



IMPORTANCE OF HISTORICAL BACKGROUND OF THE PLACE AND CULTURAL AWARENESS IN DESIGNING COMPETITION PROJECTS DURING STUDENTS' WORKSHOPS

ZNACZENIE TŁA HISTORYCZNEGO DANEGO MIEJSCA I ŚWIADOMOŚCI KULTUROWEJ W TWORZENIU PROJEKTÓW KONKURSOWYCH PODCZAS WARSZTATÓW STUDENCKICH

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Abstract

This article's primary objective is to illustrate how an understanding of the historical and cultural context of a location can significantly enhance students' academic workshops, fostering interdisciplinary knowledge acquisition and aiding them in designing projects for international architectural competitions. Frequently, such projects tend to conform to global trends, often imitating fashionable patterns without regard for the local context, traditions, or cultural nuances. The first section of this article describes the methodology employed in international student workshops. The second section delves into the application of the problem-based learning method (PBL) when conceiving projects for architectural competitions, emphasizing the importance of factoring in historical and cultural heritage when selecting design concepts. The third section provides a comprehensive analysis of the workshop outcomes and initiates a discussion on the pivotal role of historical context and the significance of cultural awareness in this educational context.

Keywords: international architectural competition; architectural project; students' academic workshops; historical background of the place; cultural awareness

Streszczenie

Ten artykuł ma na celu pokazanie, w jaki sposób zrozumienie historycznego i kulturowego kontekstu danego miejsca może znacząco wzbogacić warsztaty akademickie dla studentów, sprzyjając interdyscyplinarnej akwizycji wiedzy i pomagając im w projektowaniu prac na międzynarodowe konkursy architektoniczne. Często takie projekty mają tendencję do podążania za globalnymi trendami, często naśladując modne wzorce bez uwzględnienia lokalnego kontekstu, tradycji czy kulturowych niuansów.

Pierwsza część tego artykułu opisuje metodykę stosowaną w międzynarodowych warsztatach studenckich. Druga część zagłębia się w zastosowanie metody nauki przez realizację projektów (PBL) poprzez tworzenie projektów na konkursy architektoniczne, podkreślając znaczenie uwzględniania dziedzictwa historycznego i kulturowego przy wyborze koncepcji projektowych. Trzecia część artykułu przedstawia szczegółową analizę wyników warsztatów i rozpoczyna dyskusję na temat kluczowej roli kontekstu historycznego oraz znaczenia świadomości kulturowej w tym kontekście edukacyjnym.

Słowa kluczowe: Międzynarodowy konkurs architektoniczny, projekt architektoniczny, studenckie warsztaty akademickie, historyczne tło miejsca, świadomość kulturowa

1. INTRODUCTION

In education of architects-engineers around the world the integration of interdisciplinary methodologies [1-3] and the strategic deployment of workshops [4, 5], particularly those with a competitive edge, are increasingly gaining traction globally. This pedagogical evolution is indicative of a broader, more collaborative approach to learning, where the confluence of diverse scientific and humanistic disciplines fosters a rich, multifaceted educational environment. These arenas with the rich interdisciplinary converge, attract a diverse assembly of students and experts from universities and academic institutions across the globe [6]. Such workshops, often hosted by prestigious universities and academic institutions both domestic and international, serve as crucibles for innovation and intellectual exchange.

The architecture workshops are one of the education elements of architects-engineers. These workshops, whether embedded within the academic curriculum or offered as supplementary activities, vary greatly in focus, ranging from specialised topics to broader themes including preparation projects for architectural competitions [6, 5].

The format and venue of these workshops are equally diverse, from traditional classroom at the campus to the internet communication and conference platforms such as MS Teams, Zoom, and Skype, and even global broadcasts, thereby transcending geographical boundaries to create a virtual platform for learning. The methodologies of the workshops differ depending on the adopted educational patterns and therefore, can have various approaches to the education process [8, 9]. The pedagogical strategies employed within these workshops are as varied as their formats, reflecting a spectrum of educational philosophies and approaches. This diversity underscores the dynamic nature of architectural education, highlighting the field's adaptability and its continuous evolution in response to the changing landscapes of technology, society, and culture.

This article shows the role and importance of historical and cultural background of the place as a part of an education process during architectural workshops, because human *race without the knowledge of its history is like a tree without roots* [7].

