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In Greece before the 4th CIAM.
Emergency and innovation in the rural colonisation sites

Abstract

In July 1923 the Lausanne Treaty enforced a population exchange between Greece and Turkey. Most Greek Orthodox refugees from Asia Minor moved to newly annexed regions of northern Greece, sheltered in tent camps, makeshift shacks and public buildings. Firstly, a census was taken of their places of origin and potential affinities. In 1923, the Greek government applied for support to the League of Nation who established the Refugee Settlement Commission. The present overshadowed any idealised vision of Greece. Standardised solutions were adopted for the new villages' layout, individual dwellings and aggregation patterns. When prefabrication came into play, the protagonists was Fred Forbát, who also played a decisive role in the choice of Athens as the venue of the 4th CIAM in 1933.

Keywords

Rural refugee settlement — Mass housing — Fred Forbát — Adolf Sommerfeld

The context in figures: an introduction

In summer of 1933, Pietro Maria Bardi, a protagonist of the Italian cultural debate as co-editor of *Quadrante*¹, travelled to Athens with the Italian delegation attending the 4th CIAM. In a lengthy article (1933), Bardi expressed his astonishment in front of Athens' chaotic sprawl, recalling a conversation with an engineer from the Marathon Barrage who, ten years earlier, had taken in sixteen refugees, among whom a woman about to give birth.

They describe the anguish and confusion of those days. Athens became as compressed as a bale of cotton. One million two hundred thousand newcomers, clueless, without a tool of the trade [...] The demographic case of Greece is unique: 2,800,000 inhabitants in 1907, 5,600,000 in 1921; then the arrival of refugees in the aftermath of a wearying war. The very efforts of the League of Nations, the Autonomous Office and the American Near East Relief were not sufficient to regulate and settle such an amazing human avalanche. [...] we seem to have understood that the super-population set itself up, building hovels and shacks in the most whimsical anarchic manner on very large stretches of land. Each family put itself under a temporary roof with tingling rapidity. (Bardi 1933, p. 16) (Transl. by authors).

At the time of events, a correspondent for *L'Illustration* (Ercole 1922, p. 437) witnessed the exodus from Thrace from a spotter plane: the quays of Redestos and Dedeagatch² packed with crowds waiting for help and columns of smoke rising from temporary camps. In the reportage *History's greater trek*, the renowned photographer Melville Chater (1925) documented their establishment in Greece. In total, 1,221,849 refugees arrived: almost one fourth of the population of Greece at the time (Kritikos 2005, p. 332). [Fig. 01, 02, 03] Athens and the entire country were under pressure,



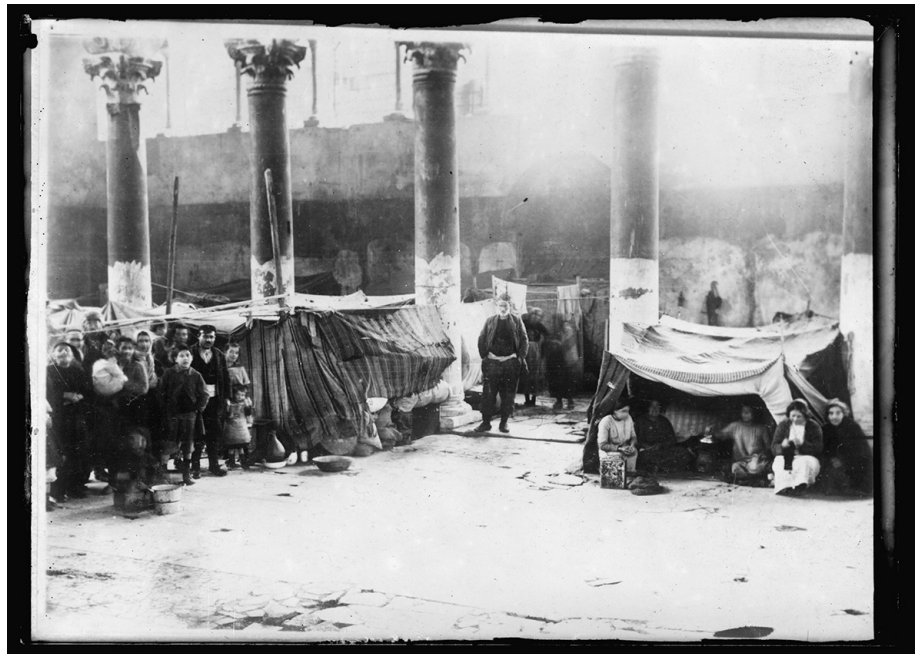
Fig. 1
 Geographic distribution of refugees from different places (source: Etablissement des réfugiés en Grèce - 1933 - La Grèce actuelle, Ministère des Affaires Etrangères, Athènes 1933).

Fig. 2

Refugee families temporarily housed in the National Theatre, Athens, 1923. (source: Hellenic Literary and Historical Archive Society ELIA).

**Fig. 3**

Refugee families in the Byzantine church of Saint Paraskevi in Thessaloniki (source: Archive of the American Red Cross in Greece, Library of Congress, Washington).



yet most of them stayed in the north, where their settlement was to accelerate the Hellenisation of newly acquired border regions³.

In 1922, the Greek government established the Refugee Relief Fund in charge of a housing programme and, in 1923, applied for support to the League of Nations⁴. The gravity of the situation led to the formation of an autonomous supra-national body, the Refugee Settlement Commission (hereinafter RSC) operating from 1923 to 1930⁵ to manage the first foreign loan of 10 million pounds provided in 1924 and the remaining 9 million pounds granted in 1927. From 1922 to 1924, before the RSC services became fully operational, the first 13,487 dwellings had been achieved by the Greek Refugee Relief Fund, who provided refugees with building materials and a small sum (5,000 to 6,000 drachmas) to build their own house; where building materials were of poor-quality, the houses were badly built and gradually disappeared (RSC, Twenty-Seventh Quarterly Report 25.8.1930, p. 11).

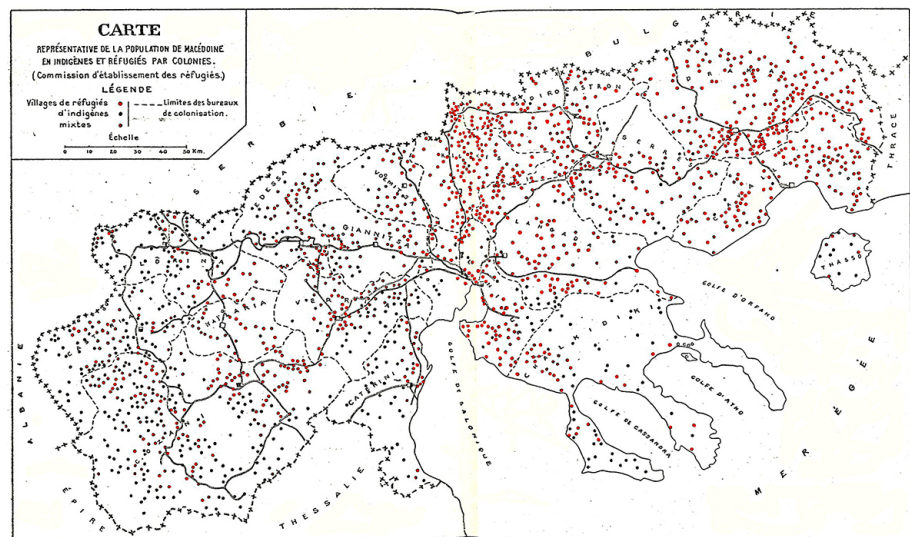


Fig. 4

Map of Macedonia with refugee villages (red), indigenous villages (black) and mixed villages (red and black) RSC, 1928. (source: Ancel 1930, pp. 148-149).

