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## ACADEMIC WORK REVISED: FROM DICHOTOMIES TO A TYPOLOGY

### INTRODUCTION: The change of Academic work

Academic work as a concept is fluid; it has multiple meanings and usages. In everyday discourse it is used as an umbrella term for all work done by workers who have academic background. In research literature it usually refers to work done by academics in universities or other higher education institutions. Quite often it is also defined as the work of the academic profession, which itself lacks clear definition. It is well known that the phenomenon is under-analyzed and lacks definitional clarity. Academic work can mean almost all activities within universities. Usually, research on academic work concentrates on changes in turbulent environments (Parsons & Platt, 1973) or only to the research-teaching nexus (Rice, 1990).

John Smyth (1995a, p. 2) has identified the problems similar to those above: the pervasive change of academic work, which is evident, is not as well understood because of the lack of analysis of the implications of recent higher education reforms. Still, this is only a secondary problem. The confusion is further amplified by the lack of analyses, not only of the change, but of the phenomenon *an sich*. Smyth's (1995b, *passim*) own edited volume *Academic Work* exemplifies the point. It is a compendium of articles that describes changes ranging from different angles from critical micro perspective to macro economical perspective, without a framework that could explain or define the connection between different approaches.

The turbulent environment and its effects on academic work and workers have been a special interest of higher education researchers—the academic profession has been in crisis for several decades (cf. Musselin, 2007). Probably the most cited typology of the recent changes is offered by Ulrich Teichler (2003). He suggests that four interconnected themes, caused by the changes in the higher education environment, are especially topical for the change in academic activities. The themes include the 1) expansion of higher education, 2) diversification, 3) system steering and higher education management, 4) internationalization, and 5) professionalization. The crisis of the profession is most often described within or without the help of these categories.

The expansion is one of the most palpable factors of the crises of the profession. The student-teacher ratio is decreasing and the higher education sector becomes more inclusive for students and staff. This has had numerous impacts on higher education and its role in society. The expansion has been one of the factors behind the diversification of the sector that has occurred both horizontally, in the form of new (professional) programs and new student segments, tailored research projects and third stream activities, and vertically (by the rank, profile and reputation of institutions and programmes of the same type).

The increased share of higher education of GDP as a consequence of the expansion and horizontal diversification has created new national needs for controlling and developing higher education. New technologies of governance (or governmentality) are implemented and new networks of power created in

all levels of the higher education sector. Old explicit and direct bureaucratic mechanisms of control have been overruled or complemented with new partly implicit performance negotiations, reporting and monitoring mechanisms, and indirect (economic) coordination. This has had implications to institutional autonomy and to the individual's academic freedom. According to many, new ideologies of management have changed academic work for the worse, and permanently (e.g., Slaughter & Leslie, 1997).

The emergent complexity of the academic organization and its management has given a momentum for new professionals in higher education administration. In the U.S., two distinct professions have evolved into higher education: one in student affairs and the other in fundraising. Also the body of experts in higher education quality control and management is rising and the role of academic decision making is gradually diminishing. Parallel to all of these changes the higher education sector is in an active process of internationalization and faces an inevitable progress of globalization, which have convergent effects on universities and higher education systems.

The tendencies mentioned above have inexorable impacts on academic work. In order to summarize the recent discussion on changes to academic work, Musselin's typology (2007) gives us a good starting point. First, the main implication of changes in academic work in the higher education sector has been the *diversification* of the tasks of academics. The mixture of teaching and research has become much more complex. The tasks, that used to be a voluntary part of an academic career, have become an obligatory part of the work. Writing proposals and recommendations, participating in international activities, holding positions of trust, administrative tasks and third stream activities, just to give a few examples, have become an organic part of the academic work, officially defined in contracts and work descriptions.

Second, *specialization* has reached the individual level and occurs in three ways. First, the work of senior academics includes more various tasks than the work of junior academics. Second, the work descriptions are becoming more specialized in their orientation, focus, and duration. Third new semi-academic semi-managerial PhD-level posts in university services have emerged side-by-side to a more traditional academic career track. Third, strengthening of institutional autonomy has *moved the control over academic staff tasks from system level to university level*. This shift together with more specialized contracting has created new types of management and control mechanism borrowed from the private sector (Steck, 2003).

