ABSTRACT: Knowledge has become one of the most important attributes of life in modern society – a productive force that has established a knowledge society. Universities, because of their function, should hold a special position in this reality. The educational processes in universities are largely determined by the accepted ways of gathering, processing and sharing information. We would like to introduce the theoretical background of these processes in the context of cultures of knowledge, epistemic cultures and cultures of learning. Although the ideas mentioned lack some cohesive base, we tried to use Bourdieu’s concept of field, which seems to be the theory with potential to explain the structure of educational actors’ relations and actions in the academic area.

KEYWORDS: cultures of knowledge, epistemic cultures, cultures of learning, academic field, habitus.
The aim of this article is to analyze and conceptualize knowledge culture using Pierre Bourdieu’s theory as a philosophical background. We use Bourdieu’s concept of field to explain the structure of educational actors’ relations and actions in the academic area. One element of the field’s dynamic and spatial structure refers to the process of organizing knowledge. This is a knowledge culture. The term has its sources and is developed in the Austrian researcher Karin Knorr Cetina’s theory of epistemic cultures and in the Norwegian perspective of epistemic practices of Monika Bærøe Nerland and Karen Jensen. Knowledge culture has also its Polish equivalent. How it is located in the field of (higher) education will be explained in this article (cf. Męczkowska-Christiansen, 2014).

Knowledge has become one of the most important attributes of life in modern society. From the economic perspective, knowledge has become a productive force. There webs, structures and educational systems were developed to gain knowledge and to apply it professionally in educational, technological and biotechnological sciences. The knowledge has lead civilization to a place that its ancestors would never have expected. Modern society at the turn of the XX and XXI century was even described as a knowledge society to feature the meaning of knowledge in everyday life.

In the 21st century, an era of rapid technological progress, knowledge has become a pass into a better world. Currently, whoever has knowledge also has power. Those able to acquire, gather and process knowledge rapidly gain the advantage. In this context, the concept of organizations that learn has appeared – that is, organizations that acquire innovations, observe trends in their field and use the knowledge for their own advancement. Such organizations work more efficiently, react to market changes more quickly and, as a rule, have a greater competitive advantage. It would appear that universities should hold a special position in this reality. Their educational processes are largely determined by the accepted ways of gathering, processing and sharing information. The choice of subject for this article was motivated primarily by the desire to gather and systematize the existing state of knowledge about the cultures of
knowledge, epistemic cultures and cultures of learning, as well as supplementing it with the philosophical context of Bourdieu’s theory. All this has been presented from the perspective of the process of these cultures’ formation in such as specific place like the university.

THE GENESIS OF THE CONCEPT OF KNOWLEDGE CULTURE

The concept of knowledge culture has its sources in philosophy, pedagogy, epistemology, cultural studies and linguistics. Its use requires explanations of the theoretical language, as well as practical levels, with research application in social sciences. From the philosophical perspective, the term “knowledge culture” may be considered a pleonasm (Celiński & Hudzik, 2012, p. 7), while in the scientific discourse, the concept is a novelty (Pajdzińska, 2012, p. 131).

Scientific work on knowledge culture developed both in Poland and previously abroad. It should be noted, however, that the Polish definition of knowledge culture that functioned in a general sense – meaning a mechanism of inter-entity and inter-institutional relations, created as a result of a crisis of faith in the world of lasting, traditional scientific methods (Celiński & Hudzik, 2012, p. 8) – is identical to the definition of epistemic cultures presented by Karin Knorr Cetina. As knowledge culture and epistemic cultures are an element of the dynamic academic field, these two ranges of definitions should be distinguished. Epistemic cultures are “those amalgams of arrangements and mechanisms – bounded through affinity necessity, and historical coincidence which, in a given field, make up how we know what we know” (Knorr & Cetina, 1999, p. 1).

Epistemic cultures are also one of the forces in the academic field influencing the learning cultures constructed, reconstructed and active within it (Becher, cited in: Nizińska, 2012, pp. 118-119).

KNOWLEDGE CULTURE: LINGUISTIC CONSIDERATIONS

Language analysis indicates that “knowledge” and “culture” may have the same range of meaning “All culture, by definition, is based on knowledge, both the unconscious, contained in our customs and habits, as well as the conscious, discursive […]” (Celiński & Hudzik, 2012, p. 7). The language justification of the emergence of the concept of “knowledge culture” can be described from two perspectives.

