

TRUTH, FAITHFULNESS AND RELIABILITY VAGUENESS IN THE ACCOUNTING THEORY AS A CHALLENGE FOR ACCOUNTING TEACHERS

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Abstract

The study was aimed at examining the notion of truth, faithfulness and reliability approaches in chosen social sciences, and accounting theoretical foundations among them. In order to explore whether accounting conceptual framework together with accounting theoreticians have developed a satisfactory understanding of the notion of truth, faithfulness and reliability, a literature review was undertaken seeking the definitions and classifications of truth that might be useful in business practice, especially in accounting preparation of financial reports. The main method used in order to achieve the aim was a critical analysis of the contemporary English and Polish literature on accounting, philosophy, as well as psychology and sociology to go to the comparison of the truth and reality perception from various perspectives. The results have shown that the recent changes made in foundations of accounting theory did not provide a satisfactory solution to the problem. The researchers contribute to the existing literature as there is an on-going debate on the direction and extent of changes in the international harmonization and standardisation of accounting that is focused on the problem of faithfulness of the information disclosed in the financial reports. It is argued that the understanding of truth is a key to an understanding of accounting theory and an inevitable factor of proper practice of accounting. Considering accounting teaching process, there was a qualitative analysis conducted based on accounting curricula of Polish public university with long tradition in accounting undergraduate and graduate education. With regards to the accounting curricula of a chosen university, it has been observed that there is an urgent need for a discern of accounting curricula in order to make substantive contents corresponding with developing economic surroundings of business entities preparing financial reports. Moreover, the importance of non-algebraic approach is stressed as a result of the study.

Key words: *economic reality, faithfulness, faithful representation, financial reporting, truth in accounting, accounting education.*

Introduction

Accounting is often seen as a science based on numbers and on algorithms because of its reconciliations and balancing the accounts. The same applies to the process of accounting teaching and accounting education literature. A good accountant – in public perception – is a thorough and accurate employee of financial services who can record and report procedures of financial transactions in favour of reflecting the economic phenomena of a business entity.

An accountant is rarely associated with dilemmas regarding ethical behaviour and deciding what is faithful and true information in an increasingly complex global economy. However, the business practice of the last several years has shown that an accountant is continuously more often expected not only to have qualifications and skills on the techniques and methodology of accounting, but also to make decisions on professional and ethical judgment in the field of the reliability of financial information in the dynamically changing conditions and requirements of the business environment.

In today's global economy the information complexity is accelerating and is subject to interpretation in a specific business context. The requirement that the accounting system is to generate relevant and true financial information is no longer adequate. The information must be generated and compiled in such sets, so as to give a faithful presentation of the financial position. This, in turn, raises the question of what is the truth in accounting? Since the interpretation of a piece of information and its sets as a credible and reliable is conditioned by the business context, the task of an accountant must be to grasp this context appropriately in the information disclosed. Because of the above, the education process of a modern accountant should ensure that the person would be open to the numerous aspects and overchoice in assessing faithful representation in words and numbers, and have the ability to examine and evaluate many problems in an appropriate business context in particular. This, in turn, requires the teaching and learning process of accounting to involve social aspects: praxeology and ethics among others.

Research Focus

The study investigates the problem of truth, faithfulness, and reliability presentation in accounting theory and its implications for accounting teaching process. The main aim of the study is to point out the complexity of the notion of truth in financial reporting and to stress the necessity for capturing the essence of faithfulness in accounting theory as well as to highlight the need for widening accounting educators' approaches to accounting teaching. Two goals have been adopted in this study. The first goal is to demonstrate the vagueness of accounting theory in the terms of financial information relativity and alternatives in the truthful representation of economic reality and to compare it with the conceptual background of philosophy and other social sciences relating to the concept of truth. Authors contribute to the existing literature as there is an on-going debate on the direction and extent of changes in the international harmonization and standardisation of accounting that is focused on the problem of faithfulness of the information disclosed in the financial reports. It is argued that the understanding of truth is a key to an understanding of accounting theory and an inevitable factor of proper practice of accounting.

The second goal is to verify whether accounting curricula in the bachelors' and masters' degree courses within accounting major of a public university sited in Poland have a potential to prepare future accounting professionals for unbiased and neutral assessment of truth standing behind accounting numbers. Accountants' awareness to the importance of professional judgment (in a process of creating accounting information) should be subject to academic education. Lack of clear guidance introduced during learning time might adversely affect faithful presentation of economic phenomena in financial reports. The analysis was focused on the teaching process and on the verification whether future accounting professionals are prepared for unbiased and neutral assessment of truth standing behind accounting numbers and if they are aware of the importance of professional judgment of faithfulness of financial information. Considering accounting teaching process, the importance of non-algebraic approach is stressed as a result of the study.

