸⁸ Then, in 1975, the trustees decided that, in addition to the above priorities, it was necessary to take care of art institutions, artists and art, which are necessary to develop a mature society.²⁸⁹ These changes in priorities led to the programme being renamed The Humanities and Contemporary Values in 1974 and The Arts, the Humanities & Contemporary Values in 1975.

Just as the Humanities and Social Sciences programmes had done decades earlier, the Arts, the Humanities & Contemporary values programme was seen as a counterbalance to the purely scientific and technical knowledge brought by the other programmes. For the programme to be effective as a counterbalance, it should therefore promote an active humanism responsible for using knowledge in the field to illuminate modern culture and society's fundamental goals, beliefs and values.²⁹⁰

When the Arts and Humanities programmes were merged into a single programme, the study of contemporary values came under the umbrella of the Humanities, and the programme was renamed Arts and Humanities in 1983 without a substantial change in its objectives.²⁹¹

With the Equal Opportunity for All programme, as the Foundation acknowledges, although the efforts were bearing fruit, what this progress did to a greater extent was to show the significant dimensions of the problem of racial discrimination in the United States. Therefore, the Foundation continued to support the programmes mentioned above while, at the same time, it began to support others aimed at improving local public schools or promoting integrated rural development.²⁹²

²⁸⁷ Rockefeller Foundation, ‘Annual Report 1974’, 88.

²⁸⁸ Rockefeller Foundation, ‘Annual Report 1972’, 8.

²⁸⁹ Rockefeller Foundation, ‘Annual Report 1975’, 53.

²⁹⁰ Rockefeller Foundation, ‘Annual Report 1977’, 26.

²⁹¹ Rockefeller Foundation, ‘Annual Report 1983’, 15.

²⁹² Rockefeller Foundation, ‘Annual Report 1971’, 58–64.

Later, in 1973, the Foundation, always with the improvement of opportunities for non-White Americans in mind, changed the priorities of the Equal Opportunity for All programme. Accordingly, it focused on improving community education, developing minority leaders, ensuring equal fundamental rights and promoting policy-oriented research. Also, in 1975, it began to support projects to improve the conditions of different minorities in rural areas, especially in the country's southeast.²⁹³

This programme was updated almost annually because of all that was unknown about racial discrimination in the United States. Indeed, with increasing urbanisation, another problem that emerged was that of youth unemployment, especially among black and Hispanic people. Understanding the structural causes of this phenomenon was deemed necessary, and, to this end, the Foundation began to fund research projects.²⁹⁴ Another problem was that, as minorities were entering the education system in more significant numbers, the under-representation of minorities in academic disciplines where job prospects after graduation were good, but support for minority students was not so good. It, therefore, began to financially support programmes that sought to increase the number of minority students in disciplines such as the natural sciences, mathematics or economics.²⁹⁵

With the Conquest of Hunger programme, the Foundation channelled its efforts to help countries in need to increase their agricultural productivity. As the Foundation recognised, despite progress in this regard, food production growth was not keeping pace with global population growth. Thus, while in the past, the Foundation focused on supporting projects aimed at improving agricultural technologies and training for those involved in farming, from now on, it will consider socio-economic and environmental aspects and production-oriented strategies.²⁹⁶ Thus, while continuing to support research projects on different crops or to promote an international agricultural research and development system, it began to fund research on food policy for development. In addition, as mentioned above, from 1978 onwards, it began to support research related to the environment, including studies focused on the appropriate use of fragile environments and marginal lands.²⁹⁷

²⁹³ Rockefeller Foundation, 'Annual Report 1977', 18.

²⁹⁴ Rockefeller Foundation, 'Annual Report 1978', 29.

²⁹⁵ Rockefeller Foundation, 'Annual Report 1980', 61.

²⁹⁶ Rockefeller Foundation, 'Annual Report 1974', 40.

²⁹⁷ Rockefeller Foundation, 'Annual Report 1978', 32.

For a reason not explained by the Foundation in its annual reports, this programme was dropped from the name The Conquest of Hunger by Agricultural Sciences in 1982.²⁹⁸ Then, in 1983, the Foundation revised the categories of agricultural grants it made to adapt to the moment's needs, in kind, to accelerate knowledge in genetic engineering for both agricultural and animal production.²⁹⁹ The Foundation's faith in genetic engineering went so far as to state: "*The use of science and technology to produce improved crop varieties has proven to be an effective means of increasing food production and stimulating economic growth in the developing world.*"³⁰⁰ In its first stage, this organisation sought to develop the technical bases for the biotechnological engineering of rice and, in the second stage, to transfer the new techniques to the countries that wanted them.³⁰¹

With its youngest programme, Conflict in International Relations, the Foundation sought to assist in developing a stable and cooperative international system to facilitate the anticipation, control and resolution of potential "*conflict*" between countries. To this end, the Foundation supported financially both research institutions, conferences and awards to prominent personalities in the following fields: international economic and resource issues, arms control and international security, and new approaches to world order.³⁰²

The turbulence of international relations during the 1970s and 1980s impacted this programme, as it was one of the programmes that underwent the most changes during these years. Let us look at these transformations in the following lines.

Recognising how diffuse the programme's objectives were, in 1977, the Foundation reviewed and changed the areas on which it would focus in the future. These became world energy, world food (in partnership with the Conquest of Hunger programme) and regional conflict. With this change, the Foundation hoped to be able to contribute to the development of sound public policies should problems arise in any of these three areas.³⁰³ However, the changes did not stop there. A year later, more changes were implemented, starting with the programme's name,

²⁹⁸ Rockefeller Foundation, 'Annual Report 1982', 22.

²⁹⁹ Rockefeller Foundation, 'Annual Report 1983', 6.

³⁰⁰ Rockefeller Foundation, 'Annual Report 1984', 14.

³⁰¹ O'Toole et al., 'The Rockefeller Foundation's International Program on Rice Biotechnology', 41.

³⁰² Rockefeller Foundation, 'Annual Report 1974', 63.

³⁰³ Rockefeller Foundation, 'Annual Report 1977', 32–33.

which was changed to “International Relations”. Regarding the areas in which it would be active, it continued to be involved in world energy issues, began to support activities related to international economic policy and broadened the spectrum of the third area to encompass security arrangements and regional conflicts.³⁰⁴

Another change in the objectives of this programme occurred in 1982. Due to the increasing interdependence of international actors and the growing uncertainty created by the inability of governments to control either the speed or the scope of their international relations, the Foundation decided to help reduce this uncertainty both in the United States and beyond. To this end, it set itself the goal of strengthening independent international relations research institutions to contribute to individual states' more informed international policy. In addition, it wanted to facilitate cooperation between experts from different countries to provide practical solutions to concrete problems that could gain broad support from the masses. Finally, it wanted to support those with a promising future in international relations through its fellowship programme³⁰⁵.

In 1984, the Foundation began another process of reflection to study how it could accelerate material and human progress in the third world over the next fifteen years. Moreover, as they recognised: *“the field known today as “development” is now perceived to be far more complicated than most of us had at one time anticipated. Furthermore, a substantial number of international agencies have come into being whose resources dwarf those of the Rockefeller Foundation.”* (AR 1985, 2) As a result, the Foundation had to coexist with a plethora of international agencies and foundations with far more resources than itself.

When this period of reflection ended in 1986, the Foundation concluded that, on the one hand, only if the benefits of science and technology are shared fairly among its end users will it fulfil its promise as a catalyst for development.³⁰⁶ On the other hand, if the Foundation wanted to prevent the inequalities between rich and poor countries from widening further, it had to understand how new technologies can support the development process and develop these technologies with a focus on the needs of those who would use them. To this end, the Foundation decided to act on four fronts. First, the Foundation should support research that

³⁰⁴ Rockefeller Foundation, ‘Annual Report 1978’, 58.

³⁰⁵ Rockefeller Foundation, ‘Annual Report 1982’, 65; Rockefeller Foundation, ‘Annual Report 1985’, 68–69.

³⁰⁶ Rockefeller Foundation, ‘Annual Report 1985’, 4.

could improve the quality of life of people in developing countries. To this end, new technologies should be developed considering the conditions in these countries. In other words, it will promote the development of technologies that are simple to deliver and use, culturally acceptable, safe to use, inexpensive, and immune to class and gender barriers. Second, the Foundation will seek to ensure that technologies capable of promoting development are used effectively and fairly. Third, strengthening a multi-disciplinary approach to understanding and developing science-based development strategies. As in the first point, this approach must consider the specific situation of the populations to be assisted. Fourth, the Foundation will support countries in developing qualified personnel capable of developing and implementing development policies.³⁰⁷

In order to act on these four fronts, the Foundation reorganised the programmes to promote development in developing countries. As a result, the Agricultural Sciences, Health Sciences and Population Sciences programmes were to come under the new “International Program to Support Science-Based Development” programme.³⁰⁸

As we will see in the following paragraphs, after the 1986 reconfiguration, there is no substantial change in the objectives of the Health Sciences, Population Sciences or Agricultural Sciences sections. The change was in that through this reconfiguration, it sought to underpin scientific advancement and innovation as tools to reduce inequalities between countries in health, poverty or malnutrition, among others, to advance the welfare of their peoples.³⁰⁹ This reorganisation was due to the Foundation’s concern that “*trends in world science threaten to widen the already great inequalities between the wealthier and poor nation*”.³¹⁰ To this end, end-users’ needs were put at the centre of the design of development-oriented technologies.

With its Agricultural Sciences programme, following in the footsteps of the previous agriculture-related programmes, the Foundation continued supporting projects focused on developing and applying biotechnology to improve crop productivity and cooperation. However, from now on, the Foundation will seek to support projects focused on Africa and, more precisely, those focused on improving family food production systems.³¹¹

³⁰⁷ Rockefeller Foundation, ‘Annual Report 1986’, 24–25.

³⁰⁸ Rockefeller Foundation, 24–25.

³⁰⁹ Rockefeller Foundation, 24–25.

³¹⁰ Rockefeller Foundation, 24.

³¹¹ Rockefeller Foundation, ‘Annual Report 1988’, 9–12.

Regarding Health Sciences, the Foundation ended its work on great neglected diseases in 1987 when it began to be funded by other foundations, the World Bank and the United States National Institute of Health, among others. As a result, its work in the field of health sciences was called from that year onwards “Health Sciences for the Tropics” and collaborated with the World Health Organisation (WHO).³¹² With this renamed programme, it continued to develop an indigenous force of professionals in developing countries to research and deal with endemic diseases there. To this end, it continued to build bridges between academics in developed and developing countries. It also continued to support research projects in epidemiology.³¹³

With the Population Sciences programme, the Foundation continued to support projects in different fields related to the demographic field. On the one hand, it focused on funding projects to develop new contraceptives, improve their availability and identify possible barriers, risks and impediments that these new methods might encounter. On the other hand, it funded projects to train professionals capable of establishing population policies and managing family planning programmes effectively. As projects in this field were funded for both developed and developing countries, the level of support was increased for projects focusing on the latter, whether in Asia, Africa or Latin America.³¹⁴

With the restructuring that ended in 1986, the Equal Opportunity programme redirected its focus to the problems triggered by extreme poverty. Consequently, it focused on two objectives. First, to attack extreme poverty by stimulating consensus building on how to eliminate the conditions that facilitate the creation of the so-called “underclass”,³¹⁵ as well as by lobbying for the implementation of policies that attack this problem, research and public policy analysis, and by researching and strengthening basic skills and family support. Second, in protecting basic rights by educating citizens about their rights, voter registration and research focused on public policy analysis.³¹⁶

³¹² Rockefeller Foundation, 6.

³¹³ Rockefeller Foundation, 13–14.

³¹⁴ Rockefeller Foundation, 18–23.

³¹⁵ The term « underclass » is used to refer to US citizens living in areas where institutions have not reached or prospered (AR 1988, 3-4).

³¹⁶ Rockefeller Foundation, ‘Annual Report 1988’, 33–36.

As the Foundation did in the past when closing a programme, interests worthy of continued support were brought under the umbrella of other programmes. This was the case with the International Relations programme, which was wound up in 1986, and whose projects that deserved to be maintained became the programme's responsibility to Support Science-Based Development.³¹⁷

Finally, with the 1986 reconfiguration, the Arts and Humanities programme added to the objectives present in previous years the long-standing objective of promoting international and intercultural understanding between countries. In order to achieve this, the Foundation funded interdisciplinary artistic projects that were conceived cooperatively between artists from different countries. Moreover, to promote understanding of other cultures in the United States, the Foundation funded various museum exhibitions, plays, festivals and “television” programmes to broaden Americans' horizons and correct distortions they may have about other cultures.³¹⁸

As we have seen throughout this topic, many changes took place within the Foundation, especially in how it became involved in the activities in which it did so. This was due to the state of the development debate, as well as the international political situation. Indeed, the world witnessed the first two oil shocks during this period. These supply-side oil shocks caused stagflation³¹⁹, and the Foundation lost purchasing power. At the same time, the philanthropic environment was becoming more and more fragmented, reducing the power that the Foundation once had. Therefore, to maintain its importance among philanthropies, it had to emphasise its entrepreneurial function, i.e., supporting projects in the early stages so that later institutional investors with greater capacity could take them over.

The Keynesian policies applied by governments to control stagflation did not bear fruit, and the neoliberal project began its rise in the 1980s and became hegemonic in the 1990s. In other words, there was a change in the figure seen as the most appropriate for regulating the economy, moving from the state under the Keynesian paradigm to the market with the neoliberal thesis.³²⁰ Thus, countries undertook economic restructuring plans (deflationary monetarist policies and

³¹⁷ Rockefeller Foundation, 'Annual Report 1986', 86.

³¹⁸ Rockefeller Foundation, 60; 63–64.

³¹⁹ Combination of economic stagnation and inflation

³²⁰ Davies, 'Neoliberalism: A Bibliographic Review', 315.

privatisations), dismantling the state apparatus focused on guaranteeing the welfare state and installing market-based economic policies. In the same way, this new economic paradigm also became hegemonic in the International Financial Institutions so that when the public debt crises of the 1980s arrived, economic liberalisation was prescribed so that countries could access credit.³²¹ As a consequence of the implementation of these policies, inequalities increased around the world. Moreover, neoliberalism instilled the view of personal economic profit as desirable and the devaluation of collective action and industrial protectionism as rental havens contrary to economic efficiency.³²²

Parallel to these events, with the UN's second Development Decade, the concept of human development was introduced, promoting a concept of development that included aspects such as people's life expectancy. Similarly, because development policies to date had not achieved the desired results, the basic needs approach was proposed to focus on meeting the basic needs of those it was intended to help. However, various criticisms of this model arose, such as those made by the Participatory Development or the Women in Development movements, which advocated involving the people it was intended to help in the aid design process. Furthermore, in the 1980s, the right to development was adopted at the UN and defined as an economic, social, cultural and political process that seeks to improve people's well-being. These changes outside the Foundation were reflected to varying degrees in how the Foundation viewed development in this period. Thus, the focus was on developing practical knowledge to meet the demographic challenge of promoting the world of the arts in the United States and improving intercultural understanding. In addition, with the reconfiguration of 1986, it put the people it was intended to help at the centre of development programmes, in line with the World Bank's approach. In this way, solutions were devised that could be applied by these people, taking into account their different situations. Finally, to improve the agricultural sector's productivity while focusing on technical improvements, social, economic and environmental factors were also considered.

