Revisiting the Issue of Interdisciplinarity and Disciplinary Distinctions in Social Sciences

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Abstract

Interdisciplinarity depicts a theoretical and pedagogical approach and a set of academic practices that has been increasingly more popular and widespread. Being more than a general term describing theoretical, pedagogical and institutional activities, interdisciplinarity has radically altered the conception of disciplinary distinctions and caused various disciplines to redefine their symbolic and methodological boundaries. Moreover, academic communities are on the way of changing their symbolic and institutional territories, very solidly defined at times, upon influence of interdisciplinarity. This article focuses on the concept of interdisciplinarity with respect to the relatively long history of disciplinary distinctions and attempts to critically analyze the various definitions of and problematic points regarding the concept.

Keywords: Interdisciplinarity, Disciplinary Distinctions, Postmodernism, Social Sciences, Methodology.

Introduction

Interdisciplinarity, when it first emerged as a concept, simply described a more efficient method of education by bringing together the methods and knowledge of different disciplines. However, this approach led to the questioning of the epistemological assumptions of different disciplines and ways of acquiring knowledge and, through the very perspectives it provided, led to a radical set of transformations. Moreover, interdisciplinarity has become almost a keyword not only in terms of academics of today, but also in the business world and in different professional fields. With interdisciplinary programs that are becoming increasingly common in universities and interdisciplinary approaches that are increasingly influential and important in different academic practices, interdisciplinarity has become a hallmark of contemporary education and approaches.

However, we see that the term is often used to create a conceptual confusion and is simply perceived as a side-by-side introduction of different areas of expertise. On the other hand, it is also true that the concept of discipline notion tends to define a particular specialty or specialization practice and, in particular, to create 'disciplinary disciplines' with the same specialization practice on the institutional level. This is a fairly accurate observation especially in areas such as cultural studies or communication that have begun to take root in the institutional sense. However, when the basic rationale of interdisciplinarity is understood, it would be clear that this is only a seemingly contradiction, that interdisciplinarity is not merely a discipline of different disciplines, which is to bring the boundaries of these disciplines together. In this relatively long historical light of the division of social and human sciences into objective disciplines, this paper aims to problematize interdisciplinarity, to reveal how interdisciplinarity emerges and to reveal the theoretical implications of interdisciplinarity, which is a concrete practice of interrogating traditional disciplinary distinctions.

Disciplinary Distinctions in Social Sciences and the Rise of Interdisciplinarity

Discipline is conceptually related directly to the notions of hierarchy and power. The discipline that derives from the word disciplina in Latin refers to a kind of master-apprentice relation in the learning process and necessarily implies a specialized and valued knowledge that some have and some do not possess (Moran, 2010: 2). Discipline speaks of a certain degree of coherence in the sense that it has been "encased in stainless steel" as Frank (1988: 100) says. However, the etymological effort for the concept of discipline, of course, hardly provides us with an understanding of the epistemological and ontological assumptions of the concept, its place in the modern knowledge creation process and its institutional background. In order to understand these structures, it is necessary to look at the basis on which the distinctions between disciplines occur. In this sense, it is useful to return to one of the most popular and basic texts on the emergence of disciplinary approaches and distinctions between disciplines. The 1996 report of the Gulbenkian Commission, which imposes an

ambitious mission of restructuring social sciences (Wallerstein, 1996), is in fact a late manifestation of the embodied interdisciplinary tendency in social sciences. This manifesto, which rejects disciplinary divisions. European universalism and methodological positivism altogether, is trying to reinforce a belief that scientific knowledge can be combined on a pluralistic basis. The report basically follows the historical distinction between the natural and social sciences, helping to keep track of the disciplinary crisis that social sciences have faced today. It is observed that the distinction between the disciplines of social sciences in the period of 1850-1945 has strengthened both in the sense of the dominant science paradigm as well as in the institutional sense. This is also the period when social sciences completely purify itself from the idiographic historical roots. Disciplines of different social sciences (such as economics, political science, and sociology), which define themselves on a nomothetic basis, are in need of finalization by emphasizing a number of disciplinary divisions among themselves, which are specific to their fields (Wallerstein, 1996: 31). We can say that the process of building these disciplinary boundaries, which have been successfully established in both institutional and paradigmatic sense, has been dragged after the 1945s.

Several different tendencies are striking in the period after World War II. Especially after 1960, in social sciences the intellectual boundaries between different disciplines become increasingly unclear, but a relative resistance to this obscurity in institutional sense is observed (Wallerstein, 2004: 23). Secondly, there was a gradual disappearance of the differences in intellectual spheres dealing with the Western and the non-Western world. Another point is that as the interdisciplinary distinction becomes unclear, the culture gains an increasingly decisive role as an area of study. Moreover, with the "cultural turn" which "encompasses a wide array of new theoretical impulses coming from fields formerly peripheral to the social sciences" that emphasize the "causal and socially constitutive role of cultural processes and systems of signification" (Steinmetz, 1991: 1-2) the paradigm of cultural studies has had a significant role in dissolving of disciplinary boundaries.