Methodology of Research

The main research method used in order to achieve the first goal was a critical analysis of the contemporary English and Polish literature on accounting, philosophy, as well as psychology and sociology to go to the comparison of the truth and reality perception from various perspectives. The special focus was definitions of truth that can apply to complicated contemporary business environment that is expected to be reflected in financial reports.

The second research method used was a qualitative analysis of accounting curricula for full-time and extramural accounting major at the public university in Poland. Based on the fact that accounting curricula obey the ministry of higher education requirements in large extend, the chosen university serves as an example of a public university's education contents referring to teaching accounting professionals in Poland. The analysis was carried out in order to identify social sciences and humanities' orientation in the curricula of accounting courses. The subject of assessment was the content of curriculum and its contribution to enhancing students' awareness for the notion of truth, faithfulness and alternatives in faithful representation of economic phenomena as well as the preparation for the ethical behaviour in a professional day-to-day conduct.

In the contemplation of every phase of conducted study, the method of interim synthesis was used as well.

Philosophical Approach to the Notion of Truth

Many definitions and interpretations of the notion of 'truth' can be indicated in the philosophy. Approaches to the understanding of this concept have evolved over the years along with the development of civilisation, and with the development of national cultures as well. Debates on understanding the notion of truth were intensively carried out in the nineteenth and twentieth century and they still continue. As noted by S. Judycki (2001), every highly developed culture considered these issues. There are three reasons for this:

- 1) realising the distinctiveness of metaphysical (ontological) issues in relation to epistemological ones,
- 2) creation of great scientific theories in the natural sciences, the development of formal disciplines and the so-called humanities,
- 3) taking into account the linguistic issues.

The on-going debates have led to the recognition of 'the specificity of the truth problem' in each of the identified scientific areas. However, despite the great diversity in the approach to truth, the overriding feature of definition created by different scientists was the acceptance of it as a value per se.

Understanding of truth can be colloquial, based on common sense, also called existential. The other approach is to understand truth on scientific grounds. An eminent Polish philosopher K. Ajdukiewicz (1949, cited by Chlewicki, 2013) presented the following classification of the definition of truth:

- 1) classic definitions of truth, presented by Aristotle and the Scholastics,
- 2) non-classical definitions of truth, also called alternative.

The overriding feature of the definitions included in the first group is the compliance of the truth of thought with reality. Aristotle defined truth and falsehood by reference into being. 'To say of what is that it is, and of what is not that it is not, is true'. However, 'to say of what is that it is not, or of what is not that it is, is false' (Aristotle, *Metaphysics*). This is so-called the correspondence definition of truth. Thus, as the essence of the correspondence approach one can point a theorem: 'The truth is the quality of the judgement involving the compliance between the content of this judgement and the fact, to which the content refers' (Judycki, 2001).

Whereas St. Thomas Aquinas held that truth can be understood at three levels:

- 1) metaphysically – truth is being, or true is only what exists,

- 2) cognitively – truth is when what exists in our intellect is in line with reality,
- 3) logically – all what indicates truth and leads to it

In case of the approach presenting the compliance of truth with the criteria, it is considered that a true statement is one that corresponds to the assumed criteria, which, in turn, is related to the problem of determining a criterion and its value, the problem of ultimate criteria. K. Ajdukiewicz pointed to the four criteria of truth:

- 1) coherence (also called coherentism) – thoughts are true, if they are in compliance with each other,
- 2) universal agreement (also called consensual) – claim is true, if it is the subject of universal agreement,
- 3) obviousness (also called the theory of evidence) – a claim is true, if it is clear, true is what is obvious and necessary; such an approach was adopted m. al. by Descartes (Tatarkiewicz, 2011),
- 4) pragmatic (also called utilitarian) – a claim is true, if it is useful; this position was presented m. al. by W. James, who presented the so-called pragmatic theory of truth.

The literature also indicates positivist theories and empirical theories of truth, according to which true is what is factual and consistent with the experience (Judycki, 1999). Moreover, literature presents other, diverse approaches to the concept of truth. For example, St. Augustine was of the view that the mind comes directly to the truth, without reasoning. Galileo acknowledged that the truth of scientific claims has to correspond to phenomena. He recognised the so-called experimental knowledge (Tatarkiewicz, 2011). On the other hand, S. Kierkegaard believed that the more spirituality in personal lives, the more truth in them. This means the superiority of the existential truth over the scientific truth. He claimed that truth is subjective.

Yet, in mathematical logic, truth is understood unlike and according to the concept of mathematical formalism, truth is only a symbol and has no deeper meaning. In turn, in the concept of mathematical Platonism, truth has its deeper meaning. Still, in another way, truth was comprehended by A. Tarski (1933), referring it only to formal languages. He described truth as a certain feature of sentences, expressible only in the meta-language to the language in which these sentences are uttered.