It is crucial to highlight how students gain a deeper understanding of transdisciplinary professional knowledge, skills, and competences through student led project-based learning [10, 11], which implements

learning by doing, and blended learning approaches in the realms of architecture, design and construction [12]. Architecture, as a discipline, is intricately woven into the tapestry of history and culture [13]. It's important to note that architectural design is significantly influenced by historical context, which includes the physical, cultural, religious elements [14], and the evolving social dimensions of a place over time [15].

The significance of historical context cannot be overstated in architectural design; it serves as a wellspring of inspiration for creating buildings that honour their surroundings. Research consistently demonstrates that integrating historical context into architectural education enhances students' comprehension of their role as architects in preserving cultural heritage [16-18]. This involves conducting comprehensive analyses of the location and delving into historical studies, encompassing both the natural and cultural facets of the source [19].

Awareness of the imperative nature of preservation and historical context within architectural design education is crucial for future architects. The integration of heritage and historical context into architectural curricula fosters an appreciation for the importance of preservation and cultural heritage in the practice of architectural design [20-22] and creates possibilities for creating designs that are culturally appropriate and significant. By instilling this awareness, architecture students are better equipped to design structures that honour and safeguard the cultural heritage and historical context of a site, ultimately contributing to a sustainable and liveable built environment [13].

The primary objective of this article is to present how students acquired insights regarding the importance of understanding the historical and cultural background of a place during the 3rd International Student Workshop "2019 Kaira Loro Architecture Competition Peace Pavilion".

2. HISTORY OF INTERNATIONAL STUDENT WORKSHOPS

The 3rd International Student Workshops: "2019 Kaira Loro Architecture Competition Peace Pavilion", that took place from the 18th until the 26th of March 2019 in Krakow, Poland, are the result of long-lasting continuations cooperation between the Institute of Building Design, Faculty of Architecture Cracow University of Technology (CUT) in Krakow, Poland and the College of Environmental Design, Faculty of Architecture University of California Berkeley (UC Berkeley) in San Francisco, USA.



Fig. 1. Students and atutors: a) 1st workshops at the CUT in Krakow, Poland; b) 2nd workshops: at the UC Berkley in San Francisco, USA

Since the beginning of the cooperation in 2016, prof. Mark Anderson (UC Berkeley), prof. Peter Anderson (California College of the Arts, San Francisco) and prof. Sabina Kuc (CUT) organised three series of International Student Workshops. The 1st workshops in this collaboration were organised at the CUT in Krakow, Poland between the 18th and the 22nd of June 2018 and were entitled: “International Student Workshops: Drawing on City: King Kazimierz and The Secret Kiss” (Fig. 1). The 2nd workshops took place at the UC Berkeley in San Francisco, USA entitled: “International Student Workshops: Walls and Others: King Kazimierz and the Secret Kiss; Building toward Africa”, 22 February-March 3, 2019 were part of Architectural Design IV classes supervised by prof. M. Anderson at Berkeley [23] (Fig. 2). In years 2018-2019 after prof. Mark Anderson and prof. Peter Anderson were beneficiaries of Fulbright Specialist Program, it became continuous trilateral scientific and didactic cooperation. The same group of students from the CUT and the UC Berkley participated in the workshops. The consultants partly changed due to the specificity of the topics of the workshops. The specialists of the 3rd workshops at the CUT included: prof. Carol Batker (University of San Francisco), prof. Waław Celadyn (CUT), prof. Mateusz Gyurkovich (CUT), dr Paweł Mika (CUT) and mgr Apolonia Kuc (PhD student Jagiellonian University).

3. THE ROLE OF INTERNATIONAL STUDENT WORKSHOPS

The series of International Student Workshops were constructed based on the methodology used during prof. Mark Anderson “Architectural Design IV” design studio classes at UC Berkeley [23] and the philosophy of the educational process implemented during all three levels of university education (bachelor, master and PhD) at Faculty of

Architecture at the CUT [24]. This approach was broadened by the introduction of international specialist in various fields (2nd and 3rd workshops) and the cross-continental cooperation between students from CUT and UC Berkeley with the use of conference video conversations (3rd workshops). Moreover, the experience of the use of internet communication and conference platforms during the 3rd workshops is especially useful during the COVID-19 pandemic for all participating universities to organise and conduct online classes with students at all education levels. During the workshops students worked with the interdisciplinary specialists from various fields of science and humanities, who “*can help, lead, keep track and determine the right direction*” of the competition projects [8]. This philosophy is widely used in the engineering and architectural education at the CUT: “*Interdisciplinary is the way of contemporary world*” [24]. This phrase shows the current trend in, not only, technical higher education, but the educational direction in general. It discloses the necessity of inclusion of the interdisciplinary approach to studies of architecture. Above-mentioned methodology is depicted on the graph (Fig. 2).