³²¹ Harris and Scully, 'A Hidden Counter-Movement? Precarity, Politics, and Social Protection before and beyond the Neoliberal Era', 9.

³²² Portes, 'Neoliberalism and the Sociology of Development: Emerging Trends and Unanticipated Facts', 238.

Topic 3: Globalisation challenges (1994 – 2013)

The period we found topic 5 with a probability greater than 0.1 ends in 1988. The STM did not find any topic correlated with time between 1989 and 1994, the year from which we found topic 3 (topic relating to the challenges brought about by globalisation).³²³ However, during the period without a topic, the Foundation created four new programmes that will be active during the first years of the period we find in Topic 3 with a probability greater than 0.1. In this topic related to the challenges of Globalisation, we find the reports for the periods 1994 – 2006 and 2010 – 2013 with a probability greater than 0.1. Let us see what happened in this transition period where no topic appears and what topic 3 is about afterwards.

The period between 1989 and 1994 is another period of reflection for three reasons. First, the socio-economic changes brought about by globalisation meant that Western states began to find themselves powerless to protect their citizens from the shocks induced by globalisation, thereby increasing inequalities, especially induced by financial globalisation.³²⁴ Consequently, the Foundation advocated redesigning the welfare safety net mechanisms typical of the welfare state. In this regard, it stated: *“The American system of welfare is vivid example of an institution that has drifted far from its original context and purposes. It was created to provide temporary assistance to the unemployed and longer-term support for the disabled. Today, by almost every measure, the system is a resounding failure. (...) High on our nation’s agenda, therefore must be the task of redefining the terms of the contract between society and the unemployed”*.³²⁵ To redefine this new contract, the Foundation supported new ideas, experiments or initiatives to create jobs for the unemployed. One example the Foundation cites is the Women’s Community Revitalization Project (WRCP). This project was born out of neighbours’ desire to improve their community. As a result, they started to renovate their neighbourhood by improving its infrastructure and providing services such as health care or childcare facilities, for example. In addition, to economically revitalise the neighbourhood, they offered job-training opportunities for residents within the neighbourhood.³²⁶

³²³ Integration of the world’s economies, politics, and cultures. (‘Globalization | Examples, Impact, & Pros and Cons | Britannica Money’ 2023)

³²⁴ Heimberger, ‘Does Economic Globalisation Affect Income Inequality? A Meta-analysis’, 2978.

³²⁵ Rockefeller Foundation, ‘Annual Report 1994’, 5.

³²⁶ Rockefeller Foundation, 5.

Second, as atrocities such as the Rwandan genocide or the Yugoslav wars (to name but a few) demonstrated, neither the end of the Cold War nor the international institutions created half a century earlier brought the desired peace and stability.

Finally, the model promoted by the West to develop the world is beginning to be questioned on two levels. On the one hand, the results obtained with it have not been equal to the needs, in fact, it has accelerated the degradation of the environment. On the other hand, it is evangelistic in its purpose, as illustrated by the following statement by an Egyptian philosopher to an American participant during one of the conferences at the Bellagio Center: *“Why is the West’s version of modernity being used as a yardstick to judge Islam? Implicit in the question whether Islam is capable of modernity or pluralism is an accusation – as if you were the prosecutors and we were the accused... I know your civilisation very well and your house is not in order.”*³²⁷

In this way, having defenestrated the post-World War II Western worldview,³²⁸ as the Foundation acknowledges, the assumptions on which development was based are not valid. An infinite expansion of Western-style industrialisation and consumption is neither possible nor desirable since natural resources are neither unlimited as previously thought nor are most problems technically solvable. Ergo, a new set of assumptions had to be identified and applied in the transition to sustainable development.³²⁹ Therefore, the Foundation stated: *“Dramatic changes will be needed in the North in the areas of consumption, energy generation, and the production and treatment of hazardous waste. In the large countries of the North, this process has barely begun. The countries of the South are engaged in discussion, but it has not yet begun”*.³³⁰ On the other hand: *“Put bluntly, many developing countries have made significant progress, toward a goal that has proven to be the wrong one for the conditions of the 21st century”*.³³¹ This erroneous path followed by countries made the Foundation ask: *“And where do we find institutions that are building for the new era? Where do we find thoughtful people who will sit down with one another to puzzle through the policies and institution forms of cooperation that the new era will require?”*.³³² According to the Foundation, this is where

³²⁷ Rockefeller Foundation, ‘Annual Report 1992’, 4.

³²⁸ Also called by the Foundation « the assumptions of the Atlantic era ». Rockefeller Foundation, ‘Annual Report 1994’, 6. (AR 1994, 6).

³²⁹ Rockefeller Foundation, 6.

³³⁰ Rockefeller Foundation, 6–7.

³³¹ Rockefeller Foundation, 7.

³³² Rockefeller Foundation, 7.

foundations came into the picture. Again, the Foundation reaffirmed that a philanthropic foundation aims to find, support and connect those leaders capable of catalysing change in the framework that can bring about sustainable development.³³³ Again, we see the new role assumed by the Foundation. Where previously the bulk of its activities were either operational programmes or the funding of programmes, it is now seen more as a facilitator of contacts between the stakeholders it finds relevant.

To promote sustainable development after the structural questioning of the previous development model,³³⁴ the Foundation adopted new objectives and maintained some of those of the previous phase. For example, within the programme to Support Science-based Development, it added two further sub-programmes to the previous sub-programmes Health Sciences, Agricultural Sciences and Population Sciences. Considering the interdependence between development and the environment, the Foundation included the Global Environmental Program sub-programme in 1989. With this programme, it sought to help developing countries implement environmentally sustainable development while participating in international environmental protection initiatives. In this way, the Foundation wanted to link action to protect the world's environment with the planet's development. To this end, it devised two strategies. On the one hand, to train the future generation of leaders in various fields (both scientific, political and community leaders) to be able to materialise an ecologically sound development.³³⁵ On the other hand, to promote the transition towards more efficient energy systems and alternative energy sources such as wind and solar energy.³³⁶ These two strategies aimed to neutralise the harmful effects of unbridled production and consumption, i.e. the effects that cancel out the planet's capacity to regenerate itself.³³⁷

It should be noted that in this context, the struggle for sustainable development took root in the UN sphere with the UNCED in 1992. Thanks to this conference, the UN member states confirmed the new layer of meaning of development in which its environmental, social and economic aspects are interdependent.³³⁸ This, together with the efforts to consolidate the

³³³ Rockefeller Foundation, 6–7.

³³⁴ Model that saw nature as an inexhaustible source of resources, and industrialisation as the engine of development.

³³⁵ Rockefeller Foundation, 'Annual Report 1989', 8.

³³⁶ Rockefeller Foundation, 'Annual Report 1994', 16.

³³⁷ Rockefeller Foundation, 14.

³³⁸ Rist, *The History of Development: From Western Origins to Global Faith*, 188–95.

Human Development Approach, strengthened the view that there would be no development without progress in its economic, social and environmental aspects.³³⁹

On the other hand, with the Agricultural Sciences sub-programme, it continued to support projects aimed at developing and applying new techniques to genetically improve foodstuffs such as rice and maize or improving the production systems of small farmers in sub-Saharan Africa. Likewise, with the awareness of the need to preserve the environment, it began to finance projects that sought to generate greater knowledge of how natural resources contribute to sustainable food production or how agriculture impacts natural resources, among others.³⁴⁰

In Health Sciences, the Foundation sought to improve health systems' quality and "equity" by strengthening population-based medicine. In other words, it sought to advance the entire population's health by supporting projects aimed at, for example, improving vaccination systems. In addition to this field, in collaboration with the Population Sciences sub-programme, it sought to improve the quality and coverage of reproductive health and family planning services in developing countries and develop new diagnostic and prevention devices for sexually transmitted diseases.³⁴¹

With environmental degradation and population growth, the Foundation continued its work to try to synchronise the growth rate with the rate at which natural resources can regenerate with its Population Sciences subprogramme. As with the previous subprogramme, the Foundation became involved in expanding and raising the quality of reproductive health and family planning services in developing countries. It also supported the so-called second contraceptive revolution by supporting expanding birth control methods for both men and women. Finally, it supported research concerning birth control policies or the effects of socio-economic changes on populations' fertility.³⁴²

Let us turn to those programmes outside the Science-Based Development umbrella programme. The Arts & Humanities continued to play a crucial role in the Foundation at the turn of the century. They continued to be the Foundation's bid to find the greatest common ground

³³⁹ Hirai, *The Creation of the Human Development Approach*, 14.

³⁴⁰ Rockefeller Foundation, 'Annual Report 1994', 20.

³⁴¹ Rockefeller Foundation, 71.

³⁴² Rockefeller Foundation, 26–29.

between different communities and cultures, iron out their differences, and ensure a healthy society. There were no notable differences in this area with the initiatives supported in previous years.

As we will see in the following lines, the two programmes presented here could be complementary as they sought to empower the most vulnerable people in US society at the time in different ways. Moreover, they took place exclusively in the United States.

With the School reform programme, created in 1989, the Foundation sought to enrich the fight against persistent poverty in the United States by reducing the school dropout rate, especially among disadvantaged populations at risk of social exclusion. In addition, it supported projects that sought to improve school curricula so that recent graduates would be better equipped to succeed in the labour market.³⁴³ Similarly, to improve the integration of students in schools, the Foundation supported projects focused on increasing collaboration between teachers and parents to improve the social development of students.³⁴⁴

The Equal Opportunity programme was initially launched to reduce discrimination against minorities in the United States, especially black minorities, and to protect their basic rights. Over time, other objectives were added, such as improving the employability of people living in areas where poverty is endemic. To improve the economic situation of these people, the Foundation acted in three areas. First, it funded research and informed policymakers about the impact of macroeconomic changes on the poorest. Second, it explored new forms of job creation for the urban poor. And third, it enhanced community efforts to support residents' efforts to find work and improve their job prospects. In this way, it sought to make the most disadvantaged strata of society self-sufficient.³⁴⁵

Finally, during these years, the Foundation decided to devote special attention to the African continent, as it judged that the differences between this continent and other regions were widening due to the lower adoption of new technologies in the former. To this end, through its African Initiatives, created in 1991, it sought to narrow the gender gap, especially in primary

³⁴³ Rockefeller Foundation, 46.

³⁴⁴ Rockefeller Foundation, 'Annual Report 1990', 43.

³⁴⁵ Rockefeller Foundation, 'Annual Report 1994', 40.

and secondary education, and improve mathematics and science education.³⁴⁶ At the tertiary level, it sought to support the development of postgraduate programmes in science and technology at the University of Cape Town (South Africa) to promote cooperation between African universities.³⁴⁷ Furthermore, it wanted to improve the education of social and natural scientists, especially economists, who were in short supply.³⁴⁸

Years later, under the leadership of Gordon Conway – the Foundation’s president from 1998 to 2004 – the Foundation set itself the goal of becoming a global knowledge-based foundation to enrich and support the lives and livelihoods of the excluded and the world’s poor.³⁴⁹ However, what did this new goal imply on a practical level?

By a global foundation, the Rockefeller Foundation meant a foundation that would contribute to understanding the challenges that globalisation brought with it. Furthermore, it meant learning and contributing to solving specific problems that contribute to a global understanding of the problems, i.e. understanding them without being constrained by national “*borders*”. Furthermore, conversely, it means using policy and global knowledge and resources to improve conditions at the local level.³⁵⁰

Indeed, as he acknowledges, little is understood about this process of growing interconnectedness, but what is seen is that it has benefited many people and potentially improved the well-being of the whole world. However, this process was not affecting everyone equally. It seems that the benefits of globalisation were being enjoyed to a lesser extent by poor people and those discriminated against because of their race, religious beliefs, gender or sexual orientation, among other reasons. This differentiated impact of globalisation meant that those who did not enjoy the positive effects of globalisation were in an even more vulnerable position. To try to reduce these inequalities, the Foundation aimed to include those it intended to help in the decision-making process so that they could express their priorities and hold policymakers accountable for their actions.³⁵¹

³⁴⁶ Rockefeller Foundation, 31.

³⁴⁷ Rockefeller Foundation, ‘Annual Report 1993’, 31.

³⁴⁸ Rockefeller Foundation, ‘Annual Report 1995’, 28.

³⁴⁹ Rockefeller Foundation, ‘Annual Report 1998’, 3.

³⁵⁰ Rockefeller Foundation, ‘Annual Report 1999’, 6.

³⁵¹ Rockefeller Foundation, 7.

For the years to come, therefore, the Foundation set itself the twofold objective of, firstly, understanding the changes induced by globalisation and, secondly, finding out how the poor and discriminated people are not left behind during globalisation. For these people to enjoy the benefits of globalisation, the Foundation sought to help them access the knowledge, tools and opportunities that will enable them to improve their lives and livelihoods.³⁵²

Finally, to make the Foundation more global and thus respond to the challenges of globalisation, the Rockefeller Foundation judged that it needed to integrate its programmes further and focus them on the moment's needs. This is why another programmatic reorganisation took place in 1999. It created the following programmes: Creativity & Culture, Food Security, Health Equity and Working Communities. As well as being defined by the development needs perceived by the Foundation at the time, they were also shaped in such a way as to make maximum use of the Foundation's previous experience. Finally, the programme set up to integrate the other programmes and create synergies between them was called Global Inclusion.³⁵³

In addition, to enrich the global perspective with the diversity of the local reality and to apply the knowledge gained in the above-mentioned programmes (more focused on the global perspective), this philanthropic foundation began to support specific regional projects in Africa, Asia, Latin America and on the West Coast of the United States.³⁵⁴

However, not only globalisation required the Foundation to adapt to new times. The accumulation and concentration of wealth that characterised the end of the 20th century meant that new philanthropic foundations were created, causing the Foundation, while always in the top ten, to lose ground in terms of its endowment. Therefore, the way it felt it could continue to have an impact was through public-private partnerships (PPPs), not only with other foundations but with other actors such as governments, the private sector and NGOs. Moreover, working in partnership with other types of actors would, according to the Foundation, allow for the complementarity that they bring to each other.³⁵⁵

Let us see, then, what the new programmes consisted of.

³⁵² Rockefeller Foundation, 'Annual Report 1998', 2–3.

³⁵³ Rockefeller Foundation, 'Annual Report 1999', 3.

³⁵⁴ Rockefeller Foundation, 4.

³⁵⁵ Rockefeller Foundation, 5.

