The Genesis of Theory and Practice

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Abstract

One of the questions in social science is about the relationship between theory and practice. It goes back to the ancient Greek philosophers whose world was strictly separated into polis and oikos. The actors of polis were engaged in the formation of a democratic society requiring active action in the sense of vita activa. According to Arendt, with the decline of the polis and the emergence of the new forms of the society, vita activa was initially set in opposition to vita contemplativa and then later devalued in favour of vita contemplativa. However, with Galilei and Kant, there has been a counter-movement, which no longer understood theory as isolating oneself from the world but as shaping social realities. Theory and practice are joined today by the concept of research. The relationship between theory and practice will be examined initially within a historical perspective offering the genesis. Then the features of some institutions are discussed in terms of their communications with theory and practice and redefined accordingly.

Keywords: Theory-Practice Relationship, Society, Science, Galileo Galilei, Immanuel Kant, Hannah Arendt.

Teori ve Pratik İlişkisinin Gelişimi

Öz

Sosyal bilimlerdeki sorulardan biri teori ve pratik arasındaki ilişkidir. Bu soru dünyaları polis ve oikos olarak ikiye ayrılmış antik Yunan filozoflarına kadar uzanır. Sadece polisin aktörleri vita activa anlamında aktif eylemi gerektiren demokratik toplumun oluşumuna katılıyorlardı. Arendt'e göre polis'in çöküşü ve orta çağla yeni bir toplum biçiminin ortaya çıkışıyla birlikte vita activa başlangıçta vita contemplativa'nın karşısına konmuş ve daha sonra vita contemplativa lehine değersizleştirilmiştir. Ancak Galilei ve Kant'la teoriyi dünyadan soyutlamak olarak değil sosyal gerçeklikleri şekillendirmek olarak anlayan bir karşı hareket de ortaya çıkmıştır. Bugün teori ve pratik araştırma kavramıyla birleştirilmiştir. Aşağıda teori-pratik ilişkisinin tarihsel gelişim sürecindeki oluşumu verildikten sonra, kimi kurumların özellikleri teori ve pratikle olan iletişimine bakılarak yeniden tanımlanmaktadır.

Anahtar Kelimeler: Teori-Pratik İlişkisi, Toplum, Bilim, Galileo Galilei, Immanuel Kant, Hannah Arendt.

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Introduction to the Discourse on the Theory-Practice Relationship

The discourse on the theory-practice relationship is about a question that has been with us since the writings of ancient Greek philosophers at the least. This longstanding discourse is based on the question of whether and what exactly distinguishes knowledge from ability, from doing. One reason for that endures lies in the fact that this question is still not answered sufficiently. Of course, this also has to do with the fact that this question is answered differently depending on the type of society. The question here is whether a person's freedom of action depends on his freedom from the necessity of not working. In ancient Greece, a person's capacity for freedom was determined by his membership to the polis. This logic has a consequence also today, which explains why we still consider it legitimate when a professor earns a lot more than a shoemaker. However, even though there are a number of occupational groups today that are neither shoemakers nor professors but enjoy a higher standing in society and consequently earn much more than both together, property, gender, and social affiliation still determine the life prospects of everybody (Arendt, 1992; Wright, 2005; Habermas, 2013).

Another reason for the persistence of this discourse lies in its complexity of the areas addressed, as well as the integration achieved; in that discourse are, on the one hand, the questions posed in philosophy about the foundations of knowledge and epistemology and on the other hand the questions dealt within sociology about action typologies mediated with each other. On an abstract level, the question is what distinguishes theory from practice and whether theory should be valued more highly than practice. The discourse on the theory-practice relationship is thus constitutive both for the logic of science and society as a whole as well as for the organization of the subsystems of society, such as science, law, economics, education, politics, etc. (Parsons, 1951: 288-322; Stichweh, 1987: 278-336; Oevermann, 1997: 109-135). In order to deal with this question, the genesis of the theory-practice relationship is offered below.

