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The typo-morphological facade of the catholic churches of S. Miguel, Azores

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Abstract
This paper intends to present the research results that comprised a comparative facade analysis of 41 parish and non-parish Catholic churches on the island of S. Miguel, Azores, built during the 18th and 19th centuries. The research highlights the existence of a facade typology expressed in the formal similarities between them.
The matrix composition and the ornamental elements present on the 63 churches' facades were analysed and studied in detail in 41 churches, mapped and characterised by the elements that compose them. These are grouped into categories, allowing to establish and synthesise a typology, called the *micaelense* model facade, according to the composition principals present in the facades.
The analysis method, the reading of the forms of the churches' facades, and the metric survey of these were based on old and current photographic records, supported by a comparative analysis elaborated and organised from tables and synthetic schemes systematised in vector drawings (graphic representations made in CAD).

1. Introduction

The study presented in this paper demonstrates the existence of a model of the *micaelense* church, and exposes the methodology used in the master's dissertation in architecture entitled "*Uma tipologia de fachada na igreja micaelense (1728-1882)*" (Vieira, 2019), which evidences the existence of the main facade typology in parochial and non-parochial Catholic churches on the island of São Miguel, Azores, built during the 18th and 19th centuries.
This study focuses on the morphology of the church's most significant component, the facade, that carries paramount symbolic importance and is a rich source of information in historical, cultural, spatial, temporal, social, ethical, moral, and aesthetic terms, transmitting a particular way of a people's culture.
This research aims to confirm a concept for this facade typology that emerges through the similarities between 41 parish and non-parish church facades. An analysis of the matrix composition and the ornamental elements present on the church's facades is thus developed by mapping, characterising, and grouping the elements that compose them into categories. In this scope, it was necessary to make new graphical schemes due to the complexity of Vieira's (2019) previous research and the size of the graphical analysis tables to present a synthesis of the work.
The work synthesis will contribute to the knowledge of the distributive composition of the elements that design the facade, namely the central body, the tower, and the baptistery.

2. Material and Methods

The research starts with a comparative analysis of 63 parish and non-parish churches on the island of São Miguel, dating from the 18th to the 19th century, focusing on 41 churches whose facades present a morphological composition model (Vieira, 2019).
To assess the method, we studied the facades and plants of the selected churches through a comparative analysis using old and current photographic records. Due to the scarcity of original technical drawings of the churches, the photographic elements were worked through CAD software. The churches were drawn with the rigour that the photographic features allow.
The analysis and reading method of the forms focus mainly on the direct church facades observation, as in Quintão's (2015) study, in which facade interpretation was based on drawings analysis.
In this way, the study focuses in detail on the comparative analysis of the facades from the elaboration and organisation of schematics and synthesis drawings systematised in vectorial drawings (graphic representations made in CAD).

3. Literature Review

The literature review has shown the paucity of scientific studies that focus on the composition facade and technical drawings concerning the churches under investigation.

Despite the diversity of authors/ chroniclers from various eras (16th century with Frutuoso (2011), 17th century with Mont'Alverne (1960-1962), 18th century with Cordeiro (1866), 19th century with Canto (2000), 20th century with Dias (1949-1950), 21st century with IAC and SIPA) who reflect on the theme of religious architecture in São Miguel and the Azores. These works focus on the historical part, building contextualisation, inventory, and characterisation, and rarely present a study on the reason for the existence of a church facade design replication, except Caldas (2011; 2012).

However, despite this lack of scientific studies on our research topic, the theories of these authors motivated this research. Through this Literature Review, we clarify several issues that led to our study, namely:

i) the existence of a particular way of living and people culture of the lower layers of society, as stated by Ataíde (2011);
ii) the idea of a " *micaelense* facade type" presented in a short investigation by Caldas (2011);
iii) the analysis of the drawings for reading the facades, through the work of Quintão (2015);
iv) and the historical framework of religious architecture in Portugal according to the analysis developed by Kubler (1988).

4. Theoretical framework

It is essential to mention that from the literature analysed for this study, five elements were extracted, which in our view, are central and structure the *micaelense* churches, namely: i) heritage; ii) authorship; iii) the facade; iv) the plant; v) the building material, which influences the facade and the plant.

Heritage is determined by island settlement, seismic activity, and Franciscan influence, which determined the image of the settlements, and the isolation that allowed a "crystallisation" of certain devotions brought from mainland Portugal (Almeida, 2012; Costa, 2012).

Regarding the authorship that includes architects, constructors, and masons of religious buildings on the island of São Miguel, we only have the list drawn up by Ataíde (2011), and nothing can confirm its veracity, being aggravated by this lack of correlation with the list of Portuguese architects drawn up by Viberto (1922). In addition, many names are still unaccounted for, which makes research difficult, as we cannot justify the relationship of similarity between the churches through their authors (architects/constructors). We can only highlight the name of the vicar João de Sousa Freire as a possible creator of the Ribeira Grande parish church's scratch, considered the island's mother church.

According to Caldas (2011), these buildings are not the work of an architect, but rather made by local builders who adapted a compositional structure seen elsewhere or who all started from the same model established in the 18th century on the island and developed by an architect.

The facade is composed of three distinct volumes, the central body, the tower, and the baptistery (Caldas, 2011), which read as a whole regardless of their compositional logic. The central body is a reflection of the plant (nave body/naves), whose constructive structure depends on the interior since the compositional elements of the facade correspond to the architectural/constructive elements that structure the plant. In other words, the pillars or columns correspond to the pilasters and the naves to the bay.

The plant is composed of three-naves for larger-scale churches, whose central nave is wider and taller than the sides or is composed of single-nave for smaller-scale churches, characterised by being an archaic construction for its construction time (18th and 19th century) (Caldas, 2011).

The material, basalt stone, endogenous to the island is characterised by its color that in contrast with the white wall facades, highlights the black color, increasing its light-shadow contrast, transmitting an impactful image and easy to memorise (Ataíde, 2011).

This analysis justifies the methodology used to justify the existence of a "model facade", which is due to the similarity verified between facades, and which expresses a notion of image systematically adopted on the island of São Miguel.

5. "Model Facade" Concept

This facade starts from concepts already defined by Caldas and Sousa who suggest the following terminologies: " baroque *micaelense* (from the island of São Miguel) facade " (Caldas, 2011), " a type of *micaelense* facade " (Caldas, 2012) and " facade with baroque *micaelense* ornamental elements " (Sousa, 1986).

Due to the terminological inconsistency, Vieira (2019) establishes the concept of " model facade ", a concept that is divided into two words, facade, which represents the object of study, and model due to Rossi's classification (1995) that defines and argues that the designation "model" refers to a precise (architectural) object that can be repeated and copied as it is.

Therefore, the concept of "model facade" (Vieira, 2019) applies to any facade with baroque *micaelense* ornamental elements whose compositional matrix is a classical referent and which conveys the notion of analogous image, which

is a consequence of its material (natural basalt stone on a white background) and its construction system (adapted to the endogenous material of the island). Therefore, the churches with "model facade" present:

i) baroque style ornaments defined by a pediment made up of volutes;
ii) a counter-curved cornice;
iii) a flat facade, and a compositional mix of classical elements, determined by the facade that reflects the floor plant;
iv) the trilithon structure (bay, level and entablature);
v) the elements that form the trilithon structure with the same expression;
vi) the double pediment (larger pediment surmounted by the smaller pediment) (Figure 1).

Figure 1. S. N.ª da Estrela parish church in Matriz, Ribeira Grande municipality (Developed by Author)

However, this analogous image is not only restricted to "model facade" churches, but also to the heritage and legacy of other facades, with various facade typologies emerging. Although there is a common image that extends to all existing churches on the island, due to the material used, we find different characteristics, which leads us to apply different designations, verifying the existence of churches whose facade conveys an image of "family", for having one of the classifications mentioned above (Baroque ornamentation or compositional matrix of classical reference), and even "non-standard" facade verifying the absence of the two classifications listed above, remaining only the material - basalt stone - but with another function, not structural but aesthetic.
Our reflection will focus exclusively on summarising the schemes for churches with a model facade.

6. Synthesis Schemes

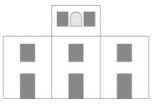
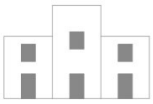
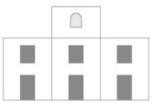
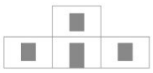
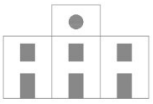
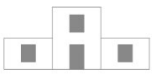
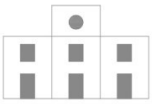
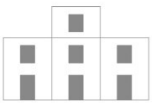
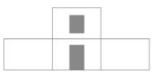
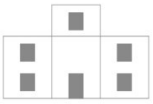
As a starting and framing point, it was necessary to organise the case studies inserted in the 18th and 19th centuries, in chronological order according to the date of construction/refurbishment of the facade, and cross-check them later with the typological classification attributed to each building according to the facade composition (i) model churches; ii) family churches; iii) non-standard churches) (Vieira, 2019).
Thus, there are 26 parish and non-parish churches in the 18th century, of which 18 are model churches, 7 are family churches and 1 isolated case of the non-standard church, and 37 parish and non-parish churches in the 19th century, of which 23 are model churches, 6 are family churches and 8 are the non-standard church.
Thus, we can observe that the church typology with model facade is inserted in the eighteenth and nineteenth centuries, with its first construction of a three-nave church in 1728 with the N. .ª da Estrela parish church in Matriz, Ribeira Grande municipality and its last construction in 1882 with the N. S. ª do Rosário parish church in Achadinha, Nordeste municipality and for churches with single-nave, its first construction in 1728 with the Santa Clara parish church in Santa Clara, Ponta Delgada municipality and its last construction in 1865 with the N. S. ª do Amparo parish church in Algarvia, Nordeste municipality.
To better understand the 41 churches that present a model facade, we tried to establish visual and metric relationships among the various elements that compose the facade, the central body, the tower, the baptistery, and their distribution in the territory.

6.1 Central Body

To understand the distributive composition of the elements that design the facade, direct observation and comparison was made to the various photographs of the different churches. For that, Scheme 1 was created that

analyses the architectural and artistic structure of the central body, excluding the tower and baptistery bodies that are seen as independent bodies that mostly do not follow the metric of the central body of the facade.

Scheme 1. Typological classification (model) (Developed by Author)

Typology	Model Facade		
Composition	3 Naves	3 Naves	1 Naves
	3 Bays 3 Levels 2 Entablatures	3 Bays 2 Levels 2 Entablatures	1 Bay 1 Level 1 Entablature
Elements	 3 Doors 3 Windows 1 Niche between windows	 3 Doors 2 Windows + 1 Half height window	 1 Door 1 Oculus under
	 3 Doors 3 Windows 1 Niche	 1 Door 2 Windows 1 Window	 1 Door 1 Window under 1 Niche over
	 3 Doors 3 Windows 1 Oculus	 1 Door 2 Windows 1 Window under	 1 Door 1 Window under 1 Oculus over
	 Elements of old building	 Elements of old building	 1 Door 1 Window over
	 3 Doors 3 Windows 1 Window	 1 Door 1 Window	 1 Door 1 Window between
	 1 Door 2 Windows 2 Windows 1 Window		
Window Type:	Oculus	Fenestration	Window Niche

Given the complexity of this scheme and the fact that it was the starting point for the analysis of the church's facades in São Miguel, it was necessary to use synthetic drawings to represent the compositional and metric logic of each facade. Thus, Scheme 1 is divided into three groups according to the number of naves (plant) and the number of bays (bay is the structuring part that corresponds to the filling surface between the supporting elements and is expressed as a wall. It is always found in odd numbers, with the central bay standing out for its importance because its width is greater than the other side bay (end or middle) (Quintão, 2005)), levels (is the unstructured part between two horizontal elements. Morphologically, the level corresponds to a floor, but it is not so linear, because a facade may contain more floors and represent only a smaller number of levels (Quintão, 2005)), and entablatures (entablature is the third element that builds the portico / trilithic, understood as a horizontal element. The entablature makes the separation of the remaining components of the facade and is composed of architrave, frieze, and cornice, varying according to the order to which it belongs (Quintão, 2005; Rodrigues, 2002)) (facade). Next, each group is organised and classified according to the elements that make up the facade. According to the type and number of spans (doors, windows, and recesses), the configuration of the spans' lintel (straight or curved), and the location of the spans along the bays and levels.

