

Pseudoscientific Bias in Polish Economics in 1948–1989

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Abstract

In this article I analyse political economy in Poland in 1949–1989. I start with a presentation of pseudoscience. Next, using Robert Merton's sociological approach and Anthony Derksen's multicriterial approach, I try to prove that political economy in communist Poland meets the criteria to be considered a pseudoscience. I also present additional arguments for recognising this economy as a pseudoscience.

Keywords: methodology of economics, pseudoscience, economics in Poland under communism

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Introduction

In this article, drawing upon contemporary philosophy of science, and in particular the methods it offers to research pseudoscience, I argue that political economy in the Polish People's Republic (Polish acronym PRL) in the years 1949–1989, like Lysenkoism and phrenology, was a kind of pseudoscience.

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1. Pseudoscience

Pseudoscience (empirical) is a notion depicting activities (or knowledge resulting from it) which a) refer to a general theory; b) pretend to be science; and c) are not science. Condition a) excludes a single fraud (e.g. falsification of experiment results). Condition b) excludes e.g. religion. Understanding condition (c) requires the specification of a demarcation criterion of science from nonscience (including pseudoscience) (Hansson 2014: 19–20).

Robert K. Merton, for example, indicates epistemic norms guiding scientists as such a means of demarcation (Merton 1942). Following these norms endows the emerging knowledge with scientific city. First, statements aspiring to truth are assessed in terms of empirical and logical adequacy, and their acceptance does not depend on characteristics of their authors. Merton calls this science *universalism*. Second, statements accepted by science are common property of researchers and may not be appropriated, which contributes to the progress of science (*communism*). Third, scientific statements are subject to collective control, so they are free from the impact of human interests (*disinterestedness*). Fourth, science verifies beliefs considered important by other institutions such as religions and ideologies (*organised scepticism*).

Karl R. Popper, however, focuses not so much on scientists' behaviour as on qualities of scientific knowledge. As a demarcation criterion, he suggests falsifiability of statements or systems of statements (theories), i.e. their ability to be contradicted by evidence. According to this criterion, only falsifiable statements which resist numerous attempts to contradict them may be considered scientific knowledge (Popper 1962).

Imre Lakatos and Paul Thagard propose a synthesis of the sociological approach of Merton and the knowledge analysis of Popper. Lakatos is interested in sequences of theories altered under pressure of observed anomalies. 'Scientific research programs' are 'theoretically progressive' when new theories explain anomalies and result in forecasting new facts. Once forecasts are confirmed, the program is 'empirically progressive'. Research programs degenerate if theories are altered *ad hoc*, merely to explain anomalies (Lakatos 1974: 118). In this case, they are referred to as pseudoscience. Thagard, however, is of the opinion that a degenerating research program can be considered a pseudoscience only when its supporters cease to seek

explanations of observe da nomalies, ignore inconvenient facts and do not try to evaluate the program against other programs (Thagard 1978: 227–228).

By the end of the 20th century, under the influence of the criticism of Larry Laudan (Laudan 1983), among others, numerous authors ceased attempts to indicate the necessary and sufficient conditions for pseudoscience. They are satisfied with an enumeration of standard characteristics (identifiers) of pseudoscience. More or less similar sets of identifiers of pseudoscience are offered by, among others, Langmuir (1953), Gruenberger (1964), Dutch (1982), Bunge (1982), Kitcher (1982), Grove (1985), Lugg (1987), Thagard (1988), Derksen (1993), Ruse (1996), Kuipers (2001), and Mahner (2013). Sven O. Hansson calls such a method a 'multicriterial' approach (Hansson 2014).

2. Polish Political Economy and Robert Merton's Criteria of Scientific City

Political economy¹ in Poland in 1949–1989 met the first two conditions for pseudoscience put forth by Hansson. Polish economists referred to Marxism as a general theory and took pride in the scientific city of their theories. A justification of the thesis that Polish political economy was not a science (the third condition) requires separate arguments. In order to prove this, I shall first apply Robert K. Merton's criteria for scientific city.

2.1. On 'Science Partyiness'

Merton claims that researchers are driven only by cognitive goals and that in the process of evaluating their theories they follow the criteria of the correspondence theory of truth. Acceptance of their theories is not author-, religion- or ideology-dependent.

However, Marxist economists did not so much strive for truth as they served the Communist Party (PZPR), in accordance with Emil Adler's² idea of 'science

¹ I refer to strictly economic studies published in Poland (excluding, for instance, econometrics and economic sociology).

² Emil Adler (1906–1997), philologist, philosopher, Deputy Director of the Institute for Training of Scientific Cadres (Polish acronym IKKN) of the Central Committee of the Polish United Workers'

partyiness' (*'partyjność nauki'*) formulated in his article published by the Polish Academy of Sciences (PAN) in *Nauka Polska* (Adler 1953: 248–250). Adler claimed that the objective of philosophy and science (including economics) is not truthfulness but agitation (Vladimir Lenin was the first to formulate the science partyiness rule in 1909).

