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## Three Pillars of Security Culture

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## THREE PILLARS OF SECURITY CULTURE

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**ABSTRACT:**

The article presents a proposal for multidisciplinary scientific platform, as a basis for security studies. It includes not only the military but mostly non-military aspects of security. An emphasis is put on *security culture*, the main pivot of the “Security Culture” as a scientific journal, with the three pillars of the security culture concept: mental and spiritual (individual dimension), legal and organizational (social dimension), material.

**KEY WORDS:**

Security culture, security studies, multidisciplinary, pillars



This article is programming paper, an invitation for co-creating interdisciplinary scientific platform. The aim is to provide such a mutual understanding, that allows to achieve a certain coherence and the comparability of the *security studies* research results, in the frame of “Security Culture”, a transdisciplinary scientific journal, created by me as an editor-in-chief, in accordance with the motto *e pluribus unum*.

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The proposed platform is the scientific category known as *security culture*, with her three pillars: individual, social, and material, connected with such scholars as Alfred Louis Kroeber or Marian Cieślarczyk.



The development of the human being, and daily functioning of the social collectivities, formed by families, local communities, including professional groups – is accompanied by a continuous erection of edifice of culture. **The phenomenon of culture is the whole material and nonmaterial embedded elements of the legacy of people.**

In 1871 English anthropologist Edward Tylor formulated a definition of the concept of culture<sup>1</sup>. According to Tylor, culture includes knowledge, belief, art, morals, law, customs and other capabilities acquired by man as a member of society. American anthropologist of culture Alfred Louis Kroeber (1876–1960) presented the concept of culture, which is the inspiration for the idea of *the pillars of security culture*. In his concept presented in *The Nature of Culture* (1952), the three components of culture are *material reality*, social culture, and ethical culture with related values<sup>2</sup>.



English philosopher and sociologist, Roger Vernon Scruton, as an apologist of Western *culture*, highlights importantly – “culture is important”. This statement, in globalization era, does not reverberate all around us so strongly that it does not need to be repeated after Scruton, and confirmed in the specific actions<sup>3</sup>. To teach others, that “culture is important”, we must therefore first begin with ourselves. Nowadays the false interpretations of freedom are very common, depriving us of culture, that give us patterns of behavior in accordance with specific standards and rules. Interpretations exempting us from obligations or responsibilities, result in aberrations in subarea of culture known as

<sup>1</sup> E. B. Tylor, *Primitive Culture*, Vol. 1, Vol. 2, John Murray, London 1871.

<sup>2</sup> A. L. Kroeber, *The Nature of Culture*, University of Chicago Press, Chicago 1952; Idem, *Configurations of Culture Growth*, University of California Press, Berkeley 1944.

<sup>3</sup> *Action* in sociology is a kind of human conduct, to which their operators (the authors) imply some *meaning*. Such recognition of *action* category widespread thanks to the sociology of Max Weber – today is considered to be a rudimentary sociological category: Max Weber, *Gospodarka i społeczeństwo. Zarys socjologii rozumiejącej*, (*Wirtschaft und Gesellschaft*, Tübingen 1922), Państwowe Wydawnictwo Naukowe, Warszawa 2002, p. 6.

*security culture*. There have been a threat that our culture can be devaluated, and morality will be eliminated, to the detriment of *human security*.

The phenomenon of security culture is a part of culture in wide sense. “As being clearly shaped, a cultural domain is accompanied by a man from the dawn. As many anthropologists conclude, with Malinowski in the lead, providing *security* lays at the root of humanizing and constituted a *conditio sine qua non* not only of the survival of the human species, but also the development of other sectors of human culture”<sup>4</sup>.