In the on-going discussion a question was also raised whether the classical definition of truth is necessary at all? A question can be asked, following S. Judycki, whether science and technologies need the classical concept of truth? Maybe other concepts would do? A philosopher believes that not, because at any attempt to discredit this concept at some stage of reasoning it anyway needs to be assumed. K. Adjukiewicz questioned the non-classical definitions of truth, which is referred to in the literature as a meta-accusation against them (Chlewicki, 2013). He pointed to too high the degree of possible arbitrariness in recognition of truth, thus relativism in regard to this concept. Such a conclusion is particularly important from the point of view of the aim of this paper. It can also be referred to accounting as a science. It is worth noting that relativism in determining truth can be dangerous because it can lead to manipulation of information. At the same time, the classical approach, referring to the actual state, can also take a multi-variant form.

The Awareness to the Truth and Reality in Accounting

Truth in Professional Ethics in Accounting

On the grounds of jurisprudence, truth means knowledge in line with the actual state. This is called the material truth, also called the objective truth. The opposite of the material truth is the procedural truth, also called formal, based on presumptions (Code of Criminal Procedure, Article 2; Code of Administrative Procedure, Article 7). In this context it is particularly important to recognise the actual state. It may be burdened with the consequences of relativism. J. Baggini and P.S. Fosl (2010) define relativism as the ethics of arbitrariness, denying that

something is right or wrong. Ethical relativism broadly consists in rejecting the view that the rules and principles of morality are absolute and universal, that applies to all individuals at any time and place. W. Galewicz (2010) draws attention to the moral relativism of the courts of law, which may also affect the perception and assessment of reality, including the economic reality.

R. Mattessich (1995) distinguished the so-called onion model of reality, in which the nucleus is a fundamental reality. The nucleus is surrounded by the reality of higher orders, namely physical-chemical, biological, psychological and social orders. The social reality occurs 'when a group of people (stakeholders) generate new, emergent social properties, which at higher levels become properties of a moral, economic, or legal nature (Wójtowicz, 2010). Particularly important in case of social reality is the fact that its product is money – on the one hand abstract, the other real (Dobija 2001, cited by Wójtowicz, 2010). In the light of the presented concepts it is also important to understand the relativity of reality, which refers to the definitions of truth.

Ethical awareness of a decision-maker and compliance with the law are of particular importance in the assessment and perception of the business reality. E. Maruszewska (2014) identified four situations at the intersection of law and ethics:

- 1) the conduct is ethical and consistent with the law,
- 2) the conduct is ethical, but it is not consistent with the law,
- 3) the conduct is unethical and consistent with the law,
- 4) the conduct is unethical and illegal.

The presented groupings are important in relation to relativism in defining and identifying truth. From the point of view of the purpose of this paper, special significance should be attributed to professional ethics based on professional morality of a particular social (professional) group (Galewicz, 2010). Accountants form a group of professionals that should be guided by professional ethics. The accounting professional or the auditor should be aware to ethics and should have the ability to judge ethical behaviour in an increasingly complex economic reality. These people should also be guided by the principles of ethical behaviour, while respecting the observance of the law, which constitutes the first track of the conduct, referred to the above. At the same time the understanding of ethical conduct proves to be relatively different in various cultural and social circles, which, therefore, results in the presented here diversity of attitudes and behaviours. A desire for uniformity is the development of professional codes of ethics of specific professional groups. However, this does not limit the duality of human nature, which on the professional grounds may be subject to regulations and restrictions, but not necessarily in a private life.

Faithful Representation or True Picture of Financial Position?

The vagueness in the understanding of truth and the relativity arising from it can be observed in financial accounting theory and practice, particularly in the preparation of financial reports. Single, fragmentary and detailed information generated by the accounting system may be true and faithful. However, a set of such perfect information can mislead the users presenting a manipulated or coloured financial position. An example of such an approach is - adopted by IAS/IFRS¹ - inventory valuation at the purchase price as an alternative to the cost of purchase. Stock of materials presented in the statement of financial position using the purchase price valuation, although transport, handling and other costs are of high value, would be judged as true financial information. Indeed, the value of stock of materials based on the purchase price measurement represents truth as one can classify it as a material truth. Moreover, if the purchase costs were disclosed in the financial report in the same accounting period, this information would be considered true, too. The reporting entity did not conceal this information. The reported information about the purchase price and the information about the cost of purchase are true and precise financial data. However, the disclosed picture of the financial position is