Genesis of the Theory-Practice Relationship

Hannah Arendt has worked out that life in ancient Greece was divided between the oikos and the polis, between the private and the public, and that the oikos was the place of work, of need, while the polis was the place of action, of speaking on behalf of and for the community. The word public meant the visibility and audibility of a common phenomenon. A thing is public when

it has been normatively assigned a higher significance and thus taken out of the private, abstracted from it. In this respect, the public sphere is the epitome of freedom and brings action to light, indeed also for future generations (Arendt, 1992: 16, 49-54). In the moment of unveiling, in the initiation of the public sphere, man shows his plurality in that he is, in his uniqueness, a part of a community (Arendt, 1992: 165). Sociologically, this notion was reflected in the way each actor lived his life, speaking in the community, on the polis/ public, on behalf of society and for society, or was denied this ability by associating his activity with bare working, which was assigned to the private, to the oikos. Nonetheless, action was seen as the highest human activity (Arendt, 1992: 19-22).

Arendt would also emphasize that all three of these basic human activities (working, making, and acting) were included in the concept of vita activa. With the disappearance of the ancient city-states, the term vita activa lost its proper meaning and began to mean active occupation, which was also contrasted with the passive one of resting in oneself. With the shift in ancient logic, action was separated from the polis, from the public sphere. Following the juxtaposition of the public and the private, a theory-practice opposition also emerged, especially as the practice was interpreted from the perspective of the private (Arendt, 1992: 10-26; Habermas, 2013: 12-32). The public was originally associated with the polis and the private with the oikos. In the polis were the free, the equal, and the just, while in the oikos were the slaves, the women, and the uncivilized. There was also a third area, agora, where artists made and displayed their products. To cut a long history short, polis was associated with acting, oikos with working, and agora with making (Arendt, 1992: 55).

Although originally oikos, the private stood in opposition to the polis, to the political, to freedom, in modern times society was extracted from its function of guaranteeing intimacy, and the private was added to society (Arendt, 1992: 38). This change did not happen all at once. Rather, it was a long process, from state cities, kingdoms, and empires to nation-states. Kingdoms and empires were organized around a family. With the establishment of nation-states, this logic changed.

The organization is now called neither polis nor empire, but the nation, which, following the example of the family, was simply understood qua origin as a gigantic super-family. In the modern era, society was thus separated from politics, and politics was defined as a function of society, which blurred the differences between politics and society (Arendt, 1992: 31-35). Especially since, at the same time, extended families began to disappear, the conflicts that arose could be addressed neither according to the principle of diversity nor equality in the ancient sense. The relationships of equals on the polis were based on the principle of diversity. In contrast, not diversity but equality was the basis of communication in nation-states. However, this equality within a nation resembles the "equality of all members of a family under the despotic power of the head of the family" (...) (Arendt, 1992: 40). One consequence of this is the reversal of the logic of private and public. In this process, not only does the private trump the public, but also the vita activa degenerates into mere work (Arendt, 1992: 11). This transition can be observed in the structure of society. This thesis will be discussed below with an examination of the change in the institutions of the economy.

Exchange market, agora, and labour market

Each type of coordination of action presupposes a whole particular institution and society. Barter markets belong to the phase before the emergence of the polis and the republic. Polis was the place of free and equal citizens. The agora was the place where private contracts were concluded between laborers who were not citizens but also not slaves. Agora is the place of crafts, of homo faber (Arendt, 1992: 146). In modern times, this place of exchange was transformed into a market, where the products were displayed to the langer public (Arendt, 1992: 147). Now the master begins to exhibit not only the raw material, tools, and other objects for production but also the labour. In the commodity market, the producers then appear as owners of commodities and the workers as owners of their own labour power. Finally, in this competitive struggle, the product is assigned an exchange value measured by market scarcities instead of the use value immanent in the thing (Arendt, 1992: 149-152).

Exchange markets and agora differ from modern markets above all in that money as an abstract, generalized medium of expectation coordination only unfolds here at the expense of all other social forms (Simmel, 1920). For the establishment of a market, a *legislator* is still needed, but once it is established, every actor then contributes to its constitution, regardless of whether it wants to or not and whether it works, produces, or trades (Arendt, 1992: 187). First of all, a *legislator* is in total contrast to the logic of the polis, which was the place of the equal, the free, and the just. Only those who did not depend on their own labour in the oikos had a place in the polis. Polis is the sphere of rich men with the corresponding knowledge, wealth, and lineage. Only these actors have exclusive access to the polis. The distinction can be seen more clearly if we compare polis with the function of the modern economic market.