During the workshops, various ways of working, teaching and learning were implemented. These were design studio type of workshops [23]. The same group of students participated during three consecutive workshops and benefited from various forms of work: lecture, discussion, hand and computer drawings of the project [6]. The student’s participation in specialists lecture, discussions and collation of their vision of the project combined with the expertise and knowledge of the specialists led to the deepening understanding of the project’s issues and challenges that needs to be addressed and resolved. During the workshops, students worked with other students and

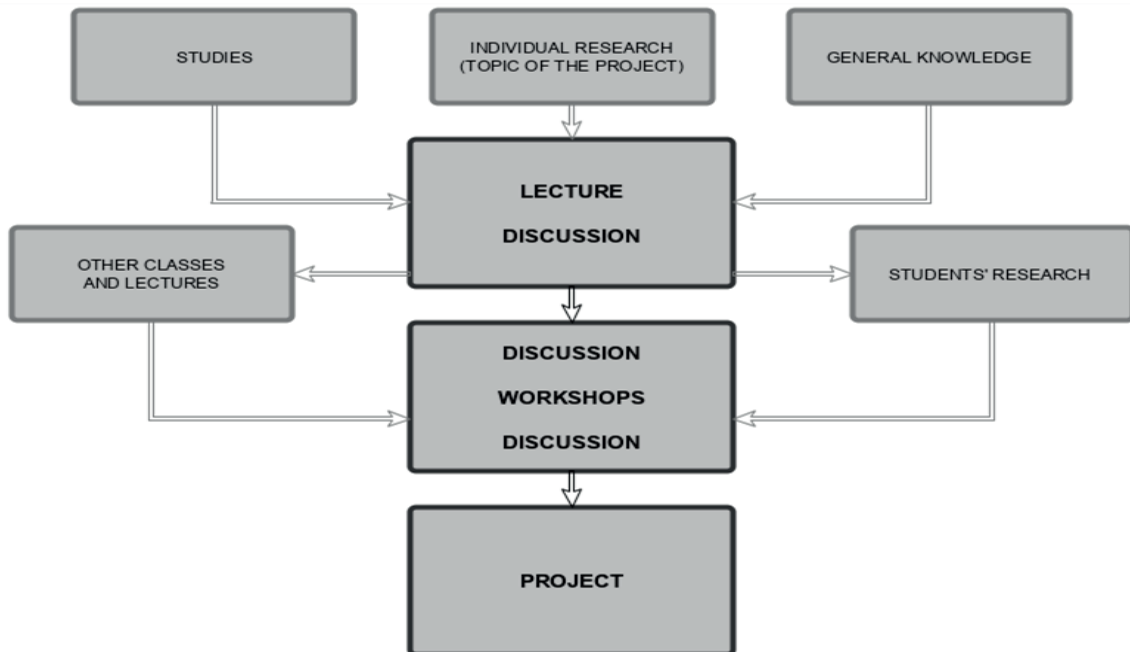


Fig. 2. The methodology of the workshops. The form of work (graph by A. Kuc)

specialists in the workshops' teams and therefore, they were introduced to the like-architectural office type of cooperation and worked as the team of professional architects. *Practicing architecture is asking one-self questions, finding one's own answers with the help of the teacher, whittling down, finding solutions. Over and over again. The strength of a good design lies in ourselves and in our ability to perceive the world with emotion and reason* [25]. The knowledge gain by students in this way helps them to make projects that are internationally competitive, interesting and can win international competitions.

This process fostered the growth of creativity [9] and other complex skills vital for their forthcoming professional endeavours. Given the ubiquitous nature of creativity, spanning from artistic and design fields to technology, science, and contemporary business practices, its development is particularly beneficial. The synergy between students and specialists (Fig. 2) not only enhances the students' general technical and architectural knowledge but also broadens their artistic perspectives. The varied background and general knowledge of each participant mixed with their specialised expertise and higher education plays a crucial role in knowledge exchange. This diversity fosters an environment where students can integrate multifaceted knowledge into their projects and further work. It also raises their historical sensitivity and awareness.