The combination of the word “culture” with an adjective or adjectival noun is rare and can relate, for example, to the stages of societies’ development. Thus we speak, for example, of Neolithic culture, medieval culture and Enlightenment culture (Pajdzińska, 2012). Thus “knowledge culture” would mean a period of a society’s development in which knowledge was the most important thing. Indeed, we are living in such a period, a time when which
creation, gathering, protection and processing of knowledge, as well as its effective use, play a fundamental role. Modern technologies permeate into all spheres of life, there are forms of work and organization previously unknown, even people who perform physical labor are forced to acquire knowledge and use their intellect in their work to a much greater extent than before […]. (Pajdzińska, 2012, p. 132)

The human need to be properly informed is being articulated more than ever. That is why we often say about “knowledge society” and “learning society” (Męczkowska-Christiansen, 2014).

The second possibility of combining the term “culture” with an adjectival noun allows for the description of the level of acquisition of a certain skill. An example is phrases such as “language culture” or “word culture,” “describing the level of people’s preparation in a certain area or a skill level in using something or its appropriately advanced level […]” (Pajdzińska, 2012, p. 133). Thus, knowledge culture also means the ability to use knowledge.

In continuing the consideration of the linguistic justification of the functioning of the term “knowledge culture,” Kondrasiuk draws attention to the possibility of using the phrase “culture knowledge.” Nevertheless, switching the word order in the phrase changes the range of definition and the consideration context, which will be discussed later in this article (Kondrasiuk, 2012, p. 103).

The term “knowledge culture” is not a logical-linguistic error. The juxtaposition of these two interpenetrating definitions does not exclude further semantic analysis. On the contrary, it allows the redefinition of the processes of education and the broadening of the scope of considerations about it, in particular by including the relations between culture and knowledge. The emergence of this concept also opens up new possibilities for the analysis of the academic space.

**Sources of understanding of knowledge culture**

The practical application of the concept of “knowledge culture” brings a new dimension of research to social sciences. Knowledge culture is a hybrid. There are as many knowledge cultures as there are “possible combinations of cooperation between disciplines and its internal and external partners” (Celiński & Hudzik, 2012, p. 8). The emergence of knowledge cultures is served by the idea of interdisciplinarity, in terms of both culture and knowledge. The interdisciplinarity of culture as a system of metatexts lies in its intertextuality. The system is created by texts that have their sources is other texts; they verify each other, justify each other or deny justification. Knowledge, in turn, no longer has a function subordinate to the development of mankind. It is a tool for change and improving a heterogeneous world (Celiński & Hudzik, 2012).

Sources of the functioning of a knowledge culture in Polish academic circles may be seen in the initiative for the European Capital of Culture competition (Hudzik
Knowledge culture is meant to refer to the academic city, whose greatest assets are universities and culture centers. The concept of knowledge culture in this aspect is constructed around two areas of social life: cultural activities and the arts.

Kondrasiuk places the scope of the “knowledge culture” concept in cultural activity. This is to be an area of ignorance, discourse – accompanying, impossible to master in a purely academic mode that binds the cultural circles together. [...] It is knowledge oriented exclusively toward practice, [...] tacit knowledge, subject to continuing verification, through acting in changing political, legal, social and technological conditions. (Kondrasiuk, 2012, p. 103)

It is in the context of cultural activities that Kondrasiuk considers using a phrase in which knowledge is an attribute of culture, namely “knowledge culture” (Kondrasiuk, 2012).

