

Cultural Significance of On-Site Construction Objects: An In-depth Examination

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Abstract

Culture has many meanings and synonyms in Polish - so we can talk about good manners, savoir-vivre rules, social refinement or politeness. Most people intuitively know how to behave in situations outside of work. In recent years, there has also been increasing talk about culture in the workplace. This is particularly important in the construction industry at a time when new forms of employment are emerging and many organizations are undergoing restructuring processes. This causes e.g. high turnover of staff, employing more contract workers, frequent changes in the working environment, as well as performing work on various construction sites. In such cases, the direct and long-term impact of supervision on maintaining safe and cultured working conditions becomes increasingly limited, and all construction workers should take responsibility and adopt an attitude of active and continuous care for the culture and safety of their behavior and others, and be personally involved in the process of shaping cultural and safe attitudes on construction sites. The article defines culture and proposes its use on construction sites.

Keywords: construction, culture, construction sites, construction site personnel

1. Introduction

The Construction Law does not clearly define the term "construction", but includes construction, in addition to reconstruction, assembly, renovation, demolition, to construction works carried out in the execution of a construction object as well as reconstruction, reconstruction, extension and superstructure of a building [20].

From the point of view of civil engineering, construction is a space in which construction works are carried out, and from the point of view of organization and management sciences, it is an organization that was created as a result of combining people, machines and materials to make a construction object. The organizational efficiency of the construction is determined by its structure. An example of a traditional organizational structure of construction is shown in Fig. 1.

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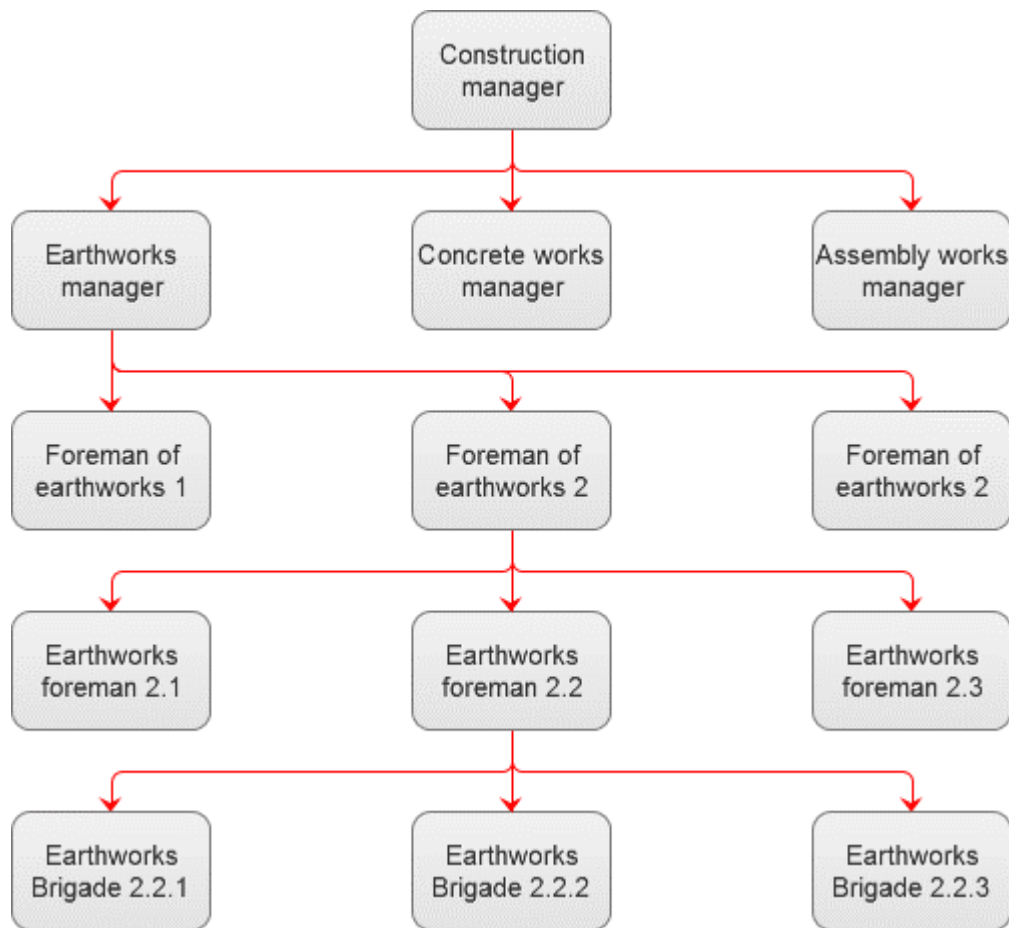


Fig. 1. An example of the organizational structure of the construction site

For each position in the organizational structure of the construction site, specific requirements in terms of tasks, qualifications and responsibilities should be assigned. A person working in a specific position should meet these requirements. In practice, employee requirements should be included in the organizational regulations. At the same time, it should be remembered that the creation of such regulations is not mandatory, only certain groups are obliged to create such documentation.