Through Scheme 1, we can see that the model facade follows the various scales of construction occurring on the island, from three-nave main churches to the more humble and smaller churches of only single-nave.

Thus, the model facade is the one that always presents, in churches with three-naves, a compositional matrix of three bays, three levels, and two entablatures (i); or a compositional matrix of three bays, two levels, and two entablatures (ii); in churches with single-nave, a compositional matrix of one bay, one level and one entablature (iii). (Figure 2).

Figure 2. Group i) Church of Lomba da Maia (left); Group ii) Church of Lomba da Pedreira (central); Group iii) Church of São Vicente Ferreira (right) (Developed by Author)

Group i) of a compositional matrix of three bays, three levels, and two entablatures, is organised:

- On the first level, of access, by three doors, one corresponding to each bay, whose central door stands out from the rest by its size or by a door between windows in a higher position.
- On the second level, for lighting, by three windows each one topping a door, and the openings can all be of the same size or the central opening can be larger than the others.
- On the third level, the nave is illuminated by a niche bearing an image of the oracle, between windows (or not) or a central oculus or by a window identical to the windows on the lower level.

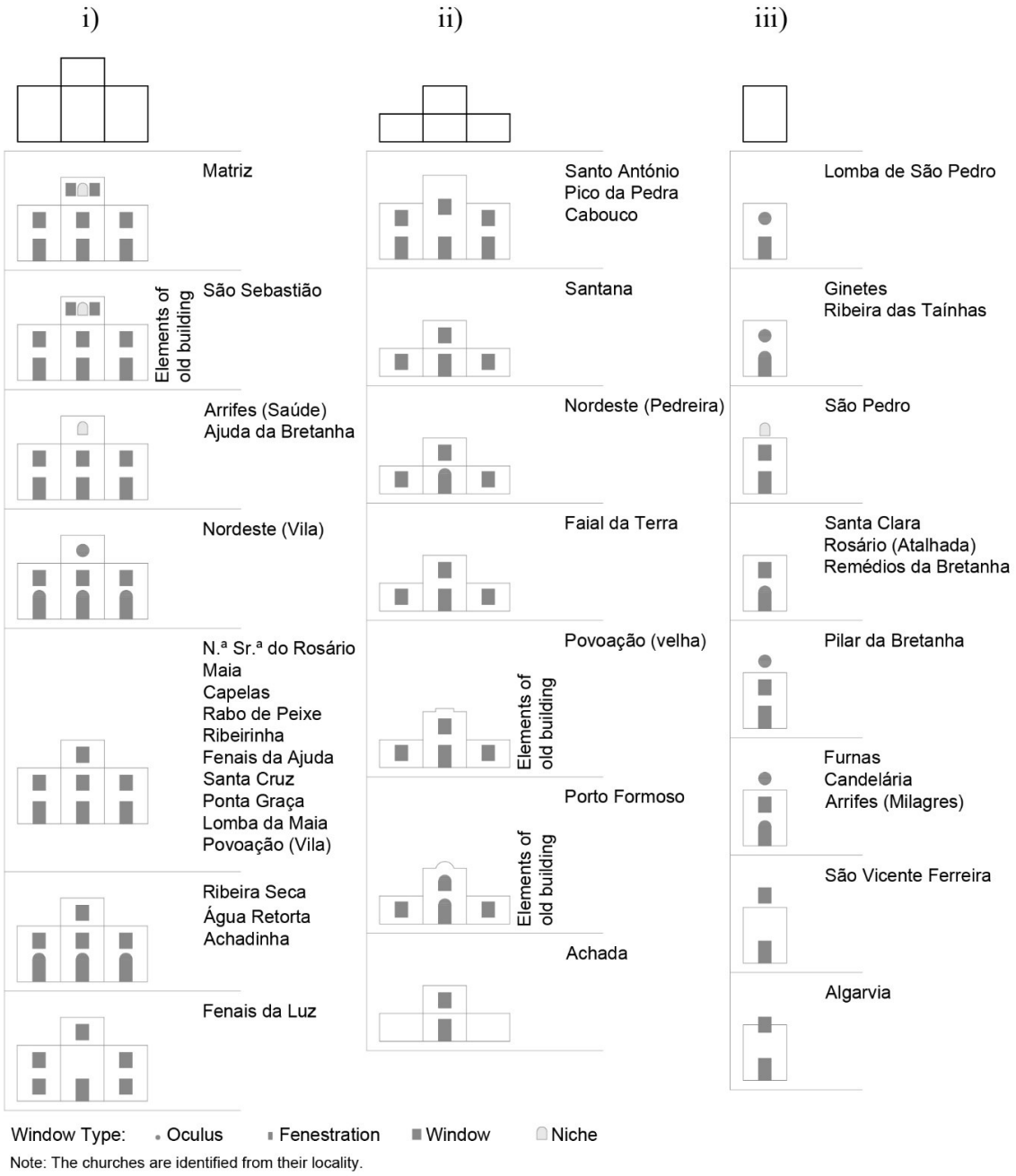
Group ii) of a compositional matrix of three bays, two levels, and two entablatures, is organised:

- On the first level, access, by three doors, one corresponding to each bay, whose central door stands out from the rest by its size or by a door between windows in a higher position, corresponding to each bay, or even by only one door in the central bay.
- On the second level, to illuminate the nave, with three windows; the openings may all be of the same size, or the central opening may be larger than the others, and in these cases, the central opening may or may not interrupt the first entablature.

And group iii) of a compositional matrix of a bay, a level, and an entablature, for churches of single-nave, is organised:

- On the first level, access, is by a single door topped by an oculus or a window. There are also situations where there is a window, an oculus or a niche above the entablature, or a window that interrupts the entablature due to its size.

Scheme 2. Characterization of the central body (Developed by Author)



We highlight in both groups situations where the facade takes advantage of constructive elements from a previous construction by adapting these elements to the new facade reformulation.

Thus, according to Scheme 2 in group i) we can observe seven variants of architectural structure, where:

-In the first row, 3 doors, 3 windows, and 1 niche between windows fit the N. S. ª da Estrela parish church in Matriz.

-In the second row, we present an architectural structure identical to the previous one, however, it adds the adaptation of elements of the old construction, which fits the São Sebastião parish church in São Sebastião. Due to the aesthetics of the Manueline portal, there is an adjustment in the second level where the central window is replaced by two central windows. Moreover, its current facade was the target of restorations and maintenance and changed in the twentieth century with the demolition of the niche and windows, on the third level, for the reintroduction of a rose window, with the principle of aesthetic reintegration of the primitive gothic style church.

- In the third row, 3 doors, 3 windows and 1 niche, we can see the N. S. ª da Saúde parish church in Arrifes and the N. S. ª da Ajuda parish church in Ajuda da Bretanha.
- In the fourth row, with 3 doors, 3 windows, and 1 oculus, we can observe the isolated case of São Jorge parish church in Nordeste.
- In the fifth row, 3 doors, 3 windows, and 1 window, we can observe the most significant composition, with 10 cases, the Church of N. S. ª do Rosário, the Church of Maia, the Church of Capelas, the Church of Rabo de Peixe, the Church of Ribeirinha, the Church of Fenais da Ajuda, the Church of Santa Cruz, the Church of Ponta Garça, the Church of Lomba da Maia and the Church of Povoação (Vila).
- In the sixth row, we have an architectural structure identical to the previous one, however, on the first level of access, the doors are composed of the carved lintel, fitting the churches of Ribeira Seca, Água Retorta, and Achadinha.
- In the seventh row, 1 door flanked by windows, 2 windows, and 1 window we can observe the isolated case of the N. S.ª da Luz parish church in Fenais da Luz, which despite having a plant composed of three-naves and a facade with three levels, its facade height is lower than the other cases present in this group, so the access portal occupies the first two levels not allowing the alignment of 3 windows on the second level.

In group ii) we can observe seven variants of architectural structure, where:

-In the first row, 3 doors, 3 windows, composed of 2 side windows and 1 central window, slightly elevated interrupting the entablature, we can see the churches of Santo António, Pico da Pedra, and Cabouco.
-In the second and third row, 1 door flanked by windows and 1 window, fit the Church of Santana with a straight lintel door and the N. S. ª da Luz parish church in Nordeste (Pedreira) with a curved lintel door.
-In the fourth row, 1 door flanked by 2 windows and 1 slightly elevated window interrupting the entablature presents the N. S.ª da Graça parish church in Faial da Terra.
-In the fifth and sixth row, we present an architectural structure identical to the previous one, however, there is the adaptation of elements of the old construction that for this reason interrupt not only the entablature but also change the shape of the horizontal entablature that forms the pediment, it means, instead of being a horizontal entablature this one follows the shape of the span, therefore, in the case of the N. S.ª do Rosário non-parish church in Povoação (velha) the entablature is broken linearly, and in the case of the N. S.ª da Graça parish church in Porto Formoso the entablature is broken in a curved shape.
-On the seventh row, with 1 isolated door on the first level and located in the central bay, topped by 1 window on the second level, we can see the N. S. ª da Anunciação parish church in Achada.

In group iii) we can observe eight variants of architectural structure, where:

-In the first and second row, 1 door topped by 1 oculus, enchase the São Pedro non-parish church in Lomba de São Pedro, with a straight lintel door, and the São Sebastião parish church in Ginetes and the Menino Jesus parish church in Ribeira das Tainhas with a curved lintel door.
- In the third row, 1 door topped by 1 window, crowned by a pediment with 1 niche, fits the São Pedro parish church in São Pedro.
- In the fourth row, 1 door topped by 1 window, we can see the Santa Clara parish church in Santa Clara, the N. S. ª das Necessidades parish church in Rosário (Atalhada) and the N. S.ª dos Remédios parish church in Remédios da Bretanha.
- In the fifth and sixth row, 1 door topped by 1 window, crowned by a pediment with 1 oculus, are the N. S. ª do Pilar parish church in Pilar da Bretanha with straight lintel door and the churches of Santana in Furnas, N. S. ª das Candeias in Candelária and N. S. ª dos Milagres in Arrifes with curved lintel door.
- In the seventh row, 1 door topped by a pediment with 1 window, is the São Vicente Ferreira parish church in São Vicente Ferreira.
-In the eighth row, we present an architectural structure identical to the previous one, however, the window located in the pediment interrupts the entablature, fitting the N. S. ª do Amparo parish church in Algarvia.

6.2 Tower

Although the body of the tower and the baptistery are seen as independent elements concerning the central body and in some cases are subsequent constructions to the construction of the remaining church, the tower is a fundamental element for its functional character of communication (religious acts and notices). Thus, its reading cannot be indissociable, regardless of not following the metric of the central body of the facade.

Scheme 3. Characterization of the tower body (Developed by Author)

Thus, Scheme 3 specifies the study of the tower morphology divided into two groups according to the number of naves and consequently divided according to their location (The ideology of location (right or left) assumes that any object is observed from within and never observed from the outside, so the observer is positioned inside the church facing the main door).
To read the body of the tower, we resorted again to synthesis drawings that represent the compositional and metric logic of the facade. Thus, the respective drawings show the body of the tower divided into two levels separated by an entablature. At the lower level, also called body or tower-bay, we will have the study regarding the type, number, typology/ format (window, oculus, fenestration), and the disposition of the openings. And on the second level, also called the crowning, we will have the part corresponding to the belfry composed of one or two windows, crowned by a balustrade or a dome roof.
Generally, towers with or without spans are presented.

- In the cases of towers with an oculus, these vary in number, with towers with one, two, three, and four oculi, whose shape can be circular or heart-shaped, and also with simple or richly carved stone frames.
- In the case of towers with fenestrations, small openings, are usually rectangular, and these vary in number with towers appearing with one, two, and three fenestrations, centered or aligned to one side.
- In the case of towers with windows, these vary in number, with towers appearing with two or three centered windows, presenting an identical configuration to the windows of the central body.