And to explain the function of this exchange market, Adam Smith's seminal work, the Wealth of Nations, is constitutive. He shows that a single unskilled worker can produce a maximum of 20 pins per day. By decomposing the labour and dividing it among ten people, the quantity of production would increase to 48,000 pins (Smith, 2007: 8). At the structural level, in these markets, vertical relations such as orders from the top/centre are replaced by horizontal relations. Now, thanks to and within the legally institutionalized framework, actors can change the system of multi-layered expectations to a formalized symmetry instead of a higher/lower, profane/sacred asymmetry (Luhmann, 1972: 59-73). Society here is no longer organized around the principle of God-given difference but around the equality we human desire.

If you have money, you can buy. Either you have it or you don't. This either-or logic is also formalized in the sense that it imposes itself on participants in markets; the money in the market determines the memberships, ownership, and interactions of the actors. As a result, the seller does not behave like a judge, and the buyer does not act like a professor in a lecture hall. The matches and/or the discrepancies are immediately registered and either rewarded or punished. No longer who is closer to the pope, the church, or the king, but who has money, acts appropriately, according to expectations, and rightly, in this last sense. According to the ideal, it is not so much ascriptive qualities of belonging that are rewarded, but rather individual abilities. It is a skill and not a being and/or a commanding. No more ascriptive qualities but accomplished, achieved performance determine the status of the individuals in that kind of society.

The Proposals of Galilei and Kant

This shift goes back to the theories as well as to the everyday practices of those who belonged to the society; businessmen, artists, inventors, and philosophers. Some of the actors of this society were the following personalities; Galileo Galilei (1564-1642), leading science with his experiments and the telescope; constitutionalists like Hobbes (1588-1679) and Locke (1632-1704), Rousseau (1712-1778) and Immanuel Kant (1724-1804) leading society with their thought experiments, businessmen the economy with the steam engines of Newcomen (1663-1729) and the actors of the American Revolution (1776) and the French Revolution (1789) humanity into a disenchanted world of Weberian professional man made of steely ethics of rights and duties. Two of these men are particularly important here, Galileo Galilei and Immanuel Kant.

First, Galilei transferred with the use of his telescope and his experiments the ancient modern theory-practice opposition into the theory-research relationship. With a telescope and experiment, he set a new standard, especially in hard science; observation could no longer be expected of the naked eye. No longer in view of nature, as in ancient Greece, but through the spectacles made by man, light was thrown on the true, the beautiful, and the good. Thus, the method of experience was preferred to the method of revelation and authority (Oevermann, 1997: 96; Chalmers, 1999: 22 f, 27-40, 163 f; Diekmann, 2007: 141).

And Kant makes a peculiar mediation proposal for the theory-practice relationship that is still constitutive for social science today. Kant places the concepts of theory and practice in a relationship as follows:

"A set of rules, even practical rules, is called *a theory* if the rules are conceived as principles of a certain generality and are abstracted from all multitude of conditions which necessarily influence their application. Conversely, we do not give the name *practice* to every activity, only to that accomplishment of an end which is thought to follow certain generally conceived principles of procedure.

However complete the theory may be, it is obvious that between theory and practice there must be a link, a connection and transition from one to the other. To the intellectual concept that contains the rule, an act of judgment must be added whereby the practitioner distinguishes whether or not something is an instance of the rule. And since we cannot always lay down rules for our judgment to obverse in subsumption (as this would on ad infinitum), there may be theoreticians who, for lack of judgment, can never be practical: physicians or jurists, for example, who have been well schooled but do not know what to do when they are summoned to a consultation." (Kant, vol. 11: 127)

Kant understands theory as a conceptual system with which reality is depicted. Reality itself is no longer what we see every day with our naked eyes. In order to look at it, in order to experience what, in Adorno's words, "secretly holds the gears together", the observer needs a good theory that specifies the conditions of valid observation and statement (Adorno, 1998: 196). Theory is now no longer the divine worldview in the ancient sense but an explanatory pattern, a conceptual system of principles and rules for grasping, and understanding the image of reality designed, appropriated, held to be true by us humans.

Methodologically, the quality of the theories can be measured by the causal statements (cause-effect-relationship) that this theory produces. This also states that theory, conceptual analysis, must be kept apart from practice but not separated. In fact, practice can be measured by the goodness of theory, by the logic of the causal statements (cause-effect-relationship) but must be measured by its instruction of action (means-purpose-relationship) (Dilthey,

1969: 47 f; Weber, 1985: 146-211; Oevermann, 1997: 95-109). Therefore, Kant addresses this tension by clarifying the relationship of theory to practice in morality, state law, and international law. He makes this practical by mediating law with contract, legality with legitimacy. On the theory-practice relationship in morality, Kant prescribed adherence to the unconditional law of reason on the basis of causal statements (Kant, vol. 11: 136). He, therefore, derives this law from the law in the sense of an instruction for action.

