

The Lack of Interdisciplinarity in Undergraduate Geography Teaching in Turkey

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Abstract

The aim of this study is to understand and explore interdisciplinarity in geography and undergraduate geography courses in geography teaching departments in Turkey. There is a growing literature in science underscoring the importance of interdisciplinary approach and its beneficial outcomes. Increasing body of knowledge on social theory, on philosophical and theoretical movements and paradigms have made easier communication among disciplines which give rise to more perceptible interdisciplinarity specifically in social sciences and humanities.

At the second part of the present study we focused on relationships between geography courses, interdisciplinary approach and course selection. Because in the study course selection is seen as the most important point to analyze and understand the extent to which whether interdisciplinarity finds a place in geography teaching. Lastly, it is given some conclusions by making suggestions.

Keywords: interdisciplinarity, geography course, geography program, plurality

Theoretical Framework and Method

In the present study we used the interpretive and critical theoretical framework. Interpretation is making inferences from observations, artefacts or texts by explaining meanings. According to Leavy, critical paradigm a belief system developed in interdisciplinary contexts (Leavy, 2017). In the study it is aimed to interpret the extent to which interdisciplinarity approach is embedded in geography. I tried to combine interpretive and critical paradigms because interpretivism allows for multiple realities co-constructed by individuals, groups and cultures (Corbetta, 2003) as critical paradigm centers on emancipation and taking action related to problems (Pernecky,2016). First, I tried to interpret interdisciplinarity in geography focusing on undergraduate geography teaching programs in Turkey with critical lens. As the data collection method document analysis used.

1. Introduction

Interdisciplinarity commonly refers to the joining of forces by two or more academic fields of knowledge (Raento, 2009). Interdisciplinarity as a noun and interdisciplinary as an adjective have increasingly been used in scientific circles and publications in recent years meaning that discipline boundaries are blurring even disappearing due to growing links among disciplines and sub-disciplines. Interdisciplinarity has entered the common usage and parlance particularly in humanities and social sciences. Disciplinary boundaries have been eroding not only in social sciences, but also between natural and social sciences. Grbich (2004) underlines that interdisciplinary links between social science and science are now appropriate, particularly in ecological and environmental research, that is, a number of issues require and push boundaries to allow for multiple views from different disciplinary perspectives.

Interdisciplinary researches are generally encouraged in a given field as many academics have referred to it as to how this approach can be useful in broadening scientific thinking and horizon. In the same manner, there is an increasing number of books related to interdisciplinarity appears, to name a few, *Interdisciplinary Research: Process and Theory* (Repko and Szostak, 2016), *A Interdisciplinarity: Its Role in a Discipline-based Academy* (Aldrich, 2014), *Interdisciplinarity* (Moran, 2001). This leaning tends to grow. As is stated by Seidman “*the proliferation of interdisciplinary studies, for example, gender, urban, gay, and African studies, suggests the implosion of disciplinary boundaries*” (Seidman, 2012).

The lack of interdisciplinarity of an academic in a given field may be seen as indicative of narrow-mindedness and

repulsiveness to new ideas. This view is also prevailing in geography teaching in Turkey as well. The importance of interdisciplinarity in geography, as in other disciplines, has been emphasized for a long time. What is not clear at this point is how to implement it and in what contexts and in what ways.

2. Why Interdisciplinarity?

We live now in an interdisciplinary and even further postdisciplinary age that means that discipline boundaries are being wiped and there is no fixed, static and unchangeable boundaries. Seidman (2012) says that it is valid for social sciences and social theory. Interdisciplinary signifies that two or more disciplines converge on some themes, phenomena or events combining differing views in a given context aiming to get more fruitful outcomes. This type of research does not mean just coming together of researchers from different disciplines, but more gaining new insights, piecing together diverse points and combining perspectives that are conducive to scientific development.

One of main reasons of interdisciplinary approach is the effects of poststructuralism, postmodernism, critical theory, social theory, feminist theory and many other theories, paradigms and movements on the social sciences or more precisely on science wholly. These movements tend to push aside boundaries making help communication more fluid both between disciplines and researchers. What is more, they complement and feed interdisciplinary leanings with the insights taken in through them. It is these movements that cause us to talk about interdisciplinary and even postdisciplinary that means that concrete discipline lines do not exist or tend to erase or are myth or fiction. Merriam and Tisdell say that a postmodern world is one where the rationality, scientific method, and certainties of the modern world no longer hold (Merriam and Tisdell, 2015). Hence, similar movements such as postmodernism, poststructuralism and the like reject any strict boundaries, lines or limits and those movements see boundaries as obstacle for both society and science as they have informed of philosophical and theoretical assumptions (Creswell, 2012) and interpretive/constructivist frameworks for researches. So, these movements and paradigms are increasingly getting embedded and entrenched in disciplines and research processes. Drawing on Raento's article on the matter (Raento, 2009), we can summarize the pros of doing interdisciplinary research as the following;

