

volume 11 \_2019  
N° \_3

# S A J

serbian architectural journal

# ICA 2<sup>0</sup>1<sup>9</sup>



21<sup>ST</sup> ICA  
POSSIBLE WORLDS OF CONTEMPORARY AESTHETICS:  
AESTHETICS BETWEEN HISTORY, GEOGRAPHY AND MEDIA

PART 2 \_2019\_3\_

Serbian Architectural Journal is published in Serbia by the University of Belgrade, Faculty of Architecture, with The Centre for Ethics, Law and Applied Philosophy, and distributed by the same institutions / [www.saj.rs](http://www.saj.rs)

All rights reserved. No part of this journal may be reproduced or transmitted in any form or by any electronic or mechanical means [including photocopying, recording or information storage and retrieval] without permission in writing from the publisher.

This and other publisher's books may be purchased at special quantity discounts for business or sales promotional use.

For informations, please email at [office@saj.rs](mailto:office@saj.rs) or write to following adress.

Send editorial correspondence to:  
Serbian Architectural Journal  
Faculty of Architecture  
Bulevar Kralja Aleksandra 73/II  
11 120 Belgrade, Serbia

ISSN 1821-3952

cover image:

Official Conference Graphics, Boško Drobnjak, 2019.

S A J

serbian architectural journal

21<sup>ST</sup> ICA  
POSSIBLE WORLDS OF CONTEMPORARY AESTHETICS:  
AESTHETICS BETWEEN HISTORY, GEOGRAPHY AND MEDIA

s e r b i a n   a r c h i t e c t u r a l   j o u r n a l

EDITOR-IN-CHIEF:

**Vladan Djokić**

EDITORIAL BOARD:

**Petar Bojanić**, University of Belgrade, Institute for Philosophy and Social Theory, Serbia; University of Rijeka, CAS – SEE, Croatia

**Vladan Djokić**, University of Belgrade, Faculty of Architecture, Belgrade, Serbia

**Haruhiko Fujita**, Osaka University, Graduate School of Letters, Osaka, Japan

**Hans Ibelings**, A10 New European architecture, Amsterdam, Netherlands

**Zoran Lazović**, University of Belgrade, Faculty of Architecture, Belgrade, Serbia

**Vladimir Mako**, University of Belgrade, Faculty of Architecture, Belgrade, Serbia

**Xavier Monteys**, Universitat Politècnica de Catalunya, Escuela Técnica Superior de Arquitectura de Barcelona, Spain

**Ákos Moravánszky**, Institut für Geschichte und Theorie der Architektur, ETH Zürich, Switzerland

**Ana Nikezić**, University of Belgrade, Faculty of Architecture, Belgrade, Serbia

**Rado Riha**, Institute of Philosophy, Scientific Research Centre, Slovenian Academy of Sciences and Arts, Ljubljana, Slovenia

**Aleksandra Stupar**, University of Belgrade, Faculty of Architecture, Belgrade, Serbia

**Dušan Teodorović**, University of Belgrade, Faculty of Transport and Traffic Engineering, Belgrade, Serbia

PUBLISHER:

University of Belgrade, Faculty of Architecture

TECHNICAL EDITOR:

**Ana Raković**

PROOFREADING:

**Iris Arsić, AKADEMIJA OXFORD**

CIRCULATION:

**300**

PRINTING:

**SVEN doo, Niš**

volume 11 \_2019 N° \_3

ISSN 1821-3952

## C O N T E N T S

- 363-368 BEAUTY AND BUILDING STEREOTYPE. AESTHETICS OF THE ARCHITECTURE.  
Raffaele Milani
- 369-396 MULTI-CRITERIA EVALUATION OF BEAUTY IN ARCHITECTURE  
Bogusław Szuba
- 397-404 ARCHITECTURE AS A TOOL FOR AESTHETIC AND POLITICAL THOUGHT  
Thomas Symeonidis
- 405-414 THE ADDED VALUE OF REGENERATIVE ARCHITECTURE AND  
CONTEMPORARY AESTHETIC PHILOSOPHY  
Andrea Wheeler
- 415-426 FROM FAMILIAR TO UNCANNY. THE AESTHETICS OF ATMOSPHERES  
IN DOMESTIC SPACES  
Elisabetta Di Stefano
- 427-440 A STUDY OF THE BIOLOGICAL CONCEPT IN ARCHITECTURAL THOUGHT:  
A COMPARISON BETWEEN “DER RAUM ALS MEMBRAN” (1926) AND  
“METABOLISM” (1960)  
Shiho Hasegawa
- 441-462 FROM THE BIG MAC AND IKEA SOCIETY TO THE ENVIRONMENTAL  
AESTHETICS, SMART CITIES AND STORYTELLING ARCHITECTURE  
Irena Kuletin Čulafić
- 463-472 AESTHETICS OF SUSTAINABILITY:  
CAPSULE ARCHITECTURE IN THE CITY AND IN NATURE  
Peter Šenk
- 473-486 AESTHETICS AND CULTURAL ASPECTS OF BAUHAUS:  
TOWARDS A NEW CONCEPTION  
Christiane Wagner
- 487-500 CLASSICAL ARCHITECTURE IN THE SCOPE OF KANTIAN AESTHETICS:  
BETWEEN LYOTARD AND RANCIÈRE  
Helen Tatla