The objective of teaching design skills is to equip students, who are aspiring architects, with

the capability to make autonomous design choices. These choices are crucial in shaping both architectural structures and the open spaces connected to them, aiming to fulfil the requirements of both individuals and communities. Making independent design decisions must be supported by foundation of knowledge, not only technical, but also holistic, interdisciplinary approach that includes historical perspectives. These workshops serve to enhance the participants' interdisciplinary understanding while simultaneously strengthening the collaborative ties between peers and colleagues from a range of universities and institutions, both in Poland and abroad.

4. THE CONCEPT OF PEACE PAVILION AS THE AIM OF THE 3RD INTERNATIONAL STUDENTS' WORKSHOPS

Peace is a dream, it can become a reality... but to build it we must be capable of dreaming.

Nelson Mandela [26]

The series of workshops was designed to familiarise students with potential challenges encountered during the architectural design phase. Spanning three sequential sessions, the workshops introduced diverse methodologies to engage students in exploring their cognitive and creative capacities. The culmination of this creative journey was the conceptualization of an architectural masterpiece – the Peace Pavilion. Inspired by Nelson Mandela's

vision of a harmonious Africa, *of an Africa which is in peace with itself* [26], the final project of the Pavilion ought to be the symbol and embody the dream of African continent, a beacon symbolizing the continent's aspirations for peace. Mandela's poignant words shaped the competition's ethos and informed the guidelines for the pavilion's design, becoming the main motto of the competition and the basis for the creation of the competition rules.

The essence of the Peace Pavilion lies in its dedication to fostering global universal peace, serving as a sanctuary for reflection, contemplation, and remembrance of those who have suffered or unjustly lost their lives in African conflicts.

The pavilion aims to establish a versatile space conducive to hosting both permanent and temporary exhibitions from artists championing peace and historical awareness. It is intended to be a repository of African history, offering insights through photographs and documents [26].

This location would have a rich historical heritage and is poised to function as the perfect backdrop for experimentation with diverse strategies that showcase the impact of historical context on design processes [15]. It aspires to transcend its role as a mere historical site; the pavilion project aims to create an innovative platform for exploring design strategies that vividly demonstrate the profound influence of historical narratives on architectural creativity.

In order to fulfil the competition guidelines including: the ideas of the competition, the symbolic

message and ideological legibility, the following steps were implemented during the workshops: a) cultural and historical study, b) searching for inspiration, c) designing the project (Fig. 3). To achieve this, students got help and guidance from knowledgeable and experienced consultants – specialists in various fields, among many: architecture, history, building construction, and building construction in landscape architecture. One of them was a specialist in history and culture specialising in migration history and cultural heritage of ethnical minorities.

All the stages gave the students time for working with the specialist of history and culture. Figure 4 shows the methodology designing projects for architecture competition and choosing the right concept with the accordance with the historical, cultural and ethnical heritage. The first step was to research the historical and cultural background of the place/city/ region/ country. The second was the research of accessible materials in this region of Africa, and popular and culturally desirable colours and shapes. The third was the design stage of creating a conceptual design of the architectural project. Next, there was the verification of the design according to the history and culture of the place and implantation of knowledge and corrections into the architectural project. Lastly, the verification of the final elements of the architectural project. By using this methodology all the projects made during the workshops fulfilled the guidelines of Competition Agenda [26] and created good context-aware architecture.