The Greek Ministry of Social Welfare took care of urban refugees, whereas the RSC was mainly responsible for rural settlements which, by 1928, amounted to 2,085 for a total of 145,127 families⁶. Out of the 1,088 agricultural colonies in Macedonia, only 646 were built from scratch; the remaining 442 were new quarters near pre-existing villages. A considerable number of families were settled in villages abandoned by Turks or Bulgarians⁷. When possible, refugees were delegated to sites according to village of origin, so as to empower existing links of solidarity. They were asked to select their representatives, who were then taken around several districts before choosing a site, the best of which often aroused some antagonism. New settlements were usually named after refugees' place of origin preceded by the word *neo / nea* (new); in the case of pre-existing villages, Greek names replaced Turkish or Bulgarian toponyms⁸. [Fig. 4] One of the main tasks of the RSC was distributing the land made available by the Greek government (mostly former Turkish or Bulgarian estates) as its quality and extension dictated the number of settlers of the respective village⁹. Athens was the seat of the RSC, subordinate to it, in Thessaloniki operated the General Directorate of Colonisation in Macedonia (hereinafter GDCM) headed by Ioannis Karamanos, an agronomist trained at the Agricultural High School of Portici (Naples). The success of the colonisation plan envisioned by Venizelos¹⁰ depended not only on the work of surveyors, topographers and hydraulic engineers, but also on the fact that doctors, engineers and architects had their place near the colonist himself (RSC, Twenty-seventh Quarterly Report, 25.8.1930, pp. 16,17; Ancel 1930, pp. 152, 194-195)¹¹.

Macedonia and Thrace were divided into 17 districts with their respective Colonisation Offices where agronomists ran agricultural stations and doctors the anti-malaria and anti-tubercular dispensaries (Metallinos 1931). In the same regions, the RSC established 15 model agricultural and stud farms (Hope Simpson 1929, p. 588; RSC, Twenty-second Quarterly Report, 27.5.1929).

From 1922 to 1929, a total of 130,934 rural houses were built throughout Greece¹²: almost all – 116,905 houses for 128,912 families – in Macedonia and Thrace (Twenty-Seventh Quarterly Report, 25.8.1930)¹³.

Emergency and innovation

In 1924, on behalf of the RSC, the League of Nations held an international

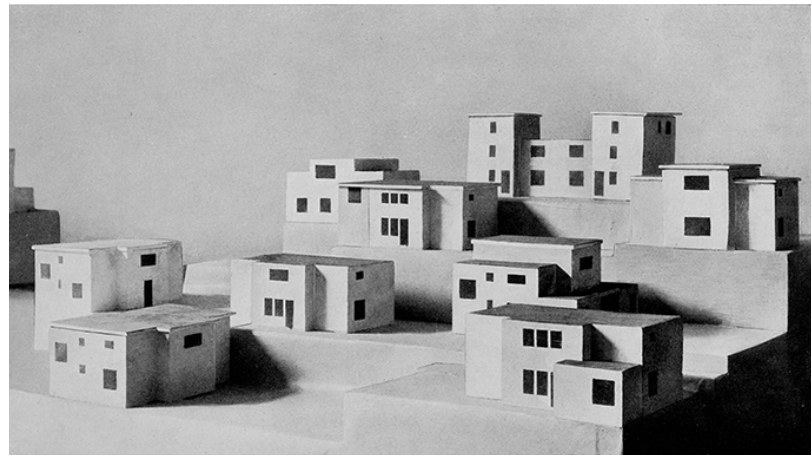
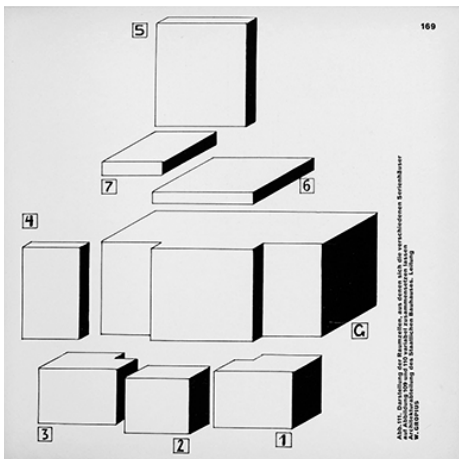


Fig. 5
Walter Gropius and Fred Forbát:
Honeycomb System ('Waben-
bau'), 1922. (source: Nierendorf
1923, pp. 169–70)



Fig. 6
The loading deck of Steamship
Attika, 9.9.1924 (source: Paul
Sommerfeld family archive).

Fig. 7
Adolf Sommerfeld (first from the
left) and Fred Forbát (standing)
on a trip to Athens). The lady in
the middle is possibly Renee
Brand, Sommerfeld's second
wife. (source: Paul Sommerfeld
family archive).

tender for 10,000 prefabricated rural dwellings. The tender-winning company was Danziger Hoch und Tiefbaugesellschaft mbH (Danzig Building and Civil Engineering Company DHTG), founded for the purpose by Adolf Sommerfeld, a Berlin-based contractor specialised in prefabricated timber structures. The “Sommerfeld method” developed during the First World War¹⁴, rose to the realm of architecture with the famous chalet at Berlin Dahlem designed by Walter Gropius and Adolf Meyer using teak obtained by dismantling an old ship and producing the interior wooden finishes in the Bauhaus workshops¹⁵. The building’s completion in 1921 was celebrated with several hundred guests, signalling its cultural and spiritual importance. In 1921, Gropius and Meyer also designed the Sommerfeld Headquarters near Berlin Botanical Garden. In view of the industrialisation of the sector, the two *bauhausers* invented the “big construction kit” and the “honeycomb-system” (*Wabenbau*)¹⁶ in collaboration with Fred Forbát, an Hungarian who had worked with them since 1920 (Colonas 2003, Tournikiotis 2019). [Fig. 5]