Through Scheme 3, we can see that thirteen variants of the architectural structure of the tower occur, alternating in both location and scale of the church, where:
For churches with a window in the crowning, we can observe:

- In the first row, with an empty nave located on the left, are the churches of Ginetes and Candelária. For single-nave churches and the churches of São Sebastião, Fenais da Luz and Pico da Pedra for three-naves churches.
- In the second row, with 1 oculus, located on the left, the churches of São Vicente Ferreira and Lomba de São Pedro for single-nave churches, and the churches of Ajuda da Bretanha and Achada for three-nave churches.
- In the third line, with 2 oculi, located on the left, the church of Ribeira das Tainhas for single-nave churches and the churches of Nordeste (Pedreira) and Achadinha for three-naves churches. And located on the right are the churches of Santa Clara and Arrifes (Milagres) for single-nave churches and the church of N. S. ª do Rosário for three-naves churches.
- In the fourth row, with 3 oculi, the most significant composition, with 11 cases, but presents a greater variety of frame shapes, with 4 round windows in the shape of an inverted heart, 4 with a simple frame, 2 with worked frame. Located on the left, the church of Algarvia for single-nave churches and the churches of Santo António, Ribeira Seca, Ponta Garça, Lomba da Maia, Ribeirinha, Cabouco, Povoação (Vila) and Santana for three-naves churches. And located to the right are the churches of Porto Formoso and Faial da Terra for three-naves churches.
- In the fifth row, with 4 oculi, the isolated case of the church of Rabo de Peixe, with its tower on the right.
- In the sixth row, with 1 fenestration, located on the left, the church of Pilar da Bretanha for single-nave churches and the churches of Ajuda da Bretanha and Achada for three-naves churches. And the one located on the right, the church of Rosário (Atalhada) for single-nave churches, and the churches of Arrifes (Saúde) and Água Retorta for three-nave churches.
- In the ninth row, with 2 fenestrations, located on the left and for three-naves churches, the church of Capelas, which besides the balustrade crowning presents a dome roof, and the churches of Povoação (velha) and Nordeste (Vila).
- In the eleventh row, with 3 fenestrations, located to the right and for single-nave churches, Furnas' church.
- In the twelfth row, with 2 single frame windows, located to the right and for single-nave churches, São Pedro church.
- In the thirteenth row, with 3 windows of the identical frame to the windows of the central body, for three-naves churches, located on the left the churches of Maia and Fenais da Ajuda and located on the right the church of Santa Cruz.

For churches with two windows in the crown, we can observe:

- In the eighth row, with 1 fenestration, located on the left, an isolated case is the São Sebastião church, which besides the balustrade crowning presents the addition of a new body, built in the 19th century, crowned by a roof that houses the clock.

- In the tenth row, with 2 fenestrations, located on the right, is the N. S. ª Rosário church.

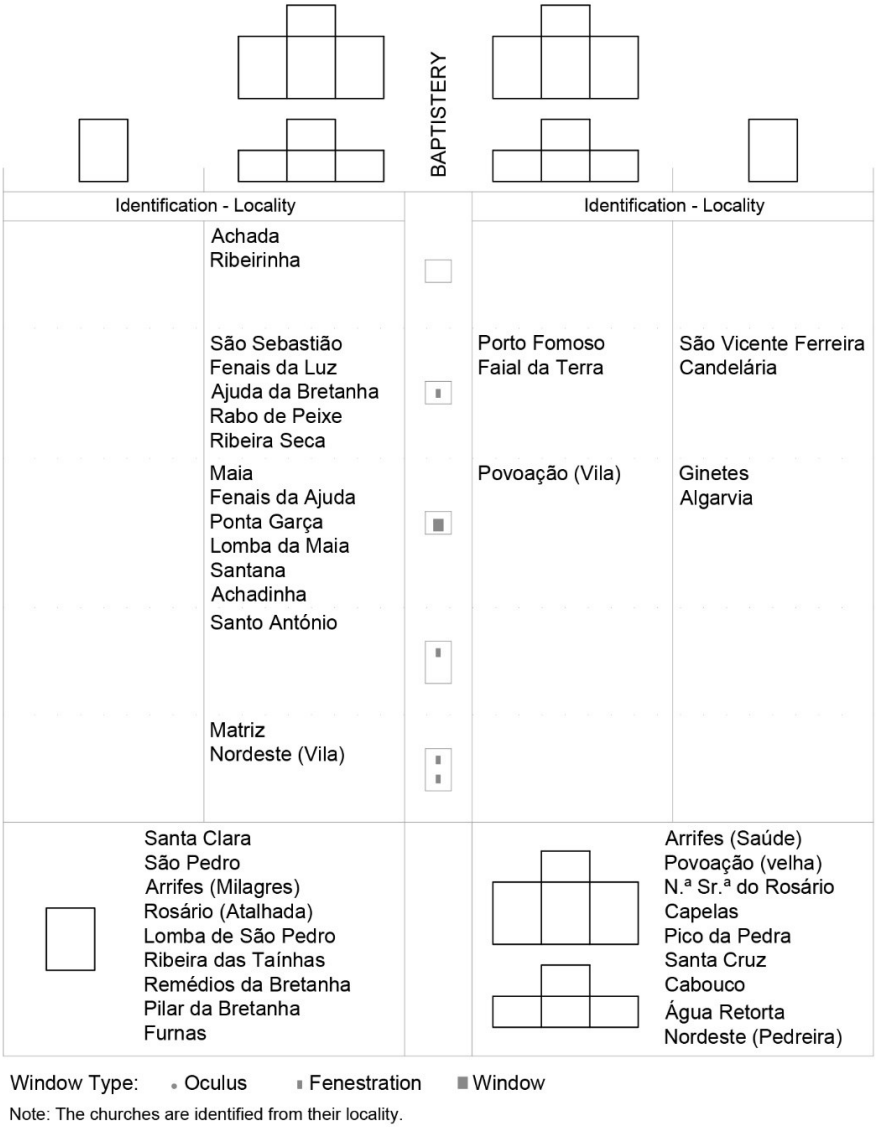
For churches with four windows in the crown, we can observe:

- In the seventh row, with 1 fenestration, located on the right, isolated case of the church of Matriz, whose lower windows are aesthetic.

6.3 Baptistery

Likewise, the body of the baptistery presents itself as an independent construction in the overall facade, whose presence is less foreshadowed.

Scheme 4. Characterization of the baptistery body (Developed by Author)



This way, Scheme 4 specifies the study of the morphology of the baptistery, dividing it into three groups according to the number of naves and the absence of the body. This scheme is consequently organised similarly to the tower study, divided according to its location, the type, the number, the typology/shape, the arrangement of spans, and the number of levels.

Generally, baptisteries are presented with or without openings and composed of one or two levels. In the cases of single-level baptisteries, these display only a single central opening, of the fenestration or window type, the latter being able to have a simple frame or a worked frame identical to the frame of the windows of the central body. In the case of two-level baptisteries, these feature one or two centered single-framed windows.

Through Scheme 4, we can see that most churches do not present baptistery in the facade composition with 9 cases for both church scales. Thus, there are 3 cases of non- parish churches, Lomba de São Pedro, Furnas and Povoação (velha). And 15 cases of parish churches whose baptistery is inside the church or markedly recessed, presenting itself in a second plant not part of the composition of the facade, as is the case in churches of Santa Clara, São Pedro, Arrifes (Milagres), Rosário (Atalhada), Ribeira das Tainhas, Remédios da Bretanha, Pilar da Bretanha, Arrifes (Saúde), N. S. ª do Rosário, Capelas, Pico da Pedra, Santa Cruz, Cabouco, Água Retorta, Nordeste (Pedreira).

In the cases of churches that feature a baptistery body on the facade, we can see five variants of architectural structure, alternating in both location and scale of the church, where:

- In the first row, with an empty bay, located on the left and slightly indented, for three-naves churches, the churches of Achada and Ribeirinha.
- In the second row, with 1 fenestration, located to the left and slightly indented, for three-naves churches, the churches of São Sebastião, Fenais da Luz, Ajuda da Bretanha, Rabo de Peixe and Ribeira Seca. And located to the right for single-nave churches, the churches of São Vicente Ferreira and Candelária.
- In the third row, with 1 window, the most significant composition for three-naves churches and located on the left, we can observe with simple frames the churches of Ponta Graça, Lomba da Maia, Santana, Achadinha and with frames identical to the windows of the central body and tower, the churches of Maia, Fenais da Ajuda. And located on the right are the churches of a single-nave, the churches of Ginetes and Algarvia.
- In the fourth row, with two levels and with 1 fenestration on the second level, located on the left, the isolated case of the Church of Santo António.
- In the fifth row, with 2 fenestrations one for each level, located on the left, are the churches of Matriz and Nordeste (Vila).

6.4 Metric

The analysis of the model facade is not only restricted to the characterisation of its morphology through the synthesis drawing but is also understood about the metric of these three bodies (central body, tower, and baptistery).
Scheme 5 was developed to show that the similarity between these various model facades is not only visual but also metric. In this way, the table is divided by its various bodies, presenting the width of each body, in meters, to better analyse the number of existing cases.

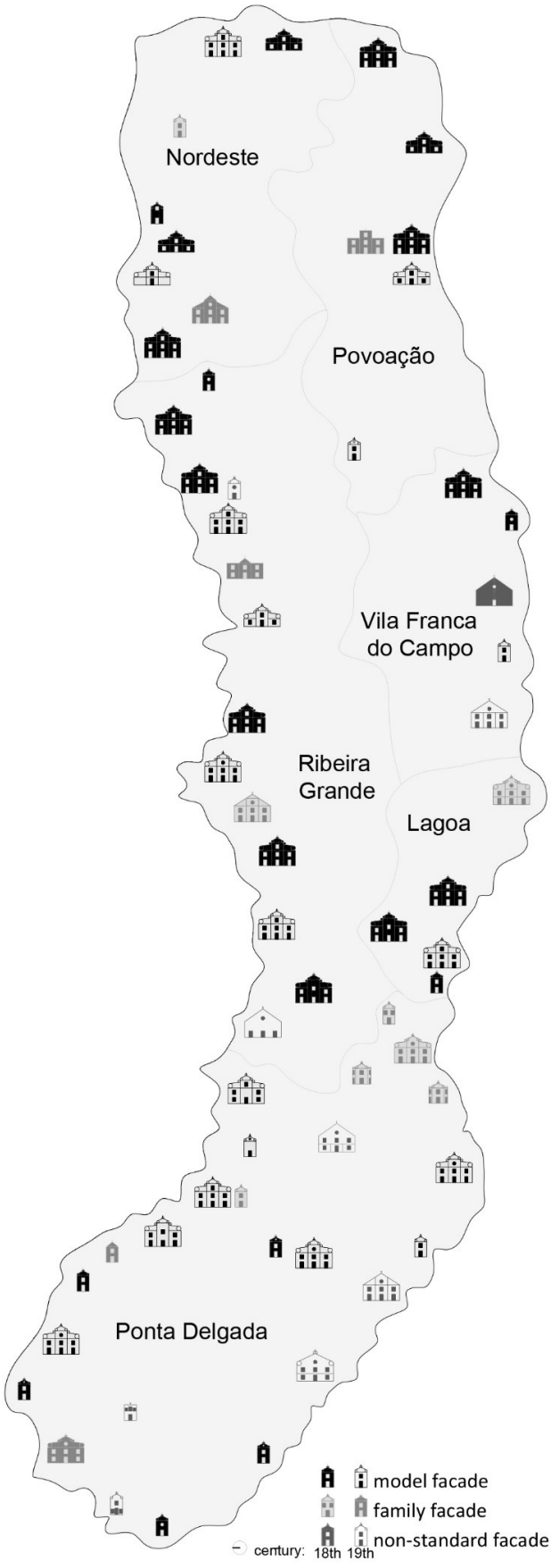
Scheme 5. Measurement relationship of the various facade bodies - Analysis of case numbers (Developed by Author)

Measurements (meters)			2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	21
Units	Central Body	3 naves											2	2	**7**	**7**	2	3	2	1
		1 nave						2	**6**	2	2	1								
	Tower	3 naves		**12**	**11**	2	2	1												
		1 nave	2	**9**																
	Baptistery	3 naves		6	**8**	4														
		1 nave	1	1	**4**															

The measurements oscillate according to the scale of the church, they correspond to churches with single-nave or three-naves.

In this scheme we highlight the measures that are most often repeated, concluding that:

- The size of the central body varies from seven to eighteen meters or twenty-one meters, with three-nave churches presenting seven cases with fourteen meters and fifteen meters, and single-nave churches presenting six cases with eight meters.
- Tower size ranges from two to seven meters, with the most common case being a three and four meters tower in both church plants, with 12 cases of churches presenting a width of three meters and 11 cases for churches presenting a width of four meters churches of three-naves and with 9 cases for single-nave churches.
- The size of the baptistery in both scales shows a front dimension of two to five meters or seven meters, with the measure of four meters being the most common in both church plants, with 8 cases for three-nave churches and 4 cases for single-nave churches.