- 
- 501-510 FLUID STATE OF ARCHITECTURE  
Bojana Jerković-Babović
- 511-518 CINEMA AND ARCHITECTURE: MODERN PERCEPTION  
Sônia Campaner Miguel Ferrari
- 519-530 AUTHORSHIP AND LANGUAGE IN CONTEMPORARY ARCHITECTS' BOOKS  
Deniz Balık Lökçe
- 531-542 ARCHITECTURE AS A TEXTUAL PHENOMENON:  
ALEXANDER BRODSKY'S ARCHITECTURAL PRACTICES OF APPROPRIATION  
Boško Drobnjak
- 543-552 PETER EISENMAN AND THE POSSIBILITY OF AN AESTHETIC FORMALISM  
Amund M. Rolfsen
- 553-570 THE DEATH OF AESTHETICS IN ARCHITECTURAL EDUCATION?  
POSSIBILITIES FOR CONTEMPORARY PEDAGOGY  
Renata Jadrešin Milić, Catherine Mitchell
- 571-574 BOOK REVIEW:  
*URBAN MORPHOLOGY: AN INTRODUCTION TO THE STUDY OF  
THE PHYSICAL FORM OF CITIES*  
Jovana Bugarski

# THE DEATH OF AESTHETICS IN ARCHITECTURAL EDUCATION? POSSIBILITIES FOR CONTEMPORARY PEDAGOGY

---

## A B S T R A C T

The importance of aesthetics within architecture has a long history. Although evidence suggests that the term was not brought into architectural writing until 1735<sup>1</sup>, the place of aesthetics can be identified across architectural theory and philosophy since the time of Vitruvius. Developing an aesthetic sensibility was seen as crucial for an architect and the study of architecture was understood through the three Vitruvian lenses (*utilitas, firmitas, venustas*) one of which, *venustas*, is directly associated with aesthetics. This paper responds to the current and ongoing discussions between architects, architectural educators and architectural students on the role of aesthetics in architectural education and professional practice today. It was initially inspired by questions raised at the 2017 and 2018 annual conferences of the Society of Architectural Historians (SAH 2017 and 2018) about the role of architectural history in architectural design and practice today, and in line with this, questions about place of aesthetics in architectural education. This paper considers the place of aesthetics in architectural education and provides a detailed overview of the key pedagogical interventions undertaken in one architectural studies programme which might serve as a guide for educators interested in maintaining the place of aesthetics in contemporary architectural education. It suggests that aesthetics can continue to play a key role in the architectural curriculum whilst a focus on design problem-solving and achieving the contemporary educational requirements of accreditation is maintained.

Renata Jadrešin Milić  
Catherine Mitchell

School of Architecture, Unitec Institute of Technology  
rjadresinmilic@unitec.ac.nz  
cmitchell@unitec.ac.nz

## KEY WORDS

AESTHETICS  
ARCHITECTURAL EDUCATION  
FUTURE SKILLS OF EMPLOYMENT  
CRITERIA FOR ACCREDITATION  
PEDAGOGICAL INTERVENTIONS

## INTRODUCTION

At the most recent conference of the Association of Architectural Educators “Learning Through Practice”<sup>2</sup> an international body of researchers and practitioner-teachers in architectural schools across the world discussed two critical questions: What is architectural education today? And, how is it connected with practice? The need for re-articulation of design as problem-solving in the education of architects was recognised and the importance of problem-solving was further connected with the present-day criteria for the ranking of the top five skills necessary for future employment in the UK based on an analysis by Bakshi and colleagues.<sup>3</sup> These criteria are: judgment and decision-making, fluency of ideas, active learning, learning strategies and originality. In the same list “design as aesthetics” was placed in the bottom third of required skills with it being ranked number 68 out of 100.<sup>4</sup> This suggests that aesthetics in architectural education is now, as indicated by this key domain, understood as being of circumscribed value. This paper asks: Will the demands, pressures and priorities of higher education and the profession create future practitioners with limited grounding in aesthetics based on its deprioritisation in contemporary architectural education? Many of us involved in the education of architects regularly discuss the importance of aesthetics and this is borne out in a variety of fora. For instance, the introductory sentence of the initial Concept of the Congress ICA 2019 guide recognizes aesthetics as an important philosophical, theoretical and even scientific discipline that aims at interpreting the complexity of phenomena in our world.<sup>5</sup> However, in reality, due to the requirements to map our current course descriptors to the updated performance criteria for accreditation in architectural schools, it may be the case that sufficient curriculum space is no longer provided for aesthetics. It may be that in fact, we are facing “the death of aesthetics in architectural education”. Recognition of these kinds of concerns confronting architectural educators may provide a call to action and demand from teachers creative approaches to maintain the place of aesthetics within architectural curricula. Informed by a growing body of research on the topic of professionalism that has explored the future skills of employment in architecture, this paper through the presentation of a case study advocates for the role of aesthetics in architectural education. It identifies the pedagogical value of weaving together the teaching of aesthetics with design problem-solving, ultimately with a view to strengthening professional practice. Before introducing the case study in more detail, it is worthwhile to ground our use of the term aesthetics in this paper. Although the concept is understood in diverse ways in architectural theory, it can be described in basic terms as the analysis of judgements and the objects to which they are applied.<sup>6</sup> The



word itself is derived from the Greek word for “feeling” which means that the discipline of aesthetics is more than just the study of beauty; it is a study of that which appeals to our senses, most often in connection with the classification, analysis, appreciation, and understanding of art.<sup>7</sup> As mentioned above, it is also recognised as a branch of philosophy or/and an academic discipline in a broad sense.<sup>8</sup>

