

INTRODUCTIONARY ARTICLE

SOCIAL RESPONSIBILITY OF SCIENCE

ALEKSANDER KOBYLAREK

Institute of Pedagogy, University of Wrocław
J. Wł. Dawida 1, 50-527 Wrocław, Poland
E-mail address: aleksander.kobylarek@gmail.com
ORCID: <https://orcid.org/0000-0002-4562-9035>

ABSTRACT

This article tackles the problem of social involvement by academics and researchers. The author defines social responsibility widely as the involvement of knowledge, academics and educational institutions in solving the problems of the local community. The concept predicts that this can come about not only by disseminating research results, but also by involvement in pro-social activity without loss of autonomy. The author shows that this can be a way of building trust in science, as well as being a tool in opposing the anti-science culture. It can also be a means of rebuilding the status of science in the world of information bubbles and fake news.

Key words: postmodernism, anti-science culture, pro-social activity, third mission of the university

It would appear that the creation of science is by definition characterized by its own kind of responsibility, and that the products of scientific work are assumed to be for the benefit of mankind in one way or another. This means we are dealing with a kind of tautology (Such, & Szcześniak, 2002).

Similarly, when it comes to academics creating science, the average person feels a special kind of respect for representatives of the world of science because they regard them as knowledgeable and responsible (Goćkowski, 1998).

Many sociologists and philosophers also tend towards the view that the ideals of the academic world consist of dedication and a search for the truth, which is the summit of the researcher's values. According to traditional and common understanding, academics are predestined to show others the way, assess the activities of others, lead or give advice to their political masters, and finally pronounce upon matters which are important to smaller or wider communities. It should be accepted that an authority who is recognised as knowledgeable and moral and who may be a model for the activities of others will also be a responsible person who, for the good of the community, will in some

way engage themselves socially and be mindful of its needs (Goćkowski, 1984).

On the other hand, even the traditional image of the academic is characterised by independence, which is attainable if academics are above all able to separate themselves from everyday problems and the influence of various interest groups. This independence should guarantee healthy judgement in various situations in which academics themselves are not personally involved, but at the same time it gives them a choice – when, how, and indeed whether, to express an opinion on a given matter. The Humboldtian academic model is based on the assumption of creating a community of academics who can only be tempted to take part in the wider community either by lack of finance or a strong sense of responsibility. The Humboldtian academic can spend his or her whole life in the library, researching and publishing, with no regard to what is happening in the surrounding environment. And the effects of his or her work can only be judged by a community of academics in his or her own field – with varying degrees of success – because how can we assess professors who give opposing assessments on the same work? Sometimes, therefore, the academics are the only ones who can assess his or her own work, because he or she is the only ones who have gone down that long specialist scientific path.

The question arises, therefore, as to whether academics should be involved in the wider community at all, constructing a civic society in all its forms of activity, which has no direct connection with their scientific work, and which brings no benefits in the form of publications or paid lectures. How should academic independence be understood in the 21st century? Does going beyond strictly scientific activity decrease the quality of the knowledge obtained? Will entanglement in current social problem finally lead to a kind of intellectual distraction, which will worsen the conditions for intellectual work, or even make it impossible? If academics perform their scientific work professionally, dedicating themselves wholly to science, can they find time for additional activities?

Social responsibility can be viewed in various ways. For the purpose of this article let us assume that it is a pro-social fundamental, related to voluntary activities on the behalf of others. In the case under discussion we can talk about social responsibility in relation to science in its strictest sense (knowledge), to scientists, and to educational institutions. In turn, these three areas can also be considered in relation to the activities themselves, whether explicit or implicit.

In examining the explicit approach we should consider what socially responsible science is, what are the qualities which characterise the socially responsible academic, and how educational institutions should shape their activities in carrying out their idea of social responsibility.

In turn, in analysing implicit social responsibility in science, we should be looking at how particular areas (knowledge, academics, educational institutions) can or should fit in with the needs of the non-scientific community.

It is probably easiest to define what should characterise socially responsible science. Above all it is a thorough and expert verification of knowledge which can be the starting point for practical action – designing and altering reality,

correcting errors, avoiding mistakes, predicting, constructing comfort zones, and finally making further development of the world possible. The opposite of this kind of science is pseudo-science, creating fake science and constructing the gullible theories detached from reality and an inadequate vision of the world around us. Very often this pseudo-science appeals to common knowledge. Sometimes it is created in order to justify some ideology or some practical enterprise designed purely for profit, such as alternative medicine.

Another category is knowledge which is not fully substantiated, and which is sometimes even created in good faith. As the result of a lack of methodological facilities or unfamiliarity with the research subject (in turn resulting from an inadequate period of study), researchers obtain poor results, ambiguously indicating the existence of some phenomena or co-relations, or even falsifying data. Inadequate familiarity with the field of research, on the other hand, leads to a mistaken interpretation of the results. Knowledge created in this way often poses a big problem for science, because these false results are later quoted by those interested in justifying their choices and behaviour (for example the anti-vaccination movement).