1 IAS – International Accounting Standards, IFRS – International Financial Reporting Standards.

not true, because it has distorted the real value of the stock and does not necessarily result in useful information. The qualitative characteristic called 'faithful representation' has not been reached in described situation. It is worth mentioning that the objective of financial reports is not true and accurate in all respects presentation of the set of financial information, but faithful representation of economic phenomena it purports to represent. Single reporting date should be sufficiently reliable so as to normally 'participate' in creating a true picture of the situation of the entity. Therefore, a question arises, when it can be considered that the information is reliable. Another concern refers to the notion of faithful representation of economic phenomena. Whether the accounting law is able to clearly identify with what procedures, rules and methods the 'faithful' view of the financial situation of the entity can be demonstrated. Since it is created using reliable (not accurate in all respects) information, it becomes a 'faithful view' and not a 'true view'. A feature of 'faithful representation' has been indicated in the conceptual framework of IFRS. This term is ambiguous and does not refer to the concept of the objective truth (Flint, 1982; Ijiri, Noel, 1984) because entities present their point of view arising from their perception business surroundings. In a specific business context, information would be judged as faithful, but with the change of this context the information might not meet the qualitative characteristic of faithfulness. An accountant should, therefore, have qualifications that will allow him to properly recognise the context of the financial information and subsequently be able to select the appropriate detailed rules, methods and procedures determining algebraic formulas used in preparation of financial reports. A neutral depiction of economic phenomena in words and numbers requires special attention in the selection, than in the measurement and in the presentation of financial information at last.

In 2010 *Conceptual Framework*, the International Accounting Standard Board explained the reason for replacing 'reliability' with 'faithful representation'. Lack of common understanding of the term 'reliability' and referring mainly to measurement precision were pointed out as the main reasons for the change, as 'reliability' was most of all equated to information being verifiable and free from material error. Among other reasons, a much broader understanding of 'faithful representation' was stated as well. Because 'faithful representation' is not only verifiability and freedom from material errors, verifiability was placed among enhancing qualitative characteristics embracing comparability, timeliness and understandability as well (Strojek-Filus, Szewieczek, Maruszewska 2015). It is worth pointing out that previous versions of the *Conceptual Framework* referred to 'true and fair view' and 'fair presentation' as fundamental qualitative characteristics without precise description of the terms used in the text, while at present the word 'true' does not appear even once.

From the literature review it can be observed that there are opinions about the difficulties or even impossibility of defining 'true' and 'fair' in accounting (Flint, 1982). The notion of true means 'in accordance with the accounting records', and – at the same time – directors must look beyond the books to consider whether they do show the true financial position. At the same time, it is pointed out that it is an over-simplification to say that true means 'in accordance with the facts' since there are number of alternative sets of facts, each of which shows a financial position. Because of the identified complication with defining 'fair' and 'true', literature presents prescriptive requirements of subordinate character mainly based on conceptual framework, and references to present legislature can also be found (Erb, Pelger, 2015). Deliberations on reliability were also focused on the relationship between a phenomenon (event or object) and the term or symbol representing it (Lee, 2006; Mattessich, 2009; Macintosh, 2006). The discussion concentrates on practices that require judgments and involve questions of degree conjointly with ontological and epistemological issues. The philosophical notion of truth (or representational faithfulness) as correspondence between a measure or depiction and the phenomenon it purports to represent is presented together with wealth and profit measurement. It is demonstrated that correspondence with the facts alone is not sufficient condition for profit measurement.

The problems identified by the researchers demonstrate escalating difficulty in performing the accounting profession in a responsible and honest manner. A modern accountant (as well as an auditor) must have broad economic but also social (including humanistic) perception and evaluation of truth in accounting. The ‘technical’ skills referring to algorithms used in valuation process and the knowledge of the accounting law might not be sufficient in order to prepare financial report that faithfully represents what it purports to represent. At the same time, enhancing of ethical awareness in business environment shall be included in the accounting curricula. The student should, within the framework of carefully selected academic courses, be prepared to recognise unethical or at least ambiguous behaviour while preparation of financial data. Lack of such courses may lead to an inability to identify such situations in practice. This is all the more significant when taking into account that accountant may be pressured by managers who want to achieve a particular goal in the presentation of financial position if an entity, e.g. showing maximum profit or already famous ‘income smoothing’ (Healy, Wahlen, 1999; McKee, 2005; Schneider, Sheikh, Simione, 2012). Besides the role of academic education enhancing awareness to unethical behaviour of managers, pressure upon accountants and ability for unbiased and neutral judgments, the socio-demographic characteristic play important role, too (Kozina, Ponikvar, 2014).