## THE CASE STUDY

The case presented showcases an alternative teaching approach introduced in the School of Architecture, Unitec Institute of Technology, Auckland, New Zealand. The evidence comes from teaching the Critical Studies 1, Architectural History (CS1) course developed over three academic years, from 2016 to 2018. In contrast to the once dominant transmission approach to teaching in architectural education,<sup>9</sup> we attempt in this critical studies course to avoid communicating large amounts of basic descriptive facts; instead, learning is based on interpretation, on the sharing of personal reactions, on setting up challenging comparisons and provoking discussion between students. While doing assigned activities, the students discover the work of significant modern architects and architectural practices and the influence of historical examples on the architect’s current work. This is intended to deepen the students’ understanding of the content by extending their interest and curiosity, developing critical thinking about the history of architecture, and helping them establish their own connections within our discipline. Our approach is focused on meeting the demands for previously listed future skills for employment (judgment and decision-making, fluency of ideas, active learning, learning strategies and originality), to satisfy the accreditation requirements with their focus on design problem-solving *and* to develop students’ understanding of “design as aesthetics” by promoting interest in, and knowledge of, aesthetics values.

The main aims of CS1 include:

- 1) To encourage students to approach knowledge as a dynamic process discoverable for oneself, rather than to see it as something that is simply provided to them.
- 2) To provoke students to question the world instead of just trying to know it.

The aims were achieved through:

- a) Architectural History being presented from a point of view that corresponds to present-day demands;
- b) Architectural History being coordinated with Design Studio, so that history becomes involved in the dynamics of ‘making’ architecture;
- c) Students having an active role through taking up learning strategies to encourage them to process information and to ‘construct’ meanings.
- d) The use of new adaptive technologies to make face-to-face learning highly engaging, collaborative and team-based. Online learning and flipped learning approaches employed to expand learning opportunities.

The diagrams below guide the teaching so that the students can see the practical aspects of the theories and histories they are learning about. This approach is especially focused on enabling students to identify how historical knowledge can be engaged with to liberate innovation in problem-solving and, at the same time, is intended to draw their attention to aesthetic considerations (in all these ways architectural history presented as the basis from which modern architecture can be learnt):

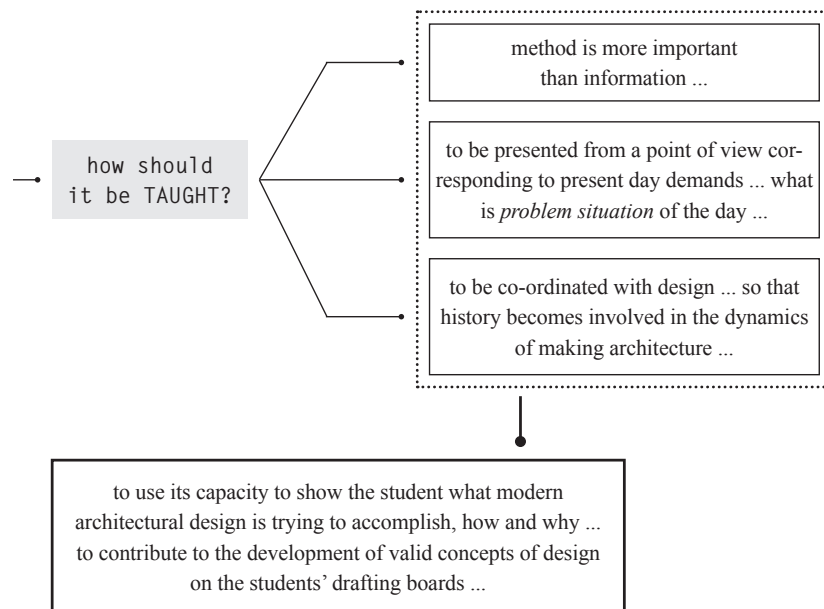


Diagram 1. The Teaching Method in CS 1 course (Authors).

The diagram below presents the framework for CS1 course development for effective learning:

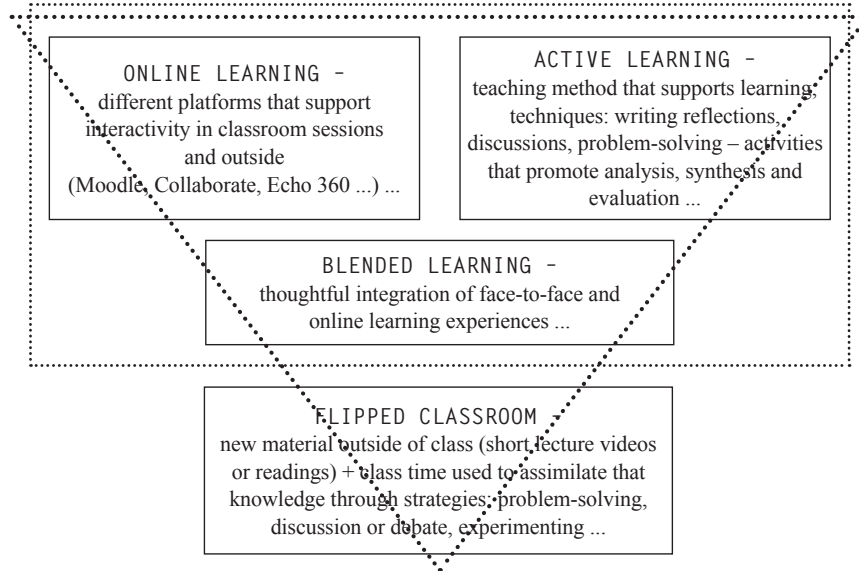
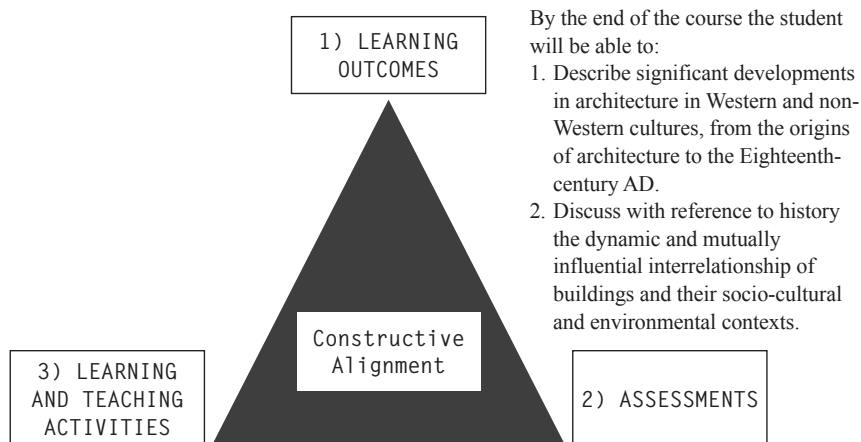


