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ORDERS AND PROHIBITIONS FOR SALE? MORAL THEOLOGY IN THE AGE OF KNOWLEDGE COMMERCIALIZATION

Abstract. Nowadays, there are very strong aspirations aiming to link science with economy. These aspirations create specific problems for humanities which do not generate products, technology and patents for sale, and thereby do not bring measurable benefits to industry and universities. Moral theology, whose essential task is to define norms, orders and prohibitions, may rather seem to restrain innovative economy than to be its driving force. However, moral theology provides practical indications which can give a more human character to the technological development. It is possible only when its relationship with business at the level of scientific research is as brief as possible, and the financing is completely independent from the market laws.

Key words: knowledge commercialization; moral theology; humanities; higher education; innovation; know-how.

Humanities and social sciences as well as their situation and development prospects have recently become the subject of particular interest of people and institutions responsible for education policy of the state. Moreover, these sciences are considered one of the priorities of this policy,¹ a kind of "apple of the policy's eye"² because while dealing with the values on which the entire social life should rest, they contribute to building cultural and national identity, as well as a sense of ties with previous generations. Therefore,

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¹ Such declarations are often made by the representatives of the Ministry of Science and Higher Education; see, for instance, a meeting with journalists on February 4, 2016. Bulletin nauka.gov.pl (access 5.02.2016).

² Minister of Science and Higher Education, J. Gowin, made such statement in the interview given to PAP on January 10, 2016. See: Bulletin nauka.gov.pl (access 15.01.2016).

the significance, problems and needs of Polish humanities are the subject of many meetings, debates and conferences. It is also the concern of the authorities to link science with economy, use the potential of the scientific community to increase its innovativeness,³ and this, as it turns out, is not possible without greater cooperation between science and business, and without all that is known as the so-called commercialization of knowledge. At the base of the latter lies the assumption that scientific result may be a commodity, and scientific research—the subject of a contract in which investor expects a specific result.⁴

There would be nothing disturbing with such assumptions, if it wasn't for the fact that in practice they are reduced to one thing: also the humanities must "propose" some "commodity" for sale; otherwise they are useless. Such a situation is a special challenge for moral theology, which is a reflection on morality, that is, on good and evil of human acts and on the person who performs them.⁵ This science aims at identifying a certain ideal and developing a set of norms, including orders and prohibitions, introduced to this ideal.⁶ In addition, these norms are derived not only from human reason, but above all from faith which recognises Divine bestowal—new life in Christ—as the foundation of life.⁷ It must be said that a "product" thus defined is not easy "to sell." The market, which is assigned the role of inspiring scientific research, is not interested in such "product." Neither is man

³ Such assumption is included in the Act on innovation prepared by the Ministry of Science and Higher Education and signed on May 4, 2016 by President Andrzej Duda. It assumes tax exemption and procedural simplifications for companies wishing to invest in research and development. The Act presents a wide range of solutions aimed at creating incentives for innovative activity: encouragement in the form of tax exemptions, stable financing for the commercialization of research results, procedural facilities. Special conferences are held to discuss science's cooperation with economy and administration for the development of innovation (one of them took place on 8–9 December 2016 in Wrocław). Their goal is to define barriers that make it difficult for science and economy to cooperate and to find solutions that support the creation of innovation, the flow of knowledge between science and business, as well as implementing new solutions and commercializing scientific discoveries.

⁴ T.B. KALINOWSKI, "Modele komercjalizacji i transferu technologii," *Komercjalizacja wiedzy i technologii a własność intelektualna* (Łódź: Wydawnictwo Uniwersytetu Łódzkiego, 2010), 11.

⁵ VS, No. 29. See also: I. MROCZKOWSKI, *Teologia moralna. Definicja—przedmiot—metoda* (Płock: Płocki Instytsut Wydawniczy, 2011), 22.

⁶ T. ZADYKOWICZ, "Miejsce 'nakazów' i 'zakazów' w posłudze Kościoła wobec człowieka i świata," Archidiecezjalne Wyższe Seminarium Duchowne w Białymstoku, Informator 2001/2002, ed. A. Proniewski et al. (Białystok, 2001), 19–30.