Oskar Lange also accepted the rule of 'economics partyiness' and, like Adler, in a way reconciled it with the demand of truthfulness (Lange 1980: 274–288). In particular, Lange claimed that 'social sciences are ... by their very nature ideological'–'only the workers' movement pursues the unrestricted striving for truth' and 'any mystification is alien to it' (Ibidem: 274, 284).

Later, in the 1970s, the same principle of the partyiness of science was put forth, among others, by Henryk Chołaj, a long-time editorial board member and deputy head of *Ekonomista*, the oldest Polish scientific journal for economists, taken over by Marxists in 1949 (see Czarny 2014b: 95, 98). Chołaj wrote that 'economic science ... is ideological in all respects' and its partyiness requires, among other things, proclaiming the 'superiority of the socialist economic system over the capitalist' (Chołaj 1977: 297–327).

That the Polish economist community founded by the party (PZPR) by means of administrative and police methods at the turn of 1940s and 1950s found truthfulness to be of minor importance is proven by rapid changes of opinions that were constantly being adapted to the current political situation. For example, in 1953, following Joseph Stalin's publication of *Economic Problems of Socialism in the USSR* [*Экономические проблемы социализма в СССР*], Edward Lipiński condemned his earlier statements on economic laws and considered them 'anti-Marxist' as they did not sufficiently stress the objective character of those laws (Lipiński 1947; cf. Lipiński 1953: 51). In the same article, Lipiński described the 'law of planned (proportional) development of socialist economy' as being opposed to the anarchy of capitalism; this view also he retracted three years later (Lipiński 1953: 47, 49; cf. Lipiński 1956: 28, 32).

In 1953, Włodzimierz Brus (jointly with Maksymilian Pohorille) condemned Władysław Gomułka. He claimed that '*gomułkowszczyzna*'s attempts... under the guise of its "own road to socialism" set Peoples' Poland against the USSR and led to the rebirth of capitalism, most seriously threatening the building of socialism'. Similar was Brus' assessment of the communists in Yugoslavia, to whom he referred

Party (KC PZPR), one of chief institutions, similar to the Main School of Planning and Statistics (SGPiS) in Warsaw, that educated party economists to fill the gaps in Polish universities left by the dismissal of 'bourgeois' scientists in 1949 (see Connelly 1996).

as 'Tito-Nazi agents' and 'Tito Fascists'. However, after Gomułka came back to power, Brus described him as an economic reformer and insightful party leader, and the 'Yugoslavian model' as one of the varieties of socialism (Brus, Pohorille 1953: 35, 148; cf. Brus 1961: 155, 244).

In 1966, Janusz Górski wrote that Polish economic science had made a major contribution to the development of the socialist economic growth theory, primarily thanks to Professor Michał Kalecki and his coworkers. Two years later, after the anti-Semitic campaign of 1968, Górski claimed that the same studies were overly formalised and detached from reality, did not account for 'social factors', promoted excessive investment, and had authors who were 'influenced by bourgeois ideology' (Górski 1966: 6; cf. Górski 1968: 5).

The discussion on the so-called 'well-developed socialist society' initiated by Henryk Chołaj in the 1970s was abruptly terminated after the massive economic crisis of the 1970s and 1980s.

In the 1980s, Józef Pajestka first claimed that economy of the PRL was fully rational on the 'macro' scale, only to change his opinion in the face of the collapse of real socialism in Poland, claiming that it was totally irrational (Pajestka 1980: 290; cf. Pajestka 1982: 353 and Pajestka 1988: 282–283).

The collapse of the ideal of truthfulness in 1949–1989 also resulted in Polish political economists claiming explicit untruths. For instance, in 1949, Bronisław Minc wrote about the 'basic law of capitalism' allegedly proven by Karl Marx, proclaiming the 'absolute impoverishment' of the working class:

The phenomenon of absolute impoverishment is expressed in... the decline of workers' real wages... Data from medical examinations in recruitment to the US Army prove that one half of... those young people were considered... not fit for military service... mostly because of... poor nutrition of the American worker, Negroes in particular (Minc 1949: 187–189).

In the 1955 'official' textbook of economics by Soviet economists translated into Polish, the authors (Ostrovityanov et al. 1955: 734) claimed that:

Socialist industry and big socialist farms are the most heavily... mechanised in the world, and are constantly developing at a pace unattainable for capitalism.

In 1958, Dimitr Sokolov announced that the industrial output of the US and the USSR would align 'surely no later than in the seventies', while:

Alignment... in farming will undoubtedly take place earlier, in many areas even before 1960. Alignment of living standards will take a little bit longer (Sokolov 1958: 41).

Likewise, in 1959, Andrzej Karpiński wrote that 'Poland is among the fastest growing economies in Europe and across the world'. As a result, 'it is completely

realistic' to expect that the country would reach the same living standards as the most developed European countries by 1975 (Karpiński 1959: 20). Józef Sołdaczuk also claimed in 1961 that 'socialist countries will shortly overtake capitalist states in global industrial output' (Sołdaczuk 1961: 68).