We observe that this process, which begins with field studies and gradually takes the form of methodological and epistemological sharing of different disciplines, is not simply a sharing of information. It is possible to explain the effect of interdisciplinary studies with the changing definition of theory. Nowadays, without any restrictive definition in human and social sciences, the 'theory' does not refer to discipline-based forms as it used to be. Today, with the intense influence of the interdisciplinary approach, the theory refers to a "combination of some specific kinds of theorizing that have acquired a metadisciplinary universal status" (John, 1996: 29). Post-structuralism, feminism, semiotics, psychoanalysis are examples that can be given to these forms.

The history of the idea of being sensitive and open to very different areas, which are the basic principles of interdisciplinarity. can be dated back to Antiquity. We see that in ancient times there is a belief that true knowledge can only be obtained by feeding from very different areas of expertise. For example, Aristotle (1952: 161) stated that a well-educated person should not restrict himself to a specific field, he must feed and acquire skills from all sources of life. However, it should be noted that interdisciplinarity is a modern concept as it is operational today and is directly related to the concept of modern university. Thus, interdisciplinarity is a movement, a set of practices and an approach, which, as mentioned earlier, occurs in response to and after the disciplinary separations that became increasingly evident in the Western world in the 19th century.

Interdisciplinarity is often defined by reference to the limitations of a particular discipline at the analysis level and the establishment of knowledge on the basis of reciprocity. For example, according to a widespread definition, interdisciplinary studies refer to a process of solving an issue or problem that is too complicated or too comprehensive to be adequately addressed by a single discipline or area of expertise (Klein and Newell, 1998: 3). However, this definition does not explain the methodological properties of the concept but rather talks about its functions. Obviously, exploiting the concepts and methods of different disciplines itself does not make a research interdisciplinary. In the words of Stember (1998: 341), the interdisciplinary approach involves the integration of knowledge produced by different disciplines on a particular subject. But this integration does not simply mean assembling. The information, concepts, tools, and rules used by different disciplines should be integrated in a way that after this process much more analysis power would be uncovered from their respective totals. It is this methodological maneuver that gives strength to interdisciplinarity. In this sense, it is necessary to point out the difference between multidisciplinarity and interdisciplinarity. While multidisciplinarity refers to bringing together different disciplines without expecting them to intersect on a well-defined matrix (Cluck 1980: 68), interdisciplinarity denotes a process necessarily involving a unifying interaction (Klein 2000). In this sense, the elements of a multidisciplinary approach may complement each other or intersect, but the communication between these disciplines is assumed to be

minimal (Hanisch and Vollman, 1983). Because there is no real integration between these disciplines, the multidisciplinary process does not create an epistemological or methodological change or difference in these disciplines.

When one of the main sources of interdisciplinarity is thought to be pedagogical, the inevitable link between interdisciplinary research and education emerges. Along with the question of disciplinary boundaries, one of the main objectives of interdisciplinary education is to develop critical thinking. In the context of interdisciplinarity, this is only possible with ability to make a transition between cognitive and theoretical structures of the disciplines and to compare and contrast their methodological principles in their different areas of research. Bradbeer (1999: 382) stated that the three main problems encountered in the provision of interdisciplinarity in education is being able to develop an interdisciplinary approach, sufficient understanding of the possibilities that disciplines have within themselves and synthesizing different disciplines. These problems are becoming more complicated when the epistemological preconceptions and discourses of different disciplines and the educational strategies and traditions of these disciplines are considered. If we go back to the differences between multidisciplinary and interdisciplinarity, we can better understand how critical these differences are in interdisciplinarity. The fundamental difference of interdisciplinary from multidisciplinarity, that is, the ability to intersect different disciplines on the basis of a well-defined matrix, requires the observation of these epistemological and pedagogical differences and the integration of these differences in the general framework of the interdisciplinary approach. In this case, interdisciplinarity in this context is far beyond bringing together different disciplines; it aims to unify them in a coherent whole. As a result of both institutional developments and interdisciplinarity, we observe that many interdisciplinary perspectives are disciplines of their own (e.g. archeology, cultural studies, communication sciences, urban studies, historic preservation).