- It enhances communication and exchange of views
- It widens the theoretical framework of a given study
- It adds new perspectives and insights to study
- It helps to open competitive channels not only in a given discipline, but across disciplines
- Interdisciplinary programs offer opportunities for joint teaching

Every philosophical and theoretical approach contain positive and negative sides. This is the case for all ways of theorizing. What is more important is that to what extent an approach is useful for a discipline or in a given context. Hence, this implies that interdisciplinary approach carries some risks with itself. These risks can be recapped as the following;

- The lack of disciplinary orientation can make it difficult to receive funding
- Core discipline values can disappear
- New ideas may not be adopted always easily

Considering positive and negative aspects of interdisciplinarity in science there is more positive tendency rather than vice versa. It should be pointed out that interdisciplinarity is a promising phenomenon in furthering scientific thinking and theorizing. As taking discipline core values into consideration we can and should be more open to interdisciplinarity no matter what discipline in which we study.

3. Interdisciplinarity and Geography

We are now focusing on interdisciplinarity in geography. Geography is itself an eclectic and interdisciplinary branch of social sciences. It might be inherently inclined to any theorizing pointing to multidisciplinary. Gregory suggests that the boundaries in geography subdisciplines are blurring and that this can be seen in economic and political geography because the two subdisciplines have often come together and entangled under political economy and Gregory also adds that the theory has itself become interdisciplinary (Gregory, 2000). By the same token, Mackinnon and Cumbers say that geography can be seen as synthetic in nature (Mackinnon and Cumbers, 2007) and it is also a discipline that embraces a very diverse range of philosophical approaches to knowledge (Clifford, French and Valentine, 2010). At this point we can observe that theories, paradigms and approaches transcend discipline limits, therefore they cannot be framed just in one discipline as the case for geography as well and this would absolutely narrow our mind and point of view.

Political geography is a subdivision of human geography and has become more interdisciplinary and for Flint, it is more eclectic and connected to other spheres of human geography (Flint, 2000). This subdiscipline also draw heavily on

economy, international relations, political sciences and cultural studies. It reorients itself with new understandings and theories. Storey underscores that not only boundaries in political geography, but discipline boundaries are blurring (Storey, 2009). Even further in tourism geography, Williams talks of blurring boundary between tourism and daily life (Williams, 2009). All said above indicates that geography should broaden its visions to allow for diverse and multidisciplinary theorizing and practicing because

4. Geography Courses in Geography Teaching Departments and Interdisciplinarity

It is only in the last decade or so that a concern with social theory has flourished in human geography (Graham, 2005). As Graham's words written a decade ago, it can be said that for the last twenty or more years geography and specifically human geography has come under the influence of social theory and its ramifications. With post-movements, critical theory, social theory supplemented with renewing research paradigms there is no escape from interdisciplinarity.

Geography courses in teaching departments in Turkey have narrowly centered on, confine itself to, limited to, discipline boundaries for a long time. There has been small changes in the course structures over time, but mostly excluding mentioned approaches, paradigms, concepts and methodologies from their programs. Descriptive epistemology, still perceptible rigid positivism in some cases, exams based on name-memorizing, fairly outdated regional geography have maintained to prevail the discipline even until now. Despite small changes, underlying structure beyond to be shaken. For example, old-fashioned courses whose name *Regional Geography of Turkey* treated repeatedly under different course names spreading over to all undergraduate program (Bilgili, 2016b). In these courses Turkey's 7 regions have been covered, which was created in 1941. Regional geography and its obsolete content can still find room. Özey underlined that Regional geography in Turkey in its current shape and content are educational disaster and it must be removed from university courses and programs (Özey, 2006) as Tüysüz and Yavan drew attention to the unchanged structure of regional geography (Yavan and Tüysüz, 2012).

Tourism Geography, Soil Geography, Economic Geography, Hydrography, Industrial Geography, Vegetation Geography and many other courses are largely founded on obsolete descriptive knowledge, fairly outdated textbooks, name-place memorizing, absence of proper philosophical and theoretical structure, abstention from novelty. This gloomy outlook is well beyond being overcome. That is not the result of unawareness of latest developments in science and education but the entrenched resistance to them mostly.

As is shown in the Table 1 below you can see that physical geography courses are mainly centered on Geomorphology, Cartography, Hydrography, Soil Geography Vegetation Geography and Regional Geography which are seen essentials of and fundamental to physical geography. There is no sharp objection to course names but to outmoded contents of them could be raised, but it is also possible to enrich the content of physical geography adding new courses informing itself of interdisciplinary approaches. Although some subjects like environmental issues, global warming and geology are being brought into the subdivision, there is an urgent need to go further with renewed understandings.