We will start by presenting the Global Inclusion programme. With this programme, the Foundation sought to democratise globalisation and make it more equitable so that it can positively affect the most vulnerable and disenfranchised. To implement this process and promote social change, the Foundation supported projects with three objectives. The first was to advance “*inclusion*” by promoting and disseminating best information, practices and processes for inclusion. The second was to ensure that the institutions and practices underpinning globalisation were more transparent, participatory and focused on promoting public good and private wealth. The third and final goal was to find the greatest common ground between the aspirations of the powerless and the powerful of the world.³⁵⁶ As the Foundation stresses, if these objectives are achieved, people previously disadvantaged by globalisation will henceforth be able to influence the rules and systems that govern political, economic and social life and participate in the prosperity of the economic change brought about by globalisation.³⁵⁷

Regarding the new “*Creativity*” & Culture” programme, the Foundation took up the work previously carried out by the Arts & Humanities programme while adding a globalisation dimension. In this sense, it continued to seek to promote the free circulation of ideas in the public sphere, but this time by preserving and renewing the cultural heritage of those disadvantaged by globalisation while supporting the artist and the humanist.³⁵⁸

To achieve these objectives, the Foundation supported projects that sought, on the one hand, to preserve traditional forms of expression and to restore missing or deteriorated cultural expressions of poor and excluded communities so that they could defend and enhance their place in society.³⁵⁹ On the other hand, considering that dissent within democratic societies allows all communities that makeup society to have their say and participate in it, the Foundation strengthened the institutions that provided this space where the disadvantaged could express themselves freely. Finally, it sought to combine “*multimedia*” platforms and artistic expression to create new artistic products and expressions.³⁶⁰

³⁵⁶ Rockefeller Foundation, ‘Annual Report 2000’, 14.

³⁵⁷ Rockefeller Foundation, 22.

³⁵⁸ Rockefeller Foundation, ‘Annual Report 1999’, 14.

³⁵⁹ Rockefeller Foundation, 14.

³⁶⁰ Rockefeller Foundation, 15.

With the following programme, the Foundation shows how one of its previous programmes (the one aimed at improving the quantity and quality of food) did not achieve the desired effects. With the new Food Security programme, the Foundation sought to help achieve food security for all, especially those in developing countries who could not enjoy the fruits of the Green Revolution. To this end, the Foundation promoted farmer participation so that farmers could more easily express their needs and be integrated into the design of future technical innovations. In addition, projects were supported that sought to put these farmers in contact with local scientists to apply the latest advances in agricultural technology better. Finally, policymakers were trained to strengthen local institutions to develop future policies to improve food security and increase farmers' incomes.³⁶¹

Another programme that tried to reduce the differences in living conditions between developing and developed countries is the new programme called Health Equity. As its name suggests, it aimed to achieve more significant equity in health between the two categories of countries. However, it is interesting to note that, despite considering socio-economic aspects with its previous health-related programmes, this programme only aims to tackle market failures in essential health products, the only judged cause of inequity in the field of health.³⁶²

To this end, the Foundation acted on two levels. On the one hand, it financially supported projects that sought to develop products to treat neglected diseases that primarily affect the poor, such as vaccines to treat HIV, malaria or tuberculosis. On the other hand, they acted on a political level by supporting projects that sought to improve the capacities of local health systems, as well as the promotion of international institutions to analyse future health threats that could cause disproportionately greater harm to the poor and excluded sectors of the world, mainly in sub-Saharan Africa and South and Southeast Asia. Moreover, aware of the severe impact of “*tobacco*” consumption on the population, the Foundation included financial support in the Health Equity programme to fight against smoking.³⁶³

Finally, the only programme exclusively focused on the United States was Working Communities, formerly Equal Opportunity. While the new programmes shown above had built on those of the previous phase while considering the harms of globalisation, Working

³⁶¹ Rockefeller Foundation, 13–14.

³⁶² Rockefeller Foundation, ‘Annual Report 2000’, 12.

³⁶³ Rockefeller Foundation, 19.

Communities does not introduce significant changes. Thus, it continues to focus on promoting urban neighbourhoods into safe and healthy communities for their residents by improving their employment rates, the quality of their schools and increasing the participation in the political life of poor and excluded people.

Indeed, if the end of the 20th brought prosperity for some, for others, such as the black and Latino communities in the United States, it brought only greater inequality and poverty. Moreover, as the Foundation recognises, poverty is a multidimensional phenomenon whose structural roots are too important to be ignored. Consequently, the Foundation pursued three objectives with the financial support it provided. Firstly, the Foundation sought to bring the issue of inequalities into the political debate, as well as research on the consequences of demographic and economic changes on work and on the structural elements that cause racial and ethnic discrimination. Secondly, it sought to create competent community organisations to enable disadvantaged communities to advocate their interests on the political stage and to implement plans to improve the quality of education and employment opportunities. Finally, it sought to facilitate the exchange of good practices achieved to date in this field and improve them.³⁶⁴

Concerning the regional programmes, as mentioned above, these programmes were designed to complement the overall understanding of the problems that the Foundation was achieving through its other programmes. To this end, it applied the knowledge gained from the global programmes to specific circumstances by delegating the application of these to its regional offices. With these programmes, the Foundation was present in Africa, Asia, Latin America, as well as the West Coast of the United States, with the Africa programme having the largest number of issues to cover. Thus, we see how the Foundation is present, for example, in “*Uganda*” supporting Makerere University to reorganise itself to meet better the needs of the country³⁶⁵ or in “*Lao*” “*PDR*” sponsoring projects that sought to improve care for “*crossborder*” health problems such as the HIV pandemic in the Greater Mekong sub-region.

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³⁶⁴ Rockefeller Foundation, ‘Annual Report 1999’, 16–17.

³⁶⁵ Rockefeller Foundation, ‘Annual Report 2000’, 2–3.

³⁶⁶ Rockefeller Foundation, ‘Annual Report 2002’, 18.

Topic 8: Smart globalisation – Climate change (2006 – 2013)

True to its history of constant self-assessment, the Function underwent another reorganisation between 2005 and 2006, reflected in the probability of finding annual reports on one or the other topic. From 2006 onwards, annual reports appear in the Smart Globalisation topic (topic 8) with a probability of more than 0.63, while they have a probability of around 0.35 of appearing in the Globalisation Challenges topic (topic 3) from 2010 onwards.

For the Foundation, industrialisation and globalisation are similar phenomena in that they are *“neither an intrinsically good or bad thing, but a pervasive and irreversible trend, with implications both beneficial and challenging.”*³⁶⁷ Therefore, having promoted welfare during the period of significant change brought about by the former, during the latter, it proposed to harness the positive forces of this process. Consequently, the Foundation was committed to making “Smart globalisation” possible.³⁶⁸ In this regard, the Foundation stated, *“Our shared challenge is to harness these creative energies and direct them to drive sustainable progress in communities around the globe. Our common efforts must serve to assure that as economic conditions improve, the world’s most vulnerable people can access tools and techniques, ideas and innovations, strategies and solutions to build better futures.”*³⁶⁹

They also recognise that the old ways of doing business in international relations no longer apply. The ecosystem of organisations involved in development is more diverse and fragmented than before. Consequently, *“Foundations, NGOs, corporations, and governments are less capable of instituting substantial social improvements from the top down or by themselves.”*³⁷⁰ Therefore, partnerships are essential, and problem-solving must *“recognise, welcome, and mobilise the resources and actions of others.”*³⁷¹ Therefore, the Foundation sought to engage partners with different points of view to collaborate. It also sought to empower aid recipients to spread progress within their communities and countries.

This proposal to use the positive forces of globalisation was made just before the financial crisis of 2008, which increased the number of people in need while the amount of resources

³⁶⁷ Rockefeller Foundation, ‘Annual Report 2006’, 6.

³⁶⁸ Rockefeller Foundation, ‘Annual Report 2007’, 2.

³⁶⁹ Rockefeller Foundation, 2.

³⁷⁰ Rockefeller Foundation, 2.

³⁷¹ Rockefeller Foundation, 3.

available to help them decreased. Consequently, the Foundation stated, promoting well-being “*had never been more important*”.³⁷² To this end, the Foundation sought new forms of philanthropy, forms that challenged the conventional dogmas regarding philanthropic foundations to date, as well as the lines demarcating the public, private and third sectors (philanthropic sector). One solution he came up with to increase the amount of development funding was so-called “*impact*” investing. This new concept was coined to describe investments that sought a positive economic and social return.³⁷³

However, the lack of market structures to carry it out prevented it from raising the necessary funds to be an effective tool in improving the social and environmental problems of the time. Consequently, the Foundation helped create the Global Impact Investing Network (GIIN), a non-profit organisation aiming to increase the quantity and effectiveness of impact investing³⁷⁴.

This approach to promoting well-being involves continuing with the same assumptions and objectives as before while further entrenching the multiplicity of actors in promoting development. In kind, it sought to facilitate access for communities and individuals to the necessary tools to cope with the risks to which they are exposed rather than waiting for help from the State.³⁷⁵ It is the underpinning of the ethic of self-reliance that was at the heart of the hegemonic socio-economic paradigm at the time, neo-liberalism.³⁷⁶ It was about enabling individuals and communities to navigate the ever-changing conditions by securing their own livelihoods at the individual or community level – as opposed to post-war collective action. As the Foundation stated: “*We support work that enhances their resilience to acute crises and chronic stresses, whether man-made, ecological, or both.*”³⁷⁷ Such is the importance the Foundation attached to “*resilience*” that this word is in the top 20 both in absolute frequency and in the FREX category (see Table 1). Finally, it sought to increase the budget for development programmes not through higher taxation of higher incomes but by optimising the market to raise more private funds that seek an economic and social return on investment. In other words, the market was seen as a catalyst for development, not an impediment to it.

³⁷² Rockefeller Foundation, ‘Annual Report 2008’, 2.

³⁷³ Rockefeller Foundation, 16.

³⁷⁴ Rockefeller Foundation, ‘Annual Report 2009’, 5.

³⁷⁵ Amable, ‘Morals and Politics in the Ideology of Neo-Liberalism’, 24.

³⁷⁶ Amable, 6.

³⁷⁷ Rockefeller Foundation, ‘Annual Report 2008’, 3.

Moreover, as the Foundation underlined, the remarkable speed with which change takes place in the 21st world was nothing like when the Foundation was established.³⁷⁸ Consequently, this last period (2006 – 2013) is the most unstructured regarding the Foundation's programmes, changing its name almost yearly. However, the Foundation was interested in 4/5 themes in a stable manner throughout the period. Let us see where it focused its efforts and how it intended to achieve them.

As the Green Revolution did little to increase the productivity of the agricultural sector in Africa, the Foundation teamed up with the Bill and Melinda Gates Foundation (BMGF) to create the Alliance for a Green Revolution in Africa (AGRA). With AGRA, both foundations aimed to recreate a second green revolution focused exclusively on Africa³⁷⁹ to end farmers' food "*insecurity*".³⁸⁰ However, this second green revolution had to achieve two things to succeed. On the one hand, it had to improve agricultural productivity. On the other hand, it had to create markets and improve the efficiency of existing ones while creating infrastructure and technologies to facilitate transactions. This multidisciplinary approach led AGRA to seek to improve the education of local crop scientists at various African universities so that they can develop seeds with higher productivity and train native farming communities in the use of new seeds and techniques. It also promoted the creation of a network of agronomist distributors to make the new seeds and farming techniques more easily accessible to a more significant part of the population.³⁸¹

On the other hand, natural disasters such as Hurricane Katrina and the adverse effects of climate change shaped the way of addressing environmental degradation that the Foundation was now proposing and supporting. For example, the Foundation sought to strengthen AGRA's capacities to prepare Africa's diverse farming communities for a future of rising temperatures.³⁸² In addition, with the accelerated rural exodus of the twenty-first century, in collaboration with New York City, the Foundation sought to promote natural disaster response planning in a highly populated area and develop a good practices code in this regard. More specifically, it sought to stimulate the design of a housing solution to rehouse populations in a highly populated area following a natural disaster. Finally, the Foundation created the Asian

³⁷⁸ Rockefeller Foundation, 'Annual Report 2005', 3.

³⁷⁹ Rockefeller Foundation, 'Annual Report 2006', 16.

³⁸⁰ Rockefeller Foundation, 'Annual Report 2010', 7.

³⁸¹ Rockefeller Foundation, 'Annual Report 2006', 19–21.

³⁸² Rockefeller Foundation, 'Annual Report 2007', 26.

Cities Climate Change Resilience Network (“ACCCRN”) through which cities in Asia could share the knowledge gained on improving climate resilience in this region.³⁸³

With the acceleration of climate change while maintaining the multidisciplinary approach, the Foundation sought market-based solutions that consider the value of “*ecosystems*” in economic and social progress and long-term resilience.³⁸⁴ An example is the support given to the company *B Lab*, which participated in developing a system that scores other corporations based on a series of assessments that measure the environmental and social goals they achieved. B Lab participated in developing a system that scores other corporations based on a series of assessments that measure the environmental and social objectives achieved by these corporations.³⁸⁵ This was an endorsement of the Foundation’s impact investing proposal, i.e. the proposal that companies should seek not only an economic return but also certain social and environmental objectives.

On health issues, the Foundation maintained its long-standing focus on improving people’s health in the recent period. To this end, it focused on three areas. First, due to the emergence of new infectious diseases in conjunction with increased migratory movements, the Foundation decided to support initiatives to improve the monitoring and control of potential pandemics. An example of this is the Mekong Basin Disease Surveillance Network, which coordinated six countries in the region to strengthen both national and regional capacities for communicable disease control and response.³⁸⁶ It also sought to improve health services’ efficiency, equity, affordability and quality by promoting information and communication technology (ICT) in the health sector, thereby promoting ehealth. Similarly, the Foundation supported projects that promoted Universal Health Coverage (UHC).³⁸⁷

In turn, as in other fields during this period, it promoted private sector involvement in providing and financing basic health services for the poor. The Foundation promoted private sector involvement in this area because, in most developing countries, the private sector carries out the majority (50-80%) of health service provision. However, because different health companies work in isolation from each other and from the government, the Foundation helped

³⁸³ Rockefeller Foundation, ‘Annual Report 2009’, 4.

³⁸⁴ Rockefeller Foundation, ‘Annual Report 2012’, 25.

³⁸⁵ Rockefeller Foundation, 43.

³⁸⁶ Rockefeller Foundation, ‘Annual Report 2007’, 18.