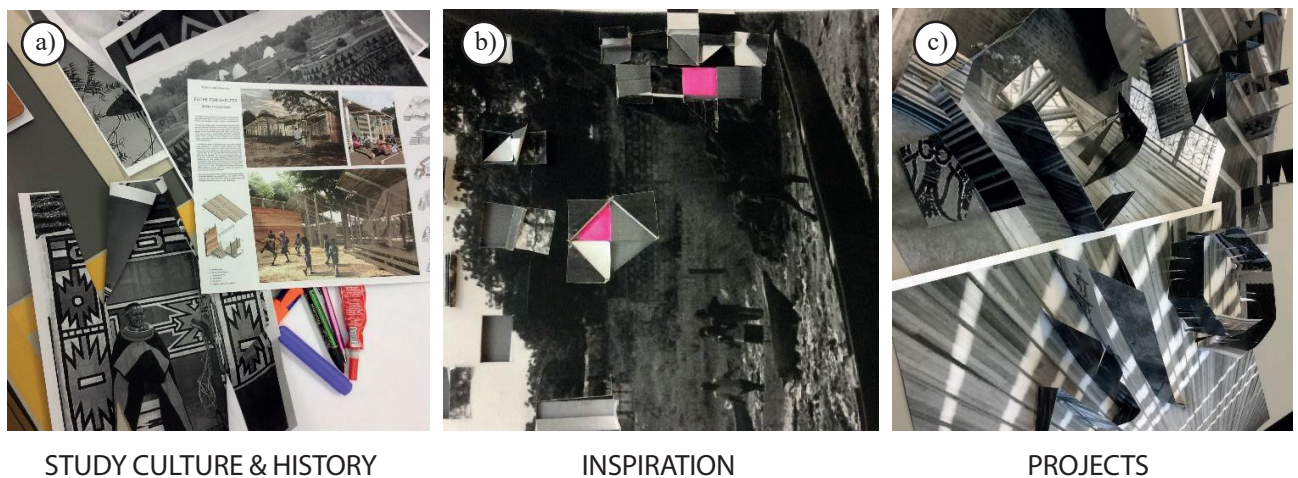


Fig. 3. The stages of the design process: a) cultural and historical study; b) searching for inspiration; c) designing the project (photographs by A. Kuc)

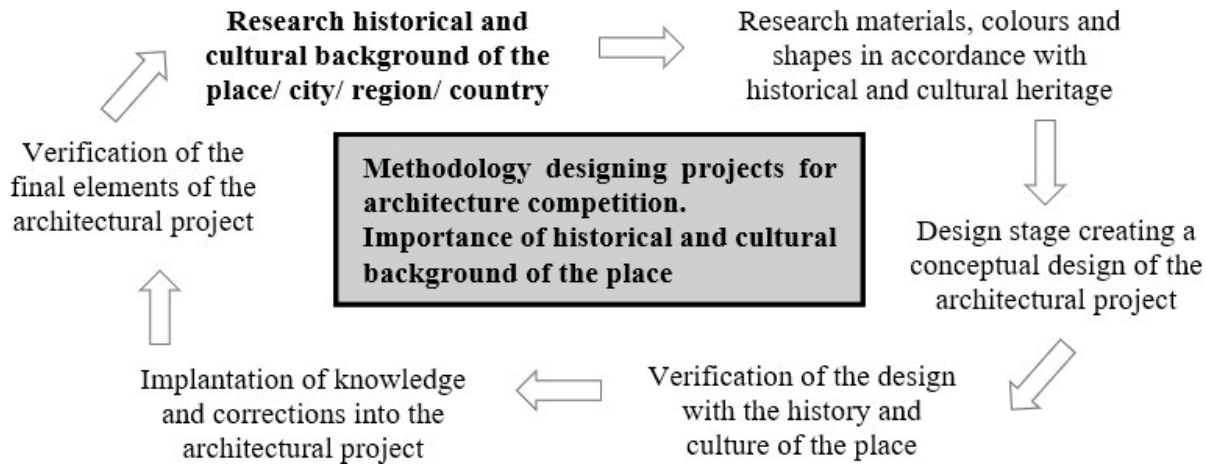


Fig. 4. Methodology designing projects for architecture competition and choosing the right concept with the accordance to the historical, cultural and ethnical heritage (author: A. Kuc)

5. IMPORTANCE OF HISTORICAL BACKGROUND – HISTORICAL AND CULTURAL AWARENESS

The evaluation of one's own social circumstance is part of the analysis of facts and events, and this kind of evaluation is, I feel, as good a starting point of the inquiry into the relations between philosophy and society as any other. Philosophy, in understanding human society, call for an analysis of facts and events, and an attempt to see how they fit into human life, and so how they make up human experience. In this way, philosophy, like history, can come to enrich, indeed to define, the experience of man.

Kwame Nkrumah [27]

In the 20th century, the African continent is an area that has experienced violence and mass migration. These conflicts resulted in millions of deaths and innumerable refugees. Families were forced to flee to other countries or cities in search of safety. The main reason for lack of stability in Africa's regions is internal conflicts on an ethnic, economic and political level. Cultural or religious differences or an effort to grab Africa's resources directly impacted the reason for the escalation of military conflicts in the region. Those issues directly and negatively contributed to the outbreak of the following conflicts mentioned in the competition agenda: War in the Democratic Republic of the Congo (1998-2003), Civil War in Sudan (1984-2005), Civil War in Angola (1975-2002), Genocide in Rwanda (April 1994-July 1994), Civil War in Mozambique (1977-1992), The Casamance Conflict (1982-now). War or any other conflict directly causes a stain on the community's memory. Exploring this difficult part of African history before creating a competition project is of high importance, especially when creating an architectural project in a foreign

country or heritage side. Unfortunately, there is a lack of knowledge about those conflicts in the international community and occasionally among African communities themselves. Therefore, possessing basic knowledge of historical background is key to the creation of good context-aware architecture [26].