⁷ J. NAGÓRNY, "Natura teologii moralnej", *Polska teologia moralna. 40 lat po Soborze Waty-kańskim II*, ed. J. Nagórny, J. Gocko (Lublin: Wydawnictwo KUL, 2006), 92–93.

who is almost "allergic" to any prohibitions and orders. What, then, is the future of moral theology in the era of knowledge commercialization and in the knowledge–based, innovative economy?

1. THE CONTEMPORARY EXPECTATIONS ABOUT SCIENCE

Search for the truth has always been considered the essence and purpose of science.⁸ Such task was set by both representatives of the natural sciences and the humanities. Implementation of thus formulated goal is particularly difficult nowadays, not only because of a huge effort which is required to understand new things and phenomena, and not only because of the relatively low reward for such work, but also because of the new goals that are set before science. In addition to cognitive functions, science serves the implementation of practical objectives, and more precisely, it serves an innovative economy and technological development.

Maybe there would be nothing wrong in it, if one tried to see the specificity of individual sciences and not to assign tasks which within the given disciplines are simply impossible to implement. Meanwhile, it is the goal of ALL sciences to have impact on technology and economy, and to raise their innovativeness. Therefore, projects with an explicit practical profile are favored. Their transferability to the industry and the degree of cooperation with business are considered as criteria of research quality. What is more, the evaluation of a researcher is dependent on the amount of grants applied for and obtained. State and university authorities are trying to motivate researchers in different ways to commercialize research. Scientists are obliged to prove how the results of the research conducted by them solve the problems of enterprises and what the basis of commercialization of research results will be.⁹ Practically all fields of knowledge are involved in individual acquisition of capital and in search for sources of financing their research.

Before describing and explaining reality¹⁰ and before undertaking research methods relevant for particular discipline, contemporary scientist must ask, or rather is asked whether practical application is possible; whether

⁸ A. BIAŁAS, "Istota i cel nauki—spojrzenie fundamentalisty," *PAUza Akademicka. Tygodnik Polskiej Akademii Umieję tności* 3 (2011), 127: 1.

⁹ D. TRZMIELAK, SZ. BYCZKO, Zarządzanie własnością intelektualną w przedsiębiorstwie i na uczelni (Gdańsk: Urząd Marszałkowski, 2010), 102.

¹⁰ These goals of science were already indicated by Aristotle.

scientific value obtained in research leads to some transactional value for the university, generating license agreements and forwarding know-how; and whether technical parameters can be exchanged into market parameters related to satisfying the needs of the recipient (e.g. entrepreneur).¹¹ In other words, commercialization has been included in research purposes. Universities are supposed to be more active on the market, having lively contacts with entrepreneurs and public administration, and their research must have economic justification. Conducting research that does not involve implementation and technology transfer to the industry has no economic justification.¹² Admittedly, the supporters of such vision of science kindly notice that not all research should be completed with implementation on the market, but ultimately it is the market that determines the purpose and justifies research. It is also the main driving force that pushes huge flows of money to science.¹³ Academic science, which according to its definition, should serve the truth and the common good, has become appropriated by pragmatism and money.

Humanities, therefore, have a problem. Like all scientific disciplines, they are under pressure of practical utility of the research carried out. Its "usefulness" is to be verified by the relation to innovative economy, "industrialization" and business. Such a situation induces moral theologian to reflect on their "product" for sale and on the potential buyer. One should be rather skeptical that someone will buy, additionally paying well for a set of orders and prohibitions, norms and demanding values. Moreover, moral theologian would rather be interested in "free" sharing of their research results, because they are convinced that in the long term norms that they discover and apply to the current situation, also positively influence the market. Unfortunately, they are only seen as a restriction of human freedom, including economic freedom, which means that hardly anyone is interested in "ordering" or "buying" such a "product". Any connection with business or remaining under financial or political pressure harm moral theology, unlike any other field of science. It may turn out that moral theology will begin to provide norms derived not from objective order, but from financial need. So, does it mean that moral theology is bound to lose the status of a science, since it is not able to achieve the goal which is the sale of a product? Or maybe there are some models of knowledge commercialization that can be used in relation to the theological disciplines, and especially to moral theology?

¹¹ D. TRZMIELAK, SZ. BYCZKO, Zarządzanie własnością intelektualną, 123.

¹² Ibidem, 124.