³⁸⁷ Rockefeller Foundation, ‘Annual Report 2008’, 9.

create the Center for Health Market Innovations (CHMI). This centre sought to accelerate the diffusion and scalability of the best health innovations. It also supported projects to improve oversight and accountability of the private health sector.³⁸⁸

Finally, the Joint Learning Network (JLN) was created in 2012 by the Foundation to facilitate the exchange of good practices, as well as technical solutions and ideas for implementing UHC among low and middle-income countries to implement UHC.³⁸⁹

With the forces of globalisation, job insecurity arrived in the United States³⁹⁰, and as the social protection mechanisms were not adapted to the new times, the Foundation felt it was necessary to complement them with new tools. Therefore, the Foundation launched the “Campaign for American Workers”, with which it sought to reinforce the economic security of workers in a context in which *“jobs are leaving communities, health care costs exceed workers’ ability to pay, employers are trimming benefits, the government no longer guarantees a safety net, and inequality and disparities are widening”*.³⁹¹ This labour market configuration increased precariousness, making, for example, whether or not workers had health insurance or a pension and whether or not they could afford to pay for health care.³⁹²

Consequently, the Foundation decided to act in three areas to supplement State resources for this purpose since, in its view, *“soon the government will lack sufficient resources to support the substantial and increasing social service needs of its citizens.”*³⁹³ For example, it began funding an initiative that promoted public policies to encourage short-term savings by low- and moderate-income families. In addition, to facilitate the protection of irregular and self-employed workers, it promoted programmes to provide health and retirement insurance. Finally, to alleviate the debt for medical services, it financed the various debates and the development of solutions to the problem at the individual, intermediary and State levels.³⁹⁴

Years later, in the 21st century’s second decade, the world saw the rural exodus accelerate and unemployment rise without apparent limit. Moreover, on the African continent, a large part of

³⁸⁸ Rockefeller Foundation, ‘Annual Report 2009’, 6.

³⁸⁹ Rockefeller Foundation, ‘Annual Report 2012’, 17.

³⁹⁰ Harris and Scully, ‘A Hidden Counter-Movement? Precarity, Politics, and Social Protection before and beyond the Neoliberal Era’, 4.

³⁹¹ Rockefeller Foundation, ‘Annual Report 2007’, 28.

³⁹² Rockefeller Foundation, 29.

³⁹³ Rockefeller Foundation, 29.

³⁹⁴ Rockefeller Foundation, 29.

the population was young and unemployed. As a result, the Foundation sought to promote new solutions to achieve economic development while fostering more inclusive markets to catalyse broader and more equitable prosperity. One of the initiatives with which it sought to do this was called Digital Jobs Africa, which took advantage of the large proportion of young people in Africa and the high development of ICTs to create digital employment opportunities and skills training. The rationale behind the initiative was to encourage Africa to jump on the “impact sourcing” bandwagon. That is, to train a corps of workers so that they can be subcontracted by companies located in developed countries that wish to relocate part of their activities to lower-wage countries.³⁹⁵

This runaway “*urbanisation*” was the Foundation’s final area of focus in the period 2006-2013. The problems linked to rapid urbanisation were multiple, interdependent and multidisciplinary,³⁹⁶ requiring better financing, planning and governance of cities.³⁹⁷ One of the ways in which the Foundation sought to alleviate the urbanisation process was by improving public transport, as it acted on several levels at the same time. On the climate level, by promoting more environmentally friendly modes of transport, on the public health level, and on the socio-economic level by being able to build less overcrowded and healthier neighbourhoods that are well connected to other parts of the city and increase the economic opportunities for low-income workers. Therefore, the Foundation focused on supporting initiatives that seek to contribute to the development of public policies and to increase the importance of public transport in the political agenda of countries.³⁹⁸ In this area, the Foundation only supported projects focused on the United States that sought, for example, to reduce greenhouse gas “*emissions*”³⁹⁹ or to improve public transport in large cities such as Chicago with the Bus Rapid Transit (BRT) system. It is worth highlighting this BRT because how it was developed was representative of how the Foundation conceived development projects in the future. That is, involving the private sector and communities in the project’s development.⁴⁰⁰

³⁹⁵ Rockefeller Foundation, ‘Annual Report 2013’, 9–14.

³⁹⁶ Rockefeller Foundation, ‘Annual Report 2008’, 12.

³⁹⁷ Rockefeller Foundation, ‘Annual Report 2007’, 20.

³⁹⁸ Rockefeller Foundation, 20–21.

³⁹⁹ Rockefeller Foundation, ‘Annual Report 2010’, 12.

⁴⁰⁰ Rockefeller Foundation, ‘Annual Report 2012’, 9–15.

We will analyse the last two together as we did with the first two topics. We witnessed significant changes inside and outside the Foundation during these two periods. Outside the Foundation, we see how globalisation, the neoliberal paradigm and the climate emergency are taking hold, causing the Foundation to adapt its programmes. Both topics correspond to clusters n°1 and n°2 from the HCPC.

On the one hand, we observe how neoliberalism becomes the hegemonic knowledge regime that is not questioned even when the harmful effects of globalisation are evident. This hegemonic position of the neoliberal thesis was manifested in the proposals made by the Foundation in that period.

Despite always defending globalisation, the Foundation has never tried to hide its adverse effects. Therefore, instead of going against it, it proposed that those disadvantaged by globalisation should be included in the decision-making process so that they can have their say and influence public policies.⁴⁰¹ Similarly, it sought to disseminate strategies and tools so that this group of people could improve their situation on their own by developing their human capital.⁴⁰² An example is the Digital Jobs Africa initiative which sought to catalyse economic development in the region by promoting skills training in IT services for young people whom companies in the Global North could subcontract.⁴⁰³

The neoliberal paradigm was not challenged even after the 2008 financial crisis. Evidently, because of the crisis, the funds of philanthropic foundations decreased at the same time as the need for money to alleviate the effects of the crisis increased. The solution suggested by the Foundation was the so-called “impact investing”, which sought to combine the search for economic benefit with social and environmental benefit. This added to the fragmentation of the development sector at the beginning of the 21st century, and the reduction of the importance of the State in development underpinned private enterprise as an actor to be considered for promoting well-being. Consequently, the Foundation was one of the standard-bearers of PPPs, proposing to catalyse synergies between actors with different and complementary competencies.

⁴⁰¹ Rockefeller Foundation, ‘Annual Report 2000’, 22.

⁴⁰² Rockefeller Foundation, ‘Annual Report 2007’, 2.

⁴⁰³ Rockefeller Foundation, ‘Annual Report 2013’, 9–14.

In addition, the end of the 20th century and early 21st century is characterised by the persistence of labour precariousness outside and within the United States. The Foundation, finding ineffective public solutions, sought, on the one hand, to empower disadvantaged people to stand on their own two feet and not rely on the State to secure a pension or health insurance. It also sought to enable discriminated and disadvantaged communities to find solutions to their problems without waiting for help from the State, as the WRCP shows. Finally, it sought to facilitate the political participation of those disadvantaged by globalisation and for these people to create their own programmes to improve their daily lives, for example, by improving the quality of education in their communities and employment opportunities.

This ethic of self-sufficiency can also be observed in other areas. For example, in the fields of school reform and arts and culture, the Foundation sought to improve the representation of the most disadvantaged in American society. This improved representation sought to give these people a voice to influence policy in their favour, in another clear example of how solutions to socio-economic problems will not be made collectively but negotiated on a case-by-case basis.

Moreover, the health case is very illustrative of the search for market-based solutions and not in a public service system. Thus, the Foundation sought to improve the health insurance market so everyone could have private health insurance rather than improving the public health system in developing countries. It also sought to remedy the health inequality in sanitary matters seeking to make the most efficient sanitary market and correcting market failures for certain basic sanitary products. To this end, it focused its programmes on the diffusion and scalability of health innovations and the accountability of private healthcare companies. Finally, it also supported the Joint Learning Network through which countries could exchange best practices and technical solutions to implement the UHC.

The belief in markets as development catalysers is found also in the agricultural initiative AGRA. Indeed, on top of improving seeds and agricultural techniques, AGRA emphasised the creation of markets where farmers could source materials and sell their produce. In this way, the aim was to transform subsistence farming into market-oriented agriculture.

In the other areas in which the Foundation is active, we also see this belief in the market as a guarantor of the efficiency and effectiveness of solutions to ensure development. In this sense, in the environmental field, market-based solutions are sought to address the degradation of

ecosystems. In addition, climate change started to increase the rate at which natural “*disasters*” occur, moving the Foundation from a purely preventive approach as in topic 3 to one that seeks, to a greater extent, to coexist as well as possible with them in topic 8. Moreover, in the context of the AGRA initiative, efficient markets are sought to catalyse the development that has eluded Africa in conjunction with improved seeds and farming techniques.

The case of the challenges imposed by rampant urbanisation is also representative of the Foundation’s concept of development. As we saw with the Chicago BRT, the Foundation sought to promote the solution by including actors from the public sector, the private sector, as well as the people who would potentially benefit from the system.⁴⁰⁴

On the other hand, climate change started to increase the rate at which natural “*disasters*” occur, moving the Foundation from a purely preventive approach as in topic 3 to one that seeks, to a greater extent, to coexist as well as possible with them in topic 8. Moreover, it will be through economic profit that nature will be preserved.⁴⁰⁵

Concerning the two programmes that appear in topic 3 and do not appear in topic 8, i.e., School Reform and Arts & Culture, we can say the following. With both, the Foundation sought to improve the representation of the disadvantaged in the everyday life of American society. The first is by involving the community, parents and teachers in improving the education of young people, and the second is by facilitating the artistic expression of those disadvantaged by globalisation.

We end this section with a remark. Despite the increase in the number of programmes and initiatives the Foundation supported in these last two topics, the STM did not show their full relevance. For example, as women are particularly affected by climate change, the Foundation supported several initiatives for women’s participation in climate policy.⁴⁰⁶ It also supported programmes to strengthen girls’ education on the African continent to close two gaps: the development gap between the African continent and other regions and the gender gap.⁴⁰⁷

⁴⁰⁴ Rockefeller Foundation, ‘Annual Report 2012’, 9–15.

⁴⁰⁵ Rockefeller Foundation, 43.

⁴⁰⁶ Rockefeller Foundation, 26.

⁴⁰⁷ Rockefeller Foundation, ‘Annual Report 1994’, 31.

Conclusion

This mémoire aimed to study the concept of development through the Rockefeller Foundation during its first century of existence. We first conducted a series of quantitative analysis techniques of the language used in the Foundation's annual reports. Then, guided by the results of these initial analyses, we examine the activities and institutions in which it was involved during the period to reconstruct the concept and the ideas that underlay it.

In this way, we see how, although the concept of development did not exist until 1949, the Foundation was already involved in activities that were later considered development-related. In fact, the activities in which the Foundation was involved were strongly influenced/contingent on the political, epistemic, and economic context. Thus, we see how the first layer of meaning of development, i.e., health, is gradually joined by an economic, social, cultural and, finally, environmental layer.

Similarly, we have seen the centrality of the ethic of self-help (and, to a lesser extent, market-oriented) in development throughout the period, especially in the 21st century. This is because, throughout its existence, the Foundation sought to ensure that the actors it helped to develop became autonomous agents who could solve their problems without recourse to third parties. Finally, we see how the actors' importance in the development process also changes. While at the beginning of the period, the Foundation conceived of the State as the primary catalyst for development, at the end of the period, it advocated development involving the State, private enterprise, civil society and individuals in particular. As the State's credibility as a guarantor of rights and provider of welfare-related services is in crisis, the Foundation encourages individuals to find their own means to cope with the risks present in contemporary society without waiting for help from the State.

In this sense, we complement the work carried out by Nally & Taylor in demonstrating that the green revolution was both a technical project (due to the improvements in agricultural techniques that were sought) and a social project (due to the quest to inoculate the self-help mentioned above and market-oriented mentality). With this mémoire, we have seen that this quest to promote these values was not limited to the agricultural sphere. In fact, we see how, at the end of our period, we sought to promote this mentality in the fields of health, education, the environment and how to deal with the precariousness of the world of work.

In short, we have seen how, on the one hand, the concept of development has evolved over a century, as has the role played by the ethics of self-help. On the other hand, how this concept has influenced the solutions that have been proposed to promote development. However, this paper has certain limitations.

Firstly, the representativeness of the data used. While at the beginning of the period, the annual reports had a large number of words (allowing for a more reliable quantitative analysis), at the end of the period, the annual reports have about a third of the words they had at the beginning of the period (see Figure 1).

Likewise, the Rockefeller Foundation was one of the few actors involved in so-called scientific philanthropy on an international scale at the beginning of our period. However, at the end of this period, the development field comprises many more actors than before. The analysis could be enriched by studying the concept of development through other important actors in this field, especially since a more significant number of actors of different natures coexisted in this field.

Appendix Pre-processing

List of words to be separated: rockefellerfoundation, thedevelopment, medicaleducation, healthdivision, thedivision, thedirection, thegovernment, healthdepartment, anappropriation, andequipment, ofinfection, ofpopulation, healtheducation, healthorganization, thecommission, theestablishment, thepopulation, theimprovement, thereproduction, theassociation, publicadministration, ofdevelopment, offoundation, incollaboration, fordevelopment, thetreatment, thepreparation, anddistribution, theadvancement, highereducation, incooperation, theorganization, foodproduction, afoundation, thecorporation, thedistribution, soilpollution, communitydevelopment, theintroduction, andtreatment, thecreation, andgovernment, aneducation, thecooperation, withfoundation, theinfection, healthadministration, theconstruction, hookworminfection, theapplication, economicdevelopment, theinvestigation, theadministration, reportfoundation, thesolution, ofequipment, nursingeducation, oftreatment, specialattention, healthcommission, sciencenutrition, thecompletion, andfixedequipment, ofnutrition, ruralreconstruction, complementfixation, thestation, saltflotation, ofinformation, thepromotion, theuniversity, thefoundation, thedepartment, thefoundations, highquality, perioduniversity, thehumanities, grantsuniversity, internationalrelations, thecity, columbiauniveristy, hssuniversity, anddevelopment, forfiveyears, infieldof, highyielding, minoritygroup, universitythe, sciencebased, foundationadministered, hivaids, nee (instead of capturing rice, it capured nee), foundationscience, tne (instead of capturing the, it captured tne), foundationuniversity wuniversity, zationseffort, pauloderpart, researchdepart , nonallgn, education cation, otherexhibition, worldpopu, collaboi, corpoi, cooper ation, evalu ation, ap propri, populationappropri, accountantfacil, brazillaboratory, foundation contents, colombiaunivesity, universitythe, varieties tanzania, policieshuman, salaamtanzania, ascomprehensive, salaamfrom, characterizationbiotechnologyscnpps, associatejohn, associatepatricia, biologyjudge, europeanracial, mexicanamerican, thegrants, availableto, theeditors, fourfellowships, valuesprinceton, japaneseunited, medicineuniversity, facultyof, veterinarymedicine, peruuniversity, biologygenetics, developmentsustainable, periodjapanhokkaido, japanhokkaido, sociologydemography, soilshokkaido, japangraduate, japanhague, laboratoryteaching, hokkaidouniversity, <http://www.hindustantimes.com/news/feed/india/india/cheers-as-monsoon-arrives-hopes-of-better-farm-out-put-raised-article.aspx>, resilierricestrategies, broadlyshared, economiesand, changewhile, inrurariceproducts, themworldand, economicshocks, smallholder, climatechange,