6.5 Location

Unsurprisingly, the location of each church on the island was also studied according to their typological distribution, through Figure 3, and according to the typological classification assigned to each building according to the composition of the facade (Vieira, 2019).

Thus, for each church facade (only the central body) a synthesis and schematic design is produced, developed from two principles, the compositional matrix (bays, levels, and entablements) and the configuration of the pediment through its ornaments (baroque (counter-curved) or triangular pediment). Consequently, the synthesis designs of church facades are divided into three representations:

i) churches with a model facade;
ii) churches with family facade;
iii) churches with non-standard facade;

First, we can see that the municipality with the largest number of parish and non-parish churches is Ponta Delgada, with 25 cases, of which 13 are churches with a model facade, 7 are churches with a family facade, and 5 are churches with a non-standard facade. Following the municipality of Ribeira Grande with 14 cases, 10 are churches with model facade, 2 are churches with family facade and 2 are churches with non-standard facade. With a smaller number, we have the municipality of Nordeste with 8 cases, of which 6 are churches with model facade and 2 are churches with family facade, not presenting any case of churches with non-standard facade. Following is the municipality of Povoação with 6 cases, 5 are churches with model facade and 1 church with family facade, not presenting any case of churches with non-standard facade. And finally, the municipalities of Vila Franca do Campo and Lagoa both with 5 cases. Thus, the municipality of Vila Franca do Campo presents 3 churches with model facade and 2 churches with non-standard facade, not presenting any case of churches with family facade. And the municipality of Lagoa with 4 churches with a model facade and 1 church with family facade, presenting no case of churches with non-standard facade.

Figure 3. Typological distribution of the churches' facades on São Miguel Island (Developed by Author)

Secondly, although the Ponta Delgada municipality has the most churches with a model facade, it is in the Povoação and Lagoa

municipalities that this type of facade has the most presence, as can be seen in Scheme 6, which shows the relationship between the three models of facade in the six municipalities of the island, first globally and then individually.

Scheme 6. Model facade ratio (global and individual - Percentage) (Developed by Author)

% by municipality	Ponta Delgada	Ribeira Grande	Vila Franca do Campo	Nordeste	Povoação	Lagoa
Model Facade	52%	71%	60%	75%	83%	80%
Family Facade	28%	14%	-	25%	17%	20%
Non-standard Facade	20%	14%	40%	-	-	-

% globally	Ponta Delgada	Ribeira Grande	Vila Franca do Campo	Nordeste	Povoação	Lagoa
Model Facade	32%	24%	7%	15%	12%	10%
Family Facade	54%	15%	-	15%	8%	8%
Non-standard Facade	56%	22%	22%	-	-	-

In the Nordeste, Povoação, and Lagoa municipalities, there are no cases of churches with non-standard facade in both centuries, and in the municipality of Vila Franca do Campo, there are no cases of churches with family facade in both centuries.

In summary, we can observe that the facade that prevails in all municipalities is the model facade.

And third, in Scheme 7, there were 26 parish and non-parish churches in the 18th century, of which 18 are model churches, 8 are family churches, and 1 isolated case of non-standard church, and 37 parish and non-parish churches in the 19th century, of which 23 are model churches, 5 are family churches and 8 are non-standard church.

Scheme 7. Number of cases per century (Developed by Author)

no. of cases		Ponta Delgada	Ribeira Grande	Vila Franca do Campo	Nordeste	Povoação	Lagoa	Total
Model Facade	18th	8	4	1	2	2	1	18
	19th	5	6	2	4	3	3	23
Family Facade	18th	4	1	-	1	1	1	8
	19th	3	1	-	1	-	-	5
Non-standard Facade	18th	-	-	1	-	-	-	1
	19th	5	2	1	-	-	-	8

7 Results and Discussions

With this research, it was possible to analyse and synthesise a facade typology among the various parish and non-parish churches on the island of São Miguel, Azores, and simultaneously map and establish a model of the *micaelense* facade, according to the composition principles present in the analysed facades.

The concept of a model facade has been precisely defined, through the facts presented throughout the graphic diagrams and summary drawings. Therefore, the concept of a model facade applies to any facade with baroque *micaelense* ornamental whose compositional matrix is a classical reference and conveys the notion of a unifying image, which is also a consequence of its construction method.

Thus, the model facade is marked between 1728 and 1882, a period in which a large number of churches with identical compositions appear (41 parish and non-parish churches). These churches follow the model of the mother churches of Ribeira Grande (1728) and Ponta Delgada (1733) which were designated by Ataíde (2011) and Caldas (2011) as mother churches because they served as an example and model for all other churches that were built on the island.

Thus, the model facade is the one with the central body:

i) a compositional matrix of three bays, three levels, and two entablatures, for three-naves churches;

ii) a compositional matrix of three bays, two levels, and two entablatures, for three-naves churches;

iii) a compositional matrix of one bay, one level, and one entablature, for single-nave churches (Figure 4).

It is important to emphasise that the construction material of the facades contributes to the materialisation of an image that is easy to remember, reinforcing the imposing nature of the church. The facade reflects the floor plant, whether in larger or smaller scale churches.
Although there is a common image of the church facade in São Miguel that extends to all existing churches on the island, due to the material used, we find different characteristics, which leads us to apply distinctive designations. In this way, we verify the existence of two more facade images that have a greater or lesser degree of comparison with the model facade image.
After analysing the rules that make up the facades of the churches on the island of São Miguel, separately, according to the central body, the tower, and the baptistery, design tendencies were evident.

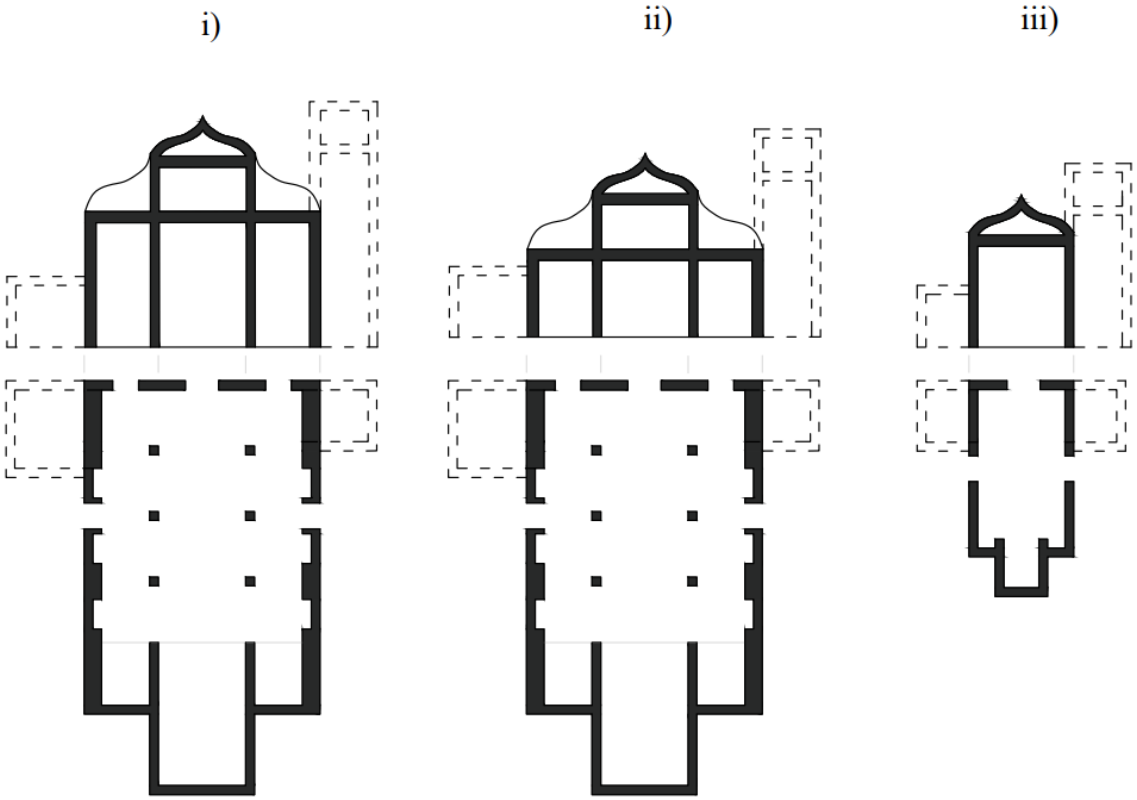


Figure 4. Typology of churches in *micaelenses* with a model facade Source: (Vieira, 2019)

Thus, the model facade presents only one tower and most are located primarily on the left, but exceptionally, due to lack of deployment space, the construction of the tower is done on the right. It was observed that the tower is divided into two levels, being the upper level, crowned by a belfry leaked, on each side, by a window in a perfect round arch, usually set on pilasters, finished by a balustrade, and the lower level presented by the two most significant situations and those present distinct logics and compositions. The tower is composed of three windows that relate to the facade of the central body from its alignment, size, or decoration of the frame of the spans, and the tower is composed of three oculi that are in no way related to the facade of the central body, however, is the most significant model (Figure 5).
As for the baptistery, it is located on the right, with a simple composition, composed of only one window, which usually follows and relates to the facade of the central body from its alignment or decoration of the frame.
The facades understudy assumes formal characteristics in the central body of the church, as a rule, completely autonomous in relation to the tower and the baptistery, whose entablature alignments and proportion of the facade lighting spans are in different harmonies.
In addition to the visual analysis and direct comparison between the various facades, a quantitative evaluation was carried out through a metric survey of the width of the facade, highlighting the measures that are most repeated in three-bays and single-bay churches. Remember that these constructions did not follow the metric system, but units of measurement such as the palm, the foot and the inch. The use of these measurements will certainly bring more accurate conclusions.

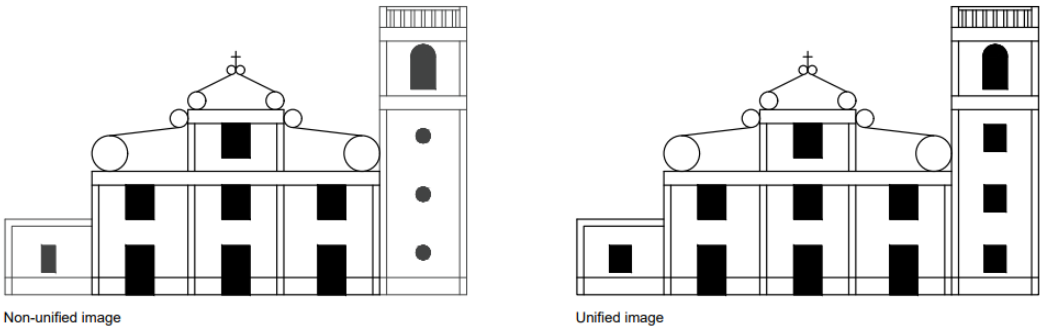


Figure 5. Comparison of the facade composition (central body vs. tower) Source: (Vieira, 2019)

Regarding the size of the central body of the facade, it was observed that this varies between seven to eighteen meters or twenty-one meters, with churches with three naves generally presenting fourteen and fifteen meters wide and churches with one nave generally presenting facades eight meters wide.
About the dimension of the tower, this varies between two to six meters, being the most common case the tower with three and four meters in both church plants. The baptistery, in both scales, presents a front dimension of two to five meters or seven meters, being the dimension of four meters the most common in both church plants.
This landscape profile conveyed by the various churches with model facades is present in small and large urban and rural centres, spreading evenly throughout the territory. It was also possible to see that in the parishes that have more than one church, it is the parish church that presents the facade with the model composition.

8. Conclusion

In accordance to what was initially proposed with this study, it was possible to analyse and synthesise a typology among several churches on the island of São Miguel through graphic and analytical design creating schemes conceived using a photographic survey accompanied by notes and synthesis drawings for the interpretation of a common facade concept on the island of São Miguel.
Despite the absence of original technical drawings and/or reproductions, or even in the absence of means, mechanisms, and knowledge for the elaboration of accurate, fast, and effective architectural surveys, it was possible from photographs with the aid of synthesis drawing to elaborate a theory and a concept.
In this work, it was only possible to make an initial and primary analysis regarding the understanding of these facades through synthesis drawings. However, it serves as a motto for future research, since it intends the enrichment of Azorean culture and history, through the decomposition (of the facade) of an element (church) that is part of the identity of the people and presents a methodology that relies on computational tools to aid the substantiation of the model facade concept, due to the scarcity of data and documentary gaps and the absence of references on the subject.
This work raises several questions, like understanding the origin of this type of facade in the parish and non-parish Catholic churches on the island of São Miguel, who its authors are, as well as to understand the means of transmission and transformation of the classical and baroque decorative elements.