You may discover that the phenomenon of *culture* and *security*, operate in a very similar way:

1. Both for security and for culture – in parallel – the importance have two simultaneously occurring parameters: *space* and *time*.
2. Physical space gives, as an example, the possibility of “regions of security” (or “regions of threats”), and at the same time allows the culture to expand on more and more territory.
3. The time parameter provides a frame of reference in which it lasts on a given territory, culture-building process identical with the development process of human bodies, small, medium and large social groups and whole societies-nations – this development determines the level of their security.
4. The development process is, by definition and common sense, the mechanism of response to any threats or even – as defined in the *security* term – can be considered an analogon of the phenomenon of security.
5. Culture is in the particular civilization not only some “added value”, but it is an autonomous self-defenceness potential of a given civilization *active persons* or *entities* – in the fields of political, military, cultural, economic, ecological, legal, organizational, cybernetic or technical activities.
6. Culture in relation to the different *active persons* or *entities* that function under its impact, from a personal to a global scale, provides such a mechanism, which may significantly affect the attitudes and beha-

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<sup>4</sup> S. Jarmoszko, *Nowe wzory kultury bezpieczeństwa a procesy deterioracji więzi społecznej*, [in:] *Jedność i różnorodność. Kultura vs. kultury*, E. Reklajtis, R. Wiśniewski, J. Zdanowski (red.), Aspra-JR, Warszawa 2010; B. Malinowski, *Naukowa teoria kultury*, [in:] *Szkice z teorii kultury*, Książka i Wiedza, Warszawa 1958, p. 101.

vior of these *active persons* or *entities* in certain situations, processes, or “points-in-time” events, carrying a variety of opportunities, risks and threats.

7. Culture can also be a theoretical model, having the power to explain, being applicable in *security studies*.



*The cultural turn* has been popularized by American philosopher and sociologist Fredric Jameson and his collection of essays *The Cultural Turn*<sup>5</sup>. Postmodernism pointed the *culture*, as the main element of *social issues* discourses. If “the *culture* is the whole material and spiritual elements of the legacy of people, embedded and enriched in the course of history, transferred from generation to generation (...)”<sup>6</sup> and its components are the *principia* reducing the risks of social coexistence, cultural patterns, moral presumptions and behavior adequate for given *social collectivity*, in consequence, it affects the formation of *social facts* and *artifacts* belonging to the subarea of *culture*, which is the *security culture*. At the beginning of the 21st century *the cultural turn* in *social sciences* was prestigiously institutionalized by creation of the Center for Cultural Sociology at the University of Yale in 2001.

The effects of research on security issues (*security studies*), belonging to the nonmaterial elements of embedded legacy of people, are an important part of a *security culture*, which used to be only a part of international relations. Over time, this scientific approach gained importance and autonomy. Today, its fields, *realism* or *idealism*, thanks to *constructivist breakthrough*, which came in the 1980s in *security studies*, can be used for research both the *active persons* or *entities*, in different scales, not only in the whole

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<sup>5</sup> F. Jameson, *The Cultural Turn: Selected Writings on the Postmodern 1983–1998*, Verso Books Publ., London – New York 1998; Idem, *Globalization and Political Strategy*, [in:] „New Left Review”, 4 (July–August, 2000); Idem, *Postmodernism and Cultural Theories. Lectures in China (Houxiandaizhuyi he Wenhualilun)*, Shanxi Teacher’s University, Xi’an 1987; Idem, *Postmodernism, or, The Cultural Logic of Late Capitalism*, Duke University Press, Durham 1991; see G. Steinmetz, *State/Culture: State-Formation after the Cultural Turn*, Ithaca, Cornell University Press, New York 1999; M. Jacobs, L. Spillman, *Cultural sociology at the crossroads of the discipline*, [in:] „Poetics. Journal of Empirical Research on Culture, the Media and the Arts” 2005, 33, p. 1–14; V. E. Bonnell, L. Hunt, *Beyond the Cultural Turn*, University of California Press, Berkeley 1999.

<sup>6</sup> „Kultura” [„culture”], *Mała Encyklopedia PWN*, Warszawa 1996, p. 445.

state scientific perspective. They are applied from the scale of the *active persons* by the scale of the *entities* up to the societies-nations and their states. A brief definition of the *security culture*, is proposed by the author of this article, as follows:

**Security culture is the whole material and nonmaterial elements of embedded legacy of people, aimed at cultivating, recovering (if lost) and raising the level of safety specified active persons or entities. It can be considered in terms of individual – mental and spiritual, social and physical dimensions.**

Developed, the so-called spectral version of the definition of a *security culture*, showing the importance of *security consciousness* for *acting person* or *entity*<sup>7</sup>, is indicated below. It is the result of the Polish-Ukrainian cooperation, as a result of research program (2013–2014), that took place in *Cracow Research Institute for Security and Defence Skills APEIRON*. The authors of the definition are Juliusz Piwowarski (*CRISD APEIRON*, Poland) and Vasyl Zaplatynski (*National Aviation University in Kiev*, Ukraine).