activities exhibition, testimony vernacular, collaboration and, technology and, provide choreographic, anyone's expectation, foundation photograph, special scholarships, scholarship assistance, automatic drips, studies and, with more, whether they, with more, blood forming, basic biological, pathological through, the blood, substances which, more than, their responsibility, degree of, entire republic, effective methods, the important, average degree, government private, education agriculture, better qualified, and commodities, residuals spraying, two representative, to accomplish, worldwide usefulness, and economic, favorable time, method the, authorities however, and economic, the international, to operate, the resources, decrease in, more limited, with the resources, which has, the committee, is an, true that, the resources, decade becomes, social sanitary, their distribution, housing family, problems which, and also, of recognized, the bureau, by for, the economic, feasibility power, for collaborative, and relationships, foundations systematically, prospect thought, to inequality, to increase, and women, self sufficiency, provide support, age groups, foundation introduction the, proposed personal, scholars philanthropic, no economic, foundations supported, journalism education berkeley, towards its, number of, newspaper industry, robinson foundation new, fund development, citizen's expanding, business collaboration we programs aimed at, improving youth, employment, tested in, career opportunities, the economic, foundation opportunities, developments affecting, giving support, sciences mathematics, core centered, social advice, comparative community, of minority youth, public health, thenational, international health, the medical, of health, the social, growing public, increased efficiency, the efficacy, varying conditions, its interpretation, become teachers, important positions, nursing public, societies general, to the, over the, to assist, the work, termination of, was made, emergency aid, foundation on, foundation balance, authorizations unappropriated, to meet appropriate appropriations pledges and, for use, for the, the california, follows balance, term was, foundation provides, general budget, given since, increasing proportion, it finally, assumed entire, the project, term was, of yellow, studies in, work the, program of, effective for, effective for, the practice, internal medicine, for a study of the use of, colombia diversity, of medical, the problem, drainage the, adjacent untiled, was offered, foundation's sanitary, the united, expected that, honduras early. Honduras, other places, under governmental, service in, furnished by, malaria studies, control in, for drainage, further tests, division in, nicaragua continued, a division, government having, of the, representatives served, give expert, at two year, and three, lately been, mechanical equipment filling a, breeding place, foundation for, prepared a, been lent, foundation to, being trained, foundation fellowship, honduras and, installing a, them the, of ceylon, observation a,

in this, furnished by, corporations who, in fields sketching and, section of, maintains headquarters,
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 successfully installed, villages attention, practicable routine, in north, entomologist collaborate,
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 greece germany, fulton montgomery, two nutritionists,, medical schools, the request,
 in barranquilla, staff member, an entomologist, sanitarian the, providing salaries,
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 lucia dominica, in charge, in europe, phase of, research physicist, with the, agriculture comprised,
 and doctor, and since, auxiliary workers, subsequent observation, physicians nurses,
 equipment george, works england, draftsmen, and secretaries, york additional, obstetrics and,
 the theatre, museum lighting, government of, screening or, form filtration has, recent biological,
 the mathematician, analysis of, meant a, people development, electromagnetic field when a,
 geneticist arthur , agriculture which, the mathematician, analysis of, trained professional,
 people development, foundation.org these, foundation.org these, foundation.org during,
 malaria logist and, foundation continued, department in, water supply, the the, local sanitary,
 drainage system, national department, driver office, workers challenge between, and world,
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 initiative washington, progress resolved, campaigning for, disease surveillance,
 network challenge because, resilience to, for small impact investing,
 industry challenge government, stewardship john, foundation.org condensed, activities december,
 rod in president, president the, foundation.org grants inescapable, with more, boston henry, and the
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 baltimore donald, adviser and, the venereal, is correlated, epidemiologist within, to honduras,
 cooperative program, made surveys, stationed in, assistance in, operation hookworm, a technical,
 york george, a medical, other places, under governmental, he has, give advice, the control,
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 physicians one, health with, under the, appropriations a, locality in, the services, activities,
 in many, available the, well equipped laboratory, fundamental studies, government for,
 presidential decree, human genetics, government development, general health, departments of,
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searchlight, acquisitionloan, massachusettsharvard, medicalboard, ofa, foundationhas, developmgcountry, contraceptivesand, hereworkinprogress, kcontinued, paymentsmissionary societieshos pitals, foundationinternational, ofinternational, thcentury, thecountry, thegeneral, thehealth, activitiescontinued, developmentcontinued, programscontinued, organizationscontinued, institutionscontinued, healthcontinued, requirementscontinued, educationcontinued, schoolcontinued, budgetscontinued, countriescontinued, europecontinued, statescontinued, paymentspublic, paymentsgeneral, paymentsresearch, dcontinued, centerfor, costof, costsof, capacitybuilding, fouryear, civilsocietyorganizations, costsof, droughttolerant, Twoyear, councilcommittee, afinalappropriation, thecouncil, institutebiochemistry, threeyearperiod, andpossibilities, andexpanded, completefinancialstatement, foundationrepresents, tenyearperiod, economichandicaps, foreignlanguage, appropriationsfor, carefullyselected, chinamedical, nationalagricultural, thestate, asingle, likelyto, socialand, mobilityregional, ofdistinguished, medicalscience, beendeveloped, ofsanitary, includingthe, andeducation, advancementof, appropriationsgrants, applicantshe, sectorinnovation, organizationalbreakthroughs, localcommunities, coricentrates, foundationabout, foundationin, cerealresearch, theothers, periodadriano, threeyear, ofresearch, shortterm, andscientists, closecooperation, inprogress, foundationgrant

Words to be merged:

Depart ments, cit ity, captiv ity, qual ity, activ ity, appro priations, Organi zation, organi zations, govern ment, depart ment, treat ment, equip ment, develop ment, require ment, move ment, improve ment, endow ment, employ ment, instal ment, agree ment, establish ment, disburse ment, adjust ment, supple ment, experi ment, pay ments, treat ments, disburse ments, invest ments, experi ments, improve ments, depart ments, ele ments, govern ments, install ments, achieve ments, settle ments, commit ments, appoint ments, docu ments, arrange ments, develop ments, assign ments, communi cation, appli cation, classifi cation, publi cation, Qualifi cations, appli cations, communi cations, telecommun, devel opment, popu lation, overpopu lation, trans lation, re lation, inocu lation, iso lation, specu lation, commis sion, comprehen sion, deci sion, mis sion, divi sion, profe sion, man sion, supervi sion, provi sion, promis sion, posses sions, mis sions, pen sions, commis sions, divi sions, exten sions, discus sions, profes sions, foun dation, accomo dations, foun dations, de velopment, de velopments, con struction, recon struction, ob structions, readi ness, dizi ness, blind ness, busi ness, sick ness, sensitive ness, indebted ness, feebleminded ness, effective ness, poor ness, interrelated ness, care ness, aware ness, weak nesses, intership nesses, busi nesses, com munity, im munity, communities, corpo

ration, prepa ration, explo ration, adminis tration, concen tration, regis tration, concen trations, situ ation, consider ation, appropri ation, demobiliz ation, oper ation, associ ation, found ation, cooper ation, program ation, oper ation, radi ation, cre ation, tax ation, feder ation, appropri ations, fund ations, oper ations, consider ations, limi tation, sani tation, consul tation, vege tation, infes tation, documen tation, compu tation, transpor tation, interpre tation, rehabili tation, compu tations, admin istration, commun ity, calam ity, hered ity, productiv ity, valid ity, objectiv ity, fertil ity, un ity, facil ity, insular ity, environmental ity, ca lamiities, cd room, certifi cates, cer tificates, expendi tures, popu ation, agricul tural, cul tural, struc tural, interna tional, addi tional, struc ture, sci ence, influ ence, confer ence, refer ence, independ ence, adminis trator, adminis tered, adminis trationpublic, adminis trationcontinued, adminis trationtrinidad, adminis trative, admin istrative, admin istrators, admin istered, admin istrationpublic, admin istbation, pos sible, intelli gence, mainte nance

plural to singular: universities, organizations, opportunities

List of pseudowords deleted: ment, opment, sion, tation, ization, struction, istration, velopment, ation, istration, struction, lation, ration, zation, duction, ganization, mation, mentation, provement, augment, agement, vention, eration, fection, propriation, versity, ments, sity, cation, dation, partment, tration, sions, munity, ness, ation, ity, istration, lation, divi, nal, tion, Its, ca (abbreviation of California), ns (Natural sciences), forl (2-for-1, regarding the ratio of the stock piles in the schedule of transactions in marketable securities), backi (from AR 2012, since the AR was meant to be solely web content, there are still traces of the back / forward buttons on the pdf file), fas (Foundation, Social Agricultural Sciences), fss (Foundation Social Sciences; for labelling the grants), ccommunity, ccommunity, ccommunities, ccommunities, appro, approappropriations, approappropriation, adadministration, tory, tional, tural, ture, cal, ab, db, research, luckknwo,

Words deleted to clean the corpus: shall, professor

Words wrongly detected: viricent (instead of Vincent), nce (instead of rice), organizaion (instead of organization), autnoma, ommunities, insurarice, resilierice, ommunity, intracontmental, darice (instead of dance), substarices (instead of substances), entrarice (instead of entrance), importarice (instead of importance), enharice (instead of enhance),

californiia (instead of california), coricerned (instead of concerned), coricentrating (instead of conception) coriception, iriception (instead of conception), coriceration (instead of concentration), scierices (instead of sciences) , scierice (instead of sciences), uricertain (instead of uncertain), resilierice, refererice, experierice, confererice, influerice,corresponderice, independerice, con, theprovirice, sanitaryengiricering, engiricerprovided, antimalariaengiricering, engiriceringdepartment, engiricering, nominerices, coricerning, Annourices, agncultural, amencan, appbopria, appbopbu, apphobia, tionb, tlon, chma (china)

Appendix STM

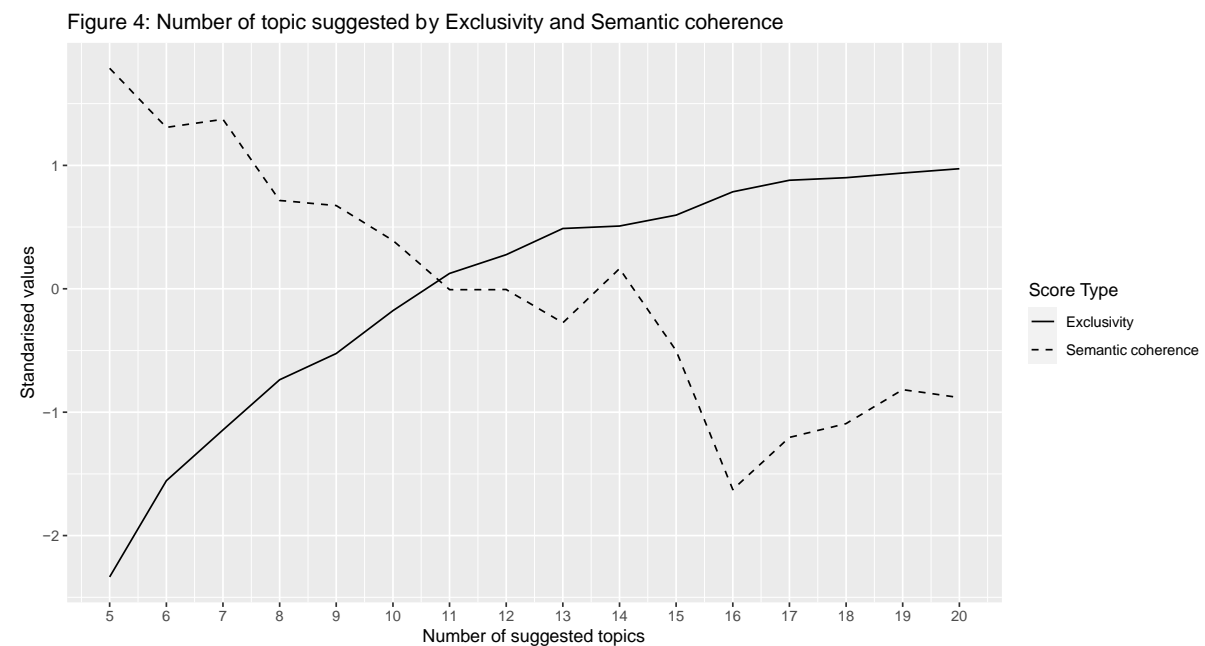


Figure 5 regressions

```
Call:
estimateEffect(formula = 1:10 ~ I(Year^2) + Year, stmobj = res10_nouns,
  metadata = as.data.frame(metadata), uncertainty = "Global")
```

Topic 1:

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	-5.185e+02	1.649e+02	-3.144	0.00221	**
I(Year^2)	-1.343e-04	4.279e-05	-3.138	0.00225	**
Year	5.278e-01	1.680e-01	3.141	0.00223	**

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Topic 2:

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	2.133e+02	1.336e+02	1.597	0.114	
I(Year^2)	5.341e-05	3.452e-05	1.547	0.125	
Year	-2.135e-01	1.358e-01	-1.572	0.119	

Topic 3:

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	4.863e+02	1.459e+02	3.333	0.00122	**
I(Year^2)	1.286e-04	3.806e-05	3.379	0.00105	**
Year	-5.002e-01	1.491e-01	-3.356	0.00113	**

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Topic 4:

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	3.292e+02	1.057e+02	3.115	0.00242	**
I(Year^2)	8.444e-05	2.726e-05	3.098	0.00255	**
Year	-3.335e-01	1.074e-01	-3.106	0.00249	**

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Topic 5:

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	-4.579e+02	1.646e+02	-2.782	0.00649	**
I(Year^2)	-1.176e-04	4.269e-05	-2.755	0.00701	**
Year	4.642e-01	1.677e-01	2.769	0.00674	**

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Topic 6:

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	5.262e+02	1.405e+02	3.745	0.000306	***
I(Year^2)	1.344e-04	3.618e-05	3.715	0.000340	***
Year	-5.320e-01	1.426e-01	-3.730	0.000322	***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Topic 7:

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	-3.761e+01	1.444e+02	-0.260	0.795
I(Year^2)	-7.785e-06	3.745e-05	-0.208	0.836
Year	3.450e-02	1.471e-01	0.235	0.815

Topic 8:

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	4.361e+02	1.348e+02	3.236	0.00166 **
I(Year^2)	1.146e-04	3.523e-05	3.252	0.00158 **
Year	-4.471e-01	1.378e-01	-3.244	0.00162 **

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Topic 9:

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	-6.178e+02	1.664e+02	-3.713	0.000341 ***
I(Year^2)	-1.608e-04	4.322e-05	-3.720	0.000334 ***
Year	6.304e-01	1.696e-01	3.717	0.000337 ***