In 1968, Bronisław Rudowicz wrote in justification of repressions against Michał Kalecki and his coworkers: 'some of our theoreticians... with all determination and deliberation have made efforts to blur the differences between bourgeois and Marxist economic science' (Rudowicz 1968: 44).

Four years after the riots on the Polish coast caused by price increases, in which dozens of people were killed and more than a thousand were injured, the following entry was inserted in *Mała Encyklopedia Ekonomiczna (Concise Economic Encyclopaedia)*:

'The law of conformity of productive forces and relations of production... applies also in the socialist formation. Emerging... discrepancies between... production relations and new production forces do not result in serious social-economic conflicts... They are removed in due time by purposeful socialist state activity' [A.R. (Adam Runowicz– B.Cz.)] (*Mała Encyklopedia Ekonomiczna* 1974: 514).

In 1984, Aleksander Łukaszewicz announced the existence of a 'Polish Economic School' dealing with problems of economic rationality (Łukaszewicz 1984: 1174). The School, however, is not mentioned in any reliable world sources (Czarny 2014a: 14, 122).

2.2. The Disappearance of Scientific Criticism

According to Merton, scientific theories are subject to control and institutional criticism, which makes them free from the impact of individual interests and beliefs. However, in the case of Polish political economy, the collapse of the idea of truthfulness was accompanied by a lack of scientific criticism of the official economic doctrine.

This scenario was encouraged by incentive schemes. Career promotion in science required compliance of opinions with the official doctrine. Disappearance of scientific criticism was also caused by restriction of access to economic information (almost total in 1949–1956 and gradually fading in 1956–1989). Censorship (by the state administration, editors and peers) had a similar function. As a result, after 1949, it was impossible to publish dissident texts in the party and state controlled press

(e.g. *Ekonomista*) and publishing houses (e.g. Polgos, the largest Polish economic publisher, renamed Polish Economic Publishing House, or PWE, in 1961).

As late as 1988, Józef Nowicki reported 'inner censorship' in *Ekonomista*, where 'every article contrary to the theory of class is rejected, preventing its verification by an official censor' (Rafa 1988: 70; see also 134)³. As a result, articles on the basic economic law of socialism and the advantages of socialist ownership of the means of production were very easy to find in *Ekonomista* from the 1960s until the 1980s. Articles on game theory or hidden unemployment in Poland were published extremely infrequently.

As regards publishers, the 1949 by-laws of Polgos, for instance, stipulated that the Political Editor '[e]nsures competent political direction of the editorial process; analyses and evaluates politically complete editorial plans, outlines of papers delivered for publication, papers submitted by authors and translators, publication series programs, and publication programs of individual magazines; ensures political correctness of editions; develops ideological training programs for editorial staff' (*Regulamin organizacyjny...*, APW, PWE, 1/1: 10–11).

In the few cases of articles and books critical of the official doctrine which were still published, they were subject to informal censorship as the economist community ignored them.

The confirmation of the monopoly of Marxism at the Second Congress of Economists in 1956 was representative. Out of 41 discussion participants, only Wincenty Styś, a pre-war professor of economics from Wrocław, supported Stefan Kurowski's postulate of freedom of science. The others, while supporting the idea of broadening the scientific discussion, restricted its context to Marxism only. Kurowski's proposal was not even mentioned in the proceedings of the Congress (see Kurowski 2007: 43).

A good example of the collapse of the ideal of truth and scientific criticism was the lack of significant local reviews of the 'Bible' of PRL economists, *Ekonomia polityczna* by Oskar Lange. Polish reviewers were enthusiastic, contrary to the world's opinion. Peter Wiles was very critical of the book (Wiles 1965). Wiles enumerated the cardinal weaknesses of Lange's monograph, namely, presenting a bogus picture of real socialist economies; ignoring the Keynesian revolution; leaving unsaid that continued growth of real wages in capitalist countries refutes Marxism and that surplus value is not an empirical category; ignoring the issue of market competition

³ Jan Rafa was the pen-name of Professor Józef Nowicki (1917–1989), a pre-war graduate of the Warsaw School of Economics (SGH), a long-time Chair of Political Economy at SGPiS, and a historian of economic thought (e.g. *Teoria ekonomii II Rzeczpospolitej*, KiW, Warszawa 1988).

as a mechanism conducive to rational allocation of resources in capitalist countries; and omitting services in the calculation of national income (Ibidem: 119–122). Other reviews, published outside Poland, were vague and appeared mostly in socialist journals (Lange 1986: 761, 801, 864, 907, 915–916). Journals such as *American Economic Review* kept silent about Lange's *opus magnum*. The concept of economic rationality, considered by Lange to be his most important theoretical achievement, was taken as an explicit apologia for real socialism (see e.g. Godelier 1972: 20).