***Security culture*<sup>8</sup> is the whole material and nonmaterial elements of embedded legacy of people in military and nonmilitary spheres – that is, the widely understood autonomous defence of active persons or entities. This phenomenon is a trichotomy, that create three overlapping dimensions:**

- mental and spiritual (individual dimension),
- legal and organizational (social dimension),
- material.

***Security culture* is used for realization the specified aims and needs:**

1. **Effective control of emerging threats, obtaining the status of a satisfyingly low level of threats.**
2. **Recovery of *security* in a situation where it has been lost.**
3. **Optimization, for a specified active persons or entities, of the level of multiareal understood security.**
4. **To encourage in the social and personal consciousness about the need for self-improvement and trichotomal (mental/social/**

<sup>7</sup> See A. Zduniak, N. Majchrzak, Świadomość emocjonalna jako *dystraktor* w procesach badawczych bezpieczeństwa, [in:] *Metodologia badań bezpieczeństwa narodowego*, vol. 3, Akademia Obrony Narodowej, Warszawa 2012.

<sup>8</sup> J. Piwowarski, *Ochrona VIP-a a czworokąt bushido. Studium japońskiej kultury bezpieczeństwa*, [in:] *Bezpieczeństwo osób podlegających ustawowo ochronie wobec zagrożeń XXI wieku*, P. Bogdański, J. Cymerski, K. Jałoszyński (eds.), Szczytno 2014, p. 451.

**material) development, along with enabling the motivation and attitudes that result in individual and collaborative activities, resulting in a comprehensive development of acting persons or entities, including their autonomous defenceness.**

The precursor of the *security and defence culture* studies in Poland is Marian Cieślarczyk. It should be noted that the defence in this concept is concerned, despite schematic approaches, far beyond the military sphere. By “defence” Cieślarczyk means also the non-military potential. This potential enables effective tackling and preventing the occurrence of threats and to react on threats at the moment of their real occurrence. Professor Marian Cieślarczyk gives the following definition of a security culture:

***Security and defence culture is a kind of social matrix, “the pattern of basic assumptions, values, norms, rules, symbols, and beliefs that influence the perception of the challenges, opportunities and (or) threats, and the way of feeling security and thinking about it, behaviour and activities (cooperation) of active persons or entities connected with this, in a variety of ways »articulated« and »learned« by them in the education of broad sense, including internal and external integration processes in natural adaptation and other organizational processes, as well as in the process of strengthening the widely (not just militarily) understood defence, serving the harmonious development of these active persons or entities, and the achievement by them widely understood security, for the benefit of each other, as well as the environment”***<sup>9</sup>.

The concept of Marian Cieślarczyk shows that *security and defence culture* is manifested in the following three dimensions:

1. The first dimension – ideas, values, and spirituality of the human being,
2. The second dimension – social impacts of the organisation and systems of law,
3. The third dimension – material aspects of human existence.

The above components Marian Cieślarczyk called “pillars of a culture of security”. They are named, respectively, mental-spiritual, organizational and legal, and material pillars. The components of these pillars interpenetrate, despite peculiarities. For example, knowledge as a component of the first pillar, is also an element of the second pillar, having the organizational-legal and technical-innovative nature. The concept of *security culture* allows, in many cases, the integration of multidisciplinary studies

<sup>9</sup> M. Cieślarczyk, *Kultura bezpieczeństwa i obronności*, Wydawnictwo Akademii Podlaskiej, Siedlce 2010, p. 210.

on security and defence issues. This concept includes also the emotional and rational understanding of safety as a neutralizing agent against controlled (for the time) and legitimated “aggression”. *Security culture*, its suitably high level, allows us to avoid the temptation of an aggressive “win” for the higher needs, what is the need for “being an impregnable”.