However, a seemingly paradoxical situation with the observation of 'disciplined interdisciplinary spheres' arises as a result of the criticism of interdisciplinarity. These criticisms that focus on the disappearance of the disciplinary boundaries and the popularization of interdisciplinarity, particularly agree on the disappearance of the historically founded methodological criteria and the ambiguity of the traditional fields. Abbott (2001: 121) speaks of an increasingly apocalyptic point of view at the academy. In the academic world, which is shaped by this point of view, professors of English language are doing anthropology and calling it cultural studies, economists are doing sociology and calling it family economics. Clifford (2005: 31) made a similar observation that in recent years there has been a sort of "disciplinary disarray" in which "things fall apart" and the "center cannot hold". In this mess, he says, cultural studies dominate the academic world. It should be noted, however, that such criticisms are, in a sense, aimed at the interdisciplinarity approaches at the extreme poles. There is also the opinion in the view of advocacy of interdisciplinarity that does not prefer establishing a duality between disciplinarily and interdisciplinarity or denying disciplinarity altogether but claim that these are complementary elements. It should also be noted that this approach argue that any attempt to protect disciplinary boundaries as such tend to neglect the complicated relationship between knowledge and power. Kelley (1997: 21) argues that we can not escape from disciplinary approaches because we are shaped by a set of disciplinary traditions, and that interdisciplinarity reinforces the position of disciplines at the center of the modern problem of knowledge. Hence, interdisciplinarity still operates within an academic language, which, while forming its own paradigm and discourse, is also influenced and necessarily shaped by disciplinary boundaries.

Some Problems of Interdisciplinarity

Although the interdisciplinarity is becoming increasingly popular and emerging as a defining paradigm of contemporary research processes, we can see that the paradigmatic and discursive differences and distances created by the disciplinary distinction embody itself in institutional sense. Especially the research, performance and promotion criteria based on the traditional disciplinary distinctions constitute the foundational basis of academic community that sustains its influence and protects its boundaries. We can easily observe that the interdisciplinarity largely influence the criteria based on disciplinary distinctions and the traditional academic community concept. This effect threatens the boundaries of academic communities, while at the same time it tends to change the relationship between the communities. Becher and Huber (1990) find that there is a hierarchical relationship between academic communities and that 'pure' sciences or natural sciences stand in a hierarchically higher place than the social sciences. Cole's (1992) explanation of which variables this hierarchy built on would help us to observe the influence of interdisciplinarity. The most important and relevant variables are high degree of quantification, methodological and theoretical compromises within and among academic communities, and a verifiable set of predictions based on theories (Cole, 1992: 107). Clearly, with the widespread adoption of the interdisciplinary approach, these features that are attributed to the pure sciences are increasingly being questioned. The

tendency to quantify has been replaced by the widespread consensus on the significant contribution of qualitative research. The direct effect of this is the threatening of the methodological and theoretical reconciliation between and within academic communities in pure sciences. Similarly, social sciences which have tended to be nomothetic and expected to be located in a high place in this hierarchy have gradually felt the need for the contribution of the idiographic human sciences. Hence, interdisciplinarity has not only directly affected the hierarchy between pure sciences and academic communities of other sciences, but also directly influenced the hierarchical positioning of academic communities in these two spheres. On the other hand, the impact of the interdisciplinarity on the relationship between academic communities significantly influences the basic academic practices of different specializations. Elzinga (1987) has already identified this phenomenon for the Western world in the 1980s and has attributed increasingly project-oriented academic activities to the reduction of disciplinary distinctions. The activities that are increasingly appreciated in the academic world are project activities (Elzinga, 1987: 16), which develop in accordance with the needs of economic centers and significant problems identified by different centers. While not being the subject of this paper, the overriding importance of project activities might result in the fact that academic communities would show less interest in dealing with basic epistemological and ontological problems and develop theoretical analysis that rely on practice.

Academic disciplines draw their boundaries and become regulatory systems through a number of institutions such as universities, research centers, associations, scholarship institutions, and academic journals. These regulatory systems can be conceptualized as cognitive systems that improve their vocabulary and cultural systems that contain norms and values about how to work on problems (Buanes and Jentoft, 2009: 448). These organizing, cognitive and cultural systems are disciplines since they are dealing with the subject from a particular perspective and generating a set of principles and methods (methodologies) on how to work on it. However, as Buanes and Jentoft (2009: 449) have noted following an analogy they have established with political systems, academic disciplines can take on a variety of forms ranging from very loosely structured 'anarchies' to very rigid hierarchically organized systems. In the same conceptualization, loosely structured disciplines that do not have a hegemonic paradigm are defined at an immature stage. Merton's idea that sociology reaches very few conclusions since it has many different areas of research refers to this 'immaturity' of sociology discipline in this sense (DiMaggio, 1997, cited in Buanes and Jentoft, 2009: 449). In other words, when we look at the concept of discipline in this way with an evolutionist scheme, it is seen that one of the basic conditions of producing a cumulative scientific knowledge is possible through the disciplines which are perceived as regulatory, cognitive and cultural systems and imagined as closed systems. The basic question is how the interdisciplinarity that is supposed to contradict this kind of scheme and which is supposed to wrap the foundations of this fiction will provide cumulative knowledge production. This is a pedagogical question, including the transfer of knowledge as much as it is production. The absence of paradigm, or the absence of a particular method, which is often put into interdisciplinarity, is in fact just the criticism developed on the basis of this disciplinary tradition and its basic principles.