Rationale for the Research Study - Humanistic and Social Oriented Courses in Accounting Curricula

The importance of humanities is increasingly emphasised in the economic literature of the 21st century, especially among management scientists (Prawelska-Skrzypek, Lenartowicz, 2013; Kociatkiewicz, Koster, 2013) and economic educators (Kozina, Ponikvar, 2014; Kolodziej, 2014). Humanities and economic science are most often distinguished², although it is possible to categorize the third group – of technical sciences, on the basis of which research on organisation and management is carried out. There is also increasingly emphasised the perception of management science from the perspective of a humanist and the humanities as a set of various ways of seeing the man and his world (Prawelska-Skrzypek, Lenartowicz, 2013). The role of interpretive and critical trend in the management research, typical for the humanities, is growing. The management of a company, inter alia managing financial aspects of business doing, does not only refer to the data reflecting the value of cost, amount of revenue or production volume, but it also encompasses data analysis influencing investment decisions, relationships with employees, contractors and marketing strategies. At the same time, these, so different in size, fields are relationally linked and complementary to each other.

The need to search for new paradigms and areas of scientific research, resulting from changes in the course of certain processes and economic phenomena is also stressed in contemporary literature (Cole 2012; de Haan, Schoenmaker 2015; Shiller 2010). On the other hand, the aspects of human behaviour and pursuit of specific objectives, as well as other phenomena and socio-psychological behaviour are equally often mentioned. Modern economists are required to have the knowledge of behavioural aspects of human conduct, as well as the ability to use communication techniques and the ability to locate business issues in the broader context of cognition.

Graduates of accounting major are faced with the requirement not only to have the knowledge about how to determine certain values and interpret them from an economic

2 The area of humanities covers the discipline of humanities (including inter alia philosophy and management science) and discipline of theological sciences, whereas the area of social sciences covers the discipline of social sciences (e.g. field of psychology and discipline of sociology), the discipline of economic sciences (e. g. field of economics, field of finance and field of management studies) and the discipline of law. Cf. Regulation of the Minister of Science and Higher Education dated 8 August 2011 on areas of academic study, academic disciplines and fields of study in the arts and sciences. Journal of Laws 179, item 10427.

perspective, but also to have the ability to analyse broader social, psychological, even anthropological aspects (Shiller, 2010), including the relevant competence in emotional intelligence (Daff, de Lange, Jackling, 2012). It is also advocated that teaching economists should not be conducted in isolation from practical life, which determines the need for case studies, active discussions and other activating teaching methods. The need to develop the curricula of accounting courses is visible not only from the perspective of trends determined in research, but also in the evolution of curriculum contents. Nowadays, primary causative agents mentioned in the curriculum are economic relations with the economic and social surroundings of the business unit. Confirmation is provided, inter alia, by social economics, also known as a social economy. Following the opinions highlighting the augmenting importance of taking into account the cultural and social aspects in the science of management there are also intensified comments on the modification of curricula of mainstream economic studies. As contributing factors to these suggestions are indicated dynamically developing phenomena in the global market, such as financial crises, the growing position of environmental concerns, reorientation towards a service economy, changes in the nature of the accounting profession. Changes in the global economy, particularly in terms of strongly expanding dependence of markets that create it, technological, financial, legal and organisational networks, as well as behavioural factors, which interact with certain financial values of various kinds, make it necessary to take into account these new developments in curricula of future economists, accountants among them. At the same time, with the development of the practical aspect of study, students should not be deprived of knowing the history of economic thought, but equally important is the mainstreaming of behavioural or institutional economics (Cole, 2014).

The idea of *Globally Responsible Humanism* (GRH) is also emphasized, which is a kind of new culture of functioning of European business schools (Sionneau, Rabasso, Rabasso, 2014). This idea should be a fundamental factor of systemic thinking in the economic education. The need for educating future managers, directors and chairmen of the management board is emphasised with the view of considering multidimensional relationships between business and social issues, as an element necessary for further development, decision-making skills, taking into account the full knowledge of their various causes and possible consequences. The objective is to train fully professional managerial personnel, who are able to successfully manage a modern company that operates in a complex environment, international and multicultural, but at the same time considering the human rights and needs. GRH dimension in economic education should not only allow for various fields in the humanities, but also the role of social sciences, critical thinking and intercultural management. As a result, the changes should take place not only in the curricula but also the culture and ways of conducting business.

The presented issues also apply to accounting teaching, including the teaching of conceptual framework and basics of bookkeeping, critical thinking, ethical behaviour, communication and interpersonal relations (Turner, Reed, Greiman, 2011). At one time, strongly emphasized algebraic formulas used in the process of managerial accounting education are currently losing importance in favour of considering aspects related to the decision-making process and organisational structure, and the widespread use of modern information technology, as well as changes in business orientation from industrial companies to services sector entities (Böer, 2000). There is a need to integrate the teaching of conceptual framework together with algebraic formulas described by the theory of accountancy with accounting fraud incentives, and other psychological, sociological, anthropological and forensic science aspects, which have a significant impact on creating these phenomena (Ramamoorti, 2008). Interdisciplinarity in education of the 21st century has been already raised in the literature by B. Abersek (2014), B. Borstner, S. Gartner (2014), and B. Jevtic (2014).