In 1924, Sommerfeld hired Forbát to coordinate the DHTG sites in Macedonia¹⁷. The company was registered in the Free State of Danzig¹⁸, with headquarters in Belgrade handling production, delivery and technical assistance (Forbát 2019, 86). Wooden studs were produced in Sommerfeld’s woodworking plants of Schneidemühl (Piła), Dragemuhl, Szczecin and Kolmar (Poznan) and shipped to Thessaloniki via Szczecin. [Fig. 6, 7, 8] Scheduled for implementation within half a year, from November 1924 the May 1925, the project consisted in three types of timber-framed dwellings, varying according to family size. The smallest (35 square metres) consisted of a single room with a kitchenette and a storeroom; the intermediate (45 square metres) comprised two rooms, an entrance porch, a storeroom and a barn; the largest (52 square metres) offered a better distribution and a symmetrical façade centred on the entrance setback¹⁹ [Fig. 9]. According to the contract, DHTG was to provide and assemble the timber frames taking care of the foundation and tiling works. The Company proposed cladding the timber frames by using the “Rabitz system”, a panelling consisting of a metal lattice as a plaster base, and plaster mortar: panels could thus be produced on site in shell shapes and then set up as walls or ceilings²⁰.

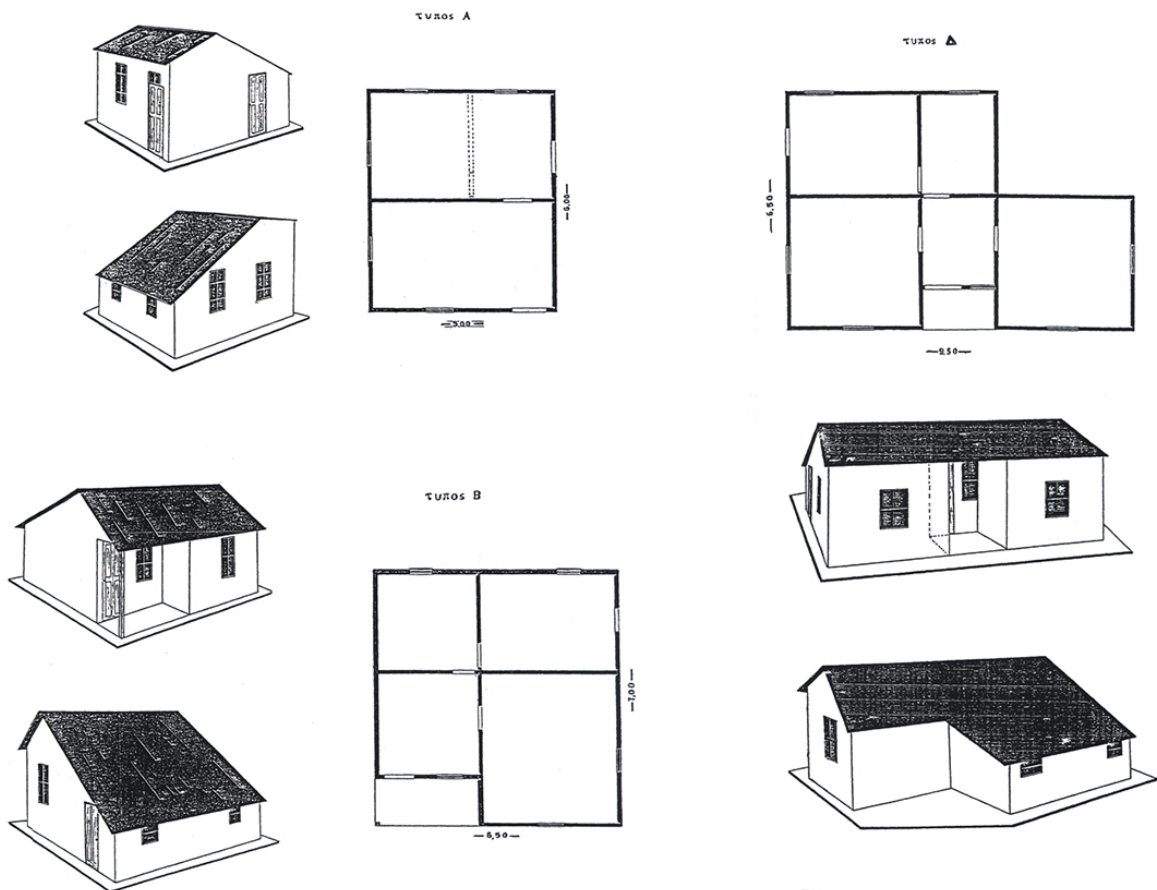
Forbát was to move to Thessaloniki, from where he could coordinate the assemblage of kits in the 80 construction sites scattered between Giannitsa in the west, Goumenissa in the north, Drama in the northeast and Chalkidiki in the south. The vast area was divided into six districts, each coordinated by a German foreman, where every site also had a German super-

Fig. 8

A DHTG team reaching a site at an early stage of preparation. (source: Paul Sommerfeld family archive).

Fig. 9

Different types of DHTG houses (source: Archive of the municipality of Nea Moudania, courtesy of Maria Lilibaki).



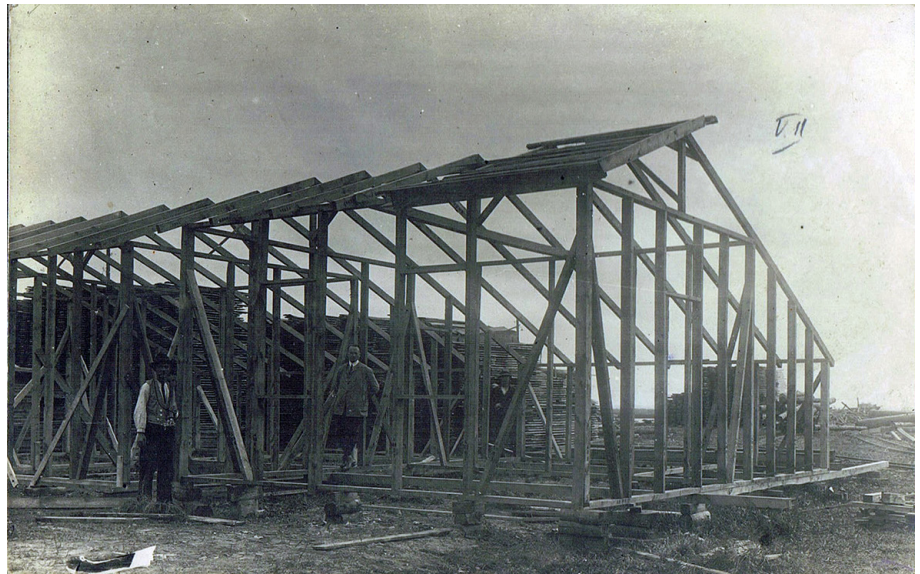


Fig. 10
Construction of a DHTG house
A / I (source: Paul Sommerfeld
family archive).

visor. Interestingly, the DHTG system put into practice Gropius' idea of producing all inter-fitting construction components in various specialized factories, eventually assembling them on site according to pre-tested procedures, so as to guarantee a fast process at a fixed price (Seelow 2018). The Colonisation services were to fill in the walls, take care of inner plastering, installation of wooden ceilings and floors. [Fig. 10]

The entire operation started in January 1925 with the plastering work assigned to local contractors²¹; in many instances, adverse circumstances forced the use of any available material, such as reinforced concrete panels, cement bricks or plain boards. The 10,000 prefabricated houses were to be ready by May 1925.