2.3. Distorted Selection of Theories and their Authors

Merton writes that scientists are not guided by their own interests, and that science verifies beliefs (e.g. ideological beliefs). Thus, science is characterised by constant selection of theories and their authors. Opinions that do not survive criticism give way to new interpretations of observed results.

In the case of the political economy of the PRL, this process was degraded. I have already mentioned that publishing dissident economic texts in Poland was not possible after 1949 and that state censorship was supported by editorial and peer censorship. Thus, no theories competitive with the official doctrine emerged. Similarly, career promotion was subordinate to criteria other than intellectual capacity. The sewer, among others, party membership, acceptance of Marxism, willingness to promote it publicly, usefulness for superiors, and even racial criteria.

For example, one of the creators of the Polish political economy Włodzimierz Brus defended his doctoral thesis in September 1951 and was promoted to a SGPiS professorship as early as January 1952. By comparison, after being deprived of the title of *Doctor Habilitatus* in 1963 for criticism of socialist economy and after obtaining the title once again, Stefan Kurowski waited more than 20 years before becoming a professor.

As usual, the revolution devoured its own children; after 1968, Brus left Poland in midst of a PZPR-inspired anti-semitic campaign. The March purge of 1968 deprived universities of eminent personalities. Not only economists of Jewish origin, like Brus, were affected, but so were those who did not blend into the environment because of their independence and creativity. Among them was Janusz Zieliński, fired from SGPiS in Warsaw and forced to emigrate, 'probably the most eminent post-war Polish economist' (Beksiak, Grzelońska 1990).

After March 1968, the position of Associate Professor was created at Polish universities and higher schools (including higher schools of economics). Those without a *habilitation* could apply. This allowed the filling of vacancies left by those fired with appointments for outstanding merit, as recommended by the school's PZPR organisation. These 'March Associate Professors' were to ensure among other things political correctness in teaching.

The symbiosis of Marxist economists with the PRL power elite, contrary to the idea of scientific career promotion guided by cognitive success, was symbolic. The symbiosis is demonstrated by the list of Presidents and Vice-Presidents of the Polish Economic Association (PTE), as well as the members of the editorial board and the editorial committee of *Ekonomista* in 1950–1989, which abounds in names of the then party and state dignitaries⁴. As a reward for political economists' services in support of the totalitarian system expressed in 'scientific' books, articles, expert opinions and all sorts of public statements, as well as university titles awarded to party apparatchiks, these experts received well-paid jobs, foreign trips and career opportunities in science and administration.

3. Multicriterial Approach

Now I shall verify the PRL political economy according to the criteria of Anthony A. Derksen, a prominent representative of the 'multicriterial approach', providing examples of each of his 'seven sins of pseudoscience'.

3.1. Conviction that Only the Chosen Ones Are Able to Spot the Truth

Derksen refers to ideas of Sigmund Freud, the founder of psychoanalysis. Only the initiated ones, those already analysed, may see the truth, provided that they overcome their own limits. Those not initiated do not understand the theory, and thus may not criticise it. Derksen argues that initiation often endows pseudoscientists with an almost religious zeal (Derksen 1993: 32–33).

⁴ On the list are, among others, PZPR Politbureau members Jan Głowczyk and Stefan Jędrzychowski, KC PZPR Secretaries Władysław Baka and Stanisław Kuziński, KC PZPR members Oskar Lange and Józef Pajestka, Deputy Prime Ministers Stefan Ignar, Stanisław Kuziński, Zbigniew Madej, Jerzy Ozdowski, Tadeusz Pyka, and Kazimierz Secomski, Ministers Tadeusz Dietrich, Janusz Górski, Wincenty Kawalec, Stanisław Nowacki, and Witold Trąmpczyński, and many Members of the factitious PRL Parliament.

In Poland in 1949–1989, the Marxists were the initiated ones. Initiation came in many forms. In the case of the founding fathers of Polish political economy (e.g. Włodzimierz Brus, Maria Dziewicka, Bronisław Minc, Maksymilian Pohorille, Józef Zawadzki, and Seweryn Żurawicki), it was usually about commitment to communism before and during World War II, supported by however brief economic studies e.g. in the USSR. Then, the initiated ones initiated their followers; for that purpose, graduate programs were organised at the beginning of the 1950s in the Department of Political Economy at IKKN, at SGPiS and in the Soviet Union. That was the way in which Włodzimierz Brus and his team initiated at IKKN some PRL Professors: Zofia Bartel, Henryk Fiszel, Jerzy Kleer, Tadeusz Kowalik, Jędrzej Lewandowski, Kazimierz Łaski, Mieczysław Mieszczankowski, Marian Ostrowski, Edward Wiszniewski, and Władysław Zastawny. Graduate students (*aspiranci*) Henryk Chołaj and Józef Pajestka were initiated at SGPiS, and *aspiranci* Zofia Myszkowska (Morecka) and Czesław Prawdzic in the USSR. The composition of the group of initiated political economists later changed.