The second area of functioning of the “knowledge culture” concept finds its justification in art. Hudzik presents this perspective in the belief that “one of the most important accomplishments in the development of art in the past century is the discovery that knowledge […] concerns it, and in a way has power over it” (Hudzik, 2012, p. 12). The subject of knowledge culture is people of knowledge – the users of contemporary art, living in a post-traditional culture, in which knowledge assumes power over nature which was previously dominant. Knowledge culture permeates both the natural and the social worlds, but it is not the source of utilitarian knowledge of everyday life. It cannot refer to any social practice or to simple actions. The goal of knowledge culture is meant to be “not only the production of specific products, but also their correction and improvement, including the correction and improvement of practices themselves (Hudzik, 2012, p. 15, cited in Detel, 2009, p. 193). Constructing the concept of knowledge culture around art allows for including the sum of texts created in communication processes (scientific, artistic and general) in its range of definition – text that shape the appropriate competencies. “These are texts in the broad sense, arranged in a continuous process of generating sense, of converting expressions into other expressions, an endless, infinite process that allows for many possible readings in the space of intertextuality” (Hudzik, cited in Torop, 2008, p. 207) – “texts that comment, describe, assess and explain cultural practices” (Hudzik, 2012, p. 19).

Academic space is the place for the creation and processing of texts, and the process of generating sense, not only in the narrow confines of the university, but also as the entire structure of continuing, non-formal and informal learning, making up the realization of the idea of lifelong learning.

Foreign authors have also described knowledge cultures from the perspective of research practice. For the purposes of this article, the descriptions by Karin Knorr Cetina, as well as Monika Bærøe Nerland and Karen Jensen, were chosen.
Knorr Cetina ties knowledge culture to the cultural environment of epistemic assumptions.

By a knowledge culture I mean [...] an ‘epistementality’ of particular beliefs about, for example, the correct distribution of knowledge, the naturalness of access to it, the particular ways knowledge should be handled and inserted into personal and organizational life. Such epistementalities also take from as particular organizational arrangements of roles and agencies. (Knorr Cetina, 2006, p. 37)

It is in knowledge culture that specific processes of creating knowledge are immersed. Knorr Cetina points to the importance of cultural and political processes in shaping methods of designing and carrying out of research.

Nerland and Jensen (Jensen & Nerland, 2012) show knowledge cultures, in the plural, emphasizing the possibility of differentiating them by scientific disciplines and professions, i.e., the use of knowledge cultures in specific professions, by teachers, nurses, accountants, etc. Thus knowledge cultures are associated with professional teaching, in both theoretical and practical aspects. According to Nerland and Jensen, knowledge cultures are the practices of generating, accumulation, transferring and applying knowledge.

**KNOWLEDGE CULTURES AND LEARNING CULTURES**

The very concept of culture is difficult to define or, as Dirk Baecker claims, undefinable (cited in Przybylska, p. 121). Learning cultures are an inseparable element associated with both knowledge culture and epistemic cultures. This concept also poses many definition difficulties. The starting point for further considerations will therefore be three different definitions.

The first assumes that learning cultures are the social practices through which people learn (Hodkinson, Biesta & James, 2007). It focuses exclusively on the practices of learning. The second is Franz. E. Weinert’s definition, which states that a learning culture is the “entirety of the forms and styles of learning typical for a given time, as well as the underlying anthropological, psychological, social and pedagogical orientations” (Weinert, 1997, p. 12). This is a broader approach: in addition to learning practices, the significance of the scientific basis for these actions is also emphasized. The third definition was formulated by Rolf Arnold and Ingeborg Schüßler, in whose view learning culture is the “overall potential of learning and development, created as a result of the interaction of the participants of the interaction and communication processes on the teaching, social and organizational levels” (Arnold & Schüßler, 1998, p. 4). In their definition, the authors took into account the practices of learning, the significance of interaction and communication in the process, and the overall social context in which learning takes place. However, none of these definitions fully reflect what learning cultures actually are.
A significant potential to fill this gap lies in the conceptual tool that supports understanding of learning cultures: the theory of Pierre Bourdieu (1984), and especially its flagship categories, the concepts of the field and *habitus*.

Learning cultures, knowledge cultures and epistemic cultures interact with one another in the academic field, creating a complex, multilayered, “bubble” structure, which serves in the creation, construction and transmission of knowledge. The concepts of the field and *habitus* also direct our attention to the broader socio-political context of these cultures’ functioning, including the social relations of power and subordination.