The weight of institutional work arrangement has increased in comparison to the professional or scientific predomination in defining the structure and substance of work. Thus, academic work is exposed to an augmented amount of measurements and monitoring and *academic freedom is, in some aspects, narrowed*. Although academic peer review remains an essential aspect in nearly all measuring activities, it too is under threat and invasive forms of management (Musselin, 2007).

Although, Musselin describes quite well the changes of academic work by identifying three interrelated themes, her analysis is insufficient for giving a good basis for analyzing the real changes of academic work. The reason for this is twofold. First the academic component of academic work is difficult to define and requires further definition. Second, work as a concept is complicated and it cannot be addressed without definition.

## THE DICOTOMIES

### “Work”

In academia the boundary between work and product is difficult to define (Slaughter & Leslie, 1997), and this is commonly acknowledged. However, the difficulty of defining the difference does not give a permission to ignore it; on the contrary, it insists on conceptual clarification. Parsons and Plat (1973, p. 369) have noted this common frailty of analysis of academic work and it is still worth of quoting in full:

Marx defined labor in both as a factor of production and as a commodity in labor market like other purchasable commodities. Contemporary writers concerned with alienation tend to stress the Marxist

commodity definition rather than a factor-of-production definition. However, commodities tend to be economic outputs, not to be production factors. Sociologically speaking the institutionalization of labor involved development of occupational role systems, thus emphasizing labor as a factor of production. In a way similar to those who stress labor as a commodity many contemporary writers on the academic system have tended to equate contemporary standards with knowledge itself. Actually knowledge should be treated as output of the cognitive process and not as a factor.

The quote identifies a typical condition for many current writers. Firstly, there is a horde of texts that are concerned with the deterioration of academic work in the neoliberal discourse of the world economy (e.g. Tidswell et al., 2010). The references to changes of labor, in these articles, as a factor are usually bypassed by the degeneration argument. Secondly, despite the fact that the critical perspective is important, Parsons and Platt are correct in stating that the importance of financial and political factors are often overestimated and are only correlations not directly related to causes and effects in academic work. Third, the most important aspect of the quote is the notion that, in academic work, both aspects of the labor are present.

To have an understanding of the difference between labor as a factor of production and as a commodity we have to make a short excursion into Marx's theory of work. According to Marx, labor-power is a combination of those mental and physical capabilities existing in a human being, which she sets in motion whenever she produces use-value of any kind (Marx, 1990, p. 270). Thus, labour-power is something that is a condition for work processes not its end. Labor-power is transferred to commodity in markets:

An immense interval of time separates the state of things in which a [hu]man brings his [or her] labor-power to market for sale as a commodity, from the situation when human labor had not yet cast of its instinctive stage. (Marx, 1990, p. 284)

Labor power can be commodified in the market when a person is the owner of her or his own labor-power and when there is an owner of *money* who wants to purchase it temporally (Marx, 1990, pp. 272-273, italics E.P.). Thus, from this it may be derived that academic work has a use-value and can be commodified so it also has exchange value.

Nonetheless, production for use and production for exchange are simultaneous and also contradictory: when the production of education and research takes the market form, this does not mean that it ceases to have use value but the nature and diversity of use values are constrained by the requirements of markets (Marginsson, 1995, p. 32). The non-market labor and market-labor cannot be easily distinguished in academic work in which even the working time and time for leisure are not easily differentiated. In this sense, my argument is (opposing to Markinsson's idea) that the conceptual definition has to be made and the phenomenon can be theoretically scrutinized differently, but the actual measuring of the domination of one over another in order to explain the impacts of different financing sources on academic work is impossible.

The public funding or tenure position of academics did not, and does not, make academic work immune for capitalist markets. Thus, theoretically labor as commodity and as labor power is separable but in practice they are bound together, because the change between these two dimensions is happening in an immeasurable interval.

In addition to Marx's definition, Arendt's (contradictory) definition of work has been so essential to the sociology of work that it cannot be bypassed when defining academic work. In her famous definition of *vita activa*, Arendt categorizes the action of human being into three classes: labor, work and action. She defines labor as an activity that supports the biological necessities for maintenance of life. Labor is characterized by its involuntary nature. In this sense labor is an animal activity (Arendt, 1958). Academic work has been separated from the necessities of animal needs, and it is done in the public sphere of society. Thus, the concept of labor in an Arendtian sense is not analytically interesting for the scholar who is directly analyzing academic work. This leaves us with the dichotomy of work and action.