A call for accounting education changes can also be seen among the professional trade associations. Already in 1986, the American Association of Accountants (AAA) issued the Bedford Committee Report recommending the extension of the technical skills of future accountants with aspects of interpersonal and critical thinking (AAA, 1986). Another

example is the joint task carried out in 2010 by the MAS (Management Accounting Section – MAS) and the Institute of Management Accountants, in order to issue recommendations on the development of economic education programmes (Lawson et al., 2014; Lawson et al. 2015). They allow for the integration of three dimensions in the teaching of accounting: core competencies (communication, quantitative methods, use of technology, analytical thinking and interpersonal skills), competences in accounting methodology (reporting, analysis, planning, taxation, information systems, internal control, professional competence and ethics in accounting), and competence in the management (leadership, ethics and social responsibility, process management, business risk and others).

Accounting Education Process in the Development of Accountants' Awareness to the Truth in Financial Reporting

The University of Economics in Katowice located in the south of Poland has a long tradition of accounting teaching going back to the first half of XIX century. 'Accounting' course, in the basic, fairly general scope, is now taught at various departments and faculties. However, the specialisation in accounting is conducted in a two-cycle process of teaching, at undergraduate and graduate courses, as full-time and extramural studies (Table 1) at the Faculty of Finance and Insurance and the Faculty of Business and Administration (as a specialisation of practical teaching profile called 'Accounting for Small and Medium Enterprises' with first admission during academic year 2015/2016).

The observations made allow for an opinion that the issues of assessing truth and faithfulness in accounting can be developed mainly in the scope of standardisation of accounting and accounting issues in crisis situations. Meanwhile, so far the teaching focuses more on financial terms and arithmetical techniques, rather than behavioural aspects and their impact on the assessment and understanding of truth and faithfulness of financial information. Considering, therefore, the list of courses and their contact hours with the range of other social sciences, mainly from the humanistic and social mainstream, enriching the teaching process of future accountants with the ethical aspect, resolving dilemmas, communication processes, ability to identify aspects confirming or negating truth or faithfulness of financial data and information as well as awareness-raising and expanding the conceptual and classification horizons, two compulsory subjects at the undergraduate cycle should be indicated. The first one is 'Social Communication' course with 30 hours of lectures and exercises for full-time and 18 hours for extramural studies that is offered during the first semester of undergraduate studies. The second course is 'Business Ethics' lecture presented within 15 contact hours for full-time students and within 9 hours for extramural studies. This course is offered on the second semester. There is also a third one of elective mode, 'Work Psychology' (15 hours for full-time and 9 extramural studies). The last course focuses mainly on the psychological mechanisms regulating human behaviour in the work environment, so it does not necessarily significantly affect the perception of faithfulness in the accounting (Syllabus 'Occupational Psychology', 2015).

Table 1. Specialisations and accounting courses.

Major: Finance and Accounting	
Undergraduate program (13 specialisations)	Graduate program (15 specialisations)
Accounting can be studied in the following specialisations	
Accounting	Accounting
Accounting & Taxes	Accounting & Taxes
Accounting & Auditing	Accounting & Auditing
Finance & Accounting for Business (English language only)	ACCA certified specialisation
Selected accounting courses	
Approx. 25 courses, including: organisation of accounting and its processes (e.g. inventory valuation, annual closures), standardisation of accounting and bookkeeping in the IT environment, costs accounting, reporting and internal audit and financial audit, courses on selected issues of accounting, including different types of business units (commercial, insurance, banking, budget, units of small and medium-sized enterprises, labour costs accounting, accounting in conditions of crisis, public-private clearing, settlement and reporting of aid funds).	Approx. 18 specialised courses, on selected, advanced accounting issues: consolidated reporting, advanced cost accounting systems, IFRS, ISA, transfer pricing in accounting, and other
Courses are obligatory or of elective mode	Courses are obligatory or of elective mode
Social sciences and/or humanities' oriented courses	
Social Communication Business Ethics Work Psychology	Accounting Ethics

Substantive content presented within the course 'Social Communication' aims to develop skills of communication, use of specific principles, tools and techniques in this field and the ability to manage own communication attitude, to create own image and the image of the institution. The student should also acquire the ability to work in teams and to resolve conflicts in teamwork (Syllabus 'Social Communication', 2015).

In turn, subject 'Business Ethics' is focused in its content on the issues underlying rationale of human action, morality in human life and good or bad behaviour impulses. The purpose of its teaching is to give students the possibility to acquire an ability to make the right decisions, based on the relevant moral grounds, taking into account the common good of society (Syllabus 'Business Ethics', 2015). In total, the above-mentioned two compulsory subjects for all students are taught on an hourly basis, which only represents about 2.5% of the total course hours taught at the first-cycle studies.