**THE SCIENTIFIC (ACADEMIC) FIELD AND KNOWLEDGE CULTURES ACCORDING TO BOURDIEU**

The first of the abovementioned concepts – the field (Bourdieu, 1984) – is the space for the mutual relations and interactions (external and internal) among many forces/dynamics operating within it. In this context, a scientific discipline is also a field, or a system of objective relations between achieved positions (Bourdieu, 1984). In the academic environment, positions are strongly marked. It is a highly hierarchical environment: the higher the degree or academic title, the greater importance and influence of the person bearing it. Titles and academic degrees serve the function of distinction: they emphasize the differences that separate individual factions within the academic field. They are also inscribed into the body (the bodily *hexis*) through active participation in various rituals, as well as the use of strictly defined dress codes and the adoption of certain characteristic behaviors when in contact with other actors in the field – differing in relation to the position of the given actor in the field.

In relation to the scientific community, Bourdieu uses the term “intellectual field.” In his view, it is characterized by specific properties. The complexity of the scientists’ concepts reflects the complexity of the world they are describing. They use a hermetic language, which from Bourdieu’s perspective is an efficient strategy in the intellectual field (Bourdieu, 2009). It guarantees a limited availability of positions in the academic field. They are intended only for those who master a specific way of communicating in effect in the field. At the same time, this hermetic language is an important element of all cultures that interact in the field.

The autonomy of the field is expressed in the recognition of the field and its ability to influence other fields (Bourdieu, 2009). The field opens itself to external influences when it assumes the logic – that is, the legitimacy – of another field (Bourdieu, 1982). What is important is that the field is not the same as institutions. Its borders are fluid and ambiguous; it reaches as far as its participants can carry its capital (Bourdieu, 2009). The content, or the concept, once it is carried into a field with a different internal logic, changes its meaning (Bourdieu, 2009). Scientists have considerable power to influence other fields by presenting the results of their research to a wide audience in periodicals, on radio and television, as well as online. Generally, these practices are referred to as the popularization of science. Today, great importance is attached
to this type of activity, which may be interpreted as the field’s efforts to increase its autonomy, although the media field is much more able to influence other fields and often forces scientists to accept its rules. Nevertheless, the capital of the academic field has great potential to spread in this way, and the methods of presenting scientific achievements, rather than their content, are what is subject to regulation. These processes also influence the constituting of contemporary knowledge cultures and irrevocably change the cultures of learning functioning in the academic field.

A presence in any field requires a specific cultural capital, which consists of appropriate competencies, language and a sense of the game. Bourdieu defines the sense of the game as knowledge of the current hierarchy in a given field, the previous systems and possible future hierarchies (Bourdieu, 2009). Individuals sacrifice parts (or sometimes all) of themselves to feel that their existence serves a purpose. Academics also adopt this strategy. Knowledge of the hierarchy in the academic world to a successful career in this world. In addition, academia is a profession in which a sense of mission has a very important role. Scientists often speak straightforwardly about “sacrifices made for science.” Many do not start families because of the time and commitment that science requires of them (cf. Kowzan, Zielińska, Kleina-Gwizdala, & Prusinowska, 2016).

In this sense, a scientific discipline is also both a field (Bourdieu, 1984) and the area of a game, a competition in which the stakes are the monopoly of scientific authority or the monopoly of scientific competency. Scientific competency is the “ability to speak and act in a way that is legitimized in science” (Bourdieu, 1984, p. 87). Scientific authority consists of both “technical skill” and “symbolic power” (Bourdieu, 1984, p. 88). All actions in the field are oriented toward acquiring scientific authority, i.e., prestige, recognition, fame among one’s equals – people involved in the problems of the field. Scientific authority is a kind of cultural capital. The tools for creating the authority – which are also the attributes of prestige – are works and products of an intellectual nature. As Bourdieu has stated, however, it is not that the content of the products determines one’s position in the field, but that the individuals’ status gives a specific status to their works (Kłoskowska, 2006). Thus works are valued because of who their creator is. At the same time, intellectual products are part of knowledge, epistemic and learning cultures.