Work and action are human activities by definition. Work refers to an activity that is not necessary for the maintenance of life and that has a goal of transforming nature for the needs of humans. Work can be

physical (e.g., building monumental houses) or cultural (e.g., building institutions like administration). The products of work are the facilitators of political activities in society. Work has instrumental character. (Arendt, 1958) In academic work granting degrees, organizing traditional programmes and conducting tailored research and consultancy could be considered as work as well as managing administrative routines.

The third and the highest category of *vita activa* is action— Action as an activity that is free from prior causes and determination. To simplify, action is the creation of something new; it is initiation. It is not free of other individuals because human action has meaning only in social context. Action is always political. (Arendt, 1958). In academic work the process of formulating new (basic) knowledge, problem-solving, brainstorming and many other activities can be considered as actions. In this sense basic research has more political impetus than applied research.

### “Academic”

Academic organization is often described as a matrix organization with academic and institutional dimension (Clark, 1983). Although, the division of labor between administrators and academics is done according to the matrix structure, the academicians, especially senior academics, have tasks in both dimensions. This means that external, as well as institutional, conditions of work affect academic work. For example, Light (1974) has defined academic profession quite simply as a profession that has an affiliation to the university and creates new knowledge.

If academic work is defined as work done by members of the academic profession, both institutional and academic dimensions are prerequisites for academic work but not sufficient conditions alone. This means that we have in practice two co-existing ways to differentiate academic work from other types of work: institutional and scientific. The most important aspect of the academic dimension is generally the ethos of science that is often global and does not fit in a national framework (Merton, 1973, Clark, 1983 & 1987). The most important factor in the institutional dimension is government regulation, still mostly national (Clark, 1987, p. 373).

*Institutional dimension.* Though the impact of other stakeholders on the academic profession and its work has continuously increased, the state plays a central role in defining academic work institutionally and in separating it from other kinds of professional work. Government has had and still has a central role directly or indirectly in:

- Resourcing and allocating resources into higher education (and by doing so defining what is academic and what is not)
- Creating major job markets for academicians
- Determining the volume and quality of higher education
- Defining the institutional framework for academics
- Securing academic freedom
- Making decisions on the emphasis on different disciplines

However, in democratic countries government lacks one competence that is central to the definition of academic work: the capacity to generate and certify knowledge as valid knowledge. As mentioned, peer review remains the most important process in evaluating academic tasks.

*Scientific dimension.* Mertonian criteria for certified knowledge are the most cited for a definition of science as a unique institution. In his classic text *The Normative Structure of Science* (orig. 1942), Robert K. Merton cemented the ideas of evaluative norms for knowledge and science. He wrote his essay before the boom of research universities. In his view the institutional goal of science is an extension of ‘certified’ knowledge (Merton, 1973, p. 272). The word certified has to be underlined, because the certification process is the most essential process of science. For Merton, the extension of any given knowledge base is

not science because scientific knowledge has to be created (or certified) under the institutional imperatives of science.

The first imperative given by Merton is *universalism*. Universalism means that everyone regardless of her or his personal qualities or qualifications should have the right to enter the field of science and scientific relevance should be decided on scientific bases (Merton, 1973, pp. 271-272). The second imperative of science is *Communism*— common ownership of science. Property rights should be whittled down to the minimum. The scientist's claim to intellectual property is limited to recognition and esteem. (pp. 273-274.) The idea of communism contradicts the possibility of the free market as a medium of science. Thus, in the Mertonian view communication that is based on the logic of the market is not sustainable. In 'communitistic' universities merits and rewards, which are earned by conducting research, are manifested in the form of esteem and recognition and property rights are limited to the extreme (Merton, 1973, 272).

The third imperative for science, *disinterestedness*, is an institutional pattern of control. The common misuse of science is the abuse of authority and creation of pseudo-science. (pp. 275-276.) Merton takes into account that the disinterestedness of science should not be confused with its altruistic goals or more general altruism because disinterestedness is an institutional not an individual requirement (Merton 1973. pp. 275-276). The fourth imperative of science is *organized scepticism*. It is a methodological and institutional mandate. Science as an institution, in contrast to many other institutions, cannot be based on crystallized and ritualized ideas and structures (pp. 277 – 276). Arendt would say science is political. To ensure organized skepticism, all the other imperatives are needed.