Construction personnel, treated as a team of people employed on a construction site, is a collection of employees representing enterprises performing specific construction works at a specific time and at a specific place in the construction process.

The personnel of any construction site, regardless of its type and size, is characterized by multiculturalism. Thus, construction is an organization that was created for a specific purpose and is characterized by a large cultural diversity. Every construction worker, regardless of their position, behaves differently. These behaviors stem from his culture.

There are many interpretations of the concept of culture. One of them was developed by Hofstede [10], who stated that the mind of each person is programmed only to a specific person, and sometimes common to a group of people, and in this programming he distinguished three main levels of mental programming and defined as:

- **Individual**, unique level, including the behavior of the individual. This level is genetically determined.
- **collective level**, common to social groups, e.g. nations, inhabitants of a specific region, representatives of a specific profession or organization. It is a learned program, passed down from generation to generation.
- **The universal level**, increasingly called global, encompassing physiological needs, safety, recognition and self-fulfillment.

The construction staff, representing various companies, creates an organizational culture.

2. The ambiguity of organizational culture

In the literature on the subject, one can encounter many different definitions of organizational culture [18]. According to Kożuch and Cywoniuk, human behavior results from the so-called *cultural program* [12]. The cultural program provides people with patterns of behavior in many situations of private and professional life. These patterns are transmitted in the form of various *assumptions*, norms and values, as well as artificial cultural creations, the so-called *artifacts*. They are elements of the culture of a given organization and should harmonize appropriately with each other.

Assumptions form the core of culture and provide the basis for its other components and respond to the problems of the essence of existence, human nature, reality and truth.

Norms and values are more noticeable and observable than the basic assumptions of the cultural level and are expressed in the views and attitudes of individuals and members of organizations.

Artifacts are the most visible creations of culture. They are divided into: linguistic, behavioral and physical artifacts. The characteristics of the artifacts are presented in Table 1.

Table.1. Characteristics of culture artifacts

Lp.	Type of artifacts	Characteristics of artifacts
1	Language artifacts	Language artifacts consist of: - characteristic, figurative words and phrases used individually, collectively or universally; - consciously phrases and words developed, for example, by management; - myths, legends, messages about important elements of the life of an employee or organization.
2	Behavioral artifacts	Behavioral artifacts consist of: - human behaviour, e.g. ceremonies, rituals, customs, which may be recorded or transmitted to each other; - things not to talk about or things not to do.
3	Physical artifacts	Physical artifacts are material elements. These are creations of a given culture such as: art, architecture, office room decor, workplace equipment, clothing or hairstyle.

Source: own elaboration based on [2]

Treating construction as an organization, it can be said that the culture of construction is created by elements: assumptions, norms and values as well as artefacts resulting from individual, collective and universal culture (Fig. 2).

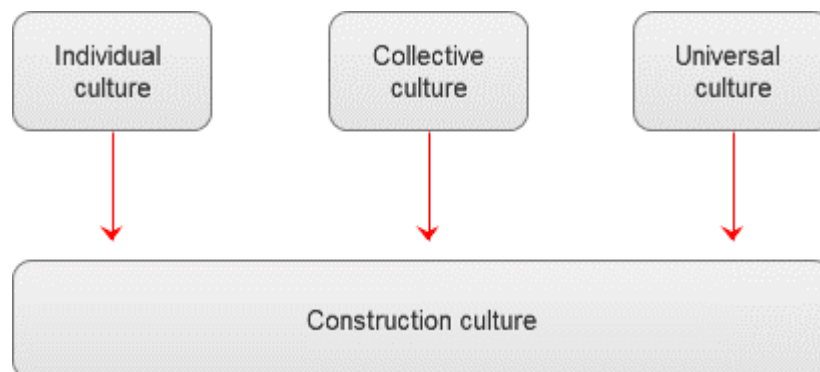


Fig. 2. Construction culture

3. Culture of construction personnel

The culture of construction personnel is the result of individual and collective values, attitudes, perceptions, competences and patterns of behaviour, as well as style and quality [1]. Pidgeon [15,16] distinguishes three basic aspects of culture that apply to the construction site:

- *standards and rules* for the work performed;
- *attitudes* relating to beliefs related to the profession;
- "*reflexivity*" associated with the ability to draw conclusions from actions taken and mindfulness enabling appropriate response to emerging new and previously unknown behaviors.

It should be remembered that every construction project, treated as an organization, does not exist in a vacuum, but in the concrete reality in which it is implemented. This reality affects the culture of construction personnel. By analyzing the most important factors affecting the culture of the organization from the point of view of management [6], it is possible to determine the elements influencing the culture of construction, such as:

- *Type of environment* – companies carrying out construction in a specific environment are in constant interaction with it. Construction workers are influenced by norms and values developed by regional, state or local culture.
- *type of construction* – depending on the type of works, technology used and organization of works, other material resources, other specialists (subcontractors) and other ways of carrying out works will be required.
- *Types of companies carrying out construction works* – depending on the age, history and size of the company, the culture of the organization will depend. For traditional organizations, ritualism and conservatism will be typical features, while for young people innovation and a focus on modernity will be attributed.
- *Features of construction management and construction workers* – each participant in the construction works brings their own experiences, views, "private" norms, points of view and thus imposes specific styles of behavior that can affect the culture of construction.