Criticism of political economy by outsiders was considered irrelevant as Western economics was rejected in toto. At the inauguration of the Congress of Economists in December 1950 Oskar Lange said: 'In order to meet the challenges, Polish economic science must be Marxist and Leninist. For that purpose, it must wholly overcome the remains of bourgeois thinking...' (Lange 1951: 4–5).

Włodzimierz Brus, the convention keynote speaker, described that over coming as follows: '[T]he most prominent characteristic of the past period ... in economic science was the fierce struggle of Marxist and Leninist economic theory against false bourgeois theories' (Brus 1951: 32).

As an example of 'false bourgeois theories', Brus pointed to the monograph of the 'ultra-reactionary representatives of American behaviourism in economic science', John von Neumann and Oscar Morgenstern's 1944 *Theory of Games and Economic Behavior* (Ibidem: 22).

Descriptions of quasi-religious zeal among political economists can be found in witness reports. Henryk Słabek (IKKN graduate) writes about the behaviour of IKKN's *aspiranci* at conferences: '[t]heir manifested passion close to ideological fanaticism impressed the old and was met with mixed feelings of anxiety and appreciation at times' (Słabek 1997: 58).

3.2. Belief in the Enormous Significance of the Theory

Derksen writes that pseudoscientists believe in the importance of their own theories. For example, Freud compared himself with Copernicus and Darwin (Derksen 1993: 36). In turn, political economists in Poland were confident about the importance of political economy. Thus, economic processes held a special place in the hierarchy of human activities described by Marxists: namely, in Marxism, economic processes drive events and are decisive for other social processes as well.

According to Polish Marxists, economic factors in particular are the driving force of society towards communism. For instance, in his *Ekonomia polityczna*, making reference to Joseph Stalin, Lange declared the existence of the so-called law of progressive development of productive forces. Societies develop continuously and that leads them through subsequent steps to socialism (Lange 1980: 35–38, 42–44, 46, 52; see also *Historia WKP(b)*... 1949: 118–150).

One of the most influential Marxist sociologists in Poland wrote in 1967: 'Specifically, economic motives are characterised by the power to condition and transform not only the form but also the content of cultural needs and satisfaction of preferences including their most subjective aspects. Indirect impact of social relations, institutions and groups driven by material interests extends (often unconsciously) to all are as of culture, without exception, and reaches even the most subtle shades of aesthetic and religious emotions' (Kozyr-Kowalski 1967: 215).

In other words, according to Stanisław Kozyr-Kowalski, economic factors determine almost all aspects of social life.

3.3. 'Magic' Method of Gathering Observed Results

Derksen describes Freud's methods of free associations, analysis of dream symbols, and interpretation of whole dreams. They can be applied as long as the desired sexual associations appear in the patient's responses. Those methods usually allowed the psychoanalyst to discover the sexuality of past events in the childhood of the patient, supposedly decisive of their subsequent behaviour (Derksen 1993: 31).

Polish political economists had their own 'magic' method of creating empirical evidence for their theories, that is, concealing or ignoring observed results. For instance, after 1949, economic statistics almost ceased to be published. Statistical

yearbooks of the Central Statistical Office (GUS) in Warsaw were no longer released. Eugenia Krzeczowska (Szyr), the wife of Eugeniusz Szyr, one of the PZPR leader and a trusted *aspirant* of IKKN, even before completing her candidate dissertation in 1954 was appointed to supervise key departments of GUS and later also supervised the unclassified GUS publications on the PRL economy including the statistical yearbook. The situation began to change after 1956. However, some economic information, e.g. data on foreign debt, remained confidential at least until the late 1970s.

As an example of ignoring observed results, descriptions of unemployment and its social consequences in market economies were rampant while hidden unemployment in socialist countries was held in total disregard. That usually provided the author with arguments proving the superiority of the socialist economy over the capitalist one. As early as 1988, Józef Nowicki pointed to this common practice (Rafa 1988: 25).

3.4. Overestimating Seemingly Spectacular Event Connections

Derksen describes Freud's arbitrary interpretation of patient behaviour (e.g. their sexual preferences, memories, dreams, etc.). All those behaviours often supplemented each other in a spectacular way, forming a logical whole, supposedly confirming the psychoanalyst's opinion. What Freud omitted, however, was their alternative interpretation (Derksen 1993: 30).

In the case of the PRL political economy, an example of similar intellectual manipulation is the idea that societies develop by undergoing subsequent 'social formations' from primitive community through slavery, feudalism and capitalism to socialism and communism (Lange 1980: 35–38). Lange claimed that this sequence is warranted by the aforementioned law of progressive development of production forces.

To prove their point, political economists referred to numerous arguments and examples, bringing them into a coherent logical structure. They claimed that technology constantly develops through the millennia, as evidenced by countless ever-new technological and organisational improvements. Technology development forces, in turn, drive further advancement in economy and organisation of society. In short, the windmill creates feudalism and the steam machine creates capitalism.