At the same time academic work in this Mertonian scheme is bound to the national institutional setting and to the universal institutional framework of science. These two are theoretically and analytically separable. Nevertheless, in practice they are bound together.

### “Academic Work”

One of the earliest writings on academic work is the classic text “Science as a Vocation” by Max Weber (1918/1958). He makes a clear distinction between the *inward calling* of science and *material conditions* of science as a vocation. His definition gives a good starting point in analyzing an *academic* career. Weber defines various material or external conditions for academic work. First, he discusses the insecurity of academic work that seemed to be a typical condition for work in early career stages in the early 1900's. The insecurity is obvious in two aspects. The recruitment and promotion procedures of the universities are not well defined and, second, there is a constant insecurity of income in the first steps of a career. Second, he emphasises the importance of the division of labor at the universities and argues that senior researchers have better possibilities for autonomous academic work. Third, he mentions the ownership of the means of the work, i.e., the library. This could be understood more broadly as resources for research work.

The material conditions of science are not enough to make it a vocation. The academicians need to have also an inward calling for science. Weber describes inward calling as follows. First a scientist has to have an ability to specialize to “put on blinders” and specialize in a certain field. Without this ability the academician has problems. Second, he or she needs to have a passionate devotion, enthusiasm, on the specialization. The scientist has to have also inspiration and intuition that might, with hard work, sometimes trivial, entice new ideas. The ideas cannot be forced only by devoted and hard work. Arendt could say that science cannot not be work; it should be action. The action cannot take place without work done. Thus both, the internal and external conditions are needed for academic work.

According to Weber, it seems that the dichotomy of *intrinsic and extrinsic motivation* might be useful in analyzing academic work. Intrinsic motivation has been defined as the doing of an activity for its inherent satisfaction rather than for some separable consequence or external reward. People are intrinsically motivated by some activities and not by another. By contrast extrinsic motivation is constrain that pertains when ever an activity is done in order to attain some separable outcome (Deci & Ryan, 2000.). One way to further analyse these external rewards in working life is to classify them into three broad categories:

salary, work security, and social esteem (Siegriest, 1996). However, intrinsic and extrinsic motivation are interconnected and cannot be strictly separated.

## TYOLOGY

There are many definitions of work and academic work in classic texts of higher education research. However, academic work is a concept that is almost impossible to operationalize because of its multiple facades. With the help of dichotomies mentioned above I will try to typologize academic work by dividing it into analytic categories in such a way that its *gestalt* is not broken.

Academic work can be seen as a one type of economic production that is done by undefined individuals. It can be also approached from more social perspective, as a way of being, and as relations of one's action to the other parts of the society. Academic work can be approached from the perspective of its use and exchange value. As it has been discussed above, academic work, as every other work, can be analytically divided into labor-power (a factor of production) and to labour commodity (a result of work). The decisive difference between these two is the existence of markets for the activity. Work can be described as a commodity that can be sold in the markets (social activity) and as an individual cognitive process. Both cognitive process and commodity are part of the production process.

Academic work can be seen, in addition to work process, as a way of being in society. It is on the one hand bound to its external conditions and their maintenance in the university institution, "Arendtian work," and on the other hand it is dependent on internal calling on the realm of science and scholarship, "Arendtian action." Weberian vocation" or calling is something that cannot be measured in markets while employment is a juridical contract of selling labor-power. Both vocation and employment determine the position of individuals in social relations. With these two dimensions, namely the market and political dimensions, a typology of academic work can be created. The typology is described in Figure 1 and discussed in more details below.