Browsing Forbát's logbook

In 2019, the Bauhaus-Archiv published the memoirs written and illustrated by Forbát in 1962, alternating working journals to personal reflections inspired by his encounters and travel experiences (Forbát 2019). Parts of the *Memoirs of an Architect from Four Countries* concern Greece, where Forbát worked from early November 1924 to May 1925, returning there as a CIAM delegate in the spring of 1933.

In early November 1924, Forbát and his wife got off the train at Belgrade central station, where they took another train to Thessaloniki (so crowded that Fred bribed the ticket inspector for the exclusive use of a compartment). At Nish the station swarmed with countless ragamuffins and layabouts. The train entered the wide Morava valley which, proceeding southwards, became narrower and rockier, with many bridges destroyed by the war. Vranje was a cluster of white houses with flat roofs. At Skopje a splendid mosque silhouetted against a large blood-red fortress. The train threaded its way up the steep walls of the Vardar valley. The night was starry and in the morning the couple alighted at Thessaloniki: «a burnt-out city where everything is being rebuilt according to a French plan»²². Only the upper town with the Turkish quarters had remained intact. The swarming district of trade and finance, along with the Jewish, Greek and Muslim quarters of the lower town, had been wiped out.

Forbát described Thessaloniki as a thicket of white minarets and concrete pillars interspersed with horizontal slabs with few habitable houses. Refugees lived in churches, ruined buildings, courtyards, cellars, shacks

cramming every open space. Despite everything, the view of the gulf with sailboats and cargo steamers against the snow-capped Olympus was hauntingly beautiful (Forbát 2019, pp. 80-82).

DGCM director Ioannis Karamanos was supported by a staff of engineers, by a responsible for transports (a white Russian) and by an additional “higher official”: an emissary of the government controlling the officials of the RSC, or an emissary of the RSC with the same task.

On 5 November, Forbát drove westwards across the plain of Thessaloniki.

We crossed a wide endless plain, then went higher and higher until we reached a village where 130 houses are being built. On the way back, it was indescribable how the bay of Saloniki suddenly reappeared in the evening light, with its anchored ships and pointed minarets. [...] The streets were full of little donkeys with two sacks hanging down their backs and an old man enthroned on top in oriental calm. One of them had baskets full of colourful chickens. You can see this everywhere in town. (Forbát 2019, p. 82) (Transl. by authors)

Adolf Sommerfeld arrived and the following day they set off for another construction site, where Forbát was asked to replace «the old Berlin big-wigs». Four days later, heading to Narés²³, one of the largest villages under construction along the Gallikos river, their car stopped on fording a stream. They were rescued by a Red Cross ambulance bus.

In his downtime at Thessaloniki, Forbát designed new housing types, a small school, an urban house that would also work for Berlin (Forbát 2019, 82-83). Forbát met Sommerfeld daily, who soon entrusted him the management of the entire DHTG organisational department. In November 1924, they were already building 60-70 villages, some on quite virgin soil, others next to pre-existing settlements. In addition to Greek refugees, construction workers came from all corners of the Balkans: Macedonians from Yugoslavia and Bulgaria, Albanians and Turks, and some Hungarians. In some villages, a mobile column of Italians worked under the supervision of a German foreman²⁴.

While DHTG was to deliver and assemble the structural skeletons, refugees themselves were to fill in the walls with bricks or dried mud blocks. Sick and weak as they were, the timber skeletons were often covered with a tent. To protect them and prevent the storms from lifting them entirely, the idea came up to integrate the skeletons with a provisional outer skin of cement raffia or wooden boarding.

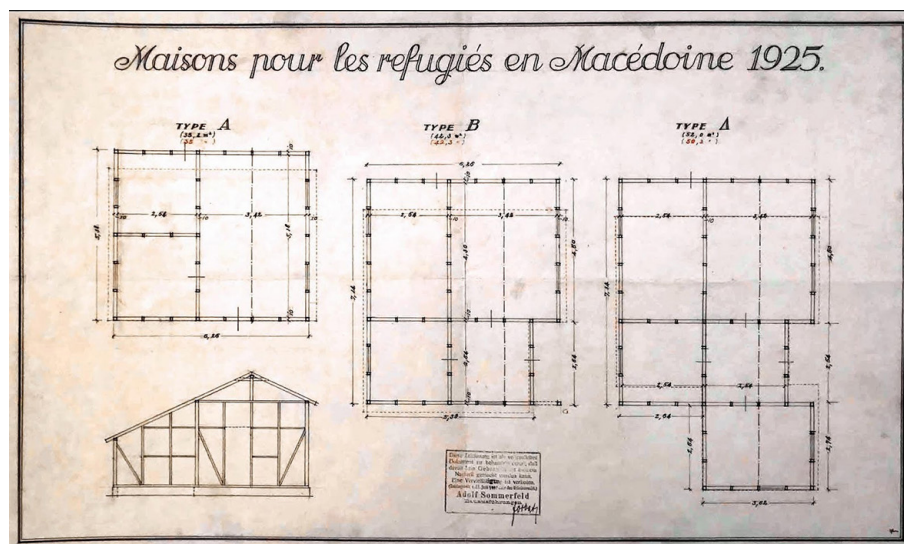
Other problems concerned transport: timber arrived by steamer, numbered according to type, from the sawmills of Schneidemühl, Kolmar and Szczecin. It was unloaded in the huge GDCM storage at the shore west of the port, next to Beşçinar garden (Makedonia, 28.12.1924), where it was bundled according to type. The Colonisation Department was to deliver these kits on sites by lorry or railway, yet in many cases nothing arrived. Challenging a clause in the contract, DHTG took over the transport buying five trucks from American army²⁵ and set up a carpentry workshop by the storage to cope with any unforeseen events.

The Berlin headquarters had standardised the woodworks for each type of house, so there were over 50 different pieces. However, as the project was intended as a prototype for similar emergencies elsewhere (Kress 2008, pp. 96-98; 2011, pp. 129-191), Forbát strove to achieve a higher level of standardisation, working on interchangeable elements, which also eased transport operations. [Fig. 11]

After a few weeks, Stephanos Deltas a former Greek minister part of the

Fig. 11

Alfred Forbát, Drawing of a refugee house, 1925 (source: The Swedish Centre for Architecture and Design, Stockholm).