This vision of economic history was contested by, for example, Max Weber's concept of rationalisation (*Rationalisierung*), left unmentioned by political economists. Marxist economists generalised the experience of some European countries, ignoring others. However, as Leszek Kołakowski writes, '[t]here is no rational method of predicting the "future" of humanity in a substantial time scale, nor forecasting future "social formations"' (Kołakowski 1988: 1208).

Nevertheless, until the fall of socialism in Poland, in their lectures and textbooks, Polish economists used to copy the Stalin/Lange theory prophesying the inevitable arrival of socialism and communism. Examples include among others Mieszczankowski 1987: 22–31, Rutkowski 1987: 62–92, *Ekonomia polityczna...* 1988: 21–26, 95–97, and Sadzikowski 1989: 11–25.

3.5. Insufficient Confirmation of the Theory With Observed Facts

Derksen writes about the unreliability of clinical data referred to by Freud. A psychoanalyst influences their content by asking insinuating questions. Proponents of Freud's theory do not boast a higher percentage of therapeutic success than proponents of alternative concepts, and the success of their therapy maybe only a matter of chance (Derksen 1993: 21–23).

In the case of the PRL political economy, an example of the lack of an empirical base for theoretical generalisations is claims of political economists regarding value, surplus value and exploitation of labour by capitalists. These theses can neither be confirmed nor falsified due to the non-empirical nature of terms such as 'socially necessary labour time' or 'surplus value'. Value in Marxist political economy cannot be measured as it is impossible to specify the value of any good in terms of socially necessary labour time. The Marxist opinion that labour is the only value-creating production factor is an arbitrary definition, which can neither be justified nor applied in an empirical description of economic phenomena (Blaug 1980: 8, 13, Kołakowski 1988: 271–273).

The Marxist definition of value, however, fulfils significant functions. For example, in conjunction with claims that workers do not sell labour but labour power, and that the value produced by labour power is greater than the value of labour alone, it results in the ideologically key thesis of exploitation of workers by capitalists.

Nevertheless, until the fall of real socialism in Poland, Polish political economists were teaching the labour theory of value. Examples include Mieszczankowski 1987: 37–51, Rutkowski 1987: 127–135, 224–246, *Ekonomia polityczna...* 1988: 32–35, 54–62, and Sadzikowski 1989: 103–153.

3.6. The Nature of Pseudoscientific Theory Eases Its Compliance With Many and Various Events

Derksen writes that a defence of Freud's theory is facilitated by the method of determining the meaning of the patient's dreams based on supposition. Observed results depend on the ideas of the psychoanalyst and this allows him to amend all inconsistent evidence in order to remove the inconsistency (Derksen 1993: 34–35, 40).

In the case of Polish political economy, a comparable example is to assume *a priori* that social conflicts in countries of real socialism are of 'non-antagonist character', allegedly warranted by 'social ownership of the means of production'. In the opinion of political economists, that is the difference between countries of real socialism and countries with private ownership of production means, where social conflicts are 'antagonistic' by default. This concept was generalised by Lange, among others, in order to account for all the conflicts in countries with real socialism (Lange 1980: 49, cf. p. 79). It survived in that form until the fall of real socialism (see e.g. Mieszczankowski 1987: 22–31, 334–335, Rutkowski 1987: 62–92, Sadzikowski 1989: 20–21, 23).

The *a priori* assumption of the antagonistic character of conflicts in capitalism and their non-antagonistic nature in countries with real socialism allowed the consideration of any conflict in countries with real socialism as non-antagonistic. This led political economists dealing with observed anomalies to, among other things, downplay massive and bloody protests in Poznań in 1956 and on the Baltic coast in 1970. The very content of the theory (i.e. in this case classification of conflict types into antagonistic and non-antagonistic) provides the desired interpretation of the results.

3.7. Immunising the Theory With *ad hoc* Hypotheses

In Derksen's opinion of psychoanalysis, the *ad hoc* hypothesis of suppression of emotions often saves the theory from falsification (Derksen 1993: 24). In the case of the Polish political economy, a good example of similar *ad hoc* is the peculiar PRL counterpart to Lakatos' 'scientific research program' in the form of Lange's and his epigones' discussion of economic rationality. Successive *ad hoc* hypotheses allowed the disputing parties to fend off more and more numerous observed anomalies. They gradually took such anomalies into consideration to protect themselves from being compromised. The effect was a surprising evolution of the 'program' resulting in the final version of the theory being exactly the opposite of its original version (Czarny 2014a: 134).