Diagram 2. The framework for the teaching provision in CS 1 course (Authors).

### Critical Studies 1 (Architectural History)

The Critical Studies strand in the Bachelor of Architectural Studies (BAS) at Unitec consists of five courses, with clear and strong connections. Critical Studies 1 (Level 5) is seen as important component of the programme in providing students with the understandings and skills to manage transition between high school and university. The course focuses on scaffolding students into the BAS, discipline knowledge, and the learning and teaching approaches that span the programme. The course always has a large cohort of students (116 in 2018) and is taught through two 2-hour classes per week + one 1-hour PASS (Peer-led) class per week.



ASSESSMENT TYPE	% OF COURSE	WEEK IT OCCURS	FEEDBACK GIVEN
Major Project - study of selected building - Timeline (Crit 1 - verbal presentation) (LO2)	5%	4	Yes - Group and individual feedback.
Major Project - study of selected building - Essay (Crit 2 - verbal presentation) (LO2)	20%	7	Yes - Group and individual feedback.
Major Project - study of selected building - Drawing (Crit 3 - verbal presentation) (LO1, LO2)	25%	11	Yes - Group and individual feedback.
Buildings and terminology Identification Test (LO1)	10%	6	Yes - Group feedback only.
Exam (LO1)	40%	15	No feedback.

#### LEARNING AND TEACHING ACTIVITIES. MEANS AND METHODS OF THE CURRICULUM

Preparation of content for online learning and flipped learning have proved to be positive for extending learning opportunities. Employing these learning approaches provided the means to more strongly connect to, and (possibly in future) integrate with, Design Studio. Moreover, the resources were prepared and organised to develop students thinking and learning with reference to the three Vitruvian lenses one of which, *venustas*, is directly associated with aesthetics. In this way, “design as aesthetics”, something that has always been seen as crucial for architects, remains highly present. Design Studio ‘crit type questions’ are prepared for Pre-class activities and applied to historical buildings in this case. Similarly, Post-class activities are designed for students so that they can analyse the most recent architectural projects as solutions to different architectural problems, previously observed in historical buildings, for example: mass, space, threshold, aperture, circulation, materials, building techniques, “corner” problem and connections between the old and the new.

#### 1.0 Learning by doing, practical tasks and knowledge application.

The following table provides an overview of the design and facilitation of CS1 with reference to key teaching and learning literature.

		DESIGN	
	ENGAGING STUDENTS IN THE LEARNING PROCESS	CLASS TIME OR INDEPENDENT TIME?	FREQUENCY
LEARNING BY DOING, PRACTICAL TASKS, APPLY KNOWLEDGE	<p><b>Pre-class activities – online experience;</b> carefully guided and structured for students ‘to do something’.</p> <p>For example:                      “The focus of this class is to explore Byzantine architecture. As you <b>watch</b> the following movie on the gorgeous Hagia Sophia in Istanbul, and its breath-taking dome <b>consider these points:</b> ..., or: <b>Jot down ... We will discuss these at the start of our lecture.</b></p>	Independent, at home	Every week, every session
	<p><b>During class activities – face to face;</b> The students usually bring their notes from the video watched for homework and share responses. After this, we start the lecture and seek to clarify any questions that remain.</p>	Class time, face to face + group discussions	Every week, every session