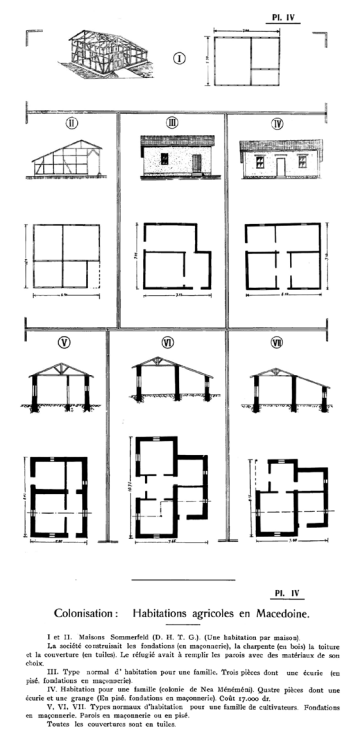
RSC, expressed Sommerfeld all his satisfaction with the new DHTG leadership. Later on, however, some refugee representatives argued that DHTG workers should be replaced by small Greek contractors. Repeated attacks in the spring of 1925 intimidated the Greek members of the RSC, who allocated all the colonisation contracts to Greek contractors. In early May, Sommerfeld and Forbát returned to Berlin, leaving only a few employees to handle the business in Thessaloniki.

Despite delays due to technical and organisational problems, by summer 1925 a total of 9,673 timber-frame units were ready: 9,228 in Macedonia and 445 in Thrace²⁶. The DHTG project turned out to be more expensive²⁷ than traditional building techniques, and less adaptable to the conditions on site (Notaras 1934, pp. 81-81). The RSC decided to outsource a further 42,045 rural dwellings to small local contractors under the supervision of the Colonisation's technical service (RSC, Eighth Quarterly Report 5.12.1925). [Fig. 12, 13, 14]

Landscapes of standardisation

In addition to the DHTG houses, the RSC built 21,015 dwellings in Macedonia, 10,982 in Thrace, and 10,048 units in the rest of Greece. These houses, also of a standard type – albeit realised with traditional building techniques, masonry foundations and walls, and a tiled roof (Ancel 1930, pp. 154-157; RSC, Twenty-seventh Quarterly Report 25.8.1930) – were slightly bigger and could receive larger families.

The simplest single-family type covered 49 sqm, the two-room house 56 sqm and the biggest one 70 sqm: to save money, they were often combined in a semi-detached unit²⁸. All plots included a vegetable garden, while the standard solution could be easily adapted to the settler's occupation. The grain farmer needed a stable for his ox or horse and a loft for his harvest, the fisherman a vast shed for his utensils and fish, the silkworm breeder a room to spread out the mulberry leaves, and the tobacco farmer a dryer protected from rain and sun. The speed of construction depended on available labour. Since many refugees were unemployed, the RSC provided them with supervisors, building materials (wood, tiles, nails) and money to build their own homes, in return for their willingness to organise their own commuting. The most common construction materials were mud brick and stone. After 1930, the availability of better building materials (i.e. baked bricks) allied to the refugees' improved economic conditions

**Fig. 12**

A Comparison of different housing types: DHTG (I, II, III, IV, upper boxes) and masonry structures built by the RSC (V, VI, VII, lower boxes) (source: League of Nations, RSC, Twenty-seventh Quarterly Report, 25.8.1930).

**Fig. 13**

A semi-detached rural house built by the RSC Colonisation Department in Macedonia, 1925. (source: Archive of the Centre for Asia Minor Studies).

Fig. 14

A DHTG house D / IV at Nea Axios near Giannitsa (source: photo by V. Hastaoglou-Martinidis).



brought about an increased size of the average house. The repetition of standard solutions, however, produced a kind of homologation in the built environment, replacing the great variety of regional styles. [Fig. 15, 16]. The geography and landscapes of Northern Greece changed dramatically. Prior to the arrival of the refugees, the plain of Thessaloniki was characterised by clusters of fisherman huts around Lake Giannitsa (the marshiest area of the plain), and few villages on the lower terraces of the Axios river valley. Their irregular layout had nothing to do with the grid-iron pattern of the new colonies – 38 in total – located along ancient Via Egnatia²⁹ on the high grounds dominating the lake from north and west [Fig. 17]. French geo-politician Jacques Ancel saw this metamorphosis in the making. At Giannitsa, on the foot of Mount Paiko, he could no longer recognise the Ottoman town extolled for its vast market and huge caravanserais. In 1923, Giannitsa had become the centre of a Colonization District. To

Fig. 15

A Refugee village of DHTG houses in Chalkidiki. (source: Benaki museum).

**Fig. 16**

The village of Mavroneri, former Karabournar, 12 km S-SW of Kilkis (source Yiannakopoulos 1992, p. 178).



the south, the old town spread out in rubble, with a last standing minaret. Turks and Bulgarians had been replaced by Thracian refugees, still wearing their brown knickerbockers, tight at the ankles, a red belt, a waistcoat and a short brown jacket. They were all sturdy planters of tobacco, corn and vines. Their neighbourhood of white rural houses had been built to the north, while another district of grey workers' houses was rising to the south-west. Out of 9,128 inhabitants, 5,383 were refugees, of whom 4,501 were farmers (Ancel 1930, pp. 193-194). [Fig 20]

Back in Athens in the Spring of 1933

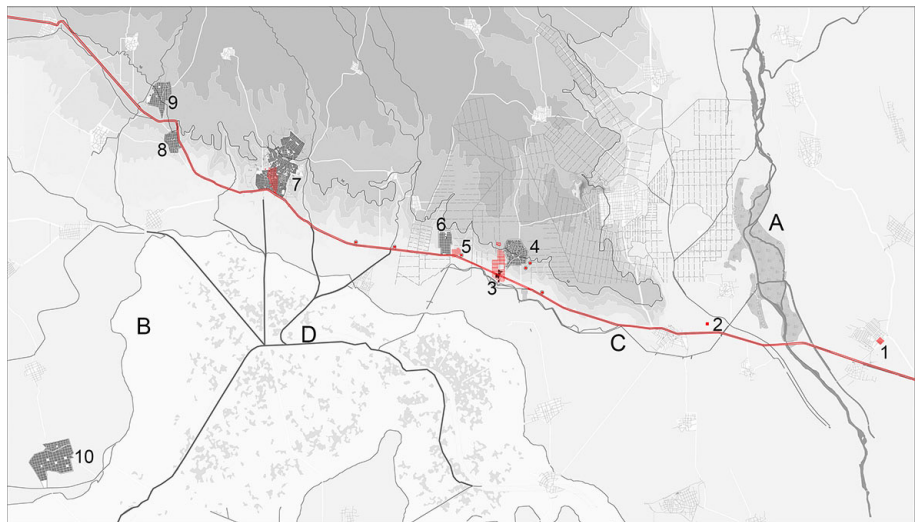
After working in Berlin for Sommerfeld³⁰, Forbát moved to Moscow in February 1932, to join Ernst May who directed an urban planning state department³¹. In July, with other 25 foreign architects working in the Soviet Union, Forbát signed a letter against the negotiations with CIRPAC, triggered by the tensions over the competition for the Palace of Soviets in Moscow³² (Tassopoulou 2020, p. 28). At the end of February 1933 Forbát left for Athens, where he was to probe the actual possibilities of holding the upcoming Congress (Athassiou et alii, 2019). His memoirs retrace this 11-day journey.