Specifically, according to Lange's 1959 opinion, socialist economy was rational both micro- and macro-economically (Lange 1980: 156–158). Confronted with the obvious wastefulness of socialist enterprises, after Lange's death his followers made use of an *ad hoc* hypothesis, according to which the PRL economy was micro-economically irrational but rational at the macro-level (see e.g. Baka 1980: 194; Łukaszewicz 1980: 54, 58). After the major social and economic crisis at the turn of the 1980s and 1990s, Józef Pajestka suggested another *ad hoc* hypothesis according to which Polish economy was macro- and micro-economically irrational; however, at the initial phase of the cycle, i.e. when building the foundations of socialism, it was (presumably) macro-economically rational (Pajestka 1983: 63–64, 142–143, 146–148). Thus, the debate of Polish political economists had features of the Lakatosian degenerating scientific research program. In the late 1980s, in view of the fall of socialism in Poland, the evolution of the program was ended with another *ad hoc* hypothesis by Pajestka, claiming that the PRL economy was totally irrational throughout the whole period of real socialism (Pajestka 1988: 282–283).

4. Other Arguments. Comment

Thus, the PRL political economy was not a science according to the definition of Robert Merton. This implies that it was a pseudoscience in the sense proposed by Sven O. Hansson. It was also a pseudoscience according to Anthony Derksen's definition. This does not exhaust the issue.

4.1. Additional Arguments

The Polish political economy in 1949–1989 had further characteristics of a pseudoscience. First, Hansson points out that proponents of pseudoscience often unconditionally believe in the authority of some chosen persons (Hansson 2014). A good example is Polish economists' massive quoting of Karl Marx, Friedrich Engels, Vladimir Lenin and (until 1956) Joseph Stalin, considered to be conclusive evidence in favour of the quoting party. This specific way of arguing was described by the pre-war professor of Warsaw SGH Jan Drewnowski (1974: 51), among others.

Second, Thagard points out that proponents of pseudoscience are often unaware of the existence of theories alternative to theirs (Thagard 1988). The Polish counterpart to this feature of pseudoscience was common ignorance of the basics of Western economics. The reasons included, among others, the rejection of the whole 'bourgeois' theory of economics and destruction of the pre-war economic education system, the lack of Polish translations of academic textbooks published in the West, poor competences in foreign languages, and the lack of motivation to study Western economics.

One of the results was so-called 'Columbusism'. This was the term used by Andrzej Brzeski at the Second Congress of Economists in 1956 in reference to the re-discovery of elementary economic theories (as examples, he quoted the re-discovery by Polish political economists of the comparative advantage theory and the income elasticity of demand) (*Dyskusja na II Zjeździe...* 1956: 104–105). However, the phenomenon of 'Columbusism' was limited in scope. I recall that notions such as the prisoner's dilemma, the Pareto optimum, the ISLM and ADAS models, and the Mundell-Fleming model were almost unknown among Polish economists in the 1980s.

Third, pseudoscientists often use persuasive language, as Artur Woll observes (2011: 9). Indeed, IKKN's (INS's) graduate students (*aspiranci*) wrote in their seminar papers and candidate theses about 'working people' in socialist countries who are 'actual masters of production', which results in their 'socialist competition' (Łaski 1952: 70); about 'exploitation' of the rural 'poor' by 'kulaks' 'maliciously avoiding statutory supplies, who should be subject to administrative measures including imprisonment (Lewandowski 1954: 13, 250–260); and about 'lies' of pre-war 'bourgeois economists', e.g. 'apologetic' opinions of the pre-war professor of economics Edward Taylor 'glorifying Nazi Germany', whose 'machinations' serve the 'class interests of the most reactionary of the bourgeois' (Kleer 1954: 22).

Similarly persuasive terms were applied by Polish political economists even at the end of the PRL. For instance, Wiesław Iskra in the 1974 *Mała Encyklopedia Ekonomiczna* claimed as follows:

Under the conditions of capitalism... [the means] of production, concentrated in the hands of a small group of capitalists, make the basis for exploitation of contracted workers... In a socialist economy, production of commodities... is not based on private but on social ownership, not on exploitation of man, but on mutual cooperation and assistance of cooperating producers (*Mała Encyklopedia...* 1974: 252).

Just before the fall of socialism in Poland, Wiesław Sadzikowski wrote in a popular textbook for higher schools of economics (11th edition) (Sadzikowski 1989: 19): 'Marxist political economy proves that the main characteristic of capitalist production relations... is exploitation, i.e. exploitation of contract workers by owners of the means of production. A social system based on exploitation is unfair'.

4.2. Commentary

The transition from science to pseudoscience is gradable, determined by the volume and intensity of the characteristics of pseudoscience. The Polish political economy of 1949–1956 was more pseudoscientific than in 1956–1989 (Czarny 2014b). After 1956, dogmatism was relaxed, and more and more statistical yearbooks and translations of Western economic literature were published. As a witness of the era stated, 'we were slowly gaining access to international scientific circulation, at least as its consumers' (Kurowski 2007: 50). Józef Nowicki confirms such progress, writing for example that a textbook of political economy edited in 1987 by Jędrzej Lewandowski and Władysław Szyber from Warsaw University was much better than the one by Włodzimierz Brus and Maksymilian Pohorille from 1953⁵. However, it seems that the opinions of Kurowski and Nowicki do not clash with the thesis of the pseudoscientific nature of the Polish political economy in the whole period from 1949 to 1989. As Kurowski himself wrote later, after 1956.