¹³ M. GRABSKI, "Uczciwość i wiarygodność nauki. Praktyka," Nauka 2 (2009): 41.

2. THE ESSENCE AND MODELS OF KNOWLEDGE COMMERCIALIZATION

First, it should be noted that the word "commercialization" itself has negative connotations for a moral theologian. It means some sort of subordination of man and social life to commercial rules. Commercialization understood in this way is an expression of materialism and consumer attitudes, and at the same time it intensifies such attitudes. In relation to science, commercialization reduces the social prestige of a university professor for the benefit of a successful entrepreneur or tradesman.¹⁴ It is no wonder that the commitment to commercialization raises objection of a moral theologian already at the beginning, because of terminology used. Perhaps, however, there is some "positive content" behind this not very fortunate terminology? It is worth looking into the source, that is, the legal act which determines the essence and principles of commercialization with reference to scientific activity. Currently applicable statute, Act on higher education,¹⁵ distinguishes two meanings of commercialization. Direct commercialization is the sale of scientific research results, development works or know-how associated with these results. It is also putting to use these results, or know-how, in particular on the basis of a license agreement or lease.¹⁶ Indirect commercialization, on the other hand, means acquiring shares in the companies in order to implement or prepare for the implementation of the results of scientific research, development works or knowhow related to these results.¹⁷ The Act obliges research workers to cooperate in the process of commercialization, including procedures leading to obtaining exclusive rights.¹⁸ It determines in detail the principles of dividing means obtained from commercialization between the university and a research worker.¹⁹ It also stipulates the rules of establishing corporations (capital associations) in order to pursue direct commercialization.²⁰ Cooperation between science and business is based on the management of relations

¹⁴ A. Koj, "Przemówienie podczas spotkania z Janem Pawłem II" (Kraków, 8.06.1997).

¹⁵ The Act of 27 July 2005. During the preparation of this article the amendments to this Act were being discussed.

¹⁶ Art. 2, §1, p. 35.

¹⁷ Art. 2, §1, p. 36.

¹⁸ Art. 86e, §5, p. 4.

¹⁹ Art. 86f.

²⁰ Art. 86a. §1.

between industry and academic environment.²¹ This management includes the management of contracts and intellectual property. University initiative to establish cooperation and to conclude an agreement generates push strategy for the offer to sell research results. Enterprises, on the other hand, most frequently search for research results by searching for scientific partners (*pull* strategy). There are two basic forms of the commercialization of research results obtained at the university. In the first case of commercialization, it is done with the help of a university technology transfer center (e.g. a technology transfer center or institutions established for this purpose). Such a commercialization model is called opting-in (entering into relations with university centers). If a university or a scientist chooses such a strategy, the university technology transfer center is responsible for commercialization, while the researcher may carry out further research. The university sells a license or contributes non-material resources to the company with university shares. The second model is independent commercialization, called opting-out (going outside the university with commercialization).²² Virtually neither of the above mentioned models is possible to use in the humanities. It is indicated, however, that it is possible to write implementation BA and MA theses, containing proposals for how to solve a specific real problem notified or identified by the employer (e.g. in the field of culture organization in a company, or the impact of certain barriers on financial results, etc.) or presenting ideas input by interdisciplinary teams of students (e.g. ideas for Internet applications, video game scenarios, etc.). This type of works is aimed to facilitate finding work for the graduates of the humanities and social sciences.²³ For moral theology, it would mean a significant limitation to the scope of the research, which is mainly due to the nature of this science.

3. MORAL THEOLOGY AND PRACTICAL SCIENCES

In order to determine the possibilities of commercialization and the best of its models, it is necessary to take into account the specificity of individual

²¹ D. TRZMIELAK, SZ. BYCZKO, Zarządzanie własnością intelektualną, 104.

²² Ibidem, 106–107. See also: G. GAWLIK, T. ŁASECKI, J. SIELEWIESIUK, *Komercjalizacja wiedzy. Podręcznik dla naukowców* (Wrocław, 2015), 54.