Fights for recognition take place not only between fields, but also within them – between various factions in the field: subordinate and dominant, young and old, autonomy and commerce. Bourdieu calls this concept the dominance of the “calculating attitude” (Bourdieu, 2009, p. 18). The frequently declared selflessness of the environment is relative. A business in the field based on continuing attempts to overtake competitors with quickly achieved results that bring credit to one’s name by publishing earlier than other people on a similar subject. Therefore, scientists’ motivations are selfish, but objectively, all of science benefits (Bourdieu & Passeron, 2006). There are also attempts to use illegal means – theft of ideas and research results, plagiarism, forgeries – to achieve desired results. This is the expression of constant struggles for the highest stakes: some “players” are ready to risk losing all their authority in the
event of detection of illegal activities. However, the possibility of achieving a high ranking in the field at a low cost is often very tempting, especially for researchers with less scientific competency.

A scientific discipline as a place of political struggle for scientific domination affects all its players, according to their position, political and scientific problems, as well as methods conceived as scientific strategies (Bourdieu, 1984). Just the definition of one’s stake in the fight in the scientific field is itself a stake in the fight, ruled by those who manage to impose their definition of science on others – according to which excellence in practicing science consists of having, being and doing what they themselves have, are and do (Bourdieu, 1984). This struggle, among others, is expressed through participation in the creation of various competing learning, epistemic and knowledge cultures. An excellent example is the proliferation in the last several decades of the trend of qualitative research in social sciences. Initially, qualitative research methods were not taken seriously in the academic world or considered full-fledged research in relation to the only “truly scientific” quantitative research in the positivist paradigm. Now the interpretive paradigm has gained strength, and its supporters have created their own research procedures and won their legitimization. Such major changes in the power system of the academic field bear signs of paradigmatic revolutions. They arise out of changes in the habituses that make up the field, while also contributing to these changes themselves.

Two more important concepts in this context are nomos and illusio. Nomos is the law that governs a given field, while the illusio of the academic field is the faith in hidden assumptions and a direct recognition of the field’s requirements (Bourdieu, 2006). Illusio is the internalized assumption of the priority nature of a given stake. It gives such stakes, as well as the game itself, real value. In the scientific field, it is the belief that the scientific view of the world is the only valid, valuable, objective and universal view. Illusio is “invisible” to the actors in the field; at the same time, it is a prerequisite for entering the game. Illusio is “routine operations, things that are done and performed because they have always been done this way” (Bourdieu, 2006, p. 145). The field “locks actors in their own stakes,” which are invisible or unimportant from another point of view (Bourdieu, 2006, p. 139).

According to Bourdieu, the entire academic field is the area of competitive struggles, in which the stakes are the monopoly of scientific authority or the monopoly of scientific competency, and the struggle is expressed through, for example, participation in the creation of various competing learning/epistemic/knowledge/organization cultures by various “university tribes” (Becher, cited in Nizińska, 2012). In this context, each learning culture works, is constructed and is deconstructed as part of it being affected by the forces of one or more fields (ibid.), internal and/or external (Maton, 2005).
**THE HABITUS OF THE SCIENTIST IN THE ACADEMIC FIELD**

_Habitus_ is a style of living and perceiving/practicing the world. In this sense, every scientific discipline generates its own specific _habituses_. The humanities and the social, natural and hard sciences have different methods of learning about the world, which at the same time affect the formation of various learning cultures in these disciplines (Becher, 1989). _Habitus_ also means the socio-cultural dispositions inscribed into the way of thinking, mental schemes and dispositions to action internalized by the individual, as well as a “practical sense” developed in social interactions. The individual _habitus_ is updated in the dimension of collective practices; it is the source of the updating of our dispositions toward a position in a given field; it evolves under the influence of the conversion of individual capitals. In the academic field, cultural capital is particularly significant because it is inseparably linked to knowledge – possessing, producing, processing and legitimizing it. It is understood as knowledge, erudition, skills and the general level of cultural competence (possessing knowledge about proper behavior and social relations, personal culture, taste, etc.). This capital has three subtypes: embodied, institutionalized and objectified. Embodied capital is associated with individual investment of time and effort; it is related to self-improvement and work on one’s own development (Trutkowski & Mandes, 2005). Institutionalized capital takes on the form of acquired and socially recognizable educational competencies, mainly academic degrees and titles (ibid.) Finally, objectified cultural capital refers to cultural artefacts, such as possessing books, works of art, unique musical instruments or other products of “high” culture (Georg, 2004) and the possibility of transferring these objects. In the academic world, all these varieties of cultural capital are crucial. They are the stakes of the struggle within the field.