⁵ In Lewandowski and Szyber's textbook, however, the Marxist definition of value was still explanatory for the thesis of the exploitation of workers by capitalists (*Ekonomia polityczna...* 1987: 64–78, 121–127).

'The primacy of Marxist economics remained a tool for verifying scientific texts and studies in political economy for publication and for assessing scholars... Economists fitting the Marxist formula were promoted and pursued the normal academic career. Those who dared to challenge the system were discriminated against' (Kurowski 2007: 50).

Nowicki points: '[t]housands of "scientific" works published in 1950–1985, with few exceptions, had nothing or very little to do with science' (Rafa 1988: 41).

People can work within the framework of pseudoscience in good faith, adhering to the rule of scientific city; however, their work does not substantially change the system. Michał Kalecki serves as an example. True, he happened to write on the 'science of historical materialism', the 'decay of monopolistic capitalism', and the 'trade unions harnessed to the chariots of imperialism' (Kalecki 1956: 11); and yet, his output from PRL times received worldwide recognition. Furthermore, people change: young Galileo studied astrology, and young IKKN graduate student (*aspirant*) Tadeusz Kowalik accused Czesław Bobrowski, a repressed creator of the post-war plan for rebuilding the Polish economy, of lies and 'opposing the industrialisation of Poland' (Kowalik 1953: 19). The charges did not prevent Galileo from later discovering the moons of Jupiter, or Kowalik from providing the world with a monumental critical edition of Oskar Lange's *Collected Works*. In Poland in 1949–1989 the official circulation brought from time to time works mildly critical of real socialism, and less often fundamental works of foreign economists, and even translations of foreign economics textbooks.

The phenomenon of Michał Kalecki or Tadeusz Kowalik and books such as *Historyczny proces wzrostu gospodarczego* (PWN 1963, Stefan Kurowski's *habilitation* thesis), or translations of Piero Sraffa's *Production of Commodities By Means of Commodities* (PWN 1965) and János Kornai's *Anti-equilibrium* (PWN 1974), were in PRL not the norm but rather an exception. The nature of the entire system was determined by institutions such as scientific journals and publishing houses, higher schools of economics, the Central Qualification Committee for Scientific Workers (its name changed many times), and the daily pursuit of hundreds of economists committed to the official doctrine. They decided about publications, academic promotions, and course syllabuses shaping Polish political economy. In the political economy of the PRL there was almost no knowledge produced that would go beyond common sense and was not merely a compilation of truths stated elsewhere, which hardly made it a science, as proved by its outcome (Czarny 2014a, Introduction; Czarny 2014b; Rafa 1988: 41, 223; Wagener 1997: 170, 187; Wagener 1998: 24–27).

Conclusion

My primary goal in this article was to demonstrate that political economy in communist Poland was a kind of pseudoscience. I hope also that this analysis has demonstrated the practical usefulness of the language and the research methods provided by the modern philosophy of pseudoscience. This language and these methods enable us to organise our thoughts effectively, orienting them towards specific problems. In other words, the concept of pseudoscience proved to be an efficient tool to describe and analyse activities and knowledge aspiring, like economics, to be an empirical science.

List of abbreviations

AAN	Central Archives of Contemporary Records (Archiwum Akt Nowych)
ANS	Academy of Social Sciences (Akademia Nauk Społecznych)
APW	State Archives in Warsaw (Archiwum Państwowe w Warszawie)
ASGH	SGH Archive (Archiwum SGH)
GUS	Central Statistical Office (Główny Urząd Statystyczny)
IKKN	Institute for Training of Scientific Cadres (Instytut Kształcenia Kadr Naukowych)
KC PZPR	Central Committee of the Polish United Workers' Party (Komitet Centralny Polskiej Zjednoczonej Partii Robotniczej)
KiW	Book and Knowledge (Książka i Wiedza) (publishing house)
PAN	Polish Academy of Sciences (Polska Akademia Nauk)
PRL	Polish People's Republic (Polska Rzeczpospolita Ludowa)
PTE	Polish Economic Association (Polskie Towarzystwo Ekonomiczne)
PWE	Polish Economic Publishing House (Państwowe Wydawnictwo Ekonomiczne)
PWG	State Economic Publishing House (Państwowe Wydawnictwa Gospodarcze)
PWN	Polish Scientific Publishers (Państwowe Wydawnictwo Naukowe)
PZPR	Polish United Workers' Party (Polska Zjednoczona Partia Robotnicza)
SGH	Main School of Commerce (Szkoła Główna Handlowa)

SGPiS	Main School of Planning and Statistics (Szkoła Główna Planowania i Statystyki)
WKP(b)	All-Union Communist Party (Bolsheviks) (Wszeczwiązkowa Komunistyczna Partia (bolszewików))
ZSRR	Union of Soviet Socialist Republics, USSR (Związek Socjalistycznych Republik Radzieckich)

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