The twenty-first century has brought many political, economic and social changes. Modern buildings are characterized by modernity, complexity and, consequently, their implementation requires new skills from people, the use of modern machines and new materials. The construction staff consists of workers from different countries. Construction organizations are becoming more diverse and multicultural. Foreign companies that have opened branches in Poland, like Polish companies abroad, often have to deal with different customs, norms or values. They must learn to function in new conditions. In international construction practice, three main models of intercultural interaction have developed [9,11]:

- *A model of cultural domination*, consisting in imposing on the entire structure or partners (subcontractors) the norms and values of the parent culture. Other cultures must unilaterally adapt to the dominant culture, otherwise they are discriminated against or ignored.
- *A model of cultural coexistence*, consisting in the search for a compromise between the cultures of partners (subcontractors), which focuses on solutions that are acceptable to all concerned.
- *A model of cultural cooperation*, based on the assumption that intercultural interaction can contribute to maintaining an appropriate level of occupational safety and health protection at the construction site or to raising this level.

The professional experience of the authors of the article in the field of construction and researchers of organizational culture [2,3,4,5,7,8,13,14,17,18,19,22,23,24] may be helpful in shaping the construction culture. They are indicated by specialists as necessary for the effective formation and maintenance of a high culture on the construction site. The basic ones include:

- ***involvement of construction management*** – consists in expressing by the construction manager, works managers, foremen and foremen personal interest and care for the preservation of cultural principles when planning and implementing organizational, technological and personnel changes in the construction process;
- ***improving interpersonal communication*** – consists in reliable and systematic information of all construction workers, including subcontractors, about the rules in force in the workplace; informing "about the work culture" in teaching, training and professional development processes by establishing social dialogue in this area;
- ***increasing the participation of construction workers*** – it consists in using the knowledge, capabilities and experience of construction workers; encouraging them to present their own opinions and suggestions regarding culture; involving employees in the development of internal standards and documents in the field of appropriate behavior;
- ***motivating and reinforcing correct behaviors*** – it consists in expressing approval and appreciation to construction workers who behave culturally and engage in activities aimed at improving the culture on the construction site;
- ***increasing cooperation*** – consists in cooperation between participants of the entire construction process and maintaining an atmosphere of understanding and trust, in particular between construction management and subcontractor management and between employees of subcontractors performing work on the site;
- ***taking into account the achievements of other countries in solving one's own problems regarding the culture*** - it consists in analyzing solutions, e.g. Member States of the European Community and using them in their own activities.

An interesting organizational solution increasingly used in construction practice, very helpful in maintaining a proper construction culture, is the development of construction regulations, which define the rights and obligations of contractors (subcontractors) in the field of cultural behavior. The most important are:

- Determining in the company starting work on the construction site the person responsible for cultural behavior on the construction site;
- The manager of a company starting work on a construction site should:
 - submit to the general contractor a statement on the absence of contraindications to work on a given position, initial and periodic training, possession of certificates of professional qualifications (if required) and information on familiarizing oneself with the rules of the current culture on the construction site;
 - develop a manual for safe performance of works on the construction site containing the principles of organizational culture, approved by the subcontractor's works manager and signed by employees confirming that they have read it;
- The subcontractor is brought to the construction site by the general contractor on the basis of a written transfer of the work front;
- The conditions for admitting people to work on the construction site should be defined, with particular emphasis on compulsory organizational training in health and safety and cultural behavior for people starting work on the construction site, documented by the employee's signature, in terms of familiarizing themselves primarily with:
 - BIOZ plan,
 - a plan for the organisation of construction;
 - risk assessment;
 - construction regulations, including the principles of organizational culture.

In recent years, culture outside of work has also been increasingly discussed – at home, on the roads or during recreation [16]. This is particularly important at a time when new forms of employment are emerging and many organizations are undergoing restructuring processes. This causes, m.in high staff turnover, hiring more contract employees, frequent changes in the working environment, as well as performing work on various construction sites. In such cases, the direct and long-term impact of supervision on the maintenance of safe and cultural working

conditions is becoming increasingly limited, and all construction workers should be responsible and take an attitude of active and constant concern for the culture and safety of their own behaviour and others, and be personally involved in the process of shaping cultural and safe attitudes on construction sites.

4. Summary

Culture on construction sites is an integral model of individual and collective values, attitudes, perceptions, competences and patterns of behavior, as well as the style and quality of personnel, which consists of: language, ideas, beliefs, customs, norms, institutions, tools, techniques, rituals, ceremonies and many other phenomena typical of a given construction site, which make an employee employed in a company that has been commissioned to perform construction works on a given construction site engage in the process shaping the cultural and safe attitudes of the staff and feels satisfaction from being in the organizational structure of the construction site.

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