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E-mail [1]: marva@iscte-iul.pt, E-mail [2]: mgts@iscte-iul.pt, E-mail [3]: joaoalvesdacunha.arq@gmail.com

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9.00-10:00 Time in turkey (GMT+3)	**Opening Ceremony- Welcome Notes and Special Invited Speakers**
Welcome Notes by Protocols	
Assoc. Prof. Dr. Hourakhsh A. NIA, Chairman of ICCAUA2022 Conference (Conference Chair) Prof. Dr. José Manuel Pagés Madrigal, German University in Cairo (GUC), Egypt (Conference Vice-Chair) Arch. Antonio Coppola, Training and Internationalization, Order of Architects, Planners, Landscape Architects, Conservators of Naples and Province, Italy. Professor Dr. Leonardo Di Maure, President of the order of Architects, planners Landscape conservationists of Naples and Province, Italy. Asst. Prof. Dr. Muzaffer ÖZGÜLEŞ, Head of the Department of Architecture, Alanya, Turkey. Prof. Dr. Erol R. SAYIN, Dean of Architecture Faculty - Alanya HEP University, Alanya, Turkey. Prof. Dr. Ebru Gülbuğ EROL- A. Rector, Alanya HEP University, Alanya, Turkey.	
Welcome Notes by Keynote speakers (2 minutes per each keynote speaker)	
Professor Dr. Sahar ATTIA, Department of Architecture, Faculty of Engineering, Cairo University, Egypt Professor Dr. Ahmed FAGGAL, Department of Architecture, Faculty of Engineering, Ain shams University (ASU), Cairo, Egypt. Professor Dr. Jianfa SHEN, Department of Geography and Resource Management, The Chinese University of Hong Kong, Hong Kong, China Professor Dr. Yasser MAHGOUB, Faculty of Architecture, Galala University, Egypt. Dr. Joseph Adeniran ADEDEJI, Federal University of Technology, Akure, Nigeria Dr. Laura P. SPINADEL, BUSarchitektur & BOA GmbH, Competence Center URBAN MENUS for Smart Urban Development, Austria Professor Dr. Carlo ALBERINI, Mohammed VI Polytechnic University, Morocco.	
Keynote speeches Coordinator: **Prof. Dr. José Manuel Pagés Madrigal**	
10:00-10:15	Keynote by Professor Dr. **Sahar Attia**, Department of Architecture, Faculty of Engineering, Cairo University, Egypt / Keynote's Bio Title: Planning the Post-Covid City: The Time for a Big Rethink
10:15-10:30	Keynote by **Professor Dr. Yasser Mahgoub** Faculty of Architecture, Galala University, Egypt / Keynote's Bio Title: From the Contemporary to the Post-Contemporary: Theory and Practice at a Crossroad
10:30-10:45	Keynote by **Professor Dr. Jianfa Shen**, Department of Geography and Resource Management, The Chinese University of Hong Kong, Hong Kong, China / Keynote's Bio Title: Urbanization and sustainable urban development in China
10:45-11:00	Keynote by **Dr. Laura P. Spinadel,** BUSarchitektur & BOA GmbH, Competence Center URBAN MENUS for Smart Urban Development, Austria / Keynote's Bio URBAN MENUS: Parametric consensus-based 3D future planning
11:00-11:15	Roundtable discussion - Q&As Session
11:15-12:00	Lunch Break

Day 1/ Wednesday / 12:00-20:45 *Discussion with the Authors*			
12:00-12:10			
12:10-12:20	**Session A** **Architecture and Technology** Moderator: Dr. Shahira Sharaf Eldin	**Session B** **Sustainability and Urban Design** Moderator: Dr. José Manuel Pagés Madrigal **See the videos:** Part 4 , Part 5	**Session C** **Architecture and Urban Design** Turkish session (Türkçe Oturum) Moderator: Dr. Seda H. Bostanci **See the videos:** Part 6 , Part 7
	Introduction by chair: ***Dr. Alpay Akgüç*** *Architecture and Technology-1* Energy and Climatic Design	*Introduction by chair:* ***Dr. Dalia Hussain El Dardiry*** *Sustainability and Urban Design-1* landscape and Urban Design	*Introduction by chair:* ***Dr. Leila Akbarishahabi*** *Sustainability and Urban Design-1*
12:20-12:30	***The Comparison of Energy and Daylighting Performances of Different Window Glazing Types in The Historical Turkish House*** **Assist. Prof. Dr. Alpay Akgüç & Assist. Prof. Dr. Şeniz Atik* To see the presentation please click here	***Landscape Architecture Role In Enhancing Different Abilities' People In Using Parks*** *Dr. Islam Hamdi Elghonaimy , Bsc. Walaa Mohamed S. Sadiq Husain & Dr. Dalia Hussain El Dardiry* *To see the presentation please click here*	***Investigation of Urban Flood Management Principles within the Scope of Buffalo Bayou Watershed Rehabilitation Project*** *Dr. Didem Dizdaroğlu* To see the presentation please click here
12:30-12:40	***Comparative Analysis of House Typologies in Different Climate Regions of Anatolian Geography in Terms of Shading Concept*** **Res. Asst. Fethi Can HALICI & Res. Asst. Furkan SAĞDIÇ* *To see the presentation please click here*	***Assessing the role of natural soundscapes in urban areas and role of landscape in bringing back the lost voices of nature*** * *Maneesha Keerthi Kavuri* *To see the presentation please click here*	***Comparison of Fatal and Injury Traffic Accidents in Şişli District of Istanbul Province with the Help of Geographical Information Systems by Dividing into Regions and Data Mining Methods*** * *Ph.D. Candidate Mert Ersen , Prof Dr. Ali Hakan Büyüklü & Prof Dr. Semra Erpolat Taşabat* *To see the presentation please click here*

12:40-12:50	***Evaluation of Energy Performance of Main Administrative Office Buildings of Universities in North-Central Nigeria*** *PhD Student, G. O. Adebisi , Prof. R.E. Olagunju , Dr. O.K. Akande, Prof. W.P. Akanmu* *To see the presentation please click here*	***Developing urban design research with VINEX*** *Dr. Alessandro Spennato & Dr. Simone Zurli*	***Increasing Flood Disasters with Climate Change and Urban Adaptation Strategies; Suggestions for Bursa City*** *Ayşe Sena ÇILDIR & Dr. Didem Güneş YILMAZ* *To see the presentation please click here*
12:50 -13:00	***Mold Development Risk Assessment In The Inner Side of A Building Envelope Under Varying Climate Conditions*** ** M.A. Bahar Türk & Dr. Mustafa Erkan Karagüler* *To see the presentation please click here*	***Towards Bikeability with Place Attachment Approach in Yogyakarta*** *B. Arch Pita Asih Bekti Cahyanti, Dr. Achmad Hery Fuad , & Ph.D Evawani Ellisa* *To see the presentation please click here*	***Effects of Urban Morphology Changed By Legal Regulations On Outdoor Comfort Conditions: Ümraniye Example*** *MS.c Yasemin Akcakaya & Dr. Mehmet İnceoğlu* *To see the presentation please click here*
13:00-13:15	***FIRST ROUNDTABLE*** *Questions & Answers*	***FIRST ROUNDTABLE*** *Questions & Answers*	***FIRST ROUNDTABLE*** *Questions & Answers*
13:15-13:25	***Adaptation Of Dutch Colonial Architecture to Palembang's Humid Tropical Climate*** **ST.,MT. Endang Sri Lestari & S.SI.,M.Kom .Evi Purnamasari* *To see the presentation please click here*	**Measuring the Sustainability Level of Tall Buildings within the Urban Context: The Case of Northern Nicosia-Cyprus** **Dr. Ayten Özsavaş Akçay & Dr. Mustafa Eyyamoğlu*	***The Importance of Environmental Characteristics in Choosing a Walking Route in Cities*** ** Asst. Prof. Dr. Leila Akbarishahabi* *To see the presentation please click here*
13:25-13:35	***The Impact of Passive Design Strategies on Cooling Loads of Building in Hot Climates: Analysis of Performance in Siwa Oasis, Egypt*** *Associate Professor Riham Nady Faragallah , Arch. Israa Samir El Dallal & Arch. Riham Sherif Hassan* *To see the presentation please click here*	***Urban Vertical Farming as a Path to Healthy and Sustainable Urban Built Environment*** *Dr. Abdulsalam I. Shema & M.A. Halima Abdulmalik* *To see the presentation please click here*	***Examination of the Urban Evolution Process of Dorylaion and Sultan Öyüğü (Sultanönü) Settlements in Eskişehir*** **Lect. Ş. Baran Yücel , Prof. Dr. D. Türkan Kejanlı & Prof. Dr. F. Demet Aykal* *To see the presentation please click here*
13:35-13:45	***Study on the climate adaptability of urban and architectural design in Tunis-Tunisia*** **Dr. Safa Achour Younsi , Dr. Athar Chabchoub, Dr. Nour El Houda Jouini & Pr. Fakher Kharrat* *To see the presentation please click here*	**Urban Heat Island Effect of Urban Spaces: The Case of the Pearling Path in Bahrain** ** Ms. Fatema Mohamed, Dr. Islam Hamdi Elghonaimy and Wisam Mohammed* *To see the presentation please click here*	***Towards Complex Adaptive Urban Systems: A Literature Review*** *MSc Gizem Hayrullahoğlu & Prof. Dr. Çiğdem Varol* *To see the presentation please click here*
13:45-13:55		***Theater, space and place making in North-East Bangladesh*** *B.Arch. Shyama Dhar & Associate Professor Kawshik Saha*	***The Soundscape and Urban Relations*** ** Zeynep Sena AKDEMİR, & Assoc. Prof. Dr. Esin Özlem AKTUĞLU AKTAN* *To see the presentation please click here*
13:55-14:10	***SECOND ROUNDTABLE*** *Questions & Answers* *Conclusion by the Chair*	***SECOND ROUNDTABLE*** *Questions & Answers* *Conclusion by the Chair*	***SECOND ROUNDTABLE*** *Questions & Answers* *Conclusion by the Chair*
14:10-14:20	*Introduction by chair:* ***Dr. Ana Paula Rainha*** **Co-chair: Dr. Mennat-Allah El-husseiny** Architecture and Technology-2 *Design philosophy and Education*	*Introduction by chair:* ***Dr. Mohamed M. Youssef*** *Sustainability and Urban Design-2* *urban planning/Management*	*Introduction by chair:* ***Dr. Ayşe Sirel*** *Architecture and cultural Heritage* ***Turkish session (Türkçe Oturum)***
14:20-14:30	***The white boxes" versus "architecture for people*** *Dr. Ana Paula Rainha* *To see the presentation please click here*	***Transit Oriented Development and Sustainable Land Use Theories Impacts on New Mega Tansportation Projects in New Capital City in Egypt*** *Associate Professor Dr. Mohamed M. Youssef* *To see the presentation please click here*	***Traditional Room-Space Setup in "Mansions" of Alanya*** *Dr. Nisa YILMAZ ERKOVAN* *To see the presentation please click here*
14:30-14:40	**Analyzing Contemporary Mosque Philosophy and Design** **Assoc. Prof. Mennat-Allah El-husseiny* *To see the presentation please click here*	***Achieving Sustainable City through Formal Urban Development: A Critical Evaluation of Measures Adopted for Enugu City, Nigeria*** **M.Sc. Chioma Agatha John-Nsa* *To see the presentation please click here*	***Investigation of Symmetrical Aesthetic Feature of Diyarbakır Behram Pasha Mosque*** ** Rümeysa Betül AKIN, Prof. Dr. F. Demet AYKAL & Prof. Dr. Türkan KEJANLI* *To see the presentation please click here*
14:40-14:50	**A Study on the Female Architects' Approaches to Design in the 21st Century** **Res. Asst. Ezgi Uyar Sun & Dr. Dilek Yasar* *To see the presentation please click here*	***The role of Urban planning and architecture in sustainable peacebuilding Lessons learned from Belfast to Syria*** ** B.A Ghada Rifai & Dr. Şeyda Emekci* *To see the presentation please click here*	***Comparative Analysis of Housing Production Processes in the Context of Actor Network Theory (ANT) in Urban Renewal Areas*** ** Ayşegül Baghal & Assoc. Prof. Dr. Candan Çınar Çıtak* *To see the presentation please click here*
14:50-15:00	***The Impact of Virtual Environment in Architectural Design Studio Contents of Turkey*** **Res. Assist. Melike Nur Şahin*	***The Impact of Urban Management on Crowd Movement and User Experience through the Pilgrimage of Hajj (Frequent Temporary Mega-Events)*** *Abdulrahman Kadi & Dr. Gehan Selim* *To see the presentation please click here*	***The Relationship Between the Street Rehabilitation Project and Gentrification: The Case of Kayseri Talas Ali Saip Paşa Street*** ** Ayşe Nur Özyazgan & Assist. Prof. Dr. Yasin Bektaş* *To see the presentation please click here*
15:00-15:15	***THIRD ROUNDTABLE*** *Questions & Answers*	***THIRD ROUNDTABLE*** *Questions & Answers*	***THIRD ROUNDTABLE*** *Questions & Answers*
15:15-15:25	***Disclosing Devices of Formal Organization: An Inquiry into the Potentials of Creative Analysis in Architectural Education*** *Dr. Sinem Çınar* *To see the presentation please click here*	***Territorial Planning Between Governance and Local Development for a Better Quality of Life*** **Dr Youcef Kamal & Dr. Qauod Rami* *To see the presentation please click here*	***An Inquiry into Historic Museum Houses as to Spaces of Memory: The Case of Tokat Canikli Mansion*** **Kadriye Büşra Özdiri & Dr. Çağla Caner Yüksel* *To see the presentation please click here*
15:25-15:35	***Architectural Design Studio as A Knowledge Intensive System: Sociology of Design Knowledge*** **Dr. Evren ÜLKERYILDIZ*	**Fire and Explosion deterrence Machine Learning hybrid model in defense of Waterspace for SaR intervention** *Per. Agr. Laur. Ing. Arch. Salvatore Polverino* *To see the presentation please click here*	***Traces of Levantine Culture On 19th Century Izmir City Form and Texture*** *İlayda Gürhan & Dr. Çağla Caner Yüksel* *To see the presentation please click here*
15:35-15:45	***Reinventing the relationship between Architecture, Biology and Human Experience*** *Lecturer Murchana Madhury* *To see the presentation please click here*	***Literature Review: Determinant Model of Land Value in the Surrounding Area of HSR Karawang Station*** *S.T. Helena Ratih Herdini, Ph.D. Ahmad Gamal, and Dr. Azrar Hadi* *To see the presentation please click here*	***A Parametric Analysis of Interior Space Organization for Improving Thermal Comfort Conditions in Office Buildings*** ** Tuğba Atsız & Prof. Dr. Gülay Zorer Gedik* *To see the presentation please click here*
15:45-15:55	***The Green Mosque: Transition to Sustainable, Eco-Friendly Features*** **Dr. Osman Rania* *University of Bahri, Faculty of Engineering and Architecture, Khartoum, Sudan (Live presentation)*		***Sustainable Architecture and Zero Energy Buildings in Urban Transformation*** *Undergraduate Stu.* ***Suleyman Emre Mutoglu***
15:55-16:10	***FOURTH ROUND TABLE*** *Questions & Answers* *Conclusion by the Chair*	***FOURTH ROUND TABLE*** *Questions & Answers* *Conclusion by the Chair*	***FOURTH ROUND TABLE*** *Questions & Answers* *Conclusion by the Chair*