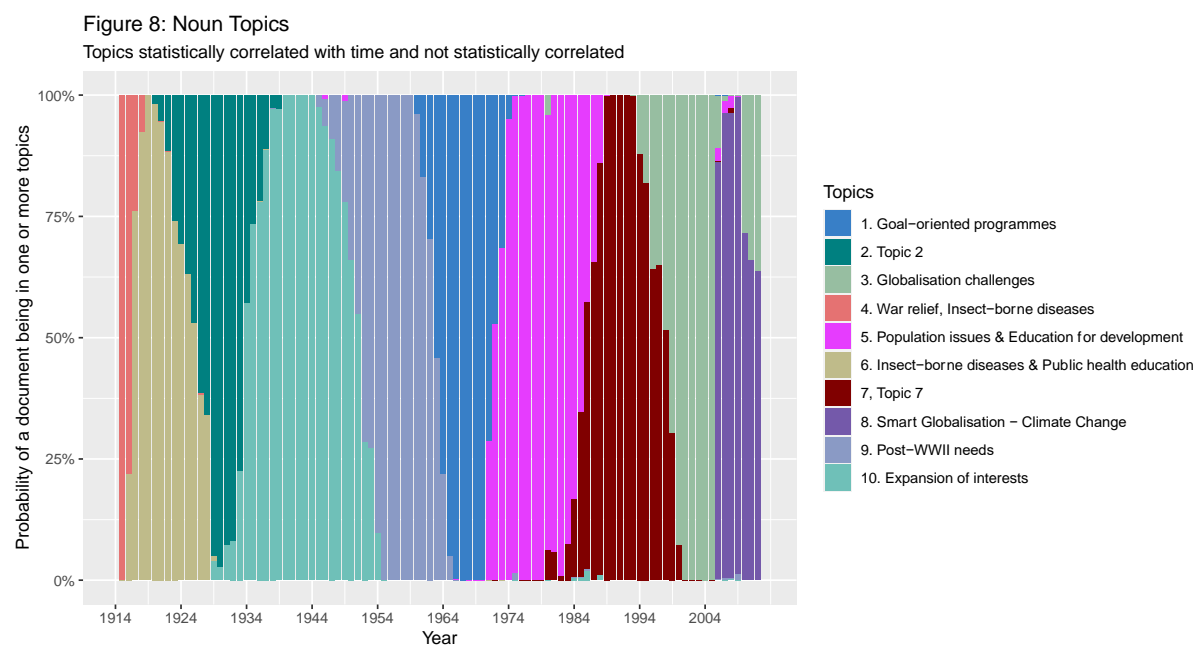
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Topic 10:

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	-3.576e+02	1.681e+02	-2.128	0.0359 *
I(Year^2)	-9.481e-05	4.363e-05	-2.173	0.0322 *
Year	3.684e-01	1.713e-01	2.151	0.0340 *

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

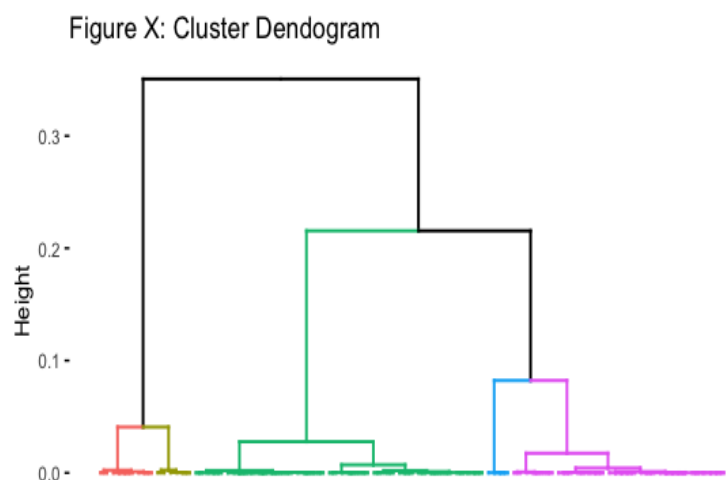


Appendix Other Methods

In this appendix, we will first present the methodology for the Hierarchical Clustering on Principal Components (HCHP) and, second, the results of the absolute frequency analysis of words and the HCPC.

Methodology of the Hierarchical Clustering on Principal Components (HCPC)

The aim of any clustering technique is to partition the corpus into coherent groups composed by similar individuals, in our case, words.⁴⁰⁸ As unsupervised method, both the composition and the number of these clusters are discovered as this segmentation is carried out without human intervention.⁴⁰⁹ Moreover, each cluster will be composed of words with a similar lexical profile, being different from the words in the other clusters.⁴¹⁰



In this sense, semantic clustering takes advantage of the semantic relationship of words that tend to appear together in an embedded space (reduction of the text complexity to simple “contexts”) to group them to create a semantic cluster.⁴¹¹ To perform the word clustering, we will rely on the Hierarchical Clustering on Principal Components (HCPC). This clustering technique belongs to the family of the agglomerative hierarchical clustering meaning that starts by considering the corpus of data as consisting of as many clusters as there are observations (in our case, nouns) in the corpus and forms clusters by agglutinating observations based on their similarity until a single cluster is created.⁴¹²

⁴⁰⁸ Kassambara, *Practical Guide to Principal Component Methods in R: PCA, M (CA), FAMD, MFA, HCPC, Factoextra*, 2:141.

⁴⁰⁹ Anandarajan, Hill, and Nolan, ‘Introduction to Text Analytics’, 103.

⁴¹⁰ Bécue-Bertaut, *Textual Data Science with R*, 61.

⁴¹¹ Wang et al., ‘Semantic Clustering and Convolutional Neural Network for Short Text Categorization’, 354.

⁴¹² Husson, Josse, and Pages, ‘Principal Component Methods-Hierarchical Clustering-Partitional Clustering: Why Would We Need to Choose for Visualizing Data’, 4.

As we see in the Figure 9 above, we see the cluster dendrogram of the HCPC. As mentioned, at the bottom of the dendrogram we find each annual report and as we move upwards, clusters start being formed. Since we asked to get five clusters, annual reports are merged based in their similarity until we obtain five clusters, each with one different colour. In this sense, the greater is the branch length, the greater is the dissimilarity between the clusters that are connected by that branch. In other words, in Figure 9, the two clusters at the bottom left are more dissimilar to the clusters located at the bottom right than between them two. Finally, what does it mean that the hierarchical clustering will be performed on principal components? The principal components are the new variables created by Principal Components Analysis techniques that summarises and visualise the information contained in an original data set.⁴¹³ Following Pestre & Moretti, we will do the clustering using just nouns.

Before performing any analysis, we must use an appropriate data structure: document-term-matrix (dtm). It is a table close to the first one. Each row represents a document, and each column represents a specific word. As we see in the Table 2 below, the intersection of a row and a column represents the number of time a given word appears in a given document This matrix is necessary for the structural topic modelling and can also be used as a correspondence table needed for our first analysis clustering method.

Table 2: Word Frequency per Year

	academy	access	account	act	activities
1913	0	0	43	59	0
1915	0	0	0	0	0
1916	0	0	0	0	0
1917	0	0	0	0	0
1918	0	0	0	0	0

The completion of the HCPC requires following three steps. First, we will compute the principal component method analysis, which in our case will be a Correspondence Analysis (CA) because our corpus is composed by categorical data (words).⁴¹⁴ Simply put, this method will us allow to reduce the distribution of words across documents in a two-dimensional graph using the distance between points as a representation of this distribution. The CA has two goals. First, it will summarise, denoise and simplify our data so we can understand how it is structured

⁴¹³ Kassambara, *Practical Guide to Principal Component Methods in R: PCA, M (CA), FAMD, MFA, HCPC, Factoextra*, 2:12.

⁴¹⁴ Kassambara, 2:150.

and we can compute the following steps of the HCPC.⁴¹⁵ Second, it will show us, in a coordinate axis the proximity between annual reports, the proximity between nouns, and the associations between annual reports and nouns. This has three consequences.

1. If two documents appear close to each other in the graphic, it means that they favour or disfavour the same nouns.
2. If two nouns appear close to each other, means that they are distributed in the same way in the different annual reports, regardless of their frequency.⁴¹⁶
3. A word and an annual report are closer if the annual report uses that word with a higher relative frequency than the average.⁴¹⁷

Note that in this representation and the following, a “dimension” represents the most underlying structures of the data and don’t have a meaning *per se*. They help to plot the data points. We could at least say that data points that are in opposite space of a given dimension (positive – negative) have negative relation between them.

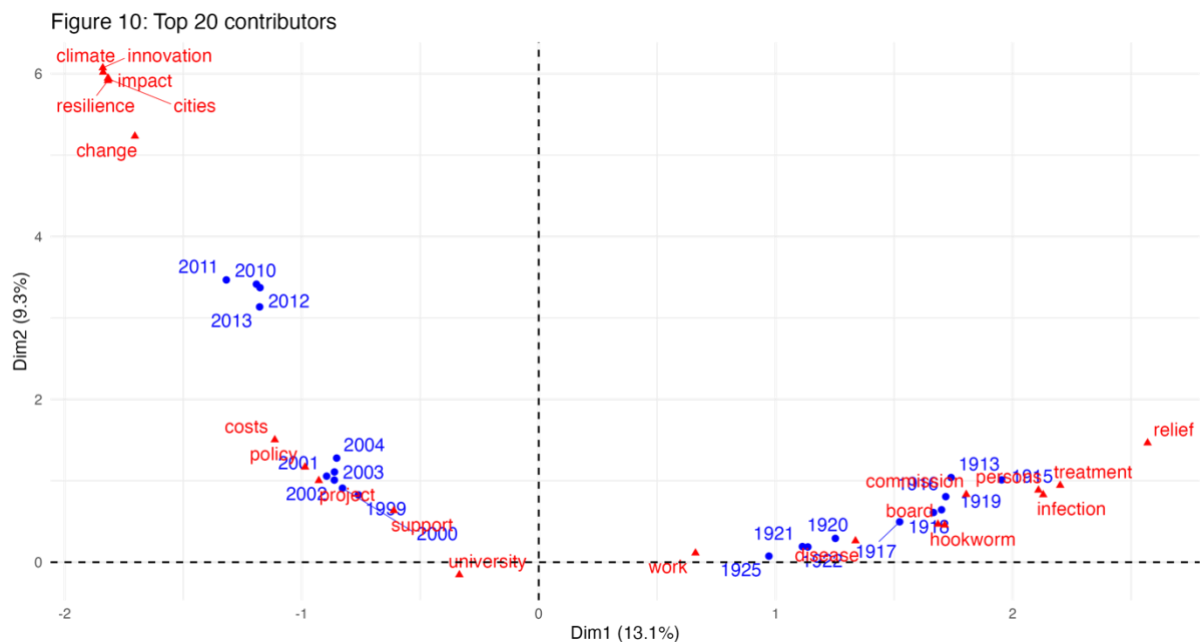


Figure 10 above shows the two-dimensional space where the coordinate axis is located is composed by the two principal components of the corpus, one per axis. The principal components are the newly created variables that better summarise the distribution of words across our original corpus. They are also called dimensions. Generally, we only use the first

⁴¹⁵ Husson, Josse, and Pages, ‘Principal Component Methods-Hierarchical Clustering-Partitional Clustering: Why Would We Need to Choose for Visualizing Data’, 2.

⁴¹⁶ It suggests that they tend to co-occur or have similar patterns of occurrence across the annual reports.

⁴¹⁷ Bécue-Bertaut, *Textual Data Science with R*, 18–19.

two components since they have the greatest percentage of inertia (\cos^2), meaning that they offer the two best summaries of the words' distribution of our corpus. These two principal components will be used for the hierarchical clustering. We used the "CA" function from the "FactoMineR" package for the CA.

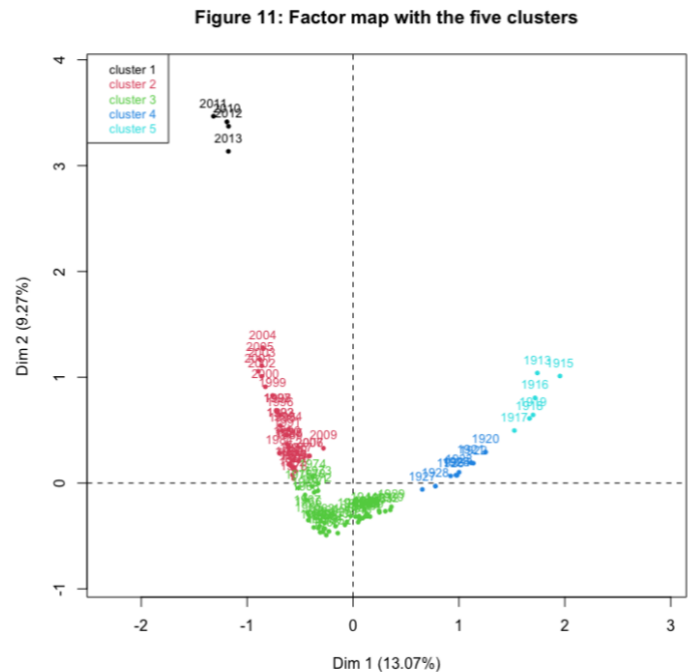
Interpretation of the correspondence analysis

Figure 10 above shows how are distributed the top 20 annual reports and nouns that contribute the most to the definition to the two first dimensions. As announced earlier, we see that document tend to be distributed chronologically by the year they were published based on the first dimension which suggest that there is a relationship between the content of the annual reports and the time. As we see there, words such as "*relief*", "*treatment*" or "*infection*" are plotted close to the annual reports of 1913 and 1915; whereas words such as "*climate*", "*change*", "*resilience*" and so are plotted closer to the annual reports of the last years of the period under review.

At the second step of the HCPC, the clusters will be established following the Ward criterion in a hierarchical way producing a hierarchical tree with the "HCPC" function of the same package. This means that the different clusters are a hierarchical sequence of clusters that overlap each other, starting with clusters composed of a single word up to a cluster composed of all words.⁴¹⁸ It is at this step, based on different measures and our own criteria, we choose how many clusters we want to get at the final partitioning. We used the gap statistic method to see how many clusters are suggested, first with the k-means partitioning algorithm and, secondly, with the hierarchical clustering (h-cut) algorithm. Although the former suggests four clusters and the latter suggests ten, we will create five clusters for ease of explanation.

⁴¹⁸ Husson, Josse, and Pages, 'Principal Component Methods-Hierarchical Clustering-Partitional Clustering: Why Would We Need to Choose for Visualizing Data', 4.

Thus, as we see in Figure 11 on the right, we obtain two clusters that take positive values in both the first and the second dimension (clusters 4 and 5), with the values of the first dimension being larger than those of the second. Similarly, we obtain a cluster that acts as a pivot between one dimension and the other (cluster 3). Finally, we see how two other clusters (clusters 1 and 2) take positive values in the second dimension and negative values in the first. Finally, relying on the k-means partitioning algorithm, we will improve the previous clustering performed with Ward's algorithm.