Paying attention to the definition of *security culture* phenomenon, we can see that this combines all aspects of social life: spirituality, social competence, materiality and their coherent, holistic implementation. It promotes security, conceived both as a value (*1st pillar of security culture*), as the desired state (*1st, 2nd and 3rd pillar of culture*) and as a process, which aim is to use the heritage of generations, repeated and evolving in three areas of the human individual, human population and the material dimension of human existence – continuously thanks to the functioning of the intersubjective phenomenon, which is a *cross-generation national transmission*<sup>10</sup>. *Security* is implemented through the defence function, also understood very broadly – not only understood as a category of military considerations.

Cieślarczyk writes: “from my research, it appears that today, but also in the foreseeable future, thinking about defence only in terms of the military is insufficient”<sup>11</sup>. Similarly, Emma Rothschild in the article *What Is Security?*<sup>12</sup>, 1995, specifies the need to redefine the category of security in the process of extending its concept. The concept of defence concerned in individual and social (collective) context is almost synonymous with the concept of a *security culture*. Here you can talk about the existence of a coherent, although multithreaded security culture, for the level

<sup>10</sup> *Generation* – the term can be through the following determinants of this social phenomenon: a) genealogical relation of parents and children – it occurs for example in the Bible, or pedigree, b) para genealogical – an extension of the previous definition on the whole *societies*, c) „registered” (all of the peer groups) and d) *cultural*; see M. Wallis, *Koncepcje biologiczne w humanistyce*, [in:] „Fragmety filozoficzne”, seria II, Tadeusz Kotarbiński (red.), Warszawa 1959; similar differentiation of the *generation* term, gives M. Ossowska, *Koncepcja pokolenia*, [in:] „Studia Socjologiczne” 1963, 2, but the first of her typologies is limited to the genealogical type (parents–children relation) and cultural–genealogical (teacher–pupil relation).

<sup>11</sup> M. Cieślarczyk, *Kultura bezpieczeństwa i obronności*, Wydawnictwo Akademii Podlaskiej, Siedlce 2010, p. 11.

<sup>12</sup> E. Rothschild, *What Is Security?*, „Daedalus”, Vol. 124, No. 3, Summer 1995, p. 53–98.



of which, of the utmost importance are, inter alia, education and teaching, identity and social constraints, and challenges associated with conscious effort, which is aimed at self-improvement of man, and on this basis the improvement created of social organizations, for example, in the spirit of the community, as it suggests the American sociologist, communitarianist, Amitai Etzioni<sup>13</sup>. According to Etzioni “the man does not exist as long as there is no socially; what he is, depends on his social being, and his use of this social being is irrevocably linked to who is. It has the ability to control his inner being, while the main path for *self-control* leads to connect with other, similar *active persons*, in social activities”<sup>14</sup>.



**“American and English universities *securitology* is equated with the concept of security culture”<sup>15</sup>, as Leszek Korzeniowski observes. The use of the *security culture* category is recorded among a large number of researchers of transdisciplinary and very capacious issue, which is a modern *security science*.**

For example, Nick Pidgeon is among these authors<sup>16</sup>. The issue of suitability of scientific term *security culture* for research carried out by securitologists, according to Korzeniowski, is confirmed “through the Zohar”<sup>17</sup>. In the United States, Dove Zohar popularized his own concept and corresponding category – an equivalent to the concept of *security* – which is *security climate*. A research team from Illinois State University, led by Hui Zhanga studied the concerned issues of one hundred seven articles in which *security culture* or *security climate* phrases were contained. Effect of comparative analysis was a prove for both concepts equity, with only one reservation, that the term *security climate* includes

<sup>13</sup> A. Etzioni, *Spirit Of Community: The Reinvention American Society*, Touchstone, New York 1994.

<sup>14</sup> A. Etzioni, *Aktywne społeczeństwo*, Zakład Wydawniczy Nomos, Kraków 2012, p. 22.

<sup>15</sup> L. Korzeniowski, *Securitologia. Nauka o bezpieczeństwie człowieka i organizacji społecznych*, EAS, Kraków 2008, p. 39.