Table 1. Geography Teaching Departments and Physical Geography Courses in Undergraduate Programs

Course	University						
	Marmara Uni	Gazi Uni	Dokuz Eylül Uni	Çanakkale 18 Mart Uni	Necmettin Erbakan	Dicle Uni	Atatürk Uni
Geomorphology	X	X	X	X	X	X	X
Climatology	X	X	X	X	X	X	X
Cartography	X	X	X	X	X	X	X
Hydrography	X	X	X	X	X	X	X
Field Studies	X	X			X		X
Soil Geography	X	X	X	X	X	X	
Meteorology		X		X			
Astronomy		X		X			
Vegetation Geo	X	X	X		X	X	X
Regional Geo	X		X	X	X		X
Geology	X					X	

Source: Related internet sites included in bibliography

Human geography courses are very similar in all teaching departments as is the case with physical geography courses above. These similarities are indicative of the absence of plurality and diversity in the programs. Some core courses can be retained but too much similarity hampers discipline from ushering in new and promising ideas and understandings. Same repetitive cycle is again in place focusing on rote learning, outmoded textbooks far from being updated, strictly protected discipline boundaries. Despite the changing nature of human geography, it is almost treated as unchangeable and it is especially in valid for regional geography courses.

Human geography courses as is shown in the Table 2 below reflect the lack of postdisciplinarity. Though place/space and human interactions are becoming discipline core themes (Bilgili, 2016a), they have not found room enough to treat them properly. Regional geography and Industrial geography evoke the geographical understanding of the first part of twenty century. Many geography departments in Europe and the US removed or renewed them in a substantial manner. Again, Settlement Geography courses are far from being reflective of current thinking confining itself generally to city types and rural settlements. There is an urgent need to include shifting tendencies impacted on settlements and population movements.

Agricultural geography is another course need to be improved on. This course at least as is shown in textbooks covered with classical approaches centering principally on agriculture types, crops, which crop in which soil and climate yields more and the like. What are the relations between poverty and politics? How GMOs will affect our health? What policies can be adopted? Why do women gain less than men in agricultural and rural regions? How can farmers affect policy-making? What are the relationships between sustainable development and agriculture politics? These questions and similar ones require fresh approaches and renewed textbooks because in the current situation we cannot address them adequately.

Protecting some core courses geography teaching departments can create their own traditions centering on some movements, paradigms and understandings. They can be renowned by distinct scientific tendency. Teaching history and science have had full of examples of them. This kind of plurality brings out fresh prospects clearing the way for multidisciplinary in a sustainable manner.

Table 2. Geography Teaching Departments and Human Geography Courses in Undergraduate Programs

Course	University								
	Marmara Uni	Gazi Uni	Dokuz Eylül Uni	Eylül	Çanakkale Mart	18 Necmettin Erbakan	Dicle Uni	Atatürk Uni	
Population Geo	X	X			X	X	X		
Economic Geo	X	X	X			X	X	X	
Agricultural Geo	X				X		X		
Political Geo	X	X	X		X	X			
Urban Geo	X	X			X				X
Settlement Geo	X	X	X		X	X	X	X	
Industrial Geo		X	X				X	X	
Energy Geo	X	X	X		X				
Transportation Geo	X	X			X				
Social Geo		X							
Spatial Planning		X							
Tourism Geo	X	X			X				X
Cultural Geo	X	X	X		X		X	X	
Regional Geo	X	X	X			X			X
Health Geo	X	X							

Source: Related internet sites included in bibliography (This table taken from the study titled Critical Theory-Based Approaches in Geography Teaching Departments in Turkey, Bilgili, 2017 in press)

5. Conclusion and Suggestions

Geography course names tend to include the “geography” word as if it were a rule and maybe it is considered that

geography becomes more geographical when it has geography in its name. It is fairly wrong line of thinking from interdisciplinary point of view. We need to push forward disciplinary boundaries to take new approaches in. This does not mean that geography is losing identity, on the contrary, it can gain strength if to do so. In any discipline can be created new subdisciplines in light of new developments and needs, as other some existing subdisciplines can become independent ones going well on its own. That is the nature of science and there is nothing important to police discipline borders creating more artificial lines.

Geography has a lot of problem in ushering in fresh perspectives. Geography teaching departments in Turkey mostly continue with traditional mode of thinking, old-fashioned textbooks and teaching methods. It is clear that we need to make considerable changes in textbooks, course selection and content and program designs. All problems are strongly connected to each other. If a positive change occurs in any part of the problems, this can be conducive to changes in other parts, but traditional mode of analyzing still persists.

Interdisciplinarity is a scientific fact. This fact has been eschewed in geography in Turkey. We should set out to use and devise new perspectives drawing on other disciplines, because the discipline is too inward-oriented not allowing to take actions to reach desired outcomes. Before completing the study, we can make some suggestions as the following. Geography in Turkey;

- It should renew its teaching programs to allow for interdisciplinarity
- In geography courses in other disciplines should find place enough to complement spatial understanding
- Some outdated courses must be removed from programs
- It is no need to place in geography programs every word containing geography. This is not an indication of doing more proper geography. It makes discipline more descriptive
- One of the most important absence in geography programs is the critical theory and critical theory based approaches and paradigms
- There is no fixed geography boundaries to protect. There are core values and subject-matters. We do not have to be so protective
- There is too many courses in geography teaching programs and some of them repeated under different names. Too many courses do not mean good teaching.

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