As part of the graduate studies, no compulsory course is taught which allows students to develop the ability of unbiased and neutral assessment of truth standing behind accounting numbers and awareness to the importance of professional judgment of faithfulness of financial information, the impact of many different determinants on this process, including those of subjective nature. However, an elective subject including 15 course hours (9 at extramural studies) of 'Accounting Ethics' is taught. In this course students are acquainted with basic ethical issues resulting from the performance of a profession of a professional accountant and non-legal aspects of decision-making in the area of accounting. In this area they also become

familiar with the content of identifying fields of work in accounting, which are threatened by the influence of unethical behaviour (Syllabus 'Accounting Ethics', 2015).

Discussion

The findings from this study seem very relevant and challenge the theory of accounting and the practice of accounting education. The discussion focuses mainly on the main aim of the study in relation to the literature review presented above. The study highlights reasons for the implementation of interdisciplinary approach to accounting teaching resulting in the accelerating of humanities and social sciences participation in the process of undergraduate and graduate education. The current trend of limiting the social sciences in accounting teaching is not a tradition. In the past, courses of a general nature, such as sociology, psychology or philosophy were taught at university courses in economics although they were not oriented toward accounting problems like ethical dilemmas, judgment of faithfulness of financial reports or reflecting economical phenomena in accounting words and numbers.

The key finding from the present study based on the evaluation of present composition of accounting major specific courses has shown that university teachers, among other challenges, shall enhance the sensitivity of their students (and future accounting professionals) in order to build up their consciousness to multifacetedness of the economic reality perception. Moreover, different recognition of economic phenomena requires the ability to pinpoint the truth and it demands a competence to present faithful information based on reliable financial data. This calls for comprehensive and widespread economic knowledge and expertise that enables accountants to faithfully present economic phenomena using accounting language.

From the above observations one can conclude that education process of accounting professionals provides an insufficient amount of fundamental concepts arising from humanities and social sciences and lacks the presentation of these fundamental in the business and accounting environment above all. Because of that it is argued as follows:

- 1) Accounting curricula content should be extended to new fields of study including philosophy, sociology, psychology and praxeology among others. Moreover, taking into account the requirements of contemporary business doing, the corporate social responsibility concept should be incorporated into accounting curricula stressing the importance of faithful financial information in the functioning of modern responsible societies, inter alia capital markets. There are possible negative effects of not extending accounting curricula, especially in terms of unintentional misleading of users of financial reports by omitting or misstating material financial data.
- 2) No behavioural aspects, including praxeology was observed in the analysed accounting curriculum. The need for praxeology as a method used in the economic research was already pointed out by Ludwig von Mises (2007). As praxeology is interested in all forms of conscious and deliberate human actions, its might be helpful in predicting and analysing purposeful behaviour related to decision-making in accounting. While there is plenty of room for valuation decisions as well as for forms and contents of disclosure in financial reports, accountants should be aware of the enlarging importance for preferences and intentional behaviour in unstructured settings.
- 3) Some courses that are currently in the offer (at the undergraduate studies) present social and philosophical issues but without paying specific attention to peculiar dilemmas that accounting professionals face in a day-to-day work. Moreover, these courses should be offered during final semesters, not at the beginning of studies of 6 (undergraduate) or 4 (graduate) semesters. In addition, the design of these courses should provide students with the knowledge necessary for them to communicate with other participants of business settings in order to succeed

as accounting professionals. This requires presentation of social, including philosophical issues, in the accounting background and by the accounting professionals or philosophers with economic or accounting practice or training.

- 4) The study highlights that an additional, obligatory course showing the principles, the tools and accepted techniques of presenting the economic reality of a business entity is a must in accounting curricula. Preparation of financial reports might use creative accounting techniques as long as they are in accordance with high ethical standards of accounting professionals and contributes to common wellbeing of all company's stakeholders in terms of relevant and faithful information. Expanding accounting teaching from narrow discipline to a broad multidisciplinary perspective calls for sound grounding in general and business education. More thought-enlightening and less structured optional courses will broaden future accountants' horizon of knowledge and develop their analytical thinking (Xuying, 1994)
- 5) Having regard to the fact that accounting major at graduate level is opened to almost all undergraduate students (with or without financial knowledge) discern of accounting curricula is accounting educators' obligation. In other words, it should be reconsidered whether i.e. accounting ethics course shall be offered to undergraduate students with regard to high moral standards of future accounting practitioners. Moreover, the findings of the study support the idea of the mandatory character of 'accounting ethics' course instead of elective mode present in current accounting curricula should be introduced.