<sup>16</sup> N. Pidgeon, *Safety culture and risk management in organizations*, “The Journal of Cross Cultural Psychology” Cardiff University 1991, No 22, p. 129–140; J. S. Carroll, *Safety culture as an ongoing process: Culture surveys as opportunities for enquiry and change*, “Work & Stress” 1998, No 12, p. 272–284; M. D. Cooper, *Towards a model of safety culture*, “Safety Science” 2000, No 36, p. 111–136.

<sup>17</sup> D. Zohar, *Safety climate in industrial organizations: Theoretical and applied implications*, “Journal of Applied Psychology”, 1980. No 65, p. 96–102.

more psychological aspects than *security culture*<sup>18</sup>. However, so as not to leave any further doubts, “must be added that both concepts in terms of subject and research methods of securitology, as the security science” – concludes finally Korzeniowski<sup>19</sup>.



You could say that modern *social sciences* put *culture* on a pedestal. As Ulf Hannerz<sup>20</sup> states “culture is everywhere”, while Mahmood Mamdani<sup>21</sup> adds that “*culture* is a matter of life and death”. In addition, with the culture “is to be reckoned with”, as recalls Samuel Huntington<sup>22</sup>. As previously noted, *culture* as a whole of the material and spiritual achievements of humankind gathered, adhered and enriched in the course of its history. It affects decisively, but often it happens unnoticed, the research by a man this kind of *social facts* and *artifacts*, that belong to a specific, divided into fixed *pillars*, through which *societies* (*Nations*) can address certain types of threats, political and military, to a threat to national identity. These pillars and their potentials, being a preserved heritage of *society*, settle national security culture.

In opinion of many security scientists, this very important social phenomenon, studied in all scales of human threats-ranging, from personal scale through national, international to a global scale – is always somehow rooted in the phenomenon of cultural trichotomy<sup>23</sup>.

#### REFERENCES:

1. Bonnell V. E., Hunt L., *Beyond the Cultural Turn*, University of California Press, Berkeley 1999.

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<sup>18</sup> H. Zhang, D. A. Wiegmann, T. L. von Thaden, *Safety Culture: a concept in chaos?*, Urbana Champaign: University of Illinois, <http://www.humanfactors.uiuc.edu/Reports&PapersPDFs/humfac02/zhawiegvonshamithf02.pdf>, accessed 2008-12-25.

<sup>19</sup> L. Korzeniowski, *Securitologia...*, op. cit., p. 39.

<sup>20</sup> U. Hannerz, *Cultural Complexity: Studies in the Social Organization of Meaning*, Columbia University Press, New York 1992; Idem, *Cosmopolitans and Locals in World Culture*, Columbia University Press, New York 1992.

<sup>21</sup> M. Mamdani, *Beyond Rights Talk and Culture Talk: Comparative Essays on the Politics and Rights and Culture*, Palgrave Macmillan, New York 2000.

<sup>22</sup> S. Huntington, *The Clash of Civilizations*, Simon and Schuster, New York, 2007.

<sup>23</sup> See i.e. L. W. Zacher, *Jednostkowe i społeczne konteksty i wyzwania dla bezpieczeństwa*, [in:] *Metodologia badań bezpieczeństwa narodowego*, vol. 3, Akademia Obrony Narodowej, Warszawa 2012.