"Law is the limitation of each man's freedom to the condition of its consistency with everyone's freedom to the extent possible in accordance with a universal law. And public law is the totality of the external laws that serve to make such thoroughgoing consistency possible". (Kant, vol. 11: 144)

Consequently, Kant envisages the social contract for constitutional law as the instruction for action, in which human freedom goes hand in hand with equality and self-determination, with one's own word, the independence of the citizen (Kant, vol. 11: 145). And in the case of international law, as is well known, he envisaged a world executive, world government with the corresponding international law (Kant, vol. 11: 172-173).

Galileo Galilei and Immanuel Kant bring together the relationship between theory and practice under new conditions. They assume that a theory like that of Copernicus explains the relationships of natural law. It says how the regularity is in this reality that is given to us, also a reality that exists without our doing. The goodness of such a theory depends on how well it describes and explains this reality of its unchanging regularity. So the question would be how well the theory of Copernicus allows exact statements about the movement of the sun, the moon, and the planets that can be verified in experiments. This understanding of theory can hardly be transferred in this form to the conditions of the social sciences. Rather, we must assume that the logic of the social-scientific laws differs from those of natural science. The objects of laws of natural science are objects, while those of social science can be not only objects but also subjects themselves. Social scientists influence their objects in ways that they themselves are influenced by. Social science is not practiced in objectivity but in a reality that is not only pre-constituted by natural laws but also by us humans. In this social world, objects are subject to the laws of man at least as much as they are to the laws of nature. In this social world, for example, duties, obligations, communications, expectations, and rights determine social inclusion and/or exclusion. In this respect, the objects of the social sciences are not the laws of nature but the respective decisions and the conditions of these decisions (Habermas, 1974; Luhmann, 1990; Popper, 1992: 77).

This has consequences for the relationship between theory and practice. First of all, the question of the relationship between theory and practice arises not in the natural sciences but in the social sciences. A serious theory with verifiable statements about the laws of nature can be right or wrong. On the other hand, a theory about the constitution of reality in terms of the social world can be right, wrong, and ideological. There is hardly any description of social relations from a neural perspective in the social sciences. All value statements are norm-bound (Weber, 1985; Popper, 1995). Secondly, the natural sciences are obliged to calculate the consequences of their methods as precisely as possible, what the consequences are to be expected when using certain technological applications. Based on this calculation, the natural sciences are obliged to reduce possible damage. On the other hand, social science, because of its subject matter, has to incorporate the consequences of the application of its theories into the theory itself. The social, cultural, and human sciences, i.e., the empirical sciences, have a duty to reflect on their practice, the reasons for applying the respective theory, the justification for the respective decision, and the conditions of verification, and to theorize in this sense. This distinguishes them from the natural sciences insofar as their "competence does not end with overcoming practical crises, but begins there" (Oevermann, 1997: 139).

Concluding remarks

With Galileo, we can consider hard science as the pattern of action by which, with the help of a theoretical worldview, in his case, Copernicus' theory, a predetermined observation can be obtained. A theory in that scientific sense explains a law of nature that describes, for example, the movement of the sun, the mode, or the planets. The law of gravitation or the laws of thermodynamics are other examples of such a theory. They describe reality as it is, in its unchanging regularity. In this sense, the statements they contain are either true or false. One possible way to test the assertions of these theories lies in experiments, in the method of trial and error, for which Galileo developed a practical instrument, the telescope.

Just as Galileo conducted his experiments on the basis of Copernicus' theory, which in other words forced him to put on glasses to observe and/or not observe, i.e., to falsify, in Karl Popper's words, what theory predicts, Kant's understanding of theory provided the social scientist with a framework within which theory could be mediated with practice. By doing so, Kant knows that the logic of social science is based on a reality that is pre-constituted by

people and for people. Its laws are those of the people. Disregarding them has, in the worst case, not the physical death of a human being but the social exclusion of that human being from the common world of expectations. This is one reason why the relationship between theory and practice is not problematized in hard science but in social science; the objects of social science are people who act in accordance with social science findings. Kant is dealing with this world of social phenomena. And here, he mediates with his theory not only between law and decision, theory and practice but between understanding and reason through the power of judgment. Kant saw the mediating link between understanding and reason in the power of judgment. The question is if he himself is the "middle link of the nexus" between ancient and modern times, between theory and practice, between the right of man and the law of a community, between the sphere of being and the sphere of ought (Kant, vol. 11: 127).