Academics enjoy deserved prestige in society and their academic titles are evidence of their long road to gaining significant knowledge in their particular field. It should not be surprising, therefore, that they use their titles outside the environs of the university, especially when appearing in the role of experts (in TV interviews for example). For them it is an additional legitimization of their replies by referring to their academic title as a mark of authority. Such behaviour is generally justified, because it informs the uninitiated that they are dealing with an expert. Sometimes, however, the use of an academic title is irrelevant. For example, the opinion of a doctor of philosophy on the subject of climate change is in all probability close to that of the average person and even less than those who are interested in ecology but do not possess the title of doctor. We may assume that those possessing a scientific title or degree are of a moral character (without mentioning impersonation or fake degrees), but they can venture outside their own field, thus (consciously or unconsciously) legitimising fake unproven knowledge, half-truths, or a particular ideology. In this case, social responsibility depends above all on care in expressing oneself. Academics must be able to control their egos, refrain from uncorroborated statements, and separate fact from comment and opinion.

The social responsibility of educational institutions is probably best expressed by the dissemination of the results of scientific work in the form of knowledge. In this context, it appears that above all limited access to research results and the stipulations of academics are irresponsible. Institutions creating science should also take care of its appropriate dissemination, which depends not only on accessing research results, but also on explaining their significance to non-specialists and all other interested persons.

The social responsibility of educational institutions also involves taking care of the procedures which guarantee the creation, verification and dissemination of knowledge. At the same time this means selecting specialists, not

only in conducting professional research, but also in managing the system of disseminating and evaluating knowledge. Unfortunately, the management of science is often entangled with political interests which mask the rationality and social responsibility of the institution. However, taking care of effective procedures is far too often connected with commercialisation, meaning the creation of science to order and the inevitable limitation of access to research results. In order to achieve efficiency of private institutions in creating and disseminating science, at the same time guaranteeing free access, the state must invest the necessary funding. It is not possible to develop science responsibly without an appropriate level of investment. The lack of funding is therefore an institutional irresponsibility on a national scale.

It is worth looking at the problem a little more widely. Social responsibility in science should not be limited to the professional creation, evaluation and dissemination of knowledge, although many societies still have a problem with this. For example, in Poland the principles of assessing those working in science, principles of evaluation, and the list of publications approved by the Ministry of Education are all changed every few years. It is difficult to create good science in such an atmosphere because what today is highly assessed may tomorrow be considered worthless. One solution may be an understanding of universal (international) assessment criteria. However, if academics are unable to tackle local requirements, sooner or later they will lose their jobs and will only be able to conduct science in the form of a hobby or as freelancers. In this respect, the most irresponsible institutions are those using their own assessment criteria which do not fit criteria with wider acceptance – national or international.

Social responsibility in science is also reflected in the relationships between players in the game for scientific truth and their surroundings (Leja, 2009). Besides, responsible activities of academics and institutions should not be restricted solely to the completion of tasks connected with the creation and dissemination of knowledge, although here a poor understanding of autonomy, mentioned earlier, could form a significant obstacle.

Going beyond that which is strictly connected with science directs our attention to the relation between representatives of science and the wider society, its needs and the process of communication.

Starting with knowledge itself, it should be borne in mind whom it is intended to benefit. This in some degree means the creation and verification of knowledge to order, but also partly with regard to social needs, understood more widely as environmental problems which are not necessarily expressed explicitly, defined, or commissioned for resolution. In any case, the problems which society has to struggle with should be considered and an attempt made to help to solve them. I am not saying that academics should restrict themselves to commissioned or tailor-made research, but rather to maintain contact with the extra-mural world, supporting it with their research and general activities. On the other hand, engagement with the environment outside the educational institution should not mean that academics become entangled in dependence and loss of autonomy.

Currently, academics are very sensitive regarding their independence. In such a situation, they are not threatened by dependence and the creation of knowledge solely to order, except in the situation where a sponsor pays for the research and expects concrete results, and the academic submits to pressure and writes a report which will satisfy the financial institution and not one based directly on the research findings (Krimsky, 2006). But then we are dealing with ethical abuse and in extreme cases law-breaking, in other words scientific pathology. Thus, it is more about changing the awareness of academics as a whole, and creating the conviction that the academic, most often funded by the tax-payer, is part of a wider community, going far beyond the world of academia. Independence in research and scientific investigation should not mean absolute autonomy and alienation. If the academic is of good moral character, he or she should have no problem in establishing the boundaries between scientific autonomy and simultaneous engagement on behalf of society.

Unfortunately institutions, like most academics, represent a somewhat cautious (not to say suspicious) approach to the external environment. At the same time it is the institutions, especially those representing large scientific organizations or carrying out state policy, which are particularly well-disposed to build understanding and links and to organise co-operation – not only in carrying out their own established statutory aims, but also in responding to social needs and creating a positive image of science and academics. In order for this to happen, they must become institutions operating between aggregation and integration (March, & Olsen, 1989).