		FACILITATION
<p>RATIONALE FOR THE CHOSEN ACTIVITY</p> <ul style="list-style-type: none"> <li>- Why this activity?</li> <li>- How does this activity assist students to meet the learning outcomes?</li> <li>- How does this activity help students to cope with assessment demands/ requirements?</li> </ul>	<p>THEORETICAL FRAMEWORK</p>	<p>HOW THE LECTURER SUPPORTS STUDENT LEARNING</p>
<p>Students are aware of the course expectations; they are clearly guided. The Course Info document - Important Explanations for Students, is prepared with clear instructions for ALL activities in the curriculum. The questions prepared for pre-class activities are linked to the assessment events – especially important for the exam (<b>LO1</b>); but also, this give the students exposure to the types of questions which flow through Critical Studies strand overall (<b>LO2</b>).</p>	<p>Cope and Kalantzis, 2015: Category - Experiencing the new. Bloom’s Taxonomy levels: Knowledge; Comprehension level; Application; Analysis. (Bloom, 1956). (Brookfield, 2011) (Van Sickle, 2016) (Brown, 2012)</p> <p>See Figure 1.</p>	<p>Firstly, students are guided to carefully read and understand the prepared questions. Secondly, during PASS (Peer Assisted Study Sessions) classes we check their answers and clarify questions or misunderstandings. We try to create a supportive atmosphere so that students are not afraid to share their opinions or to make mistakes.</p>
<p>This is directly connected with the <b>LO1</b> primarily (<b>and partly with LO2</b>), and leads the students towards the examination; by using active learning and not through memorising facts only. In addition, all sessions have clearly named lecture topics so that the students can follow where we are at any moment. For example: Lecture Topic 1: How did the environment and landscape influence architecture in the old Egypt? Topic 2: Materials, building techniques, and constructional systems in Egyptian architecture Topic 3: Architectural programs in Egyptian Architecture: Tombs Topic 4: Architectural programs in Egyptian Architecture: Temples Topic 5: Aesthetic characteristics of Egyptian architecture</p>	<p>Social learning theory, social constructivism: Discussion, debate, opportunities to explore diverse points of view. (Richardson &amp; Swan, 2003) (Abeysekera and Dawson, 2015)</p> <p>See Figure 2.</p>	<p>While the students discuss the activities, the lecturer goes around and contributes to the different conversations/ to answer questions to extend understandings. The lecturer tries to encourage positive interactions between students.</p>

LEARNING BY DOING, PRACTICAL TASKS, APPLY KNOWLEDGE	<p><b>Post-class activities – online experience;</b> students to do something.</p> <p><b>Individual Wiki</b></p> <p>For example: “You are invited to contribute <b>your explanations</b> of the following terms to your Individual Wiki. By doing so, you will be preparing yourself for your exam. <b>Add explanations for: ...”</b></p>	Independent	Created for every topic/session
	<p><b>ID Test Quizzes + Exam Preparation Quizzes</b></p>	Independent, but can be done in groups; if working in groups students can compete and have fun	
	<p><b>Verbal presentations for all parts of Major Project</b> (Crit 1 + Crit 2 + Crit 3)</p>	Class time, group work	Three times in semester

<p>This activity is colour coded (signalling principle):  <b>Red text – preparation for the exam:</b> The students are invited to contribute their explanations of different architectural terms – Q2 at the exam + architectural terminology necessary for Design Studio and for architectural practice. Each week, the students are asked to find three or more architectural terms listed relevant to the lecture topic. These terms are always carefully selected and important for understanding the particular topic we are talking about in a particular class. <b>(LO1)</b>  From the lecturer’s observation of this work, the students make obvious progress in terms of developing their use of architectural terminology generally; in thinking about what has always been part of bringing design decisions in architecture; of how to present their findings. This work is also undertaken with a view to helping them develop the language to explain their own design work - architectural work. <b>(LO2)</b></p>	<p>Bloom’s Taxonomy levels: Knowledge; Comprehension level. (Bloom, 1956).  Cognitivism: Activating prior learning; Use analogies and metaphors to explain concepts; Note-taking, mnemonics. (Brookfield, 2011) (Westermann, 2014)</p> <p>See Figure 3.</p>	<p>We check this together during PASS classes. Both the Wiki and Q&amp;A forum (see in the next section) are tools used to enable students to get timely feedback. Also, student-student and student-teacher interactions are facilitated in this process. Inclusion of these tools means the course is highly accessible from a variety of platforms and devices (provided students have access to the internet).</p>
<p>All quizzes are practice quizzes and can be repeated as many times as the students want. By doing so they check their knowledge, learn from previous mistakes, and they are prepared for the ID test and exam question Q1, on time. <b>(LO1)</b></p>	<p>Bloom’s Taxonomy levels: Knowledge. (Bloom, 1956). (Westermann, 2014) (Spector, 2016)</p>	<p>The students are encouraged to start practicing early and together, to foster interaction between them. The lecturer follows/ checks their success online, and draws their attention to the most common mistakes in class.</p>
<p>Verbal presentation of the students Timelines, Essays and Drawings - considered to be group sharing and discussion about students’ findings; the students have been engaged and they participate by listening to each other with care;  The students apply learning gained in previous weeks to each new task;  The students use the knowledge previously gained in a creative way <b>(LO2)</b>.</p>	<p>Social learning theory, social constructivism: Discussion, debate, opportunities to explore diverse points of view. (Richardson &amp; Swan, 2003)</p>	<p>The lecturer facilitates this work and tries to create a supportive atmosphere and environment. The lecturer gives an immediate feedback, important for the learning overall. Additional questions are asked – about the students’ experience while they worked on assignment, what was good/not good; what was hard/easy; what could be done differently.</p>



**Prepare for Class**

The focus of this class is to explore Byzantine architecture. As you watch the following movie on the gorgeous Hagia Sophia in Istanbul, and its breathtaking dome, which has been inspiring people for ages, consider these points:

**CONTEXT**

- Notice different names used for the contemporary city of Istanbul that were mentioned in the movie.

**UTILITAS**

- What is longitudinally planned space? Explain and make a sketch.
- What is centrally planned space? Explain and make a sketch.
- Compare the two and explain the difference.
- How were the two plans brought together in this church?

**FIRMITAS**

- What is the height of the dome? And the diameter?
- Compare the dome with the Pantheon's dome. What is the main difference between them?
- What are pendentives?
- What did support the weight and the trust of the dome?