Before and while designing the project, students answered several questions regarding history and culture of the place such as: What is a general history of the place, the country, the region and the city? What topics/issues might be still present and sensitive (such as war, internal conflicts, corruption) in this area? Extremely important is, to begin with asking the questions with a broad scope that will help to understand general historical/cultural/ethnic background and "feel the atmosphere" of the area. Then, essential is to narrow it down to understand the history of the place-land, piece of ground and/or plot, on which there is a plan to design the project.

The awareness regarding the history and the culture of the place is extremely important. Firstly, it allows students to gain methodological tools that will enrich their design planning and future structure of the project. Secondly, it allows students to gain additional knowledge as a part of their degrees. Not only in history and the culture but especially brothering their horizons and being aware or sensitive issues that may accrue regarding design and realisation of their projects. Thirdly, architect- students, in this case, will have to answer certain historical and cultural questions. Choosing the wrong project for a certain place may lead to offence against religious feelings and historical inaccuracy. Understanding the complexity of historical and cultural background of the place and therefore, choosing right building material, shape

and placement of the element or construction in the project for a certain place is a key in a successful project. This will raise student's awareness sensitivity and regarding historical and ethical issues.

Understanding African culture, ethnical and religious diversity play a key role in the process of designing the competition project, for example, being aware of certain cultural differences between European, American and African regarding shapes and colours. That for some would not have any profound meaning, and for others would have complex positive and/or negative connotations. The historical, cultural, mythical, religious and ethnical background change the meaning of certain symbols. Many questions and issues needed to be addressed during the creation of the project for the 2019 Kaira Loro Architecture Competition, among many: What factors influence architecture? How does war or peace affect it? What is the symbolism of colours in this culture? What are the cultural conditions related to religion, tribalism and other intra-social relations? What research needs to be conducted in order to create relevant and influential architecture? What people who live there would like, appreciate and value in the design? The most important is to be fully aware of the implications of certain symbols and structures, history and culture of the place and to research what are the aesthetics and conceptual preferences of the design. In the case of 2019 Kaira Loro Architecture Competition Peace Pavilion workshops, students had a chance to discuss the above aspects with the specialist of history and culture and learned about culture, art, ethnographic aspects and history of geopolitical situations which directly became an inspiration in their design and influenced the final product- the architecture (Fig. 4).

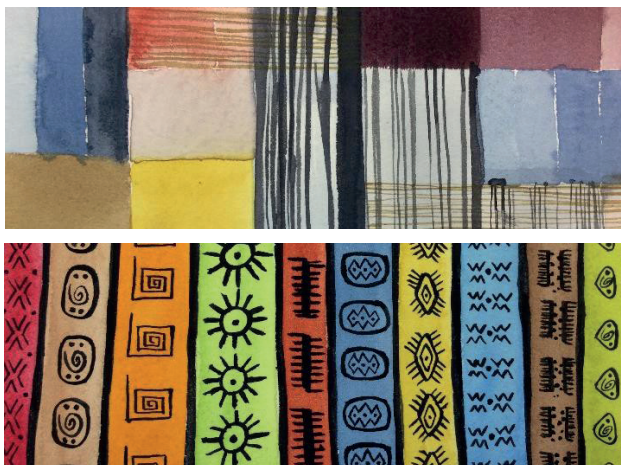


Fig. 5. Materials created by one of the students during the workshops, showing ethnic African motifs and popular colours (author: Magda Samek)