Fig. 17

Old and new villages along Via Egnatia (source: conjectural map by the authors redrawn by D. Erdim)

Legend: A. River Axios/Vardar; B. Giannitsa Lake; C. Via Egnatia (146 BCE); D. Loudias drainage canal (1930s).

1. Jacob Modiano's experimental farm (1906) now Museum of the Balkan Wars;
2. Orthodox church of St. Peter and Paul (19th c.), ruins of a minaret, and cemetery of the Bogomili (9th-10th c.);
3. Archaeological site of Pella (413 - 168 BCE) uncovered from 1914 to 1968;
4. Village of Pella, former Agii Apostoli in Greek, or Postol in Slavonic language (mixed);
5. Site of the Roman colony of Pella;
6. Nea Pella (all refugees);
7. Giannitsa, former Yenice Vardar (mixed);
8. Axios (all refugees);
9. Neos Mylotopos, former Voudrista;
10. Krya Vrysi, former Plasna.

**Fig. 18**

The main road of Giannitsa in 1918 (source: Ancel 1930, p. 161)

**Fig. 19**

New semi-detached house at Giannitsa (source: Ancel 1930, p. 161).

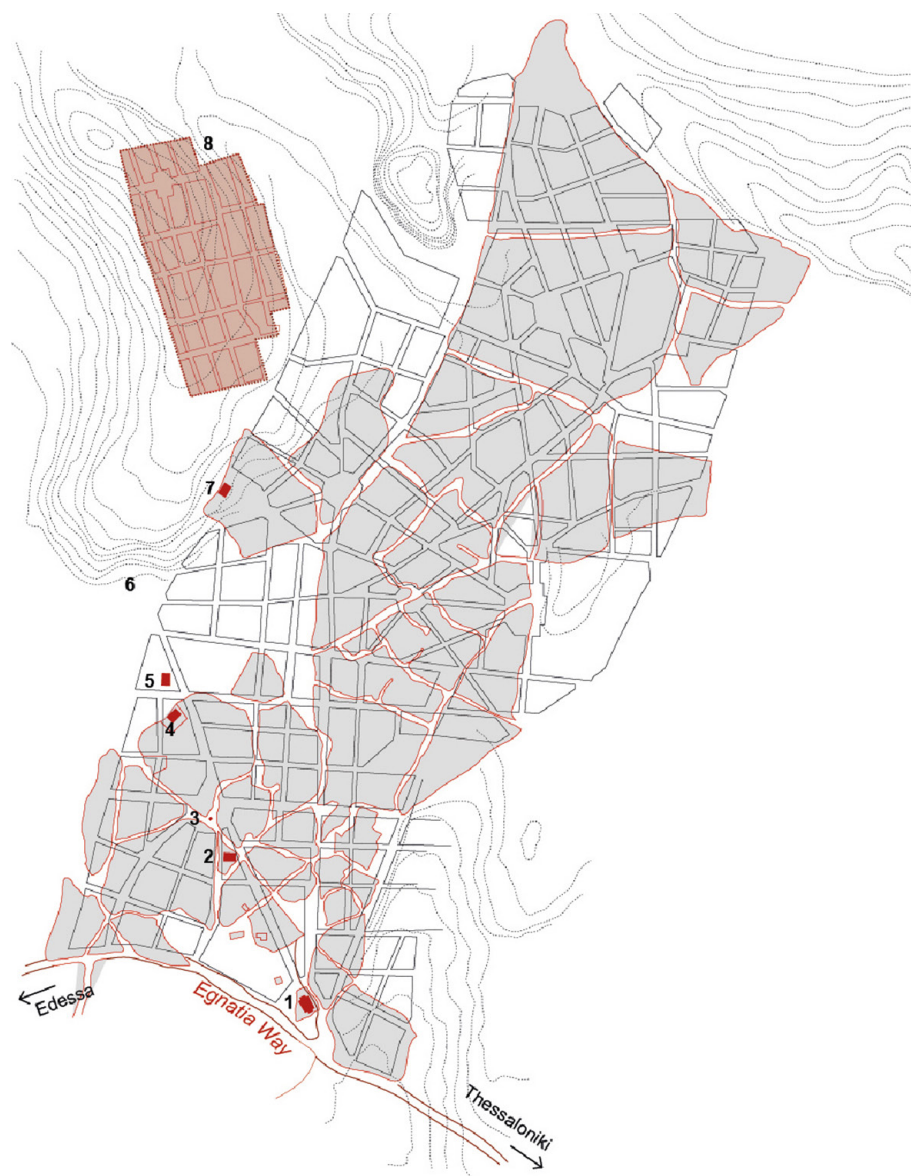


Fig. 20

Map of Giannitsa superimposing the late-1920s plan to the pre-existing urban structure. Conjectural drawing by C.Pallini and A. Korolija.

Legend.

1. Great Mosque, 1510;
2. Evrenos Bey hammam (1390-1400);
3. Mausoleum of Evrenos Bey;
4. Clock tower (1753-54);
5. Mausoleum of Ahmad Bey, late 15th c.;
6. Evrenosoglu Ahmad Bey hammam, ca. 1490;
7. Evrenosoglu Ahmad Bey Mosque, ca. 1490;
8. Thracian refugee quarter.



Having reached Odessa on 1 March, Forbát and his wife embarked on a small cargo heading to Istanbul and, while on board, heard the news of the Reichstag fire³³. The wife of an associate of Ernst Egli³⁴ was waiting for them at the port, and the three of them visited Saint Sophia, the Blue Mosque, the covered market and Eyüp cemetery; eventually, they contemplated the sunset from the Galata Tower and embarked for Thessaloniki late in the evening.

