Latin America and the Caribbean). This strengthening of national and regional social sciences is not only an aspiration but also a reality in a number of countries including China, India and Brazil. It contributes to the development of the global social sciences, gradually reshaping them into a multipolar scientific world.

What do social sciences in North African countries focus on?

Roland Waast, Rigas Arvanitis, Claire Richard-Waast and Pier L. Rossi in collaboration with the King Abdulaziz Foundation Library

What are the main objects of social science research in the Maghreb? In the Maghreb there is prolific scientific activity, and the factors affecting the choice of research topics spur specific controversies. As a contribution to these debates we present the main results of a comprehensive study of publications in the human and social sciences in Algeria, Morocco and Tunisia.

This article presents the main results of a comprehensive study of publications in the human and social sciences in Algeria, Morocco and Tunisia.

A study based on a library’s multidisciplinary catalogue

This study was based on the analysis of a large library catalogue. Following an important selection, coding and ‘cleaning’ effort, our research provides data covering approximately 100,000 academic publications over twenty-five years (1980–2004).

Unlike similar studies, we chose to examine a large library catalogue rather than international databases such as IBSS, SSCI or Francis. This choice was due to a series of considerations, some technical and some to do with social science publication practices. There is a tendency within the social sciences to publish more books than journal articles, unlike in the natural and exact sciences. In the Maghreb we also found a large number of academic publications that were unregistered in the international or even the national reference systems. Moreover, journals that are present in the large bibliographical databases have strong biases against non-English languages and particularly Arabic, which in our case represents two-thirds of the output.

Three criteria guided our choice of libraries:

- an exhaustive publications register, meaning a library that has an active document-seeking strategy and adequate management tools and know-how
- a relevant index with a bibliographical note established for all the collected documents
- a computerized file that could be used for data-mining purposes.

There was only one library in the Arab countries (including the Gulf countries) that met these criteria, the King Abdulaziz Foundation library in Casablanca, Morocco. Since 1980, this library has been committed to gathering all publications originating from the Maghreb or dealing with it in the human and social sciences, whether published within or outside the Maghreb, and whether written by regional or foreign authors. It brings together the different publications through international but also local markets and publishers, and has an active policy of seeking information instead of waiting for publishers to deposit books and articles. All publications (articles, books and book chapters) are indexed through a thesaurus. Authors are described in a note that includes their citizenship and standardized name in Arabic and Latin letters, probably a unique feature worldwide. This extensive computerized database comprises topics, keywords and authors’ names, which are in one-to-one mapping with numbers so that the

This production is divided into three roughly equal categories: books, chapters in books, and articles. About one-third of the references (34,000) dealing with the Maghreb are written by authors who do not originate from the region, and the rest are by Maghrebi authors. There was only a slight rise in the proportion of Arabic-language publications, from 50 per cent in 1980 to 60 per cent in 2004. The second most important language in 2004 was French (33 per cent).

Table 5.1 shows the distribution of this material according to the main disciplines in the corpus and its evolution over time. Over the 25 years from 1980, law and literature have been gaining ground, while history and economics have declined. These changes do not mirror global trends, nor do they indicate a change in student or academic staff numbers. The underlying explanation seems to be linked to a shift in readership interests.

A changing set of publication themes

Disciplines as they are assigned by librarians are not the only way of classifying output. A more dynamic method would be to reflect the semantic proximity of various keywords that are assigned to the documents. We therefore created coherent packages of documents and called these clusters of documents ‘scientific themes’ (Figure 5.2). As

1. Through a statistical procedure known as K-means non-hierarchical classification of associated keywords. Claire Richard-Waast carried out this analysis.
can be seen, civilization, historical and cultural themes are dominant. They are closely followed by themes relating to policy and politics. 2

Over time, several empirical fields have appeared successively: agriculture and rural studies in the early 1980s; urban studies (at their peak by 1985–1990); and gender studies during the 1990–1995 period (Table A5.2 in Annex 3). Since 2000, new themes have been emerging, such as cultural heritage, identity, law, political life and civilization, including arts, literature and language studies.