²³ Such assumptions are the basis of the competition for innovative solutions for humanists announced by the Ministry of Development. See: Bulletin nauka.gov.pl (access 15.07.2016).

disciplines. Trzmielak and Byczko didive scientific research into basic/primary, industrial and pre-competitive research.²⁴ The first kind of research is experimental or theoretical work, undertaken in order to acquire new knowledge about the bases of phenomena without focusing on practical application or use. Industrial research is done to develop new products, processes and services or to improve the existing products, processes and services. In this type of research, technology's usefulness is evaluated. Although this research does not ensure that new knowledge will be put into practice, it looks for possible applications and provides a prototype to be tested most frequently in laboratory conditions. Pre-competitive research, in turn, has particular correlation with business. It is related to the conversion of the results of industrial research into plans, assumptions or designs of new, modified or improved products, processes, software and services, such as the construction of market prototype that cannot be used commercially. These tests include demonstration projects or pilot projects.²⁵

Other divisions of sciences include the differences in the subject of the research, as well as methods of formulating and justifying theses.²⁶ One of criteria for dividing sciences includes possibilities and areas of use. Theoretical sciences perform cognitive tasks directly, while the applied ones deal with pragmatic problems.²⁷ Thus understood boundaries are, however, blurred because theoretical sciences also provide applied sciences with knowledge implemented into practice, and practical sciences form the foundation for the theory. In any case, basic (theoretical) sciences may but do not have to be applied in practice. Their goal is to investigate thoroughly the theory,²⁸ although there are also opinions that even basic research must be based on values for potential buyers. Without a market approach at the basic research stage, it is much more difficult to find a later application in practice.²⁹

Moral theology should definitely be included among the basic theoretical sciences. This does not mean, of course, that it has no practical purposes.³⁰ On the contrary, it sets itself the task of resolving specific problems, alt-

²⁵ Ibidem.

²⁴ D. TRZMIELAK, SZ. BYCZKO, Zarządzanie własnością intelektualną, 105.

²⁶ J. APANOWICZ, Metodologiczne elementy procesu poznania naukowego w teorii organizacji i zarządzania (Gdynia: Wyższa Szkoła Administracji i Biznesu, 2000), 14–15.

 ²⁷ J. APANOWICZ, *Metodologiczne elementy procesu poznania naukowego*, 15–16.
²⁸ Ibidem, 16.

²⁹ D. TRZMIELAK, SZ. BYCZKO, Zarządzanie własnością intelektualną, 106.

³⁰ The author focused on the practical orientation of moral theology in his earlier article "Chrystopraksyzm refleksji teologicznomoralnej," *Roczniki Teologiczne* 61 (2014), 3: 49–64.

hough not in the sense adopted by industrial research or strictly practical sciences. Some optimism may arise from the fact that during the conference "Development of the humanities. What and how to change in the social sciences and humanities in Poland?" held in Toruń, which was the second meeting within the preparations to the National Congress of Science, deputy prime minister Jarosław Gowin said: "It is not true that the contemporary labor market needs only a highly and narrowly specialized professionals. Equally needed are those who have broad general competences and understand cultural context. This is a great opportunity for humanities and social sciences."³¹ The Minister noted that it was not by accident that congressional considerations addressed the problem of humanities. "Everyone present here," he said, "is probably aware of the fact that escaping from this area of science and from taking care of the national heritage is an escape to nowhere."³² It was pointed out already in the announcement of the conference that "the changing social and economic environment, which prefers exact and technical sciences, has led to a common belief that humanities and social sciences do not have practical or market significance. Thus, their key civilizational significance is underestimated. Realizing the postulate of Polish humanities and social sciences development, is worth reflecting on important aspects of research and teaching in this area. During the conference in Toruń the discussions concerned, among others, the importance of individual disciplines in humanities and their contribution to social and economic situation in the country, as well as creating tools to support the promotion of the achievements of Polish humanities."³³

Also in relation to the humanities there are some research projects being implemented, the results of which are important for culture and national heritage.³⁴ The financing of such projects allows, among others, for works of documentary and source character, and thus for the flow of the most important works and thought between humanities in Poland and abroad. On the other hand, one can see the ambivalence of the relations between business and science, especially between business and the so–called humanities. Such a relationship undoubtedly contributes to the development of civilization, but also poses serious threats and challenges.³⁵ These dangers are related to

³¹ Bulletin nauka.gov.pl (access 25.11.2016).

³² Bulletin nauka.gov.pl (access 25.11.2016).

³³ Bulletin nauka.gov.pl (access 28.10.2016).