**VENUSTAS**

- Note that the dome was pierced with windows. How many of them are there? What was that done for?
- What is mosaic?

*We will discuss these at the start of our lecture.*

Hagia Sophia in Istanbul




Fig. 1.

Pre-class activities  
– online experience.  
Moodle page with one  
session example.

- What did Egyptians "imitate" while making those beautiful columns?

*We will discuss these at the start of our lecture.*

**The Pyramid of Pharaoh Djoser at Saggara**




Fig. 2.

During class activities  
– face to face. Moodle  
page with one session  
example.

**During Class**

**Video Discussion: Review in Groups (20 minutes)**

In this session the lecturer will ask you to talk in small groups about the video and the answers to the questions that were asked.

**Lecture**

Topic 1: How did the environment and landscape influence architecture in the old Egypt?

Topic 2: Materials, building techniques, and Constructional systems in Egyptian architecture

Topic 3: Architectural program in Egyptian Architecture: Tombs


Topic 4: Architectural program in Egyptian Architecture: Temples

**Follow-up Activities**

You are invited to contribute your explanations of the following terms to your INDIVIDUAL WIKI. By doing so, you will be preparing yourself for your exam. Add explanations for: MASTABA, PYRAMID, HYPOSTYLE HALL.

The following questions will help you deepen your understanding of this topic. They are about extending your interest and curiosity, and critical thinking about the history of architecture. Use your own resources, what you heard in the lecture, the video, and your assignment preparation:

1. Think and tell: You talked a lot about the context at DS1 classes throughout the last semester. Describe the way in which context in the latest DS1 assignment influences your design?
2. Find one modern example for each one of the TWO BUILDING TYPES we need to remember from the old Egypt because of their huge influence later, throughout the History of architecture, until today? Show us one contemporary pyramid - or look at this video about Ming Pei Louvre Pyramid in Paris.



How does Ming Pei compare his Louvre Pyramid with Egyptians?




Fig. 2.

Post-class activities  
– online experience –  
face to face. Moodle  
page with one session  
example.

Overall, the previous table provides an account of the ways CS1 is taught with a focus on developing student understandings of architectural history through the development of design thinking and in connection with design problem-solving processes. This is achieved while maintaining a clear focus on developing students' aesthetic sensibilities and knowledge.

## 2.0 Engaging with abstract theory or concepts

To further identify the pedagogy used in Critical Studies 1 an account of the approaches to facilitate student engagement with abstract theory and concepts that include “design as aesthetics” is provided. This is important as many students of architectural history grapple with the range of theoretical concepts and theory that form an essential part of the subject. The table below provides an overview of the ways in which we sought to address some of these challenges.

This table contributes more depth to the account of the pedagogical interventions employed in Critical Studies 1 and to enable practitioners understand the ways in which the teaching of theory, including aesthetics, can be approached to facilitate student learning. Evidence of the value of our pedagogical approach is identified within the architectural history course in terms of increased student engagement and improved academic results. The course results from 2015 to 2018 demonstrate that the number of ‘A’ level grades - 4% in 2015, was raised to 16% in 2018 indicating improved learning and achievement at the higher levels.

		DESIGN	
		CLASS TIME OR INDEPENDENT TIME?	FREQUENCY
ENGAGING WITH ABSTRACT THEORY OR CONCEPTS	<p><b>“Think and Tell” questions (Q&amp;A forum)</b></p> <p>Example One:                      “Take a <b>look at</b> the photos of the contemporary urban monument located in one Croatian city. The name of the monument is “Rusty Megaliths”. From what characteristics do you think the monument got its name? <b>Compare</b> it with megaliths from Prehistory”</p> <p>Example Two:  <b>“Find one modern example</b> for each of the TWO BUILDING TYPES we need to remember from old Egypt because of their massive influence on architecture across history. <b>Show</b> us one contemporary pyramid; or <b>look</b> at this video about Ming Pei Louvre Pyramid in Paris. <b>How can</b> Ming Pei’s Louvre Pyramid be <b>compared</b> with Egyptian pyramids?”</p>	Independent, free, interpretative. Additional movies, texts, or links are provided based on their “think and tell” questions	Created for every topic/session
	Asking my students to <b>offer</b> feedback or a question for me in writing (about something that is not clear about the content they have learned, and/or their overall advice for me as well).	Class time	Throughout the semester