**Publication language and thematic interests go hand in hand**

European languages (English and French mainly) tend to dominate the current global research agenda, for example publications on women, the environment, and globalization and its economic consequences, as well as the research areas that are of particular concern for decision-makers (such as urbanization, natural risks, economics, policy, enterprise and management). By contrast, material connected to law, cultural life, education and local history is generally written in Arabic (Figure 5.3, see also Figure A5.4 in Annex 3). The choice of language also tends to be linked to epistemological issues: disciplines that try to find scientific laws must compare their findings with others and thus use a global language, whereas locally guided disciplines tend to favour local languages (Figure 5.3).

A number of concerns are common to all three countries (for example, literary studies, democracy, law, economic themes, studies on women and environmental concerns). But the intensity of concern and the approach to the topic may differ between the three. Islam, cultural identity and liberation movements, for instance, have been strong areas

---

2. For the purpose of the presentation, themes are grouped into larger ensembles. For details refer to our publication available at www.estime.ird.fr
of interest in Morocco, less so in Tunisia; but rural studies or ancient and early modern history have attracted greater interest in Tunisia than in Morocco. Finally we should stress that North African authors (we have a database permitting us to identify them) do not always share the same themes as European authors. The former seem more interested in education, law, political studies of local life, agriculture and rural studies, ancient and modern history, women’s studies, urbanization, language and cultural activities, whereas the latter are more interested in pre-independence history (Al Andalus and later periods), arts and political Islam. Some themes overlap for both Maghrebi and non-Maghrebi authors; for example, economic policy and enterprise, literary studies and the socio-political analysis of liberation movements.

A subtle dynamic of themes and words
While we cannot go into much detail here, we argue that even within a single thematic cluster, ‘migrations’ occur. These migrations can be analysed by the changing set of keywords that are associated in a cluster. Some of these changes take the abrupt form of ruptures rather than continuous evolution. More often, a theme and its keywords are stable over a long period of time, around thirty years. Migrations are usually more subtle and difficult to observe at the disciplinary level or even at a broad level of general interest than within a single theme. For example, in sociology we can track how women’s studies emerged from studies on the family and then were separated from them; or how ‘cultural identity’ became a major theme, into which several other themes are now merging: Islam, emigration, education, Berber studies, linguistics, modernity and Arabization.

A local agenda and a definite empirical stance
On the whole, research in the social sciences tends to focus on issues of national interest; moreover, most research is mainly empirical investigation in the sense of involving the field gathering of data. Some of the themes we find on the global agenda are of course represented (for instance, women, migration and poverty). Additionally, there is a high level of cooperation with European countries, in particular France and to a lesser extent Spain. But as we have mentioned, interests are different on the North and South shores of the Mediterranean: rural sociology, for instance, has held a dominant position in Morocco, in sharp contrast to European research, and its own praxis in this field. Industrial and labour sociology in Algeria during the 1980s is another relevant example. In no way have we witnessed a tendency to adopt the global agenda en bloc. We also witness a clear tendency for hyper-empiricism, a lack of comparative studies, a number of self-centred themes and very little generalization or theorization.

Roland Waast is a senior researcher at the Institut de Recherche pour le Développement (IRD). He was a co-founder of the Science, Technology and Society journal and has written a number of books and articles on scientific communities and science indicators. He has just carried out a ‘Mapping of Science’ with J. Mouton in 55 developing countries.

Rigas Arvanitis is a senior researcher at the Institut de Recherche pour le Développement (IRD, France). He has spent numerous years working on innovation, technological apprenticeship and science policies in Latin America (Venezuela, Mexico) and in China. Most recently he led the European project ESTIME (Estimation of scientific and innovation capabilities in eight South Mediterranean countries, from Morocco to Lebanon).

Pier Luigi Rossi is an engineer at the Institut de Recherche pour le Développement (IRD).

Claire Richard-Waast is a statistician. She has held managerial responsibilities in R&D at IBM and now works at Electricité de France.

This study was completed thanks to the support and collaboration of the King Abdulaziz Foundation Library in Casablanca, Morocco. The Foundation Library holds more than 600,000 documents, all of them catalogued in a computerized index system. One of its missions is to gather all human and social science publications originating from and dealing with the Maghreb.