

Circular practices in design: The example of the restoration of the interior of the synagogue Kahal Shalom in Kos, Greece.

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Good afternoon,

I want to thank the organizers and the moderator of this session and for the introduction.

[slide]

I truly appreciate the opportunity to share today a project that is quite different from the projects presented today.

The project that I will present merges two areas that I have been pursuing for the past 20-30 years:

- one is the documentation and research on the synagogues of Greece, and
- the other sustainable design and circular practices in architecture.

Two areas that may seem very incompatible. Yet, the restoration of the interior of Kahal Shalom synagogue in Kos, made this connection possible in the most profound way.

First, I will give a little background about my work.

[survey]

I have engaged in the documentation and study of Greek synagogues since 1993. The project started upon completion of my Master in Architecture at Yale University. At the time I became aware of the destruction during the Holocaust where over 87% of Greek Jewry was annihilated and 90% of nearly 100 synagogues in Greece were destroyed.

[demolition]

My intention at the time was to create sufficient documentation of the remaining synagogues, especially the abandoned ones which were later demolished, in order to preserve this important historic, cultural and architectural heritage for the next generations.

Here we see examples of synagogues destroyed during the Holocaust and others demolished in 1995 and as late as in 2020.

The survey and study of the synagogues of Greece also became the subject of my PhD at the NTUA in 1995-1999, published partially in 1997 and fully in 2011 and 2022.

[climate destruction]X5

The destruction of the Holocaust, in my view, is essentially no different in the fact that we are allowing, enabling and in many cases causing directly destruction in communities and ecosystems around the world. A destruction, which according to the scientists of the IPCC it is caused by human activity on the planet. Meaning that it is our conscious decision to allow this destruction of entire communities, exactly like the destruction that was caused in the Holocaust.

I have been active in my academic and professional capacity, to address these challenges through design and architecture. For example, through the application of passive solar design, the reuse of materials, the use of geothermal heating and cooling, minimizing dependence on energy-intensive systems, and more. In addition, I have been teaching sustainable design to the next generation of architects and designs, in both formal academic courses and design studios and informal workshops. In addition, I engage in research on sustainable design, from retrofits, to application of cutting edge technologies, community engagement, and at the moment, I am involved in a Horizon project with Demokritos Research Center in Athens administering one of the program pilot sites for the project SINCERE.

[archival document]

My work on the synagogues of Greece was also assisted and enriched through research in archives in Greece, Israel and other countries. They enabled me to bring to light and publish materials unknown until now, contributing a great deal to the study of the subject.

For example, this document lists synagogues in Thessaloniki previously unknown. Also, the order of wood for the synagogue in Xanthi – allows us to date with accuracy the completion date of the synagogue.

[restore salonika – Trikala]

Twenty years after initiating the project of the survey and study of the synagogues of Greece, I also became involved in the restoration and preservation of historic synagogues throughout Greece. Examples in Thessaloniki, Trikala and the preservation of the mosaic of the ancient synagogue in Aegina. For these projects I have worked closely with Petros Koufopoulos and his team, Argyris Chatzidis, and KARD Architects – Dimitris Raidis and Alexandros Kouloukouris, with whom we will be also working on the interiors of the new Holocaust Museum in Thessaloniki.

[ktimatologio]

This year I was also invited by the Ministry of Culture to consult on the enrichment of the Archaeological Registry of the Hellenic Ministry of Culture with approx. 400 new entries marking Jewish sites throughout Greece. This project is ongoing and will be completed in 2024. This is the first such comprehensive documentation on an official site, and we truly hope that it will trigger more interest on the subject, but also more visitors to these sites. The project will be completed with an online exhibition and a book of all sites of Jewish heritage in Greece, expected to come out next year. Map of Arta and Map of Thessaloniki.

[books] [ecoweek books]

During the past few years, I have also published a great deal on the subject of Greek synagogues, in both Greek and English, aiming to make

this long and extensive research available and accessible to both researchers and the wider public.

[books sustainable design]

I have also published books on sustainable design, from the 2-decade experience with NGO Ecoweeek which I established in 2005 and has been active in 17 countries.

One of the recent books was on the synagogue in Kos. The restoration work of the interior, which was assisted by extensive research, was an excellent opportunity to also write about the project and explain how different words can merge: from one hand academic research and the practice of design and construction, and on the other the synagogues project and sustainable design and the climate crisis. They all merged to one whole, that both respects the past and cares for the future.

[synagogue kos]

The synagogue Kahal Shalom in Kos is a fairly modern synagogue. It was built in 1935, following the destruction of the previous synagogue – which dated from 1747 and which stood next to the site of the new synagogue.

[map] [aerial]

The earthquake of April 1933 destroyed most of the island, including the synagogue and the jewish quarter. This is a topographic plan of Kos before the earthquake. In upper circle is the location of the Jewish quarter and synagogue and the lower circle the mosque. Here we see in the topographic map of the city we see the footprint of the previous synagogue and the location of the open courtyard of the Jewish quarter – was it really a ghetto? – on which the new synagogue was built two years later, after this older synagogue was destroyed in the earthquake of 1933.

[google]

Here is again the location of the mosque and the synagogue.

[georgalis]

The new synagogue was in use from 1935 until WWII. Kos was under Italian occupation until 1943, and once the Germans assumed control of the island, they implemented the ‘Final Solution’ in Kos in July 1944. They arrested and deported 104 members of the Jewish community which numbered 120 people.