The field subjects all the _habituses_ functioning within it to transformation. A change in the _habituses_, particularly on a large scale, means, of course, a change in the field itself (Zarycki, 2003). Again, an example of such transformation may be the paradigm change that took place in Polish social sciences when there was a shift from positivist research methods toward qualitative or mixed strategies. _Habitus_ generates not only significant practices but also perceptions that give them significance (Bourdieu, 1984, p. 170). Ways of thinking are also dependent on the _habitus_. Once learned, they evolve from something we make an effort to capture into something that actually allows and facilitates thinking characteristic of a given field. In this way, the scientist enters the scientific field and acquires a _habitus_. Everyone who takes up the game in the academic field must gain the appropriate competencies: learn the methodology of the chosen discipline, master the scientific language and acquire a sense of the game – that is, recognize the system of positions and the hierarchy, both within one’s own institution and among scientists within the scope of a given scientific discipline. Both these concepts – the field and the _habitus_ – help replenish and organize ways of understanding learning, knowledge and epistemic cultures.
The use of the term “knowledge culture” results from a reflection on practical actions; it broadens the horizon of educational research. Knowledge culture encompasses within its meaning the phenomenon of mutual penetration of the worlds of science, culture, professional practice and everyday experience. It works in the academic field and mutually affects its other components, including epistemic and learning cultures. In the scientific discourse, it is a new concept that has not yet been thoroughly explored (Pajdzińska, 2012), but its theoretical basis has already been outlined, with potential research areas emerging.

The term “knowledge culture” is fixed in the post-modern view of the world, which sets new tasks for researchers: “the analysis of production and reproduction of technocratic and symbolic power, the mechanisms of which also affect people of culture – animators, managers, artists, producers and art curators” (Celiński & Hudzik, 2012, p. 7) and people of science – both researchers and students of various disciplines.

Learning cultures and the inherent epistemic and knowledge cultures are inscribed into the academic field. These cultures consist of both certain acquired dispositions of their subjects and the practices generated within individual cultures. This idea is consistent with the understanding of the habitus in Bourdieu’s terms: practices within these cultures are associated with the habitus of the scientists operating within them.

The research questions emerging in this context may concern, among others, such questions as the types of habitus, social practices and learning practices generated by various scientific disciplines/knowledge cultures. What norms of social life are inherent in these fields may also be considered, as well as what indicators of quality and social position are adopted by the students/researchers of individual disciplines, what criteria for assessing works of intellectual character are adopted, how students of individual disciplines describe and assess the position they acquire thanks to studying, as well as whether, in their own assessment, they gain the status of authority. Finally, may be considered how scientists in the field, involved with individual knowledge disciplines experience their own positions in the field. These and other potential questions set out a wide field for research exploration, especially worth undertaking because they directly touch on the most important problems in the functioning of modern knowledge-based societies.

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KONCEPCJA POLA BOURDIEU: IMPLIKACJE DLA BADAŃ NAD KULTURAMI WIEDZY I UCZENIA SIĘ W ŚRODOWISKU AKADEMICKIM

ABSTRAKT: Wiedza stała się jedną z najważniejszych cech życia w nowoczesnym społeczeństwie – produktywną siłą, która stworzyła społeczeństwo oparte na wiedzy. W tej rzeczywistości, ze względu na swoją funkcję, znaczące miejsce powinny zajmować uniwersytety. Procesy edukacyjne w środowisku akademickim są przecież w dużej mierze zależne od przyjętych sposobów gromadzenia i przetwarzania informacji, a także dzielenia się nimi. Naszym celem jest przedstawienie teoretycznych ram umiejscawiających te procesy w kontekście kultur: wiedzy, epistemicznych oraz uczenia się. Z uwagi na to, że wymienionym pojęciom brakuje spójnej, wspólnej podstawy teoretycznej, podejmujemy próbę wykorzystania koncepcji pola Bourdieu, która wydaje się mieć potencjał wyjaśniania struktury relacji i działań aktorów edukacyjnych w rzeczywistości akademickiej.

SŁOWA KLUCZOWE: kultury wiedzy, kultury epistemiczne, kultury uczenia się, pole akademickie, habitus.