Our beloved white tower was still there, but the white, pointed minarets were missing from the cityscape. We took a walk through the Turkish city to the castle, where we discovered a small Byzantine church. [...] Then we visited the round church of Saint Georgios, a tall, old Roman building where I had climbed around a lot eight years ago. Since then, the magnificent mosaics in the 5th century dome have been completely restored. In the Basilica of Demetrios, too, restoration of the mosaics destroyed in the fire was underway under a temporary roof. (Forbát 2019, p. 139) (Transl. by authors)

In Thessaloniki, the couple embarked for Izmir, disembarking only long enough to visit the bazaar and the large cemetery: Izmir too was being rebuilt³⁵. They left bound to Athens and crossed the Aegean in the midst of a storm that subsided only in sight of Cape Sunio. An architect from Munich (working at large hospital site) would welcome them in Pirae-

us. Soon upon arrival, Fred tried to reconnect with old acquaintances like Vassilis Karamanos, brother of the DGCM Director. Ioannis Despotopoulos, trained at the Bauhaus in Weimar and graduated from TU Hanover, accompanied Fred on the ascent to the Acropolis, asking suggestions about a foreign expert willing to act as consultant for the master plan of Athens. In order to get an idea of the Greek group, Forbát met Stamos Papadakis (1906-1992), whom Giedion himself had pre-alerted, Emmanouil Kriessis (1880-1967), who had built a large university complex, and Dimitris Pikionis (1887-1968) «humanly particularly pleasant, with good buildings influenced by the wonderful cubic architecture of the Greek islands». Impressed by their works and by other recent buildings, Forbát wrote to Giedion about the continuity between modern Greek architecture and the forms of tradition: in the islands, there were endless cubist and constructivist works achieved with local building techniques³⁶ (Athanassiou et alii 2019, p. 1128). Stubbornness paid off: having reached a quorum of eight members, the Greeks wrote to Giedion. In his memoirs however, Forbát could not but comment “this time I did not have a Bauhaus for him”. With his mission accomplished, Forbát left for the Peloponnese. He met Wilhelm Dörpfeld at Olympia, taking part in some surveying work on the cell of the temple of Zeus. Undecided whether or not to return to the Soviet Union, Forbát had already asked Depotopulos about the possibilities of a job in Chalkidiki and, back from Olympia, contacted Vassilis Karamanos. As suggested, he approached the German legation to the Greek government and, in the meantime, visited with his wife Corinth, Delphi and the Argolis. They reached Patras with a small steamer, then went to Pyrgos and returned to Olympia for a few days. The next stops were Nafplio and Epidaurus. The opportunity for a job in Greece did not materialise, nevertheless Forbát decided not to return to the Soviet Union. Very bad news from Germany haunted the last days in Athens: Sommerfeld had been forced to leave³⁷ and Taut was in Vladivostok on his way to Japan. On 1 June 1933, Forbát left for Hungary, his home country³⁸.

Recognising by comparison the specificity of a case study

Massive rural resettlement in Northern Greece took the record time of seven years³⁹, a slightly shorter period than “integral reclamation” of the Pontine Plain in central Italy⁴⁰. Similarities, however, may turn misleading. Firstly, in the Greek case, land reclamation was implemented after settlement operations and not before, as in the Italian case. Secondly, one cannot but emphasise the great disparity of sources: the Italian case immediately catalysed international attention from various disciplinary fields and continued to prompt further investigations and interpretations⁴¹.

Sources on inner colonisation in the Greece of the 1920s are quite different: articles in technical journals such as *Erga* (Works) and *Technika Chronika* (Technical Annals)⁴², periodic reports by the League of Nations, some witnesses’ accounts (Morghentau 1929; Ancel 1930; Allen 1943). Quite recently, historians and architectural historians, anthropologists and political science scholars have returned to such an important period for modern Greece (Colonas 2003; Voutira 2003; Kontogiorgi 2006; Mylonas 2012; Balta 2014; Athanassiou et alii 2019; Tournikiotis 2019).

The fundamental difference between Greece and Italy concerns precisely the role of architecture. In reclaimed Pontine Plain, the “metaphysics” (Besana et alii 2002) of the new towns culminated in their squares lined with state-sponsored institutions. The Town Hall with the arengario tower⁴³,

Fig. 21

Plan of Nea Pella surrounded by fields assigned to refugees. The central road joins the chapel of Saint Paraskevi along Via Egnatia, the neo-Byzantine church of the early 1940s, the school, and the sports field uphill (drawing by D. Erdim).



the Post Office, the National Afterwork Club (*Opera Nazionale Dopolavoro*) the local branch of the National Fascist Party (*Casa del Fascio*) and of the Fascist Youth Organisation (*Casa del Balilla*) each complied with an homologated programme. With their sharp geometries, these functional squares loaded with a strong symbolic meaning identified a centre of gravity for all farmers scattered in the countryside, turning them into an «imagined community» (Anderson 1983) part of a social order granted by the new political course.

In northern Greece instead, the art of building met constrains dictated by economic contingency and lack of time, leaving little room for rhetorical narratives to find solutions to the problems at stake. In the short term, rescuing Greeks from Asia Minor meant taking sanitary measures: still in November 1924 everybody was sick with malaria and mortality was colossal (Forbát 2019, p. 82). Before villages and quarters there were temporary shelters, be it tents, abandoned houses, public buildings or makeshift shacks. Besides, after surveying the reusable buildings abandoned by Turks and Bulgarians, they still had to be repaired (Twenty-Fourth Quarterly Report, 6.12.1929, p. 4).

The construction of 2,085 rural settlements in seven years was made possible by the widespread adoption of standard solutions. Villages and neighbourhoods shared the same layout, defined by perpendicular streets 8-to-3 metres wide according their importance. An average medium-size village covered 80 building blocks, each divided into an even number of identical lots⁴⁴. Unlike re-occupied abandoned villages, new refugee settlements – be it quarters or villages – were clearly recognisable by their gridiron layout and orderly rows of evenly spaced small rural houses of a standard type. [Fig. 21]

**Fig. 22**

The first church of SaintDemetrius at Neos Skopos (Serres) under construction (source: archive of the Orpheus Cultural Association, Neos Skopos).

In the Italian case, farmhouses were an integral part of the rural estates, in Greece instead refugees were concentrated to form the new village, surrounded by vegetable gardens and, beyond them, allotted fields⁴⁵, some run by agricultural engineers from the colonisation service.

As the village was taking shape, the inhabitants proceeded to build a temporary wooden church, in view of rebuilding it in stone at a later stage. Even before being comfortably settled, they commenced to agitate for a school. Their demands were so insistent, that the RSC reserved a plot for the school in every village (Hope Simpson 1929). Initially, the village centre was made up of empty blocks awaiting for the school and the church (Government Gazette, 1923). [Fig 22] In many villages, the Commission assisted refugees in building a single-hall rudimental structure to serve as a school during the week and as a church on religious holidays. Elsewhere, an extra house was to serve temporarily as a school. Gradually, villagers tested the flexibility/reversibility of use of a standard house to accommodate shops, workshops, cafes and other collective facilities. [Fig. 23, 24] The last report by the RSC (Twenty-Seventh Quarterly Report 25. 8.1930) recorded the total number of 130,934 dwellings made available for rural refugees all over Greece from 1922 to 1929, for which 1,001,722,628 drachmas (ca 3,564,849,2 pounds) had been accounted⁴⁶. Macedonia and Thrace absorbed the quasi-totality of these dwellings, that is 116,905 houses for 128,912 rural families.

**Fig. 23**

One of the RSC houses hosting the community centre of Neos Skopos (Serres) with a war memorial (source: archive of the Orpheus Cultural Association, Neos Skopos).