Using certain colours and shapes has its consequences and implications. This issues were researched during the consultation with the specialist of history and culture, and some of the materials created by the students are showed in the Figure 5. Many motifs and popular colours were examined. For example, red- the colour of extremes. Some meanings are universal, red can mean blood, conflict, aggression, but in European and American culture has also positive implications. It means love, positive relationships and various happy celebration (Christmas, Valentine's Day etc.). In the case of the 2019 Kaira Loro Architecture Competition, using Scarlet Red should be extremely well-considered and using red shades that have more yellow or blue tones, would be much more apposite. By African culture, red is also seen as ambivalent colour. Some African tribes rub their bodies in red clay during various celebrations (for example Ndembu in Central Africa) [28]. They believe red is a symbol of life and good health. In other parts, it is seen as a representation of death and the colour of mourning [29]. The same issue is with using shapes, as for most students the shape of the African vessel would not have any religious and cultural implications, but for many visitors of the Peace Pavilion, it will. Therefore, not every shape we like can be applied in the design and before the use shapes need to be properly researched. Consequently, using certain colour and shapes in the wrong place within a certain culture may cause irreversible damage to the community, controversy or misinterpretations. Therefore, the specialist in history and culture helped to reduce those issue by advising students and teaching them about various aspects of the historical background of the place during the workshops. In order to understand history, human society, and culture, one should analyse facts and events and attempt to check how they fit into human life, and thus how they make up human experience. In this way, history of the place can enrich and even define human experience of architecture.

The cultural, ethical, and at times, religious heritage of a locale inhabitants can profoundly influence architectural project development. This is particularly evident in many countries in Africa, where cultural regions and group identities often transcend conventional geographical and administrative boundaries. Selecting a design concept that aligns with the unique essence of the surrounding environment, the historical context of the location, and the collective spirit of the community is essential for seamless integration of the Peace Pavilion. It ensures harmony

with the natural and built environment, and more importantly, with the historical essence and communal ethos of the users. The challenge lies in capturing and representing the nuanced, transboundary nature of cultural identity within the architectural design [30], a task that demands a deep understanding of the interplay between culture, history, and space. This careful consideration guarantees its relevance and utility in the years to come.

The winning entry of the 2019 Kaira Looor Architecture Competition exemplifies this with the following description: *The narrow and long gap between the two exhibition halls allows you to see the outside world. But as you pass by, the scenery outside the building will fade slowly and eventually fade away as the angle changes. It encourages visitors to reflect on and remember the relentlessness of the turmoil and its depression, as well as the fresh life that has fallen from the war, but most importantly, to look forward to a peaceful and beautiful world and the future. Light shines through the gap between the eaves and the rammed earth wall, hits the wall, increases the quietness of space, and the space in this area materializes the meaning of peace* [31]. The project intricates previously mentioned relationships between the project and its context by creating a space that gradually transitions visitors from the external world to a contemplative environment. This spatial design, with its narrow, elongating gap between exhibition halls, symbolizes the gradual fading of external chaos, encouraging reflection on turbulent and difficult past with a hopeful outlook towards a peaceful future. The interplay of light and structure in this design materializes the essence of peace, demonstrating the profound impact of thoughtful, context-sensitive architecture.

The jury of international architectural competitions pay attention to many aspects of project including construction, function, town planning, aesthetics, reference to cultural, historical context, tradition and the of the study. International architectural competition jury scrutinize various aspects of a project, including the general graphics design, its construction, functionality, urban planning, aesthetics,

and the dialogue with cultural and historical narratives. Historical references often carry significant weight in these evaluations. The decision-making panels, comprising government representatives, architects, specialists, and journalists, frequently highlights the approach towards cultural and historical context as a decisive factor in award recognition [32]. Achieving a design that offers a timeless, universal commemoration while honouring the delicate, sometime even fragile, authentic remnants of history is crucial. The design should seamlessly blend with the existing landscape, introducing bold geometric forms and the strategic use of light to create spaces that are both timeless and functional [33]. Powerful forms with a clear geometry of squares, cubes, pillars, combined with a sense of universality and the articulate expression of the building's form, plays a pivotal role in the design's historical accuracy, ultimately influencing the project's perceived value and significance.

6. CONCLUSIONS

The current emphasis on an interdisciplinary approach in guiding young architects through independent project design is crucial. The synergy of cooperation between specialists and students not only facilitates the organization and execution of workshops but also fosters the interdisciplinary essence inherent in the development of competition projects. The examination of international student workshops emphasises the vital importance of historical and cultural inquiries in the project design, establishing it as a key component of the architectural competition design process.

These workshops engage students with the historical narrative and the ethnic and cultural components of the place chosen as a competition site. Such engagements significantly expand the students' perspectives, enhancing their understanding of profound societal concepts and issues like peace, memory, war, and the remembrance of victims. This enriched awareness is then skilfully woven into architectural projects, which are distinguished by their context-sensitive design and functionality.

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