		FACILITATION
RATIONALE FOR THE CHOSEN ACTIVITY	THEORETICAL FRAMEWORK	HOW THE LECTURER SUPPORTS STUDENT LEARNING
<p>With this task the students learn how to connect theoretical principles (often abstract) and architectural practice with reference to the history of architecture and aesthetic ideas; and how to apply theoretical principles in their Design Studio work today. It is also important for the assessment Major project – Essay. <b>(LO2)</b></p> <p>This activity is colour coded as: <b>Green text.</b> It is designed to become a dynamic online discussion and a shared learning resource:</p> <ul style="list-style-type: none"> <li>– By doing these activities the students find out about the most famous modern architects, architectural firms, recent significant contemporary designs and key architectural awards. In combination, this knowledge helps students understand the importance of history of architecture for contemporary design practice.</li> <li>– It can also help them to think about how they can establish their own connections across the discipline.</li> <li>– Answering the posed questions should help students to deepen their understanding of the topic, extend their interest and curiosity and help them develop critical thinking about the history of architecture.</li> <li>– The students are encouraged to use their own resources, what they hear in lectures, the videos, and all their assignment preparation as building blocks for a solid, useful and meaningful architecture practice.</li> </ul>	<p>Bloom’s Taxonomy levels: Knowledge; Comprehension level; Application; Analysis; Synthesis. (Bloom, 1956).</p> <p>Constructivism: Build knowledge by doing; Learning from reflection; Problem-based learning; Experimentation. (Brookfield, 2011; Bransford et al., 1999).</p>	<p>Primarily this approach is designed to broaden the students’ views and help them understand the purpose of everything we learn.</p> <p>Further, the Q&amp;A discussion forum allows students to share their research with the lecturer and tutors, as well as with their peers, and stimulate some engaging discussion around the topics given.</p>
<p>Every new class starts with a short reflection about students’ enquiries (feedback from students often arrives through e-mails, not in direct contact). Between our session – whenever necessary or urgent, e-mails are sent to all students through Moodle (especially before major assignment submissions, with a reminder bullet pointing of the most important expectations, criteria, grading rubric and similar).</p>	<p>Importance of self-reflection in learning process (Fink, 2003)</p>	<p>Lecturer to show to the students that he/she values their feedback and is focused on contributing to their learning.</p>

## KEY CHALLENGES

As can be identified from the discussion so far, multiple strategies were employed in Critical Studies 1 to facilitate student learning through making more explicit links between architectural history and design. However, the utilisation of these strategies and approaches was not without challenge. In brief, the most notable challenges we encountered included:

- Student resistance to engaging with activities;
- Student reluctance about working with others;
- The amount of time some activities take in class time;
- Technical problems with the e-platform.

To address the first of the two related issues of student resistance to engaging with activities and working with others we found that providing a clear overview of the expectations at the beginning of the course and identification of the value of the benefits of active learning was useful. Moreover, being consistent with structure and order of the session meant that the students became more familiar with the ways the course was structured and participated more readily. The issue relating to the amount of class time taken with activities is significant and an ongoing consideration especially with regard activity preparation. Over the three-year period of active re-development of the course we learned more about how certain activities could be made to fit within the class time though there remains as with all teaching some unpredictability in terms of how students engage and respond. The last major issue encountered involved technical matters often in relation to our course wiki, something we continue to work on with our technical colleagues at our institution.

## CONCLUSION

This paper has identified the key pedagogical interventions undertaken in Critical Studies 1, a first-year architectural history course in the Bachelor of Architectural Studies at Unitec Institute of Technology in Auckland, New Zealand. In this course we moved away from traditional teaching approaches typically relied upon in architectural history and instead focused on: Content and Interaction through questions/problems; Video + questions; Interactivity (with Others) Focus: Facilitated synchronous discussion; Critical Thinking: Response to an assigned video/short text; Production: Oral summary/presentation; written essay; drawing; Reflection: Reflection on Learning. With these strategies we sought to emphasise the value and relevance of architectural history by making explicit the connections between developing an aesthetic sensibility and

design problem-solving processes in contemporary architecture. In this way, our work represents our intent to draw together a number of different threads in the architecture curriculum where we promote design problem-solving, critical thinking *and* aesthetics. While development and refinement necessarily continues, it is hoped that the sharing of our practice may benefit educators who are seeking insights into how they can achieve stronger connections between architectural history, aesthetics and design studio in their own teaching.

## NOTES

- 1 Alexander Gottlieb Baumgarten (1714-1762), a German philosopher, was the first to use the word “aesthetics”; see: Paul Guyer, “18<sup>th</sup> Century German Aesthetics,” *The Stanford Encyclopedia of Philosophy* (Winter 2016 Edition), Edward N. Zalta (ed.). Available at: <https://plato.stanford.edu/archives/win2016/entries/aesthetics-18th-german/>.
- 2 The fifth international conference of the Association of Architectural Educators “Learning Through Practice”, 24-26 April 2019, the University of Westminster in London. Available at: <https://aaeconference2019.wordpress.com/>.
- 3 Hasan Bakhshi, Jonathan Downing, Michael Osborne, and Philippe Schneider, *The Future of Skills: Employment in 2030* (London: Pearson and Nesta, 2017).
- 4 Alan Jones, “Professionalism in Architectural Education,” Debate on Architectural Education and Professionalism convened by SCHOSA (Standing Conference of the Heads of Schools of Architecture in the UK), 24 April 2019, the University of Westminster in London; data based on: Bakhshi, Osborne, and Schneider, *The Future of Skills: Employment in 2030*, 67-68.
- 5 *21<sup>st</sup> International Congress of Aesthetics, Possible Worlds of Contemporary Aesthetics: Aesthetics between History, Geography and Media, Book of Abstracts* (University of Belgrade Faculty of Architecture, Belgrade, 2019), 7.
- 6 Jerry Palmer, Mo Dodson, (eds). *Design and Aesthetics: A Reader* (Routledge, 1996), 3-12; for main turning points in history of aesthetics see Aleš Erjavec, “The Status of Aesthetics Today,” SAJ Vol. 7 (2015): 1-8. Available at: <http://saj.rs/wp-content/uploads/2017/03/SAJ-2015-01-A-Erjavec.pdf>.
- 7 Dabney, Townsend. *The A to Z of Aesthetics* (Scarecrow Press, 2010).
- 8 Townsend. *The A to Z of Aesthetics*.
- 9 Transmission pedagogy involves teacher-centred approaches to teaching based on a view of learning as a process of acquisition of information transferred or transmitted from teachers (as experts) to students who framed as ‘empty vessels’ to be filled with knowledge; see: C. Greig Crysler, “Critical Pedagogy and Architectural Education,” *Journal of Architectural Education* 48, no. 4 (1995): 208, 210; David J. Nicol and Debra Macfarlane-Dick, “Formative Assessment and Self-regulated Learning: A Model and Seven Principles of Good Feedback Practice,” *Studies in Higher Education* 31, no. 2 (April 2006): 199-218, 200. Available at: <https://doi.org/10.1080/03075070600572090>.