The destruction of the community in Kos was no different from other cities in Greece and in Europe. With the only difference that in Kos the Germans did not destroy the synagogue, as they did in other cities.

[kis topo]

The synagogue stood abandoned after WWII for many years. In the 1980s it was threatened like most historic buildings by urban renewal and reconstruction of historic city centers. However, the Municipality which wanted to preserve this unique building, purchased the synagogue and turned it into a municipal cultural center for lectures and exhibitions.

[elias survey] [elias plans]

I surveyed the synagogue in August 1996 and later published the plans in 2011, 2022 and 2023.

The restoration project started in 2022, due to the growing number of tourists from Israel and other countries, and the need for a functioning synagogue on the island. The Municipality in collaboration with the Central Board of Jewish Communities, decided to restore the interior of the synagogue, to function again in a mix-use both as a synagogue and as a cultural center. Due to my expertise and experience on the subject, I was invited to be the architect of the project. The project was undertaken in 2023 and completed in July.

[circular economy]

The restoration of the interior of the synagogue followed the principles of circular economy, of reuse of existing resources as the best possible and most economical solution.

[sketch][Rovigo]

First a vision of the design was formulated, based on research on Italian synagogues of the same period – especially, Tempio Nuovo in Rovigo, Venice dating from 1936.

For the furniture, I first tried the option of ordering furniture from a company that specializes in synagogue furniture. The cost was considerable and also as the furniture was made in Ukraine, once the war started, there was no way to secure timely delivery.

The other option that I tried, was to find old furniture from demolished synagogues. In Greece we had the **furniture from the synagogue in Patras** which was demolished in the late 1970s. And all the furnishing were moved to the Jewish Museum of Greece in Athens [JMG]. The other furniture that could be available was from Kavala, where the interior of the synagogue that was used after WWII was demolished BUT its furnishing were moved to the Jewish museum in Thessaloniki [kavala]. Therefore, none of these furnishing were available to be reused in Kos. I tried finding old furnishing from Italy or Turkey, without success.

I then tried finding furniture in other countries. A synagogue which was closing in the US had just transferred its furnishing to another synagogue, and a closing furniture warehouse offered some pieces, but it was too expensive to ship from New York.

[furniture]

Having exhausted all these alternatives, the next was to follow a circular practice and to modify existing furnishings. A regular wooden closet was found for the *Holy Ark* and a regular wooden desk for the *Bimah* both were salvaged from the offices and basement of the Jewish Community of Thessaloniki.

[temple]

Interestingly enough, through this circular practice another benefit was achieved: synagogues, like the Temple of Jerusalem, have levels of holiness. From the profane to the Holy of Holies of the Temple. For example, the courtyards are more holy from outside the Temple, but the interior of the Temple is more holy than the courtyards.

The same applies also to a synagogue and the furnishes of a synagogue.

[furniture]

When you take a regular closet and you turn it into a *Holy Ark* you raise its level of holiness. The same with the desk. Meaning that the regular furniture, become holier than they were before. This also means that now these furniture are holy and cannot be used as a regular closet or desk anymore. They cannot go down in the level of holiness.

So there is a very unique merging in holiness and circularity in this act of merging historic restoration with sustainable design in the synagogue.

[survey Italian]

In order to modify existing furniture, extensive research and survey was undertaken of historic Italian synagogues, in order to make sure that the new furniture will be compatible with the new use, the new ergonomics and new functionality. Further, in order to allow dual use of synagogue in the summer and holidays and a cultural center for the local community during the rest of the year, the *Bimah* was made easy to move when necessary.

[Italian plans]

During research on the project, I also reviewed the original architectural drawings by the Italian architects Armando Bernabiti and Rodolfo Petracco and also discovered many architectural details that had been lost since WWII. For example, the wooden trellis separating visually the staircase to the women's gallery from the main prayer hall. This element was reconstructed, to fit the original design of the synagogue.

[implementation - sketch-drawings]

The implementation of the work was undertaken by Manos-Tsiaousi carpenter company in LefkOnas, Serres – even though we tried very hard to get a local carpenter to do the work, however his price quote was nearly double. In the end, even though the project was more design intense and more labor intensive, yet, the cost compared to ordering new furniture was nearly half. Also, in terms of delivery time, the project was done faster and more reliably, than ordering the furniture from a factory in a war zone. So, it was easy to ‘sell’ the idea to the client and to get the project developed in this circular manner.

[views]

To conclude, this project brought together two very different fields of expertise, which I have developed during the past 2-3 decades: on one hand the history, architecture and restoration of the synagogues of Greece, and on the other, sustainable design and circular practices, as a way that architecture can address the climate crisis.

[plans]

The project process was indeed more complicated than ordering furniture, but as the cost was lower and delivery more reliable, it was preferred by all parties involved.

[views]

The process produced a great deal of additional value in many ways:

- In creating a richer narrative, that tells a story that is more unique and more engaging.
- In promoting sustainable design and circular practices even in such small project.
- In creating furnishings that are higher in holiness than regular furniture.
- And finally, in engaging craftsmen both locally and from outside Kos, and thus supporting also the local economies instead of importing furniture from outside Greece.

Before I close I would like to invite our Greek audience from Northern Greece, to the upcoming book presentations of my new book TO SYNAGOI – by Infognomon Editions, that will take place in Xanthi on October 5 at 7pm at FEX and in Thessaloniki at Ianos on Aristotelous on October 7 at 1pm.

You are all invited!

[thank]

Thank you very much!