2. Carroll J. S., *Safety culture as an ongoing process: Culture surveys as opportunities for enquiry and change*, "Work & Stress" 1998, No 12.
3. Cieślarczyk M., *Kultura bezpieczeństwa i obronności*, Wydawnictwo Akademii Podlaskiej, Siedlce 2010.
4. Cooper M. D., *Towards a model of safety culture*, "Safety Science" 2000, No 36.
5. Etzioni A., *Aktywne społeczeństwo*, Zakład Wydawniczy Nomos, Kraków 2012.
6. Etzioni A., *Spirit Of Community: The Reinvention American Society*, Touchstone, New York 1994.
7. Hanerz U., *Cosmopolitans and Locals in World Culture*, Columbia University Press, New York 1992.
8. Hanerz U., *Cultural Complexity: Studies in the Social Organization of Meaning*, Columbia University Press, New York 1992.
9. Huntington S., *The Clash of Civilizations*, Simon and Schuster, New York, 2007.
10. Jacobs M., Spillman L., *Cultural sociology at the crossroads of the discipline*, „Poetics. Journal of Empirical Research on Culture, the Media and the Arts” 2005, 33.
11. Jameson F., *Globalization and Political Strategy*, „New Left Review”, 4 (July–August, 2000).
12. Jameson F., *Postmodernism and Cultural Theories. Lectures in China (Houxiandaizhuyi he Wenhualilun)*, Shanxi Teacher's University, Xi'an 1987.
13. Jameson F., *Postmodernism, or, The Cultural Logic of Late Capitalism*, Duke University Press, Durham 1991.
14. Jameson F., *The Cultural Turn: Selected Writings on the Postmodern 1983–1998*, Verso Books Publ., London – New York 1998.
15. Jarmoszko S., *Nowe wzory kultury bezpieczeństwa a procesy deterioracji więzi społecznej*, [in:] *Jedność i różnorodność. Kultura vs. kultury*, E. Reklajtis, R. Wiśniewski, J. Zdanowski (red.), Aspra-JR, Warszawa 2010.
16. Korzeniowski L., *Securitologia. Nauka o bezpieczeństwie człowieka i organizacji społecznych*, EAS, Kraków 2008.
17. Kroeber A. L., *Configurations of Culture Growth*, University of California Press, Berkeley 1944.

18. Kroeber A. L., *The Nature of Culture*, University of Chicago Press, Chicago 1952.
19. Mała Encyklopedia PWN, Warszawa 1996.
20. Malinowski B., *Naukowa teoria kultury*, [in:] *Szkice z teorii kultury*, Książka i Wiedza, Warszawa 1958.
21. Mamdani M., *Beyond Rights Talk and Culture Talk: Comparative Essays on the Politics and Rights and Culture*, Palgrave Macmillan, New York 2000.
22. Ossowska M., *Koncepcja pokolenia*, „Studia Socjologiczne” 1963, 2.
23. Pidgeon N., *Safety culture and risk management in organizations*, “The Journal of Cross Cultural Psychology” Cardiff University 1991, No 22.
24. Piwowarski J., *Ochrona VIP-a a czworokąt bushido. Studium japońskiej kultury bezpieczeństwa*, [w:] *Bezpieczeństwo osób podlegających ustawowo ochronie wobec zagrożeń XXI wieku*, P. Bogdalski, J. Cymerski, K. Jałoszyński (red.), Szczytno 2014.
25. Rotschild E., *What Is Security?*, „Daedalus”, Vol. 124, No. 3, Summer 1995, p. 53–98.
26. Steinmetz G., *State/Culture: State-Formation after the Cultural Turn*, Ithaca, Cornell University Press, New York 1999.
27. Tylor E. B., *Primitive Culture*, Vol. 1, Vol. 2, John Murray, London 1871.
28. Wallis M., *Koncepcje biologiczne w humanistyce*, [in:] „Fragmenty filozoficzne”, seria II, Tadeusz Kotarbiński (red.), Warszawa 1959.
29. Weber M., *Gospodarka i społeczeństwo. Zarys socjologii rozumiejącej*, (*Wirtschaft und Gesellschaft*, Tübingen 1922), Państwowe Wydawnictwo Naukowe, Warszawa 2002.
30. Zacher L. W., *Jednostkowe i społeczne konteksty i wyzwania dla bezpieczeństwa*, [in:] *Metodologia badań bezpieczeństwa narodowego*, vol. 3, Akademia Obrony Narodowej, Warszawa 2012.
31. Zduniak A., Majchrzak N., *Świadomość emocjonalna jako dystraktor w procesach badawczych bezpieczeństwa*, [in:] *Metodologia badań bezpieczeństwa narodowego*, vol. 3, Akademia Obrony Narodowej, Warszawa 2012.
32. Zhang H., Wiegmann D. A., von Thaden T. L., *Safety Culture: a concept in chaos?*, Urbana Champaign: University of Illinois, <http://www.humanfactors.uiuc.edu/Reports&PapersPDFs/humfac02/zhawiegvonshamithf02.pdf>, accessed 2008-12-25.
33. Zohar D., *Safety climate in industrial organizations: Theoretical and applied implications*, “Journal of Applied Psychology”, 1980. No 65.