Interpretation of the clusters

The interpretation of the clusters can be done in three different ways:

- by describing the clusters by the dimensions;
- by describing the clusters using the over-used and under-used words in each cluster; or
- by using the annual reports that compose the cluster.⁴¹⁹

For our analysis, we will describe the clusters with their 30 over- and under-used words from each cluster.

As with the STM, the two others quantitative language analyses applied to the Rockefeller Foundation's annual reports will provide us with words (absolute frequency) and clusters (the HCPC) present in these documents where the Foundation presented and justified the areas in which it was involved in promoting development. The words that we will obtain from the absolute frequency analysis and those that make up the clusters of the HCPC. First, the central themes that emerged at the time and to which the Foundation wanted to provide a solution to

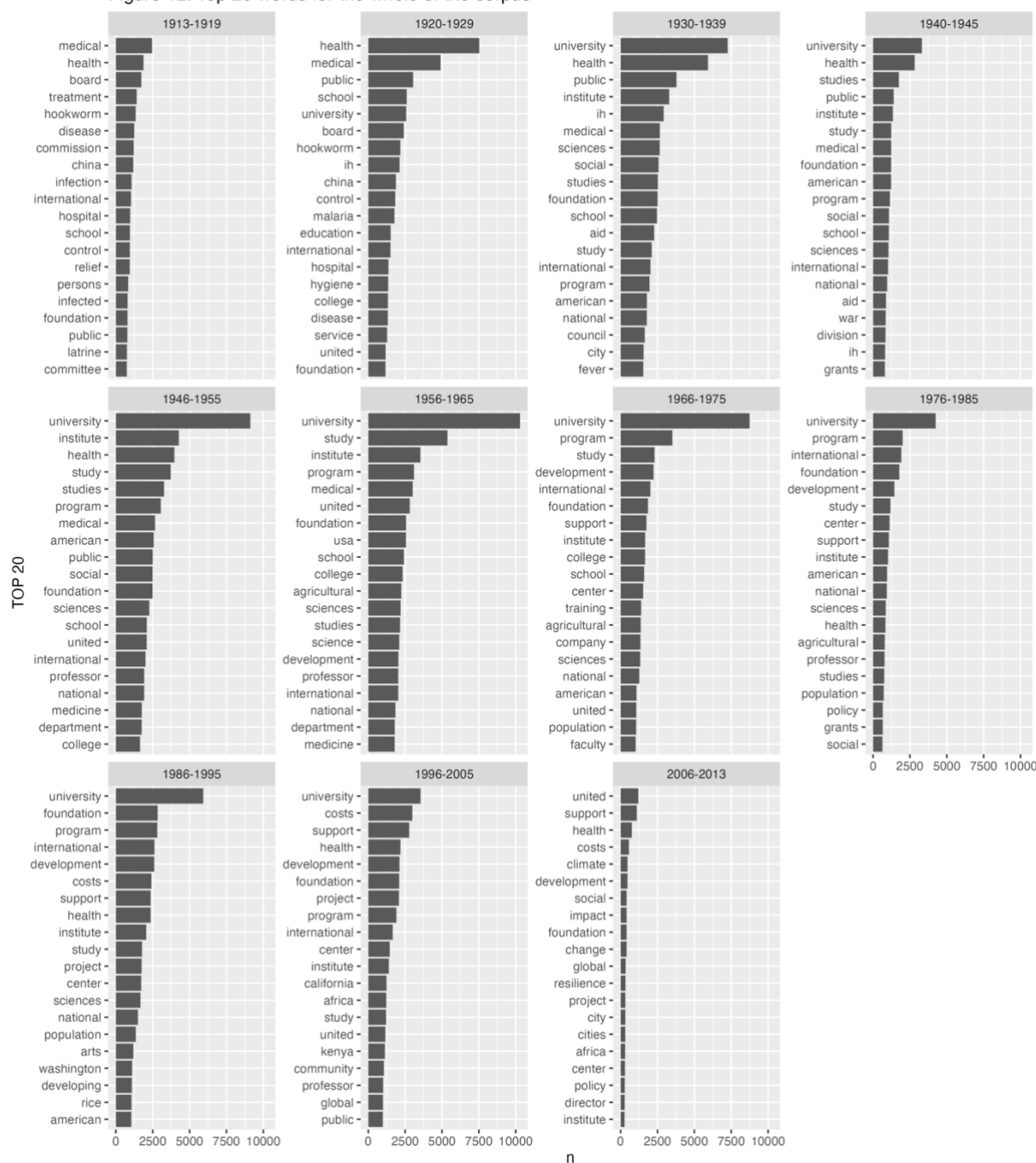
⁴¹⁹ Bécue-Bertaut, *Textual Data Science with R*, 98.

achieve its ultimate goal “to promote the well-being throughout the world”. Second, the places where it was involved in each theme. Third, the methods to achieve this objective.

Absolute term frequency

It is necessary to mention the evolution of the word count in the annual reports because, when using quantitative techniques that rely on word frequency, the results will be less meaningful if a document contains fewer words. Moreover, we chose the periodisation with which we conducted this analysis because we wanted to see if there were substantial changes between the period before and after the crisis of 1929. Similarly, we assumed that annual reports from the period before the 1930s would have different word distributions since it was in 1928 that the Rockefeller Foundation absorbed the Laura Spelman Rockefeller Memorial (LSRM), an organisation in the galaxy of Rockefeller foundations focused on the promotion of the social sciences. In addition, we wanted to see whether there would be a major change in annual reports before and after the Second World War the words used. After the Second World War, the periods were ten years. As will be seen below, this periodisation is not the same as the one obtained after HCPC and STM. This is because the analysis of absolute frequencies is exclusively supervised, whereas HCPC and STM are unsupervised techniques, and it is the algorithms that make up these techniques that define the period.

Figure 12: Top 20 words for the whole of the corpus



As we see in Figure 12 above, where the top 20 words more frequently used by the Foundation in their annual reports are plotted, this organisation uses some words in each period more regularly than others. However, we see how certain words are transversal to the whole historical period under examination – such as “*university*”, “*medical*”, “*health*”, “*international*”, “*sciences*”, “*school*”, “*institute*” or “*foundation*”. Therefore, we might be inclined to think that the Foundation devotes its efforts to activities related to education and health internationally. However, we see that other words are used very frequently but at more defined/concrete times.

For example, from 1913 until the outbreak of the Second World War, terms relating to hygiene and contagious diseases such as “*hookworm*”, “*disease*”, “*infection*”, “*control*”, “*latrine*”, “*hygiene*”, or “*malaria*” are among the most frequently used terms. As for the words relating to the way it organises and implements its work, we find words such as “*board*”, “*medical*”, “*commission*”, “*committee*”, “*school*,” or “*institute*”. Lastly, “*international*” and “*china*” give us a glimpse of the regional areas of interest.

After the WWII, new words burst onto the list of the most used words. For example, new words that could be linked to our first semantic field emerge. Terms such as “*social*”, “*science/s*”, “*development*”, “*agriculture*”, “*agricultural*”, or “*population*” invite us to think that the Foundation’s activities are diversifying and becoming more complex, to the point of encompassing issues related to what we understand today as “development”. As for the nouns that refer to how this actor implemented its programs, we find terms such as “*programme*”, “*department*”, “*college*”, “*institute*”, “*university*”, or “*center*” indicate that the Foundation continues relying on universities to promote its plans. Lastly, “*american*”, “*usa*”, or “*united*” lead us to think that despite the Foundation’s international vocation, improving the local situation in the United States was a recurrent objective by that time.

Then, after the debt crisis of the 1980s, words such as “*costs*”, “*community*”, and “*Africa*” became part of the most used group of words. This suggests not only a change in the geographical focus of the Foundation’s involvement but also the inclusion of other actors, such as communities in the political arena. Furthermore, it seems that after the economic crises of the 1980s, the Foundation paid more attention to the costs of its programmes. Finally, in the 21st century, words such as “*climate*”, “*support*”, “*impact*”, “*change*”, or “*resilience*” indicate to us how concerned the Foundation was by the challenges climate change introduced. Moreover, in this century, a new front to improve the well-being of humankind irrupted. Now, not only the fight to improve the livelihoods was in the fields, but in the “*cities*”, which should be resilient to the challenges of climate change, the increase in human population and pollution.

Let us remember that the Foundation’s objective is to “promote the well-being of mankind throughout the world”, so after this mere summary of the words most used in absolute terms in the Rockefeller Foundation’s annual reports, We can say that this actor has been persistently involved in certain activities throughout its first century of life (those relating to health and

education) and others that, over the years, have been added to its portfolio (those relating to agriculture, demography or even climate change) to achieve its objective.

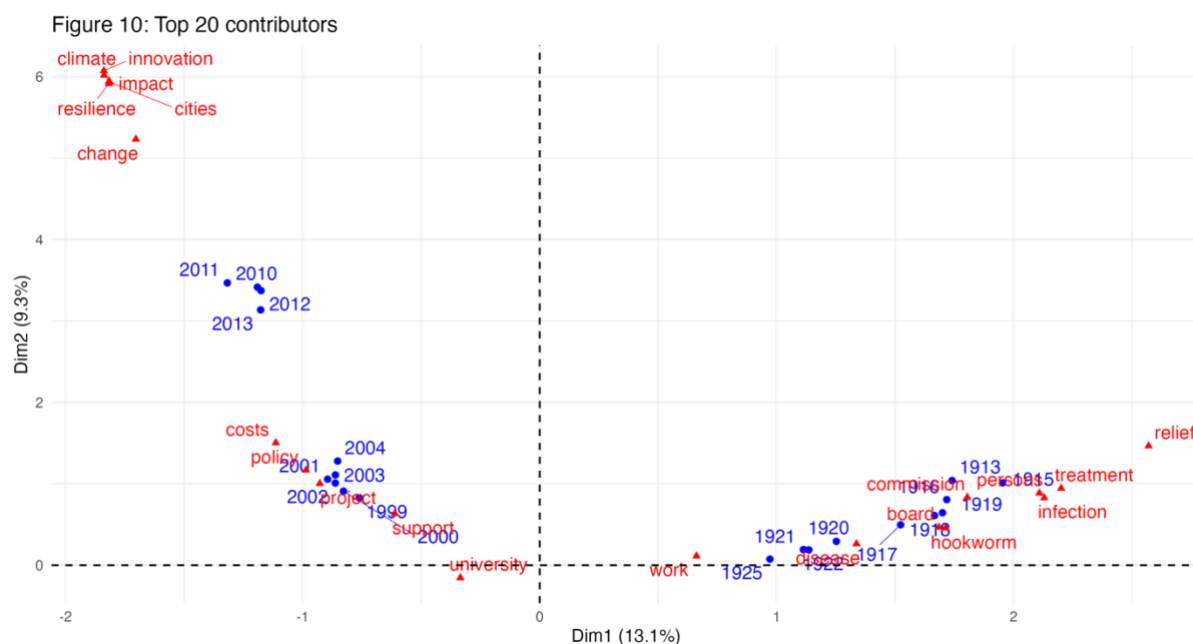
However, this analysis is still too superficial; after all, it merely calculates the most used words in absolute terms at different times. Moreover, having grouped the words ourselves, we may have included some bias in interpreting the data. Therefore, we will use the HCPC and the STM to reduce bias.

Hierarchical Clustering on Principal Components (HCPC)

Correspondence Analysis

In order to start with the HCPC, will perform in the first place the Correspondence Analysis (CA) of the corpus. As explained previously, the CA will summarise our data and allow us to represent the summarised data into a biplot where we can see the proximity between documents, between words, and the associations between documents and words. Thus, two documents are close if they favour or avoid the same words, regardless of the number of words in each document. On the other hand, words are close if they are distributed similarly in different documents, irrespective of their frequency.⁴²⁰ Figure 10 below shows the bi-dimensional graph where the annual reports (row variables) are plotted in blue dots and the words (column variables) in red triangles. To make it easier to read, this graph only contains the top 20 contributors of each principal component, i.e., the top 20 annual reports and words that contribute more to creating our corpus's two first principal components (summaries). The original graph can be found in the annexe section, together with a complete analysis of the \cos^2 values and contributions to the dimensions of rows and columns.

⁴²⁰ Bécue-Bertaut, 18–19.



The first dimension appears plotted in the abscissa axis, while the second is represented in the ordinate axis. Here, the first dimension explains 13,1 % of the whole variability of the corpus, while the second dimension explains 9.3 % of it; thus, our two principal components explain 22,4 % of the total variance of the corpus. This percentage could seem low, but considering the extension of our corpus, it is not as low compared to other peoples' results using a similar method and corpus.⁴²¹

To evaluate whether there is a statistically significant association between the row's variables (annual reports) and columns' variables (nouns), we run a chi-square test with the function "chisq.test" of the "stats" package, and we get a chi-square statistic of 2676007 with a p-value $< 2.2e-16$ and 50470 degrees of freedom. Given that the p-value is smaller than 0.05, we can reject the null hypothesis of variables' independence and accept the alternative hypothesis that annual reports and nouns in our corpus are associated. That is, annual reports and words have a link between them. Additionally, we calculated the Cramer's V to measure the association between the row variables (annual reports) and column variables (nouns). The obtained Cramer's V is 0.18, indicating that there is some association between these two variables, albeit not too strong.

⁴²¹ Bastin and Bouchet-Valat, 'Media Corpora, Text Mining, and the Sociological Imagination-A Free Software Text Mining Approach to the Framing of Julian Assange by Three News Agencies Using R. TeMiS', 15.

As we see below, the annual reports follow a chronological trend in both the first and second dimensions. In the first dimension, the reports from the beginning of the 20th century take positive values while taking lower values in the second dimension. Conversely, the most recent annual reports take negative values in the first dimension while taking positive values in the second dimension. This means that early and recent annual reports tend to use different words more frequently. For example, annual reports from the second decade of the 20th century tend to favour words such as “*relief*”, “*treatment*”, “*commission*”, or “*hookworm*”. On the other side of the spectrum, annual reports belonging to the 21st century use more frequently, such as “*climate*”, “*cities*”, “*resilience*”, “*impact*” or “*change*”.