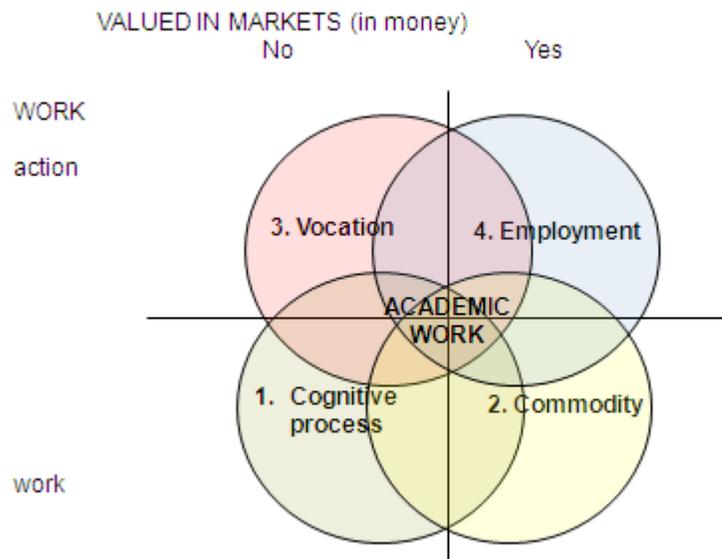


Figure 1. The spheres of academic work

Academic work as a cognitive process (1) and vocation (3) are often connected to intrinsic motivation. Academic work as a vocation and cognitive process can be described with concepts of the sociology of science, learning and teaching, cultural studies, and psychology. However, these phenomena cannot be separated from the phenomena on the right hand side in Figure 1. In science, the cognitive process has to end up in commodity in markets in order to certify the knowledge. Only ideally are there pure non-market mechanisms for this activity. Vocation, as Weber described, is also dependent on the external conditions of work. Public funding of the academic work does not make it neutral for market mechanisms. The non-market meritocratic system is the system of ideal, Mertonian, science. The main indicators of the merited academician are the citations. The non-market side of academic work can be more naturally described as action than as work. In the non-market side the restrictions of academic freedom are negative (c.f. Berlin, 1969). These restrictions, “the rules of science,” are also the basis of science. However, these restrictions should not be unchangeable. The paradigms have to be renewable in order to retain the essence of science.

Employment (4) and commodity (2) are often connected to extrinsic motivation. Academic work as employment and commodity can be best described with concepts of administrative science, economics and politics. Depending on perspectives, the market side of the academic work can be seen only as an upper layer of non-market activities that are not of fundamental nature. However, many academics work mainly for their daily income and publish in order to gain profit and to progress, not in science, but in formal organization. The merits are market-based too. The actual revenues that an academician can generate are the scale for merits. These merits are reflected in the income and formal position of an academic. The market side of the academic work can be described with Arendt’s concept of work. In market, the restrictions of academic freedom are typically positive restrictions (c.f. Berlin, 1969), i.e. by having an impact on funding and setting time limits to academic work. If the market forces are violating the negative side of academic freedom they are directly threaten the academic value of research.

## **The Change of Academic work II**

The changes and continuities of academic work can be more efficiently analyzed when the concept of academic work has been opened and divided into spheres as suggested above. The typology helps in making an analysis of academic work in a manner that does not restrict itself to the analyses done within the limits of economy. The typology makes operationalisation of academic work more reliable. Better and more valid ways of measuring academic work can be built when the concept can be divided into its constituent parts. In the following sections the possibility of analyzing the changes of academic work is pondered with the help of the typology provided.

*Cognitive process (1).* Academic work can be described as a process of problem-solving or reasoning. These cognitive processes are stable. It can be argued that academic work has not fundamentally changed during the long history of higher education. Still, the study of academic work as a cognitive process is a sensible sphere of investigation. The main reason for this is two-fold. First, although the process might be quite the same, the understanding of thinking is growing exponentially. New knowledge is accumulated on thinking and problem-solving in general both cognitively and neurologically. The progress of neuro and cognitive sciences provides new ways of analyzing the primary processes of academic work as an individual and social action. A good example of growing interest in the primary processes of scientific thinking is the special issue of cognitive development on scientific reasoning published in 2008 (Sodian & Bullock, 2008).

Second, the environmental changes are changing even the primary processes. The progress of information technology has changed the processes profoundly. Many of the stages of the processes have been computerized. This development has been especially evident in quantitative data analyses. The time used in analysis has drastically reduced, especially in social sciences, and the analyzing of the data has turned to analyzing of the results of the primary analysis. The development of technology has changed academic work also radically in the sense of data gathering and sharing. The world has grown small and the distances short for many academics. This development has launched a broad area of research on e-science.

For example in 2011 the *Social Science Computer Review's* Special Issue on e-Social Science pondered on this theme (Halfpenny & Rocter, 2011). Still, in many countries the technical support of cognitive processes is limited. This gives a great opportunity to make comparative analyses of primary academic processes.

