EDITORIAL

DOI: 10.12957/demetra.2015.16607

Food and nutrition: a really interdisciplinary scientific field?

Multi-, inter- or trans-disciplinary. This is how the Food and Nutrition science has been identified in numerous documents disseminated in such social space. The "Document of the *Nutrition* Area of CAPES", for example, is very clear when it approaches this theme, by stating, in the "interdisciplinary" topic, that:

> Food and Nutrition *is a field of production of knowledge and scientists' educational development where diverse disciplines and theoretical-methodological approaches are addressed among tensions and consensus. Thus, proposals of postgraduate programs organized around topics such as* "nutrients, foods and diets with a focus on the health-disease-care process" *are considered to be embraced by this institutional space. From the perspective of interdisciplinarity, in the area of* Nutrition, *programs addressing the following branches of knowledge can be accepted: Clinical Nutrition (presence of disciplines and contents oriented to the therapeutics of all individual´s pathologies;* Basic and Experimental Nutrition *(including disciplines and contents dealing with studies with humans and animals, such as biochemistry, physiology, genetics, among others);* Food Science and Technology Applied to Health *(disciplines and contents within the range of chemical composition and foods development);* Food and Nutrition on Public Health *(disciplines and contents such as epidemiology, policies, planning and management of health, among others); and* Human and Social Sciences on Food and Nutrition *(disciplines and contents such as sociology, anthropology, epistemology, collective feeding, among others).*

They are quite distinct scientific cultures facing issues that transcend the disciplines paradigm. There is a world of Nature Sciences – particularly *Biomedicine*, expressed in studies conducted in the field of *Clinical Nutrition, Basic and Experimental Nutrition, Nutrition and Foods* or *Nutritional*

Epidemiology – which finds common ground on the fast consumption of the latest information related to universal phenomena, with consensus reasonably achieved, characterizing a normal science, as Bachelard tells us. There are also Human Sciences, with emphasis on the sciences that deal with social relations inexorably immersed in values, interests and power will, relating to subjective, qualitative, specific and local issues. Worlds that can and should dialogue, but without quitting what they are: distinct universes.

The epistemological pluralism is imposed to the field of Food and Nutrition so it can be realized in full. The definitive recognition of such differences requires the use of instruments of evaluation for the work performed, suitable to each of these spaces or, in other words, able to identify what publications of quality have been published in each of these places.

Regarding the evaluation of scientific works in such different means of production of knowledge, there are controversies. Apart from the huge challenge involved in science evaluation, an issue that can be put into discussion is: could a single instrument assess so diverse scientific procedures?

No matter how obvious the answer, CAPES and, particularly, the so-called Major Health Area, determines that only *one* model of procedures can be used to assess the scientific knowledge published in scientific journals. Calculations of impact factors and other bibliometric indices are the major parameters that score higher any publication in periodicals that disseminate fast-consuming, short-lived knowledge, of transient worth. It reminds us of what Lipovetsky calls "hypermodernity": a "fast" world, in which the consumption "of now" already brings its immediate disuse and the urgent need for replacement by a new product.

Plunged into a voracious market of scientific periodicals, heavily concentrated in the hands of successful private publishers, researchers and students of the biomedical field see time goes fast in the run for the next publication category A1 (100 points), or A2 (85 points) or B1 (70 points). Many of these agents reach such levels, once it seems to have been consolidated as a favorable value in their scientific culture, despite strict criticisms to the model, as can be seen in some manifests that circulate worldwide, viz.: *Bibliometrics: The Leiden Manifesto for researchmetrics*,[1] published in last April in *Nature* and *DORA - The San Francisco Declaration on Research Assessment*.[2]

Works carried out in the field of Human Sciences in general are based on acclaimed studies, virtually all books produced decades, centuries and even millenniums ago. They also use articles published in scientific periodicals for dissemination of the produced knowledge, these means being

1 Available on: http://www.nature.com/news/bibliometrics-the-leiden-manifesto-for-research-metrics-1.17351. Accessed on May 23, 2015.

2 Available on: http://am.ascb.org/dora/. Accessed on May 23, 2015.

assessed not by bibliometric indicators but through the indexing bases where they are included. Another world, another assessment tools.

Returning to interdisciplinarity, i.e. the spaces where multiple disciplines and scientific cultures would converge, what do we have? Divergence! Scientific researches that deal with objects that can only be addressed by means of studies based on theoretical-methodological fundamentals typical of Human Sciences, and assessed by the bibliometric indicators of the periodicals where the corresponding papers are published.

To visualize the disastrous implications of such procedures, we illustrate with information available on the electronic site "*WebQualis*", where you can find the classification of the periodicals where researchers publish their works. The publication *Avaliação* (UNICAMP), which primarily publishes studies on "higher education assessment", i.e., dealing with objects of key importance to the universities, for Science it is classified as A2 (85 points) in the area of Education assessment, and as B4 (15 points) in the area of Nutrition and B4 (15 points) in the area of assessment of Nutrition. This means to say that Nutrition does not value such theme, once the quality of the publication is attested by the field of maximum knowledge of this subject: Education. It also means that the researchers engaged in studying issues relating to higher education in Nutrition will have to publish four articles in this journal to achieve the scores of a single article published in a biomedical periodical classified as A2 in Nutrition. On the other hand, the researcher subjected to the assessment criteria of the area of Nutrition of CAPES, who has their studies focused on the field of Humanities and has been making efforts to deal with themes connected with higher education, must work four times more than the one in the biomedicine area.

Teachers of postgraduate programs, who decided for the field of research on Human Sciences and Food and Nutrition Policies are leaving behind the object of studies therein included to seek more valuable spaces of knowledge production, such as Nutritional Epidemiology, for example. We are therefore facing an emptying process of the interdisciplinarity aspect, which can be reversed by simply adopting evaluation criteria that are more appropriate to the cultures that need to interact and share experiences.

It is worth reminding that Edgar Morin draws our attention to problems that surpass the disciplines paradigm, addressing them in their complexity. Hunger is constant in a world more and more overwhelmed with scientific products and innovative technologies. Its extreme opposite and Siamese twin – obesity – is presented as a new world epidemic that advances very fast and whose disciplines have shown failures and shortcomings.

Assuming the complexity required by the thinking process, re-connecting what is fragmented in the sciences and other social places is a vital step. Part of this step is to bring the Biomedical Sciences closer to Humanities, valuing their specificities and building Food and Nutrition more than an interdisplinarity field: as a complex field.

Shirley Donizete Prado
Fabiana Bom Kraemer

Editors