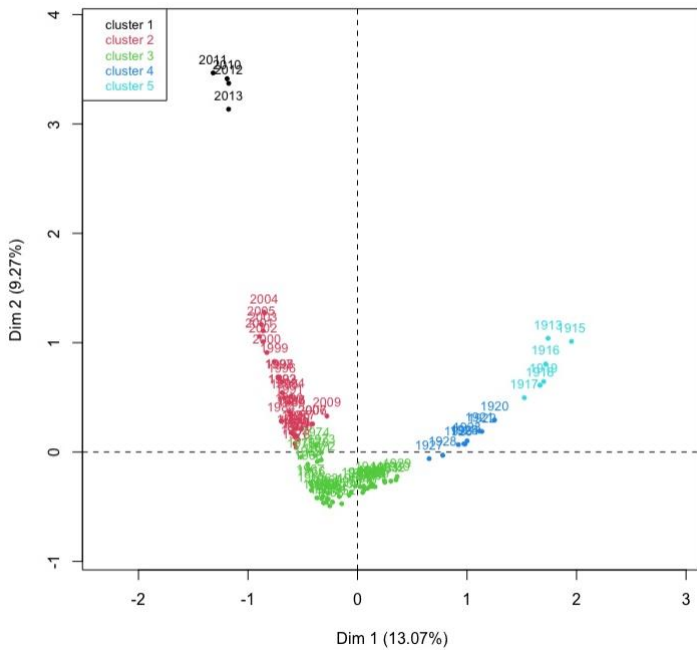
This aligns with the results we obtained by analysing the most frequent terms on an absolute basis. there is structure in the foundation’s use of words. Words that were overused at the beginning of the period (words related to the world of hygiene and various diseases) are underused at the end of the period, which invites us to think that while the Foundation’s purpose was stable, this actor changed the way it wanted to achieve welfare promotion. Let us now see what the HCPC can contribute to our analysis.

HCPC Clustering

The reason for clustering is to identify groups (clusters) of similar objects (in our case, nouns) in our corpus.

The factor map below shows the distribution of the five clusters created.

Figure 11: Factor map with the five clusters



As we see in Figure 11 on the left, we obtain two clusters with positive values in the first dimension (clusters 1 and 2), one cluster that acts as a pivot between the first and the second dimension (cluster 3) and the last two clusters taking positive values in the second dimension (clusters 4 and 5) while taking negative values in the first dimension. On top of this, it is worth noting that clusters 4 and 5 (especially the latter one) also take positive values in the second dimension. This means that the annual reports of these two clusters use more words than the average annual report which correlate positively with

dimensions one and two, especially cluster 5. In contrast, annual reports belonging to clusters 1 and 2 tend to use more words correlating positively with the second dimension than the average annual report while underusing words correlating positively with the first dimension than the average annual report.

To show the most representative reports for each cluster, we will use two different types of individuals (in our case, the annual reports): the so-called paragons (the individuals closest to the centre of their cluster) and the specific individuals (the individuals furthest away from the next closest cluster centre).⁴²² While the in-depth description of the clusters using the annual reports can be retrieved in the annexe section, here we will confirm the trend seen up until now, i.e. the clusters are arranged in chronological order. Thus, in clusters 1 and 2 we find annual reports from the period 1975 - 2013 (except for the years 2006, 2007 and 2009 which are in cluster 3); in cluster 3 we find annual reports from the period 1929 - 1974 and, finally, in clusters 4 and 5 we find annual reports from the period 1913 - 1928.

⁴²² Husson, Josse, and Pages, 'Principal Component Methods-Hierarchical Clustering-Partitional Clustering: Why Would We Need to Choose for Visualizing Data', 12.

Clusters 4 & 5: 1913 - 1928

As for the words that are most characteristic of each cluster, we will start presenting which are the over and under-used words in the clusters of the early years of the Foundation (clusters 4 and 5). Among the over-represented nouns relating to the objectives of the foundation's programmes, we find that in this period, the Foundation is focused on the improving the "health" through the "treatment", "relief" and "control" of "disease" and "infection" such as "malaria" "hookworm". As for words relating to the places where it implemented its programmes, we find "brazil" or "c.m." (referring to the China Medical Board). Among those relating to the modus operandi, we find "board", "c.m.", "board", "hospital", "hygiene" or "latrine". Regarding underused terms related to the objectives of the Foundation "corn", "nutrition", "protein", "viruses", "artists", or "homes". Concerning the places of deployment of their campaigns, we find "europe", or "ceylon". As for the words hinting to how this foundation proceeds, we find "laboratories", "scholarships", "equity" or "experiment".

Cluster 3: 1929 - 1974

Let us move on to cluster 3, the most numerous of them, covering 51 years (from 1929 to 1974 including the years 2006, 2007 and 2009) and the one that acts as a pivot between the 4 clusters that make up the extremes both chronologically and in the factorial map. This cluster accounts for the change that emerges in the three noun groups. As reflected in the overused nouns, in terms of objectives, we see how the Foundation focuses its efforts on the "research" and "teaching" on "virus", "economics", "chemistry", "genetics", "plant", "physiology", or "biochemistry". As for the geographical area, we see "USA", "England", "Colombia" or "Chile". Corresponding to the way of proceeding, the Foundations seeks to give "grant" and "aid" to the "research", to "travel" (so researchers can spend research time abroad) and "teaching", "library", or "laboratories". Finally, underused names related to the targets, we find "hookworms", "d.m.e", "drainage", "fertility", "dance", "clothing", "art", "food". While those pertaining to the geographical area, we find "Porto", "New York" or "Peking". Finally, in this cluster we find terms such as "portfolio" which pertain to the way they carry out their activities.

Cluster 1 & 2: 1975 - 2013

We will comment on the nouns of clusters 1 and 2 together, spanning from 1975 to 2013. These clusters illustrate another change of focus in the three groups of nouns. We see how, from 1975 onwards, themes linked to "women", "rice", "population", "technology", "biotechnology",

“arts”, “community”, “development”, “resilience”, “innovation”, “climate”, “change”, “city/cities”, “transportation”, “network”, “health”, or even “community/communities” gain importance in the foundation’s activities. Regarding the words relative to the geographical focus, we find words such as the previously mentioned “city/cities”, “york/ny”, “Washington/d.c.”, “Kenya”, “California”, and “Africa”. To achieve these objectives, it is proposed to “manage” “projects” and “programmes” paying attention to the “costs” and to “support” “policies” and “initiatives” while organising “conference” and “networks”.

Let us look at the underused words in both clusters. As explained in the paragraph above, new objectives and programmes made their way into the Foundation’s agenda, leaving aside those with which it started out, i.e., programmes related to “larvae”, “diseases”, “*chenopodium*”, “statistics”, “protein”, “influenza”, “biochemistry”, “physiology”, “wheat”, “food”, “genetics” or even “drama”. As for words related to the geographic focus we find “Colombia”, “India”, “England”, “Chicago”, “Ceylon” or even “Porto”. Regarding the way of implementing possible solutions, we find “centers”, “departments”, “institute”, “researches”, “colleges”, “visits” or “cm” (for the China Medical Board).

By using overused and underused words, we give a more granular picture of how the Foundation conceived of problems, their solutions and the justifications it gave for one solution or another. We see not only that certain words were used more at the expense of others but also that the words most used in one period are the least used in others, thus reinforcing the temporal division of the linguistic structure. In this sense, during the first years of the Foundation (clusters 4 and 5), it focused on the treatment, alleviation and control of diseases and infections such as malaria, hookworm, yellow fever and tuberculosis. In addition, it promoted the creation of schools of hygiene and public health. Geographically, it concentrated in Central and Latin America, as well as in China, where it promoted the improvement of medical education.⁴²³

Later, in the period between 1929 and 1974 (cluster 3), the Foundation expanded its interests and consolidated this expansion. Consequently, we see how it supported different branches of knowledge such as chemistry, genetics, biochemistry and economics. In addition, it was interested in promoting studies that would increase agricultural productivity in order to meet the demographic challenge. Geographically, these objectives led it to concentrate on Latin

⁴²³ Rockefeller Foundation, ‘Annual Report 1918’, 19–20.

America and Western countries. A further difference with the previous period is the ways in which it acted. If in the first period (covered by clusters 4 and 5) the bulk of the activities supported by the Foundation were carried out by the Foundation itself as an operational agency, in this second period, the Foundation outsourced many of the activities it supported.⁴²⁴

Later, in the period between 1975 and 2013 (covered by clusters 1 and 2), as other themes gain in importance. For example, the importance given by the Foundation to the demographic challenge is illustrated by the word “*population*” being one of the most used words of the period in comparison to others. Likewise, the urgency to increase productivity in the agricultural sector is perpetuated and led them to seek to accelerate this process through the application of biotechnological techniques. Similarly, the arts are gaining in importance in the activities that the Foundation supports, as is the fight against climate change. This added layer of diversity in the activities in which the Foundation became involved led the Foundation to pay more attention to cities in the United States, Africa and Southeast Asia.

However, as the HCPC does not use time-related data for its implementation, we cannot establish the relationship between time and the more or less used words. To make up for this shortcoming, we use the STM.

⁴²⁴ Rockefeller Foundation, ‘Annual Report 1938’, 5–8.

Appendix Ethics

Self-analysis of the ethical dimensions of the Master thesis

(This document presents the reflections of the student elaborated in dialogue with her thesis director)⁴²⁵

Last name and first name of the student : Lorenci de Francisco, Iván

Last name and first name of the supervisor : O’Sullivan, Mary

Master's programme : International Economic History

Title of Master's thesis : Develop Yourself! Development according to the Rockefeller Foundation (1913 – 2013)

Abstract (maximum 250 words):

This mémoire seeks to explore the concept of development using the Rockefeller Foundation in its first century of existence. To do so, we have quantitatively analysed the Foundation's annual reports from 1913 to 2013 and then reconstructed and interpreted the activities and institutions in which they were involved. We have observed how throughout the period, the concept of development acquires new layers of meaning. In addition, we see the centrality of the ethics of self-help and market-oriented mentality. Finally, we see how the state loses relevance in the development process when private enterprise starts to get involved in it.

Part A (to be completed **before** fieldwork)

Date : 13.09.2022

⁴²⁵ In this document, the feminine form includes all genders.

A.1. Research participants

How does your project involve participants (questionnaires, interviews, observations, experiments, etc.)? What is their profile? How are they recruited and informed about the objectives and steps of the research? How is their consent obtained? (maximum 500 words)

The work uses primary sources from people who are either dead or who produced such sources for distribution to a wide audience. Their consent to use such sources is therefore taken for granted.

A.2. Collected data

What types of data are collected and how are they processed? With what technological means is the data collected, stored and processed? Will your data be anonymised and if so, how? If not, please explain why. Do your data belong to the category of "personal data" or "sensitive data" as defined by the Geneva LIPAD law⁴²⁶ ? (maximum 500 words)

I have used the annual reports of the Rockefeller Foundation, which are freely available on the Foundation's website. The data were not anonymised because it is neither necessary to protect the privacy of the authors nor necessary for the work.

The data do not fall into either of the two categories mentioned above.

A.3 Ethical issues and identified risks

What are the possible ethical issues or risks linked to your research project, for the participants and for the Master's student ? What strategies are considered to prevent or limit their impact? (maximum 500 words)

There is no ethical problem for the authors of the documents used.

Part B (to be completed **after fieldwork)**

Date : 11.02.2023

B.1. Research participants

⁴²⁶ See video capsule "putting research ethics into practice".

Have there been any changes in your project regarding the research participants? If so, which changes have an ethical dimension? (maximum 250 words)

B.2 Collected data

Has the collection, storage and processing of the data been modified from your original intention? If so, which changes have an ethical dimension? (maximum 250 words)

No

Is your data stored after your thesis is validated? If so, where is it stored, and for how long? (maximum 250 words)

Yes, on my personal computer. Until I delete the data if I ever do.

B.3 Ethical issues and identified risks

Have the ethical issues or risks identified before fieldwork evolved over time? Have the strategies put in place to prevent or limit the risks been effective? Did new ethical issues or risks emerge during the course of the research? If so, which ones? (maximum 500 words)

No. No risks. No new stakes because by construction there can be no issues.

Part C (free)

Date(s):

Share here your thoughts on the ethical dimensions of your project that did not fit into categories A and B (maximum 500 words).

Nothing to declare.

This document is filled by the student and validated by her supervisor. In order to identify the ethical issues and reflections developed in the framework of the Master's theses carried out in the Faculty, the thesis supervisor sends this completed document to the chair of the consultative ethics commission of the Faculty of Social Sciences (ethique-autoevaluation@unige.ch).

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R Packages

We used R version 4.2.2 (R Core Team 2022a) and the following R packages: cluster v. 2.1.4 (Maechler et al. 2022), corrplot v. 0.92 (Wei and Simko 2021), factoextra v. 1.0.7 (Kassambara and Mundt 2020), FactoInvestigate v. 1.8 (Thureau and Husson 2022), FactoMineR v. 2.8 (Lê, Josse, and Husson 2008), Factoshiny v. 2.4 (Vaissie, Monge, and

Husson 2021), furr v. 0.3.1 (Vaughan and Dancho 2022), future v. 1.33.0 [@], ggcorrplot v. 0.1.4 (Kassambara 2022), ggpage v. 0.2.3 (Hvitfeldt 2019), ggraph v. 2.1.0 (Pedersen 2022), ggwordcloud v. 0.5.0 (Le Pennec and Slowikowski 2019), grid v. 4.2.2 (R Core Team 2022b), gt v. 0.9.0 (Iannone et al. 2023), igraph v. 1.5.0.1 (Csardi and Nepusz 2006; Csárdi et al. 2023), janitor v. 2.2.0 (Firke 2023), kableExtra v. 1.3.4 (Zhu 2021), knitr v. 1.43 (Xie 2014, 2015, 2023), NbClust v. 3.0.1 (Charrad et al. 2014), openxlsx v. 4.2.5.2 (Schauberger and Walker 2023), pdftools v. 3.3.3 (Ooms 2023), quanteda v. 3.3.1 (Benoit et al. 2018), RColorBrewer v. 1.1.3 (Neuwirth 2022), readtext v. 0.90 (Benoit and Obeng 2023), rmarkdown v. 2.23 (Xie, Allaire, and Golemund 2018; Xie, Dervieux, and Riederer 2020; Allaire et al. 2023), rstatix v. 0.7.2 (Kassambara 2023), scales v. 1.2.1 (Wickham and Seidel 2022), shiny v. 1.7.4.1 (Chang et al. 2023), spacyr v. 1.2.1 (Benoit and Matsuo 2020), stm v. 1.3.6 (Roberts, Stewart, and Tingley 2019), stmCorrViz v. 1.3 (Coppola et al. 2016), stopwords v. 2.3 (Benoit, Muhr, and Watanabe 2021), tidygraph v. 1.2.3 (Pedersen 2023), tidylo v. 0.2.0 (Schnoebelen, Silge, and Hayes 2022), tidytext v. 0.4.1 (Silge and Robinson 2016), tidyverse v. 2.0.0 (Wickham et al. 2019), tm v. 0.7.11 (Feinerer, Hornik, and Meyer 2008; Feinerer and Hornik 2023), udpipe v. 0.8.11 (Wijffels 2023), vcd v. 1.4.11 (Meyer, Zeileis, and Hornik 2006, 2023; Zeileis, Meyer, and Hornik 2007), webshot v. 0.5.5 (Chang 2023), widyr v. 0.1.5 (Robinson and Silge 2022), wordcloud v. 2.6 (Fellows 2018), xlsx v. 0.6.5 (Dragulescu and Arendt 2020).

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