*Commodity (2).* Academic work is defined more and more often by its products. There are basically four main reasons for this development. First the policy environment has changed. The old logic according to which funding of basic research was the best way of creating innovations by coincidence has been replaced by a logic of applied and practical research on focused problems and needs (Slaughter & Leslie, 1997).

Second, as we know, the policy environment has changed and the role of higher education has moved from cultural towards more economic forces. The European Council has stated:

In order to become a truly modern and competitive economy, and building on the work carried out on the future of science and technology and on the modernisation of universities, Member States and the EU must remove barriers to the free movement of knowledge by creating a “**fifth freedom.**”

One of the ways of creating the fifth freedom is the enhancement of the cross-border mobility of researchers, as well as students, scientists, and university teaching staff. This statement places academic work, as such, among other commodities in common European markets. The limits between academic work and its products have become even fuzzier than they used to be (Slaughter & Leslie, 1997).

Third, the productization of academic work is becoming a common topic in research. Even an academic can be considered as a product. More and more often higher education is seen as a private good instead of a public one. An example of the growing importance of this definition of academic work, is the research done on immaterial rights and patenting in universities. For example, a special issue on Faculty intellectual property in the digital age was launched in 2010 (Morrison et al., 2010), a book on students intellectual property rights (IPRs) (Herrington, 2010), and countless numbers of articles and books on IPRs of research and innovation activities have been published in recent years. In addition, multidisciplinary units on IPRs have been established to provide education and research protection of IPRs. On top of all this is literature written on marketing academic work and its products.

Fourth, the importance of society-university linkages or triple helix and third stream activities in the study of academic work has been growing. Teaching and research are not studied as such anymore but are placed in a context of markets of education, consultancy, and research markets. Academic work is also studied as “social” work. Social service and engagement are themes studied in the context of service markets. More and more often the medium between society and universities is considered to be money. However the basic products of academic work, especially teaching and degrees, but also research, are stable and their role in society and for professions is still highly important.

*Vocation (3).* Academic work can be studied as a vocation. The basic feature of vocations has remained as same as long as the idea of the modern university has existed. Vocation has had different forms in different university traditions. The ideal academic work has different contents in liberal, Humboldtian, and American universities but they all share common values. This is because of the common history of university institutions rooted in the medieval universities and the international realm of science (Altbach, 1997). When academic work as a vocation is studied the focus is commonly placed on the values of academics, academic cultures, and intrinsic motivation or the contents of the work. Typically some parts of academic work, most often research, is considered to be the core task and other parts of academic work (i.e., administration and leadership) are considered to be a hindrance to the work.

In literature, the inner calling has been one of the well maintained myths of academic work. The massification of universities has also opened new research lines to academic work as vocation. Some scholars argued already in 1990 that academic work became “just another job” (Hakala, 2009). Thus, the

change or degeneration of academic values is also becoming an important line of study parallel to the endurance and essence of the values.

Employment (4). Academic work has been studied in recent years most commonly from the perspective of changing patterns of employment. This emphasis in research has bound the main interest of research towards the extrinsic motivation, material conditions and the institutional aspects of academic work. The employment conditions have changed indeed in the academies. There is an extensive body of literature describing the changes of the contractual nature of academic work. The replacement of civil servant positions in Europe and the increase of fixed-term positions and casual labour in Europe and in the Anglo-American world has been an object of growing interest for the researchers of academic work. The most typical approaches can be labeled under concepts of precarisation, work insecurity, and casualisation. Still, some continuity seems to be evident also in employment of the academics. The first years of the academic career are and have been insecure. It might be that the phenomena considered as changing are, as a matter of fact, the essence of academic work.

### **Related Perspectives on Academic Work**

As discussed in the previous section, the spheres of academic work are interconnected and overlapping. Analysis can be made on one sphere of academic work but the *gestalt* of academic work cannot be understood without having a picture of all of the spheres. There are many concepts that are interlinked to the concept of academic work and which can be studied as subtopics. I have listed five of the most important ones.

Academic career (a). An academic career describes the decisions, success and progress of an individual in the academic world. It has strong path dependencies to both of the realms of the academic work: institutional and scientific. The academic career is an interplay of institutional academic positions and scientific progress of an individual. For example, many academic forums are open only for professors and many professorships open only for eminent academics. These two cannot always be separated. Sometimes an individual might make conscious decisions between scientific and institutional careers, e.g., by refusing to accept a professorship that would include administrative duties.