16:10-16:20	*Introduction by chair:* **Dr. Mehmet Dikici** *Architecture and Technology-3* *Technology*	*Introduction by chair:* **Dr. Riham Nady Faragallah** *Sustainability and Urban Design-3* *Environmental Sustainability*	*Introduction by chair:* **Dr. Sertaç ORUÇ** *Civil Engineering* ***Turkish session (Türkçe Oturum)***
16:20-16:30	***Investigation of wind-induced pressure distribution on various roof forms using numerical methods*** **Dr. Elif Gizem Yetkin, Dr. Murat Aksel , Dr. Mehmet Dikici and Dr. Cengiz İpek* *To see the presentation please click here*	***SIMURG: Performance-based Model for the Assessment of Sustainability: Synthesis of the Paradigmatic & Frame Models*** *Dr. Alaattin Kanoğlu, Dr. Özlem Özçevik , Dr. Deniz Yazıcıoğlu , Dr. Nisa Erkovan , Dr. Hidayet Softaoğlu , M.Sc. Burcu Ülker , M.Sc. Ediz Yazıcıoğlu , and M.Sc. Nazlı Varlıer.* *To see the presentation please click here*	***Analysis of Technical Indicators for Leak Performance in District Metered Areas with Active Leak Control*** **Prof. Dr. Mahmut FIRAT , Dr. Salih YILMAZ and Mustafa YILDIRIM* *To see the presentation please click here*
16:30-16:40	***The Effects of Using Shear Walls on Architectural Design and Project Cost*** **Dr. Bayram Er , Berna Yıldız*	***Investigating Regenerative Ideation within Sustainable Development Goals*** ** Dr. Iman Ibrahim ,and Dr. Nadia Ahmed* *To see the presentation please click here*	***Analysis of Cost and Benefit of Leakage Management in Isolated Metering Areas: Field Practices for Pilot Areas*** *Dr. Salih YILMAZ *Prof. Dr. Mahmut FIRAT* *To see the presentation please click here*
16:40-16:50	***An Approach to Control the Illuminance Distribution on Vertical Display Surfaces*** *B.Sc.Arch Sezgi Kalelioğlu, Prof. Dr. Leyla Dokuzer Öztürk* *To see the presentation please click here*	***Cooling the City with Street Afforestation: The Case Study of Antalya*** **Assoc. Prof. Dr. Çağdaş KUŞÇU ŞİMŞEK , M.Sc. Derya Arabacı and Büşra Olgun* *To see the presentation please click here*	***Dynamic Analysis and Water Demand Model with EPANET in Drinking Water Distribution Systems*** *Furkan BOZTAŞ *Prof. Dr: Mahmut FIRAT* *To see the presentation please click here*
16:50-17:00	***Design Strategies for Façade integrated Photovoltaic Technology (FiPV)*** *Mariam Ahmad , Prof. Hina Zia* *To see the presentation please click here*	***Effect of A High-Density Street-Level On Air Temperature In Outdoor Space Of Neighborhoods Of Hot, Dry Cities*** **Rami Qaoud, Youcef Kamal , Alkama Djamal* *To see the presentation please click here*	
17:00-17:10	***The Eastern Japan Earthquake and Tsunami: its Effects, Aftermath, Lessons learned*** ** B.A. Mohamad Zayat* *To see the presentation please click here*	**Identifying Urban Public Spaces Through Substance and Surface Approaches** *Ar. Afif Farhan Rizqullah , Dr. Achmad Hery Fuad* *To see the presentation please click here*	
17:10-17:25	***FIFTH ROUND TABLE*** *Questions & Answers* *Conclusion by the Chair*	***FIFTH ROUND TABLE*** *Questions & Answers* *Conclusion by the Chair*	***FIFTH ROUND TABLE*** *Questions & Answers* *Conclusion by the Chair*
17:25-17:35	*Introduction by chair:* ***Dr. Islam Hamdi Elghonaimy*** **Session Co Chair: Dr. Saraoui Selma** *Architecture and Technology-4* *Design & Behavioral studies*	*Introduction by chair:* ***Dr. Djamel Alkama*** **Session Co Chair: Dr. Carlos Mourão Pereira** *Sustainability and Urban Design-4* Gender and Behavioral studies 1	*Introduction by chair:* ***Dr. Yarah Basyoni*** **Session Co Chair: *Dr. Sertaç ORUÇ** *Civil Engineering* **English session**
17:35-17:45	***The development of a relfexion centered on the attendance of tomorrow's national museums, El Moudjahid museum of Bejaia*** *Dr. Saraoui Selma , Dr. Attar Abdelghani , Pr. Belakehal Azeddine* *To see the presentation please click here*	***Implications of Residential Housing Exposure to Urban Environmental Noise on Resident's Wellbeing in Minna, Nigeria*** **Dr Akande, Oluwafemi Kehinde, MSc. Emechebe, Lilian Chioma, Dr Ahmed, Salawu, Dr Eze, Chukwudum Jasper and MTech. Lembi, Jonam Jacob* *To see the presentation please click here*	***Behavior of Reinforced Concrete Frames on Flexible Foundations Subjected to Both Horizontal and Vertical Ground Motions*** * Dr. Yahiaoui Djarir , Dr. Mohamed Saadi *To see the presentation please click here*
17:45-17:55	***Assessment of Factory Design Requirements of Pharmaceutical Factory Buildings in Southwest, Nigeria*** ** PhD Student Bawa, John Agmada, Dr. Akande, Oluwafemi Kehinde and Dr. Ayuba, Philip* *To see the presentation please click here*	***Gender Quota and Women's Needs in Urban Planning Practices by Local Councils: The Case of Ramallah Governorate in Palestine*** **Associate Professor Manal Al-Bishawi and Arch Faten Timraz* *To see the presentation please click here*	***Climate Impacts on Infrastructure Projects and Risks Allocation*** **Dr. Sertaç ORUÇ* *To see the presentation please click here*
17:55-18:05	***Designing a Hostel in the Touristic Complex of Qurigol Lake near Tabriz, Iran*** *Ph.D. Candidate Narmin Babazadeh Asbagh* *To see the presentation please click here*	***Behavioral analysis of single-use plastic consumption in Cairo*** *Double M.Sc. Laura Maria Diaz Ospina* *To see the presentation please click here*	***Age of Resilient Urban Mobility Routes Planning*** Dr. Yarah Basyoni, and Eng. Hazem Enwar
18:05-18:15	**Factors that Influence Workspace Planning and Design in Government Offices Buildings of Lagos** *Phd Student Deborah Oluwabunmi Alonge , Research officer Abayomi Razzaq Ayoola , Dr. Isa Bala Muhammad* *To see the presentation please click here*	***Subjective assessment of thermal outdoor comfort in downtown Guelma during summer heatwave*** * Bouthaina Sayad , Abdelhakim Hanafi and Pr. Djamel Alkama *To see the presentation please click here*	***Potential Contributions of Topology Optimization for Building Structures: A Redesign Case Study on Saint Voukolos Church*** ** M.A.Elmas Pak , Assoc (PhD) A. Vefa Orhon and Assoc (PhD) Yenal Akgün* *To see the presentation please click here*
18:15-18:25	***Importance of HVAC System Selection in Reducing Energy Consumption of Building Retrofits – Case Study: Office Building in London*** ** MSc. Baran Tanriverdi , Prof. Dr. Gülay Zorer Gedik* *To see the presentation please click here*		***The Effect of Latex on The Characteristics of Asphalt Concrete Wearing Course*** **MT.,ST. Sartika Nisumanti, MT.,ST. Ghina Amalia and SA Putri* *To see the presentation please click here*
18:25-18:40	***SIXTH ROUNDTABLE*** *Questions & Answers*	***SIXTH ROUNDTABLE*** *Questions & Answers*	***SIXTH ROUNDTABLE*** *Questions & Answers*
18:40-18:50	***Effect of Indoor Operational Environment on Workers' Well-Being in Industrial Buildings: The Case for Pharmaceutical Factory in Nigeria*** ** PhD student Bawa, John Agmada [1], Dr. Akande, Oluwafemi Kehinde and Dr. Ayuba, Philip* *To see the presentation please click here*	***Psychological Relaxation of Campus Park and Arboretum*** **Dr. Prita Indah Pratiwi , Dr. Bambang Sulistyantara and M.Agr. Saraswati Sisriany and B.Sc.(Agr.) Samuel Nanda Lazuardi* *To see the presentation please click here*	***Effects of underground circular void on strip footing laid on the edge of a cohesionless slope under eccentric loads*** **Dr. Tarek Mansouri, Dr. Abderahman Benabid , Dr. Mohamed Saadi and Dr. Amar Cherif Benaicha* *To see the presentation please click here*
18:50-19:00	***The Role of Attraction Factors in Recreational Shopping Gratification: A case of Colombo, Sri Lanka*** *B.Sc. Veneka Logenthiran, Dr. Susantha Amarawickrama* *To see the presentation please click here*	***What motivates bathers to use sun shelters at urban beaches?*** ** Dr. Carlos Mourão Pereira , Dr. Teresa Valsassina Heitor and Dr. Ann Heylighen* *To see the presentation please click here*	***The influence of road traffic on heavy metal contamination of road dust and roadside soil along a major RN3 highway through a rural area in northeastern Algeria*** **Dr. Benabid Abderrahmane , Dr.Mansouri Tarek , Pr. Benmebarek Naima and Dr. Bouchham nora* *To see the presentation please click here*
19:00-19:10	***Literature Review: The Correlation of Storefront Visibility and Store Attractedness*** *B.Arch. Nadya Kamila, Ph.D. Ahmad Gamal, and Dr. Azrar Hadi* *To see the presentation please click here*	***Reconciling children and their urban environment around school through a multicriteria analysis: Case of "CHRAIT AMMAR" school, Guelma city-Algeria.*** *PhD Candidate Meryem LAMARI, Pr. Youcef LAZRI* *To see the presentation please click here*	***Selection of Optimal Geometry of Curved Roof-Trusses Based on Steel Weight Optimization*** *Dr. Hashem AlHendi, B.A. Saher Khanfer, B.A. Masa Alojaily and B.A. Homoud Al-Lozi* *To see the presentation please click here*
19:10-19:20	***Energy efficiency benchmarking: Review of Key policies, agencies, program developments in North Africa, case of Algeria*** ** Ph.D. Soumia Rahmani, Dr. Dalel Kaoula and Dr. Mohamed Hamdy*	**Vegetation and its impact according to user's perception. Case of north land use plan of Guelma city** **PhD candidate. BECHAA Teqwa, Dr. DAHMANI Krimo and Pr. ALKAMA Djamel* *To see the presentation please click here*	***The Effect of Using Iron Slag As a Replacement for Fine Aggregates for Green Concrete Mixes*** *Dr. Alaa Abdeltawab* *To see the presentation please click here*