## BIBLIOGRAPHY

- Abeyskera, Lakmal, and Phillip Dawson, "Motivation and Cognitive Load in the Flipped Classroom: Definition, Rationale and a Call for Research," *Higher Education Research & Development*, 34 (2015), 1-14. Available at: <https://doi.org/10.1080/07294360.2014.934336>.
- Bakhshi, Hasan, Jonathan Downing, Michael Osborne, and Philippe Schneider, *The Future of Skills: Employment in 2030*, London: Pearson and Nesta, 2017.
- Bloom, Benjamin S. (Benjamin Samuel), *Taxonomy of Educational Objectives; the Classification of Educational Goals*, New York: Longmans, Green, 1956.
- Bransford, John, National Research Council (U.S.). Committee on Developments in the Science of Learning., and National Research Council (U.S.). Committee on Learning Research and Educational Practice., *How People Learn : Brain, Mind, Experience, and School*, National Academy Press, 2000.
- Brookfield, Stephen, *Teaching for Critical Thinking : Tools and Techniques to Help Students Question Their Assumptions*, Hoboken, NJ: Jossey-Bass, 2012.
- Brooks, D. Christopher, "Space and Consequences: The Impact of Different Formal Learning Spaces on Instructor and Students Behavior," *Journal of Learning Spaces*, 1 (2012), 1-10.
- Brown, Brené, *Daring Greatly: How the Courage to Be Vulnerable Transforms the Way We Live, Love, Parent, and Lead*, New York: Gotham Books, 2012.
- Cope, Bill, and Mary Kalantzis, eds., *A Pedagogy of Multiliteracies: Learning by Design*, Houndsmills, United Kingdom, 2015.
- Crysler, C. Greig, "Critical Pedagogy and Architectural Education," *Journal of Architectural Education* 48, no. 4 (1995), 208-17.
- Guyer, Paul, "18<sup>th</sup> Century German Aesthetics," *The Stanford Encyclopedia of Philosophy* (Winter 2016 Edition), Edward N. Zalta (ed.). Available at: <https://plato.stanford.edu/archives/win2016/entries/aesthetics-18th-german/>.
- Fink, L. Dee, *Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses*, San Francisco: Jossey-Bass, 2003.
- Nicol, David J., and Debra Macfarlane-Dick. "Formative Assessment and Self-regulated Learning: A Model and Seven Principles of Good Feedback Practice." *Studies in Higher Education* 31, no. 2 (April 2006), 199-218. Available at: <https://doi.org/10.1080/03075070600572090>.
- Palmer, Jerry, and Mo Dodson, eds., *Design and Aesthetics: A Reader*, New York: Routledge, 1996.
- Richardson, Jennifer C., and Karen Swan, "Examining Social Presence in Online Courses in Relation to Students' Perceived Learning and Satisfaction," *Journal of Asynchronous Learning Networks*, 7 (2003), 68-88.
- Spector, J. Michael, *Foundations of Educational Technology: Integrative Approaches and Interdisciplinary Perspectives*, New York: Routledge, 2016.
- Society of Architectural Historians, "Publications: Past Conferences," 2019. Available at: <https://www.sah.org/conferences-and-programs/past-conferences>.
- Townsend, Dabney, *The A to Z of Aesthetics*, Scarecrow Press, 2010.
- Van Sickle, Jenna, "Discrepancies between Student Perception and Achievement of Learning Outcomes Ina Flipped Classroom," *Journal of the Scholarship of Teaching and Learning*, 16 (2016), 29-38. Available at: [https://catalogue.library.auckland.ac.nz/primo-explore/search?query=any.contains.discrepancies between student perception and achievement of learning outcomes in a flipped&tab=articles&search\\_scope=Primo\\_Central&vid=NEWUI&offset=0](https://catalogue.library.auckland.ac.nz/primo-explore/search?query=any.contains.discrepancies%20between%20student%20perception%20and%20achievement%20of%20learning%20outcomes%20in%20a%20flipped&tab=articles&search_scope=Primo_Central&vid=NEWUI&offset=0) [accessed 18 May 2019].
- Westermann, Edward B., "A Half-Flipped Classroom or an Alternative Approach? Primary Sources and Blended Learning," *Educational Research Quarterly*, 38 (2014), 43-57. Available at: [https://www.library.auckland.ac.nz/search/westermann %22a half-flipped classroom or an alternative approach?%22](https://www.library.auckland.ac.nz/search/westermann%20a%20half-flipped%20classroom%20or%20an%20alternative%20approach?%22) [accessed 19 May 2019].



---

CIP - Каталогизacija y publikaciji  
Nародна библиотека Србије, Београд

72

SAJ : Serbian architectural journal / editor-in-chief Vladan Đokić. - Vol. 1, no. 1  
(2009)- . - Belgrade : University of Belgrade, Faculty of Architecture, 2009- (Niš :  
Sven). - 27 cm

Tri puta godišnje.  
ISSN 1821-3952 = SAJ. Serbian architectural journal  
COBISS.SR-ID 172308748