Academic profession (b). The study of the academic profession is a field of study that explains the nature and role of academic work in society as a collective unit. It is interested in the power structure of society and the rights of using and reproducing knowledge. The study of the academic profession is especially interested in the contractual nature of academic work, because limiting the access to the academic profession by qualifications and norms strengthens the exclusive body of academic workers. The study of the profession is also interested in the inner calling and values of academic work because the profession's right to exist, and to be exclusive, is commonly based on the altruistic service mission of the profession, as well as its ethical and moral codes.

Knowledge transfer and innovation activities (c). The study of innovations and knowledge transfers in academies has been trendy from 1990's onwards. The most famous description of the change of academic work in this sense is Gibbons et al.'s (1994) definition of the different modes of academic work. The role of universities is often defined in the context of innovation systems. Also academic work is more and more often seen as an activity that catalyzes innovation, new technologies, new products and practices.

Sociology of science, epistemology, philosophy of science (d). Academic work can be studied as a process of creation of knowledge. Merton's work is a good example of this position. One of the most important aspects between the cognitive processes and science as a vocation are the methods of certification of knowledge and scientific meriting systems. However academic work, or its essence, can be thoroughly studied using methods of epistemology as well as sociology.

Economics, management studies (e). On the market side, academic work can be studied as productive work, or "industry" of knowledge. The efficiency of universities can be measured and the management practices compared. The administration and management of academic work as well as its efficiency are

nowadays the most popular research topics in higher education studies (Tight, 2003) in contrast with more sociological approaches of the 1960s and 1970s (Clark, 1973).

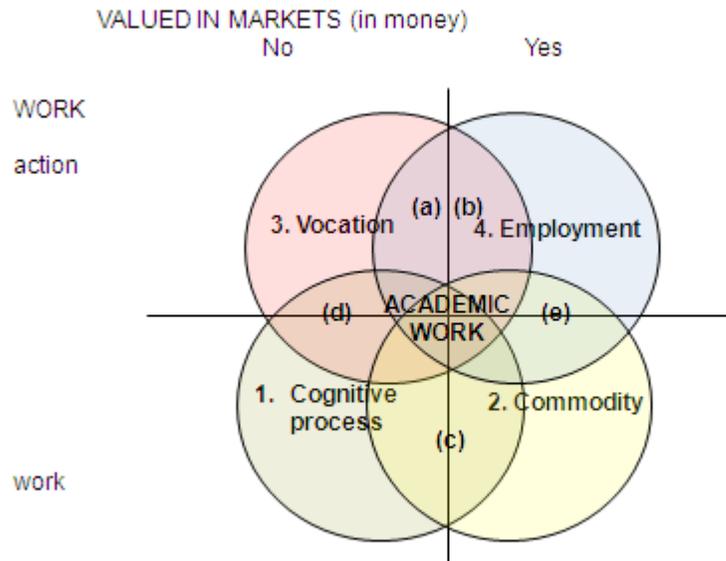


Figure 2. Interrelated topics of academic work.

## CONCLUSION

Academic work is a fluid concept that has many definitions. It can be more accurately defined by attending to constituent components: “work” and “academic.” Work can be considered as a part of work process. In a Marxian view it can be described as labor-power and labor. Work can be also considered as a way of being in society. In an Arendtian view work can be defined as the activity of working and the activity of action. Academic can be considered to be a dual concept with its institutional and scholarly or scientific dimension. As an institutional concept, academic refers to the universities; it is strongly demarcated and constituted by national states. Scientifically, academic refers to the institutions of science that are demarcated by the certification process of scientific community.

Academic work and its change has been studied too often from the perspective of its (economic) environment, that doubtless has a great effect on the academic work. Still, academic work can be studied from other angles. Academic work can be defined as a wholeness of primary cognitive processes, commodity, vocation, and employment. When discussing the change of academic work, all of its spheres should be discussed. Academic work takes place in the realms of academic institutions and those of the arts, humanities, and sciences. It functions on capitalist markets and by merit in scholarly exchange. Academic work is a way being political, i.e. creating something new, and way of maintaining and building institutions and producing income, as well as a part of production, as its factor, cognitive process, and its resultant knowledge or products.

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