19:20-19:30	***Effects of Developing Information Technologies on 21st-Century Library Architecture*** ** M.A. Student Seda Nur Şanlı, Dr. Ayşe Sirel* *To see the presentation please click here*		***Seismic Vulnerability of Interaction Soil-Pile-pier bridges under Mainshock-Aftershock Sequences using the Fragility Methodology*** ** Ph.D Saddouki Souheyla, Dr. Yahiaoui Djarir* *To see the presentation please click here*
19:30-19:40	***SEVENTH ROUND TABLE*** *Questions & Answers* *Conclusion by the Chair*	***SEVENTH ROUND TABLE*** *Questions & Answers* *Conclusion by the Chair*	***SEVENTH ROUND TABLE*** *Questions & Answers* *Conclusion by the Chair*
19:30-19:40	*Introduction by chair:* ***Dr. Shahira Sharaf Eldin*** **Session Co Chair: Dr. Abdulsalam I. Shema** *Architecture and Technology-5* Behavioral studies	*Introduction by chair:* ***Dr. Ahmad Khalilia*** *Sustainability and Urban Design-6* Social and behavioral studies	*Introduction by chair:* ***Dr. Islam Hamdi Elghonaimy*** **Session Co Chair: Dr. Salar Salah Muhy al-din** *Architecture and Urban Design* ***Arabic session***
19:40-19:50	***On Atmosphere as a Phenomenon in Architectural Aesthetics*** **Dr. Fatma İpek Ek* *To see the presentation please click here*	**Effect of Architecture on the Cultural Perception of the Palestinian Society, The Example of Nablus** *Dr. Ahmad Khalilia* *To see the presentation please click here*	**Challenges of Architectural Education Post Covid-19 Pandemic: Analytical Study of the Potentials and Problems Associated with Distant Learning** **Assoc. Prof. Mennat-Allah El-husseiny* *To see the presentation please click here*
19:50-20:00	***The Importance of Light in Steven Holl's Perception of Form*** **M.Sc. Dilara Ertaş, Dr. Ayşe Sirel* *To see the presentation please click here*	**Rethinking the Role of the Street: A Framework for Developing Livable Streets in Urban Fabric of Turkey** ** M.A. Shurouk Mohammad & Assoc. Prof. Hatice Kalfaoğlu Hatipoğlu* *To see the presentation please click here*	***Elements of Biophilic Interior Design in Healthcare Environments Case Study: The Libyan European Hospital (LEH), Benghazi*** ** Dr. Hailana Ben Ali , B.A. Lean Lateiwish and B.A. Malak Elneihwi* *To see the presentation please click here*
20:00-20:10	***An Investigation of the Impact of the Built Environment on Human Beings in the Context of Antonovsky's Sense of Coherence Scale*** ** Research Assistant Gamze Lokum Süvari , Research Assistant Hilal Türkdoğdu*	***Synesthesia, the Sensory Experience in a Multicultural City: the Case of Thessaloniki*** **Ph.D. Candidate Maria A. EL HELOU* *To see the presentation please click here*	***The Photovoltaic Facade and its Impact on the Energy Economy of Buildings Located in Semi-arid Areas*** **Dr. Youcef Kamal, Dr. Qauod Rami and Dr. Merad Yacine* *To see the presentation please click here*
20:10-20:20	***Integrating Sustainability and User's Demand in the Retrofit of University Campus in China*** ** M.A. Guorui Chen, B.A. Li Cheng and M.A. Foyuan Li*	***Adaptive reuse as a tool for sustainability: Tate Modern and Bilgi University Cases*** **Phd Student Pınar Tabak, Assoc. Prof. Ayşe Sirel* *To see the presentation please click here*	***Change in the Urban Fabric of Historic Cities: Case Study of the Residential Environment of the Old City of Mosul*** ** B.Sc. Ibtihal Do Alfuqhar and Prof. Dr. Mehmet Emre Aysu* *To see the presentation please click here*
20:20-20:30	***Vernacular Architecture Implementation on Shopping Center Buildings Design in The City of Pekanbaru*** *M.S Weldy Eka Saputra, M.S. Rika Cheris , M.D. Parlindungan Ravelino* *To see the presentation please click here*	***The Evaluation Of "Şerefiye Cistern" in the Context Of Reuse*** **Phd Student. Maryam Momaiyezi, Dr. Ayşe Sirel* *To see the presentation please click here*	
20:30-20:45	***FINAL ROUND TABLE*** *Questions & Answers* *Conclusion by the Chair*	***FINAL ROUND TABLE*** *Questions & Answers* *Conclusion by the Chair*	***FINAL ROUND TABLE*** *Questions & Answers* *Conclusion by the Chair*

Thursday, May 12, 2022

Keynote speeches

Coordinator: **Prof. Dr. José Manuel Pagés Madrigal**

See the video: Part 8

9:00-9:15	**Professor Dr. Ahmed Faggal,** Department of Architecture, Faculty of Engineering, Ain shams University (ASU), Cairo, Egypt. / Keynote's Bio Title: Education to professional practice within sustainable requirements - The Architect Role
9:15-9:30	**Dr. Joseph Adeniran ADEDEJI**, Federal University of Technology, Akure, Nigeria / Keynote's Bio Title: African indigenous urbanism and urban design: A centennial requiem
9:30-9:45	**Professor Dr. Carlo ALBERINI,** Mohammed VI Polytechnic University, Morocco / Keynote's Bio Title: Toward 2030: The role of resilient & sustainable urban planning to foster a greener decade in coastal areas
9:45-10:00	Roundtable discussion - Q&As Session
10:00-10:15	Virtual Coffee Break

10:15-10:25	***Session A*** Moderator: Dr. Abdulsalam I. Shema	**Session B** Moderator: Dr. Husam R. Husain **See the video:** Part 9	**Session C** Moderator: Dr. Islam Hamdi Elghonaimy **See the video:** Part 10
	Habitat Studies / Housing *Introduction by chair:* ***Prof. Dr. Yung Yau*** ***Session Co-Chair: Dr. Mazen Mohamed Nassef***	***Heritage and Cultural Landscapes/ Adaptive Reuse*** *Introduction by chair:* ***Dr. Husam R. Husain***	***Architecture and Technology/ Building technology*** *Introduction by chair:* ***Dr. Islam Hamdi Elghonaimy***
10:25-10:35	***Third Sector Housing in Hong Kong: Prospects and Challenges*** *Prof. Yung Yau*	***The role of Structure and Structural Analysis in Adaptive reuse of Zahir-Ol-Eslam Historic House in Tehran, Iran*** *Farnaz Faraji , Sadra Moradi and Somayeh Fadaei Nezhad* *To see the presentation please click here*	***Nanotechnologies Brooding Smart and Economic Green Architecture*** *Abd Al-Aziz S. Al-Sharkawy* *To see the presentation please click here*
10:35-10:45	**Predictive Model for Liveability in Public Housing Delivery in Niger State Nigeria** *M.Tech. Paul Baba Haruna and Prof. Remi Ebenezer Olagunju* *To see the presentation please click here*	***Transgressive Architecture: Investigating the Limits*** *Ingrid Anita Stacia Dharmawan, Kristanti Dewi Paramita, *and Paramita Atmodiwirjo* *To see the presentation please click here*	***Reviving Low-tech Modes of Construction as a Method for Sustainability*** **Assoc. Prof. Mennat-Allah El-Husseiny [1] , Architect. Hamdy El-Setouhy* *To see the presentation please click here*
10:45-10:55	***Affordable Housing for Low-Income Community in Thailand: The Challenges of the Improvement of the Quality of Life*** ** Dr. Sadanu Sukkasame*	***A Study on Civic Amenity Center In Different Neighborhoods of Chittagong*** *B.Arch. Sumon Paul, Associate Professor Mohammad Tanvir Hasan*	***The Readiness of Smart Office Interior Implementation in Malaysia*** *Nor Hafiza Halim, Dr. Arita Hanim Awang, Dr. Noraini Ahmad , Dr. Nurlelawati Ab Jalil, Dr. Syakir Amir Ab. Rahman, Assoc. Prof. TPr.*