CONCLUSIONS

Three basic conclusions arise from the above:

1. Undertaking pro-social activities as widely understood depends on the possibilities of the particular field of science, the environment, and the character of the academic. Some scientific fields demand total dedication or are particularly hermetic, and sometimes undertaking a particular research problem will not bring benefits to society.
2. Social responsibility of science should be a postulate formulated according to the scientific environment. However, it would be difficult to describe it as a law requiring specific action. Not all academics are able to combine their scientific work with pro-social activities, working on behalf of others from the silence of their study. We could instead call it a *desideratum* rather than an imperative.
3. Academics must see the sense in such activities and be aware of the needs of society. This means that they should be engaged in social life either in this way or some other. After all, more should be required from those who have received so much.

The involvement of science in society should therefore be perceived as a concept of social engagement by academics and institutions, nurtured by

knowledge. This means that the academic should certificate his or her authority as to how things really are, how reality functions, what is the truth, and what are the consequences of various actions. This can be looked at on two different levels. One is the certification of a scientific authority who speaks as an expert in their field and whose academic achievements and research experience legitimise making specific statements and commenting on reality.

The other level is pro-social and civic activity. As far as some academics are still able to engage in the dissemination of science and take on the role of experts on various kinds of committees, when it comes to civic engagement one has the impression that it is rare or not very great. Standing in the way of such engagement may be the Humboldtian tradition of conducting science (especially in continental Europe), or a specifically understood autonomy separated from the problems of social life.

The wider concept of social responsibility presented above is in opposition to the comprehension of the role of science and academics as being limited by definition. There are some areas in which everybody needs to be engaged in order to develop social capital (Sztompka, 2016), and the involvement of academics has particular significance, even when they venture beyond their own disciplines. Among the most important of these areas are the civic community, stimulating ecological awareness, provoking thought and improvement. Activity by academics in these areas should be seen as an important element in the game of forming a common understanding of how the world functions and combatting the culture of anti-science (Kobylarek, 2019). When it comes to academics going beyond their own scientific interests, they can contribute to a greater common awareness of knowledge, as long as they do it with appropriate sensitivity, without placing themselves in the role of absolute all-knowing authorities. An essential condition for functioning in such a society is to convince people that the academic is one of them, maybe slightly more well-balanced and a little closer to the target of knowledge. It is a return to the role of leader, but on somewhat different principles than previously (Benda, 1928). We can speak of a Teal society (analogous to the Teal organization – see Laloux, 2014) rather than one submissive to the pressure of authority in the traditional way. Here, in turn, there is a great need to rebuild the trust of society through participation and deep involvement in social affairs. Eastern European societies, especially Poland, still have a huge problem with this (Lasinska, 2013).

The considerations above are at the same time accompanied by a conviction that the loss of faith in science is partly from specific causes, including deception and scientific pathology on the part of alienated academics for whom nothing counts except profit and position. Involvement in the future of those operating outside the institutions can only strengthen their morality and at the same time build a positive image of science and academics.

REFERENCES

1. Benda, J. (1928). *The Treason of the Intellectuals*. New Brunswick and London: Transaction Publishers.
2. Goćkowski, J. (1984). *Autorytety świata uczonych* [Authorities in the academic world]. Warsaw: Państwowy Instytut Wydawniczy.
3. Goćkowski, J. (1998). Grupy ethosowe świata ludzi nauki [Ethical groups in the world of academic staff]. In J. Baradziej, & J. Goćkowski, *Rozważania o tradycji i ethosie* [Reflections on tradition and ethics] (pp. 301-325). Kraków: Baran i Suszyński.
4. Kobylarek, A. (2017). *Polish Humboldtian University in the Face of Paradigmatic Change*. Cambridge Scholars Publishing.
5. Kobylarek, A. (2019). Education in the post-scientific culture. *Journal of Education Culture and Society*(1), pp 5-13.
6. Krimsky, S. (2006). *Nauka skorumpowana. O nieczystych związkach nauki i biznesu* [Corrupted science. On the shady links between science and business]. Warsaw: Państwowy Instytut Wydawniczy.
7. Laloux, F. (2014). *Reinventing organizations: A Guide to Creating Organizations*. Diateino.
8. Lasinska, K. (2013). *Social Capital in Eastern Europe. Poland an Exception?*. Springer.
9. Leja, K. (2009). Uniwersytet społecznie odpowiedzialny - przykład AGH [The socially responsible university - the example of AGH]. *E-mentor* (4).
10. March, J. G., & Olsen, J. P. (1989). *Rediscovering Institutions*. New York: Free Press.
11. Such, J., & Szcześniak, M. (2002). *Filozofia nauki* [The philosophy of science]. Poznań: Wydawnictwo Naukowe UAM.
12. Sztompka, P. (2016). *Kapitał społeczny. Teoria przestrzeni międzyludzkiej* [Social capital. A theory of interpersonal space]. Kraków: Wydawnictwo Znak.