A fundamental trend observed in these criticisms is a parallelism between the postmodern approach and the interdisciplinary approach. This parallelism lies on the fact that the two approaches question the legitimacy of disciplinary distinctions. The fact that postmodernism is against the disciplinary distinctions or has a "radical interdisciplinary character" (Rosenau, 1992: 6) do not make postmodernism interdisciplinary. It should be noted that there are many differences between interdisciplinarity and postmodernism both in terms of methodology and epistemology. If a postmodern methodology is mentioned, it can only be understood by the notion of schizoanalysis and a semiotic multicentric approach that operates within the framework of this concept (Murphy, 1989). Along with the idea that the fact can have multiple meanings synchronically and there is no ultimate reading of a 'text', postmodern tradition does not conform the concept of reality and conventional sense of methodology. Szostak (2007) compares postmodernist and interdisciplinary positions in terms of different aspects in his valuable work. For example, while postmodernist position advocates that there can be no scientific method to produce claims of universal truth, the disciplinary position merely asserts that the strengths and weaknesses of different methods are present, and thus that each discipline might contribute to an integrative approach (Szostak, 2007: 66). At the same time, the interdisciplinary position does not explicitly state the radical positions of postmodernists that prefer intuition over reason and reject the whole idea of progress, or it can not adopt a radical attitude to this area (Szostak, 2007: 72). One of the most distinctive features that separates the interdisciplinary position from the postmodernist position is the fact that the interdisciplinary approach, as mentioned earlier, believe in in an integrative approach that can produce claims of truth. Moreover, the belief that amalgam, which can be formed as a result of specific contributions of different disciplines during integration and disintegration, is more capable than that of individual methods in the discovery of reality is basically separating these two positions.

Conclusion

The main difficulty in using interdisciplinary approaches in both research and pedagogical areas is due to the confusion of the concept with multidisciplinarity. Another difficulty arises from the implementation of integration which fundamentally differs it from multidisciplinarity. First of all, this process, which is based on the methodologically and epistemologically consistent analysis of different disciplines, the use of different tools specifically designed for the subject area and the establishment of the basic principles of the interdisciplinary field, undoubtedly presents its own difficulties. These difficulties continue even for the more entrenched interdisciplinary fields such as communication sciences, cultural studies, or urban studies. Another problem related to this point is that the social sciences, as explained in the first sub-section, defines a nomothetic field of research historically. In addition to the difficulty of establishing the interdisciplinarity in fields such as sociology, economics and political science, which are historically described in the nomothetic field, there are difficulties created by intersections of those fields with the disciplines of philosophy and history which are historically described in the idiographic realm. This creates new challenges for disciplines such as women's studies, comparative literature, cultural history research, and a host of other problems related to disciplinary boundaries. One of the fundamental criticisms of interdisciplinarity is the ambiguity or limitlessness of the methodology, but in fact, it becomes an 'non-disciplinary discipline' as a result of the interdisciplinary integrative approach as we have seen from the differences between interdisciplinarity and postmodernism. Therefore, the goal of these criticisms should be read more in terms of relatively less-developed interdisciplinary approaches.

Another radical transformation brought about by interdisciplinarity is, as mentioned, felt in the concept of academic community and in its interrelated institutional and structurally embodied relations. As noted, this is particularly a question of increasing importance of project activities in academic performance and knowledge production. This is of course a positive development in terms of questioning the strict boundaries between academic communities and their hierarchical relations, and the negative effects of these boundaries on the realization of the meritocracy. However, the dependence of the awards of academic performance and academic practice on project execution leads to the gradual depreciation of theoretical studies specific to their own fields of different disciplines and relatively well-established disciplinary fields. The production of cumulative scientific information is not merely an issue of problem-solving. The mentioned process tends to limit scientific knowledge to this issue, and the role of interdisciplinarity in this process is remarkable.

When interdisciplinarity is perceived in superficial terms, it is simply defined as cooperation of different disciplines. We are often faced with such perceptions in project activities and in pedagogical processes. In fact, interdisciplinarity is a process in which conventional disciplinary distinctions are questioned and, as explained in the present work, it refers to a process of 'non-disciplinary discipline' which generates an integrative approach rather than new disciplinary boundaries. We can easily observe good examples to this process in deep-rooted interdisciplinary fields such as cultural studies, communication sciences, archeology, urban studies, etc. So an interdisciplinary field will contribute positively to the production of cumulative scientific knowledge as a 'non-disciplinary discipline', as long as it questions the knowledge-power relations operates within the structuring of disciplinary boundaries and is being embodied through institutional and symbolic formations.

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