	To see the presentation please click here	*To see the presentation please click here*	*Dr. Norzailawati Mohd. Noor , Prof. Ar. Dr. Abdul Razak Sapian and Norfazillah Ahmad* *To see the presentation please click here*
10:55-11:05		***Integration and Adaptive Reuse of Industrial Heritage Sites in Modern Urban Centers: The Case of Izmir Alsancak Sümerbank Complex*** **B.A Halime Ecem Bayir, Assistant Prof. Dr. Figen Akpinar*	
11:05-11:20	***FIRST ROUND TABLE*** *Questions & Answers* *Conclusion by the Chair*	***FIRST ROUND TABLE*** *Questions & Answers* *Conclusion by the Chair*	***FIRST ROUND TABLE*** *Questions & Answers* *Conclusion by the Chair*
11:20-12:10	**Lunch break**		
Day 2/ Thursday / 12:10-17:05 *Discussion with the Authors*			
	Session A Moderator: Dr. Abdulsalam I. Shema	**Session B** Moderator: Dr. Husam R. Husain	**Session C** Moderator: Dr. Islam Hamdi Elghonaimy
12:10-12:20	***Habitat Studies /*** *Affordable housing* *Introduction by chair:* **Dr. Carlo ALBERINI**	***Heritage and Cultural Landscapes/*** *Urban growth and Morphology* *Introduction by chair:* ***Dr. Philippe Devillers*** **Session Co-Chair: Dr. Zahraa Zawawi**	***Architecture and Technology/*** *Building cost & Management* *Introduction by chair:* ***Dr. Didem Güneş Yılmaz***
12:20-12:30	***Assessment Of The Service Delivery At The Internally Displaced Persons' Camps (Idps) In The Federal Capital Territory, Nigeria*** *Owoeye Olusegun Idowu, Danlami Gideon and Ohadugha C. Bernhard* *To see the presentation please click here*	***The Grid that Remained: Redating the Coastal Urban Morphology of Ayvalık*** **Dr. Hasan Sercan Sağlam* *To see the presentation please click here*	***Artificial Neural Network Analysis for Cost Estimation of Building Projects in India*** ** Arch. Ankita Gupta and Arch. Piyali Debnath* *To see the presentation please click here*
12:30-12:40	***Architectural Heritage in Medium and Small Syrian Cities: Management Advanced Strategies for Postwar Recovery*** *MSc.Hussein ALTAH, prof.Dr. Salah HAJISMAIL* *To see the presentation please click here*	***Impact of Morphology and Vegetation on Housing Estates Sustainability*** *M.Sc. Mathieu Paris, M.Sc. Marjan Sansen, Dr. Stéphane Bosc and Pr. Philippe Devillers* *To see the presentation please click here*	***A Study On Construction Waste Optimization With A Holistic Approach*** Potluri Sushma, Ph.D Scholar in JNAFAU *To see the presentation please click here*
12:40-12:50	***House and Land: an architectural review of bulk housing in Australia*** *Peter Hogg, * Dr. Rajjan Chitrakar , Nick Bamford and Rosalind Herriotts* *To see the presentation please click here*	***Form and Function in The Pearl-Qatar Artificial Island Development*** ** Dana Al-Amadi, Dr. Mark David Major, AICP, CNU-A , Raya M. Atour, Dalal Y. Al-Ansari, Nouf Al-Maiki [1], Rozan A.A. Amleh, Victoria Mareeva, and Hamdi Mohammedsheriff* *To see the presentation please click here*	***Architecture as a tool of financial power*** *M.A. Alberto Bortolotti* *To see the presentation please click here*
12:50-13:00		***Gamification and Storytelling for Architectural History and Cultural Heritage Awareness*** Asst. Prof. Dr. **Muzaffer Özgüleş** *Live presentation*	***The Influence of the Thermal Conduction and Detail Development Process in Architecture*** *M.A. Kire Stavrov* To see the presentation please click here
13:00-13:15	***SECOND ROUND TABLE*** *Questions & Answers*	***SECOND ROUND TABLE*** *Questions & Answers*	***SECOND ROUND TABLE*** *Questions & Answers*
13:15-13:25	***Designing Alternatives for Residential Appartments in Cairo Using Shape Grammars*** *Dr. Mazen Mohamed Nassef and Dr. Maha AbouBakr Ibrahim* *To see the presentation please click here*	***Application of Genetic Algorithm Classification Approach to Study Urban Streets Morphology At Neighboorhood Scale*** **Dr. Mariame CHAHBI* *To see the presentation please click here*	***Fire Safety of Tall Buildings: Approach in Design and Prevention*** *Dr. Didem Güneş Yılmaz*
13:25-13:35	***Exploring the Factors Influencing Residential Location Choice of a Household: Learnings from the Indian Context*** *Research Scholar. Preety Saini , and Dr. Debapratim Pandit* *To see the presentation please click here*	***Transformation of Urban Morphology of the Palestinian urban character: The Case of Qaffin, North of the West Bank*** ** Dr. Zahraa Zawawi , Dr. Mohammad Itma and M.A. Amneh Dhelieh* *To see the presentation please click here*	**Evaluation of Strategies for Employee Participation by Nigerian Construction Organisations** *MSc. Ashiru Adegbenga Raphael, MA. Anifowose Kamaldeen Jide and MSc. Mohammed Ismail. Oladunni* *To see the presentation please click here*
13:35-13:45	***Mapping the evolving peripheries of Lahore through the study of the trajectory and scale of the city*** ** M.Phil. Mehreen Mustafa and M.Arch. Hafsa Imtiaz* *To see the presentation please click here*	***Morphological Changes in Kampung Pahandut of Palangkaraya City In Response to the Cultural Shift of Riverbank Communities*** ** B.A Yesser Priono and Ir. Evawani Ellisa M.Eng., Ph.D.* *To see the presentation please click here*	***Modelling Indoor Environmental Performance of Pharmaceutical Factory Buildings in Nigeria*** ** PhD Student Bawa, John Agmada , Dr. Akande, Oluwafemi Kehinde and Dr. Ayuba, Philip* *To see the presentation please click here*
13:45-13:55		***The Evaluation of The Identity Features / Characteristics at Urban Waterfront zones; The Case of Terme*** **Nur Çelik Nalbant , Assoc.Prof. Bora Yerliyurt* *To see the presentation please click here*	
13:55-14:10	***THIRD ROUNDTABLE*** *Questions & Answers* *Conclusion by the Chair*	***THIRD ROUNDTABLE*** *Questions & Answers* *Conclusion by the Chair*	***THIRD ROUNDTABLE*** *Questions & Answers* *Conclusion by the Chair*
14:10-14:20	***Habitat Studies /*** ***Vernacular & Agricultural studies*** *Introduction by chair:* ***Dr. Ana Bordalo***	***Heritage and Cultural Landscapes /*** *heritage studies* *Introduction by chair:* ***Dr. Nihan Kocaman Pavlovic***	***Pandemic Studies*** *Introduction by chair:* ***Dr. Dalia Hussain El Dardiry***
14:20-14:30	***Structures of community life in Portuguese Home-Villages: two case studies*** ** Dr. Ana Bordalo* *To see the presentation please click here*	***Architectural Projects Prepared Through National Or International Design Project Competitions On Archaeological Sites as Contemporary Additions*** ** Ahu Sönmez , Prof. Dr. Mine Tanaç Zeren* *To see the presentation please click here*	***Courtyard and Controlling the Spreading of The COVID 19 Virus In Commercial Buildings*** ** Dr. Dalia Hussain El Dardiry , and Dr. Islam Hamdi Elghonaimy*
14:30-14:40	***Transfer of Development Rights for Agricultural Land Protection in Izmir's Periphery: A Case Study in Torbalı*** ** Hacer Akbudak, Asst. Prof. Dr. Figen Akpınar* *To see the presentation please click here*	***Reflection of History on Soundscapes: The Hanlar District Case Study*** **Dr. Yalçın Yıldırım* *To see the presentation please click here*	***The impact of the Covid-19 pandemic crisis on BIM architectural practice in France*** *Ph.D. student Hana Rezgui , M.C.F. Hassan Ait Haddou and M.C.F. Guy Camilleri* *To see the presentation please click here*

14:40-14:50	***Investigating the Role of Vernacular Architecture as a Sustainable and Eco-Friendly Architecture In City Branding*** ** M.A. Sarvin Elahi* *To see the presentation please click here*	***From Picturesque Landscapes to Brand-new Cities: A Survey for Understanding the Effects of Protective Structures on Visitor Impression*** *Büşra Ceylan , Dr. Nihan Kocaman Pavlovic* *To see the presentation please click here*	***Delineating the Impact on Design Parameters Due to Covid-19*** ** Piyali Debnath and Ar. Ankita Gupta* *To see the presentation please click here*
14:50-15:00	***Social Hybrid Architecture for Water Regeneration in Rural Settlements. A Case Study in La Vega Del Guadalfeo (Spain)*** ** M.A Alegría Pacheco-Montero and Dr. Carlos Rosa-Jiménez* *To see the presentation please click here*	***Evaluating Heritage Site from the Perspective of Visitor's Satisfaction: Insight from Puthia, Bangladesh*** ** Afrina Akter , Ferdous Farhana Huq , Mst. Umma Roman , MD. Wahidur Rahman* *To see the presentation please click here*	
15:00-15:15	***FOURTH ROUND TABLE*** *Questions & Answers* *Conclusion by the Chair*	***FOURTH ROUND TABLE*** *Questions & Answers* *Conclusion by the Chair*	***FOURTH ROUND TABLE*** *Questions & Answers* *Conclusion by the Chair*
15:15-15:25	***Heritage and Cultural Landscapes /*** *Documentary & Theory* *Introduction by chair:* ***Dr. Vaidehi Lavand***	***Heritage and Cultural Landscapes /*** *Urban Regeneration* *Introduction by chair:* ***Dr. Ugo Rossi***	***Post- Pandemic Studies*** *Introduction by chair:* ***Dr. Hidayet Softaoğlu***
15:25-15:35	***Industrial Archaeology in the Era of Nasti's Family From Napoli: Manufacturing Gelato Under Its Mondial Gelo Division*** *Per. Agr. Laur. Ing. Arch. Salvatore Polverino* *To see the presentation please click here*	***Can our old city survive?*** *Ph.D. Ugo Rossi* *To see the presentation please click here*	**What is Posthuman architecture: cities as a potential and emerging term of post-pandemic World** *Dr. Hidayet Softaoğlu* *To see the presentation please click here*
15:35-15:45	***Smart Heritage for the Urban Sustainability: a Review of Current Definitions and Future Developments*** *Mr. Heng Song , Prof Gehan Selim* *To see the presentation please click here*	***Behind the Skyscrapers: An Assessment of Dubai's Cultural and Creative Scene*** ** M.Urp Marieh Mustafa Sharaf* *To see the presentation please click here*	**Post-pandemic urban future. Identification of the main trends of change in Latin America, through the application of the Delphi method** **PhD Candidate Yeimis Milton Palomino Pichihua* *To see the presentation please click here*
15:45-15:55	***Theories of Conservation and Scientific Restoration from Gustavo Giovannoni's point of view*** *Ph.D. Candidate Narmin Babazadeh Asbagh* *To see the presentation please click here*	***The Impact of Placemaking to Revitalize the Identity of Coastal City*** **Prof. Mohamed Hassan Atwa Eldek , Prof.Dr. Shimaa M. Ali and Eng. Nourhan El-Sohafi* *To see the presentation please click here*	***New Normal Third Places After COVID-19 Pandemic*** **B.Sc. Hasini Uthpala , M.Sc. Lakshika Meetiyagoda* *To see the presentation please click here*
15:55-16:10	***FIFTH ROUND TABLE*** *Questions & Answers*	***FIFTH ROUND TABLE*** *Questions & Answers*	***FIFTH ROUND TABLE*** *Questions & Answers* *Conclusion by the Chair*
16:10-16:20	***Discourse on Lost Pages of History: Architectural Works of Vasudev Kanitkar in Western India*** ** Dr. Vaidehi Lavand and Ar. Onkar Khebudkar* *To see the presentation please click here*	***The Role of Cultural Heritage Tourism in Regenerating Old Muharraq in Bahrain*** ** Fatema Shubbar, Dr. Djamel Boussaa, Associate Professor*	***Heritage and Cultural Landscapes /*** *Cultural Heritage Structure* *Introduction by chair:* ***Dr. Shantharam Patil***
16:20-16:30	***Comparative Analysis of Qajar Historic Houses in Tabriz, Isfahan, Yazd, and Kashan, Regarding their Architectural Forms and Elements*** *Ph.D. Candidate Narmin Babazadeh Asbagh* *To see the presentation please click here*	***Assessment of Historic Cities within the Context of Sustainable Development and Revitalization; The case of the Walled City Nicosia*** **Dr. Mustafa Eyyamoğlu , Dr. Ayten Özsavaş Akçay ,* *To see the presentation please click here*	***Evaluation Role of Wind Catcher in Integrated Passive System used for Natural Ventilation and Cooling in Traditional Cairene Court Yard Houses*** ** Dr. Ahmed S. Zaki* *To see the presentation please click here*
16:30-16:40	***Vietnam Veterans Memorial – An Arts and Architecture Based Critique*** *MA, MS, MFA, FAIA, RIBA Lester Korzilius* *To see the presentation please click here*	***Marine Conservation and Promotion of Tourism: An Approach on Marine and Coastal Planning at Cat Island, Muscat, Oman*** *M.S. Maria Lourdes V. Evangelista , M.S. Irene G. Florendo and M.A. Robert V. Romero* *To see the presentation please click here*	***The typomorphological facade of the catholic churches of S. Miguel, Azores*** ** M. Arch Maria Antónia Vieira , Drª. Mafalda Sampayo and Dr. João Alves da Cunha* *To see the presentation please click here*
16:40-16:50	***The Tomb of Sultan Bokht Agha and Two Minarets of the Dardasht Neighbourhood in Isfahan, Iran*** *Ph.D. Candidate Narmin Babazadeh Asbagh* *To see the presentation please click here*		***Evolution of Buddhist Architecture in Andhradesa: South Eastern Coastal Region of India*** **Dr. Shantharam Patil, Ar. Preethi Belmann and Chekuri Krishna Jyothi* *To see the presentation please click here*
16:50-17:05	***FINAL ROUND TABLE*** *Questions & Answers* *Conclusion by the Chair*	***FINAL ROUND TABLE*** *Questions & Answers* *Conclusion by the Chair*	***FINAL ROUND TABLE*** *Questions & Answers* *Conclusion by the Chair*

Online Gathering
Thursday, May 12th 2022
18:00-19:00
See the video: Part 11