Kant sees the difference between the natural and social sciences as a general tension between theory and practice, which he treats not only in science in particular but also in society in general. Even more, Kant is guided in his definition of theory and practice by both the old idea of difference and the new concept of equality, first distinguishing the general from the specific and then stating the conditions under which a ranking is to be taken in favour of the general. Building on this, he brings law into a complementary relationship with a contract. Law stands here for the generally binding norm with the highest legitimacy in society.

From this perspective, law legitimately guides action because it stands on the one hand for the guarantee of legality, and on the other, it is compatible with the freedom of every human being. Consequently, lawful action is an action guided by principles. It is logically derived from law and contains the idea of rights and the idea of contract but cannot be equated with neither of them. Such action, analogous to the principles of law, mediate theory with practice. Indeed, law consists of abstract principles and instructions for action at the same time (Habermas, 1992: 174).

Galileo and Kant are the two most important representatives of a society of highly educated people with strong images of human being. In this society, the representatives of technique, technology, science, and research met on the one hand with the representatives of industrialization, Enlightenment and, on the other hand, with those of businessmen, money, rationality of purpose, and trade. Together they initiated not only the disenchantment of the living world but also its mediation under the new circumstances. As a result, these social thrusts of industrialization and the Enlightenment, which diverge and/ or complement each other depending on the worldview, were mediated with each other on the one hand with the American Revolution and the French Revolution and on the other hand with the ideas of fundamental and human rights in the concept of the nation-state and their constitutions.

During this time, people were raised on the one hand to discover other cultures, people, points of view, and even continents. On a daily basis, they also experienced that discovery also means appropriation, occupation, colonization, and dispossession. The time of the natural man, the man in harmony with Rousseau's nature, is supplemented with Weber's professional man of steely ethics. Part of this discovery, rationalization, and disenchantment is also the realization that, for example, poverty is man-made, that equality is a civilizational demand, that something similar to *repression*, *subconsciousness* exists, that the structure top-bottom is not natural, that wars are not won with faith in God, or with good strategies of clever men, but with efficient war machines. The institutionalization of principled or rights-based action (human-civil rights at the individual level and the right to self-determination at the group/nation level), devastation, homelessness, and the demands of social movements for participation began to co-exist.

We can see that this development was initiated by Kant and his society. Kant and his society wanted to give way to influence instead of prestige, to scientific evidence, and legitimacy instead of the words of God. He and his society appeared with the claim to universality, and they acted in a cosmopolitan sense. His philosophy and epistemology exalt validity in a pre-constituted reality in which principles and morality are in a learning relationship with money, power, and the spirit of commerce. Thanks to this background, Kant's words still echo in our ears today, according to which it is not the well put ideas but the commercial interest that would take possession of everybody.

The question for the next contribution is whether, in the proposal of Galileo and Kant, the basis of a new mediation in science between vita activa and vita contemplativa can be considered in research if we understand research as model building and its verification on the basis of social research. In this type of social research, models are verified with methods of mathematical proof and confirmed and/or falsified with the corresponding data collection and data evaluation. In this respect, the tension between theory and practice, the general and the specific, is transformed into a communication between them. Such communication in science would also be available to society as a learning model. An idea for this was already developed by the ancient Greek polis.

"This paideia is such a splendid structure of the overall Greek spirit as art and science. Once as education itself, but then in its interweaving with the education of the nation in general, which in this comprehensive sense is still something other than scientific or artistic creation. Finally, it is the shaping of the work of art of the person or of personal education, the essential thing that produces the culture of an age and makes all its individual achievements possible. It is the unity of the same." (Dilthey, 1986: 21)

Research today has a similar function to the term paideia in the sense of ancient Greek philosophy, which meant both art and science. In fact, there has been and still is a close, logical and structural connection between the type of society (polis, kingdom, nation state), its principle of organization (diversity, equality, freedom) and the view of the relationship between theory and practice in science. Especially since we live in a more democratic society today, the relationship in and between these spheres will probably also become more democratic - this is the hope or promise of a highly digitized, post-modern, post-truth society in which the principle of difference has been upgraded.

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