Suggested changes in the accounting curricula do not exclusively apply to the issues of perception of truth as well as creating and understanding of the faithful representation of economic phenomena disclosed in financial reports. As indicated above, the proposed changes in accounting teaching have a much broader scope. They concern the implementation the theoretical foundations of humanities and social sciences in the process of challenging the dynamic changes of the business settings. Developing complexity of economic reality should serve as a guiding principle for developing a better accounting curriculum. New teaching case studies arise from evolving business surroundings: accounting in times of crisis, long-term contract accounting, measurement and presentation of human capital and environmental issues, the use of advanced IT tools in finance and management accounting and accounting ethics as well that would cover new dilemmas arising from new fields of interests.

The changes in accounting university education over the last decade in Poland have been noted through the conducted study. Although, there are visible changes in the scope and contents of accounting curricula, still the implementation of aspects related to purposeful behaviour in business settings, financial information communication, interpersonal relations in work environment and analytical as well as critical thinking is not truly present in contemporary accounting major. With regards to the accounting curricula of a chosen university, it has been observed that there is an urgent need for a discern of accounting curricula in order to make substantive contents corresponding with developing economic surroundings of business entities preparing financial reports. The recommended approach requires a great deal of time to reorganize and plan the sequence of all courses offered in accounting major with special attention paid to the curricula, employment of multiple disciplines, completeness, and sound foundations of economic knowledge. On the other hand, high quality of accounting university education requires life long learning of accounting university teachers to follow the changes taking place in business environment that are supposed to be presented in a faithful manner in financial reports. Education of professional accounting practitioners is now devoid of delivering content on foundations and basic assumptions on problem solving of philosophical nature, on teaching critical thinking, on formulating judgments and noticing opportunities of various determinants' influence on the perception of reality. Therefore, it is more difficult to develop the skills necessary to identify diversity in social, economic, political or cultural processes in these people.

Moreover, behavioural aspects in accounting profession are not presented to future accounting practitioners at present. On the other hand, a contemporary accountant is required to have advanced economic knowledge together with certain personal skills that are prerequisites in a day-to-day business communication and interpretation of economic phenomena they are obliged to present in financial reports. The functionality of the accounting profession is changing. In fact this person should have the competence to assess economic phenomena in the conditions of dynamically interacting immediate and remote environments, as well as awareness and ability to present economic reality using accounting language and considering business objectives. While performing their duties, accountants should also respect the rights of other individuals, especially stakeholders, and account for preservation of moral, social and cultural standards.

Due to the qualitative nature of the study, the accounting curricula involved in the analysis was obtained from one public university located in Poland. The objective was not to present statistically significant findings, but to explore patterns of university education in accounting major in Poland. Therefore, the information obtained from the analysis is not in any way representative of the entire accounting teaching. Another limitation of the study is that arising from the qualitative character of the method used in this research. No software was used during analysis and findings are based on thorough studying of each curriculum of courses offered at accounting major in the academic year 2015/2016. The authors are convinced that qualitative analysis was particularized as all researchers are accounting practitioners and university teachers. Besides its limitations, this study serves as a basis from which the findings could be used to stem future research interests in the field of accounting theoretical foundations referring to faithful representation of economic phenomena or methodology used in the valuation process as well as in the presentation of accounting numbers in financial reports, and developing accounting teaching methods.

Conclusions

Accounting profession has entered an era of an increasing role of non-financial information, as algebraic approach to the preparation of financial reports does not guarantee faithful representation of economic phenomena. Moreover, rapid economic, technological, and social changes in the highly complicated business environment underline a key role of accountants in true and clear presentation of financial situation of reporting entity. This recognition, in turn, calls for guidance on how one decides whether disclosed information is faithful or is not faithful. On the other hand, it emphasizes the need for high quality accounting education that helps to understand the philosophy of accounting that builds the theoretical foundations standing behind legislation.

The paper presents the vagueness of truth, faithfulness, and reliability understanding in the accounting theory. As aim of the study was to stress out the complexity of the notion of truth in accounting theory and to highlight the challenges for accounting educators, the literature review was conducted together with qualitative analysis of accounting major curricula based on the public university located in Poland. The findings of the study suggest that today accounting educators are faced with the challenge of enhancing the relevance of truth, and the need for defining the concept of faithfulness. Accounting education apparently suffers from the algebraist approach to preparation of financial reports and that is why changes in education process shall be made in parallel with introduction of humanistic and social (including ethical) elements into the theoretical foundations of accounting

To find solutions to these challenges, a recommendation is made for a continuous teachers' development, especially in the times of unpredictably and rapidly changing business settings. Accounting college and university teachers need to be oriented to interdisciplinary teaching, while students shall possess sound economic knowledge enriched with high ethical standards derived from strong necessity of accounting professionalism.

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