³⁴ This is the nature of the National Program for the Development of Humanities.

³⁵ M. GRABSKI, "Uczciwość i wiarygodność nauki," 41.

the fact that business does not always work in public interest it is called to. Consequently, a scientist does not always work for the truth. Moral theology may also be in such danger. Subordinated to the laws of the market, it can start working not in the interest of truth, but on commission, limiting the scope of its interest to the historical, cultural and comparative aspects, or abandoning its normative nature in favor of a non-directive description³⁶. So what are the chances of moral theology in confrontation with today's situation?

4. CHANCES OF MORAL THEOLOGY AS BASIC SCIENCE IN CONFRONTATION WITH PRAGMATISM

Commercialization and partnership with business have the task of directing science towards innovative economy. That is why the system strengthens and promotes cooperation between scientific community and economic environment, and both supports and promotes those scientific achievements that have influence on the development of innovation. Special programs are created to support the management process with the results of scientific research and development works, in particular in the field of commercialization.³⁷ Such a strategy for science and higher education basically does not concern theology. Moral theologian, like every scientist, feels satisfied when he manages to discover something new, interpret the message of the Bible in changing circumstances, or apply general moral norms to new phenomena and attitudes. Is this, however, a sufficient criterion for the "innovation" of this discipline? In addition, will anyone see this as a "product" serving innovative economy? In other words, will anyone buy it?

Moral theology provides results that can also be used in practice. They can contribute to economic development. The rules that moral theology formulates are useful and necessary for individual person and the society,³⁸ including business. To put it in a different way, moral theology knows how

³⁶ T. ZADYKOWICZ, "Etyka pracy naukowej i dydaktycznej teologa moralisty," *Ksiądz Profesor Janusz Nagórny—teolog moralista (1950–2006)*, ed. K. Jeżyna, J. Gocko, W. Rzepa (Lublin: Wydawnictwo KUL, 2010), 200–201.

³⁷ An example of such a program is *Incubator of Innovation* +.

³⁸ J. GOCKO, Nauka społeczna Kościoła w poszukiwaniu własnej tożsamości (Warszawa, 2013), 27.

and on what to base individual and social life.³⁹ According to the logic of commercialization, society should be interested in such knowledge. But it is naive to say that in today's world somebody will want to "pay" for indicating what he or she is not allowed to do. Moral theologians are thus confronted with a dramatic choice: truth or profit. The first option condemns us to non-profitability. The second limits research to only some of the topics. If we yield to the need for commercialization, also in our field, we will start to create *junk science*, and to omit important, though not always comfortable, issues.

By transforming science into trade activity, commercialization takes science's freedom and independence away. In our field, it can lead to a situation in which, in order to improve our own and university budget, we will be ready to justify any view and we will be unable to present a clear opinion about good and evil. Interested in "free" delivery of our results to the society, we will not provide commercialization results, we will have neither profit nor impact on economy and improvement of life. You can, of course, try to launch the so-called projects, applying for grants, and to express in a bureaucratic jargon, for example, the problems of the sacrament of penance or the Decalogue, but these are rather frantic activities which only pretend to be commercialization. It must be said directly that it is impossible to make money on moral theology. Is there any sense to force the moral theologians to commercialize their knowledge if activities in this field can only reach one goal, i.e. fill the gaps in the reports?

The entire current education system and its transformation towards a closer relationship with the economy pose a special challenge for moral theology, like for many other disciplines, in particular for humanities. It is difficult to refuse good intentions to those who try to make the economy more innovative. It is also no wonder that someone wants to take material profits from their discoveries, especially the technical ones. However, it must be recognized that there are sources of innovation and development that cannot be priced, and are even harder to sell. Such sources are the subject of moral

 $^{^{39}}$ The term *know-how* has been intentionally used here, although it concerns professional knowledge and experience in the field of technology and production process of a given product. In the narrow sense it cannot be applied to the knowledge in the field of moral theology.

theology. There is hence a huge field of social involvement for moral theologians.⁴⁰ However, if this discipline wants to maintain its identity, it should share its research results also when there are no "buyers" for them.

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⁴⁰ The importance of people of science as experts in general is irreparable. See: P. OLEŚ, "O niektórych etycznych i nieetycznych obrzeżach uprawiania nauki," *Nauka* 4 (2007): 31.

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