Shifting boundaries between construction and architecture

Some architectural historians have ventured to clarify the role of prefabrication in modern architecture. Back in 1978, Herbert Gilbert highlighted the innovative aspects of prefabricated wooden huts in British colonisation (Gilbert 1978). More recently, Itohan Osayimwese focused on Germany (Osayimwese 2017). From 20 July to 20 October 2008 the Museum of Modern Art in New York held the exhibition *Home Delivery: Fabricating the Modern Dwelling* (Tadashi Oshima et alii, 2008) showing how prefabrication engaged many recognised masters, from Walter Gropius to Richard Buckminster Fuller. In June 2021, Haifa's Technion organised a webinar on *Mass Housing and Prefabrication*, involving experts in the field (Aleksandrowicz 2017, Cuypers 2020, Glendinning 2021).

The rural colonisation of Northern Greece offers an unprecedented field of observation on the subject. The settlement of so many refugees, in a situation of housing shortage, accelerated the modernisation of the building sector, promoting the integration of logistics, standardisation, prefabrication, rationalisation and large-scale production. Planning and design problems were part of an overall process of nation building and territorial restructuring. Refugee posed a multifaceted challenge. While taking a census of potential "embryos of community", the various kind of available resources had also to be mapped: land, buildings and villages abandoned by the Turks and Bulgarians, properties expropriated from religious bodies. Moreover, the grid-iron layout assimilated rural villages to the refugee quarters in the outskirts of Athens and Thessaloniki. [Fig. 25]

Fig. 24

The two churches of Axos (Giannitsa): the earliest (in the forefront) follows a hall layout, the second (in the background) featured a cross-in-square plan typical of Byzantine architecture (source: photo by C. Pallini, 2018)

The defeat in Asia Minor and the arrival of 1,221,849 refugees, the economic crisis and political instability, overshadowed any idealised vision of Greece. Dire straits set in motion a bottom-up process, whereby the doctor, the engineer and the architect had their place near the colonist himself. Somehow paradoxically, just as the Mediterranean was seen as North Star of modern architecture, the making and remaking of history burst into the



Fig. 25

Thessaloniki in 1928, with the walled city destroyed by fire and surrounded by refugee settlements (source: drawing by C. Pallini), based on Umgebungs-karte von Saloniki, 1928-1939, 1:25.000

present, re-proposing the relationship between architecture and settlement phenomena in all its complexity. Disregarding these phenomena, we may end up talking about architecture regardless of its degree of necessity.

In the 1920s Greece, and the New Lands in particular, became a great laboratory of problem-solving. In 1938, *L'Architecture d'Aujourd'hui* published a special issue on Greece; one of the articles, illustrated by a rich iconographic apparatus, argued that urban infrastructure and tourism had played the lion's share in the modernisation of the country, along with important areas of public welfare, such as education, health, road infrastructure and housing for refugees (Sirvin 1938).

Notes

¹ The architectural journal *Quadrante* was published from 1932 to 1934 promoting rationalist architecture in the context of fascist ideology (Rifkin 2012).

² Dedeagatch, present Alexandroupolis, was the main evacuation centre.

³ These were the so-called New Lands acquired by Greece: Macedonia in the end of the Balkan Wars (1912-1913) and Western Thrace in 1919. Here, with the arrival of refugees from Asia Minor, the Greek-Orthodox population rose from 42.6% in 1912 to 88.8% in 1926 (Aigidis 1934, p. 168, Pentzopoulos 1962, p. 134).

⁴ The League of Nations was founded on 10 January 1920 by the Paris Peace Conference.

⁵ US diplomat Henry Morgenthau Sr. headed the RSC. The other members were John Campbell from the Indian Civil Service (also representing the Bank of England), and the Greeks Pericles Argyropoulos and Stefanos Deltas. The following RSC chairmen were Charles P. Howland and Charles B. Eddy.

⁶ 1,088 in Macedonia, 623 in Thrace, 212 in Crete and 162 throughout Greece.

⁷ Even if many villages had been destroyed during the previous decade of war, there were still houses available (Notaras 1934, pp. 12-13).

⁸ Specialists from the School of Philosophy of the Aristotle University of Thessaloniki played a part in this process (RSC, List of the refugee settlements in Macedonia with their new names 1928).

⁹ Refugees owed to the State for housing, equipment and supplies, but most of their

debts remained unpaid and were eventually cancelled in the 1940s.

¹⁰ It was Eleftherios Venizelos (1864-1936) who signed the Treaty of Lausanne as Greece's representative, a key figure of the Greek political scene until 1932.

¹¹ In 1929, the GDCM employed 1,010 people (more than half of the colonisation staff) of which 130 were agronomists, 112 surveyors/topographers and 112 health officers.

¹² For a total expenditure of 1,001,722,628 drachmas, approximately £3,564,849.2.

¹³ In the years that followed, the RSC strove to maintain existing settlements and prevent the less successful, mostly in the mountains at the border of Macedonia and Thrace, from being abandoned.

¹⁴ Adolf Sommerfeld (1886–1964) experimented with material-saving prefabrication methods for construction of industrial structures, military halls and troop accommodation. He patented a construction system which layered relatively advanced thermal insulation materials between factory-cut, interlocking timber, building a prototype prefabricated wooden house.

¹⁵ The interiors were decorated with reliefs depicting devices and joints typical of carpentry work, evoking sectors of the Sommerfeld enterprise (Berdini 1983, pp. 35-37). At that time Gropius directed the carpentry workshop at the Bauhaus, and sought to facilitate collaboration between masters, apprentices, artists and designers in pursuit of a unity of the arts.

¹⁶ The “big construction kit” consisted of six basic modules of different sizes which could be combined to form different housing units; the “honeycomb-system” instead consisted of a basic module that derived its variability from the honeycomb-like “addition and attachment of linked space cells according to the number of heads and the needs of the inhabitants”. Both were presented at the first Bauhaus exhibition *Art and Technology - A New Unity* held in Weimar in 1923 (Seelow 2018).

¹⁷ Trained as an architect at the University of Budapest and at the Technical University of Munich, Fred Forbát had already worked for the Berlin-based AHAG (Allgemeine Häuserbau AG) run by Adolf Sommerfeld, drawing up a plan for Zehlendorf-West AG, which brought him into contact with Bruno Taut, Otto R. Salvisberg and Hugo Häring (Forbát 2019, 91-92). On its part, Sommerfeld also collaborated with Richard Neutra (Sommerfeld Houses project, 1923; Bürgerhaus quarter, 1930s), and Bruno Taut (Großsiedlung Onkel Toms Hütte, 1926-1932). In 1923, Sommerfeld was also commissioned a housing development on Mount Carmel (Haifa, British-Mandate Palestine), carried out with Erich Mendelsohn and Richard Kauffmann.

¹⁸ With the Treaty of Versailles (1919) Danzig, then a German city, was separated from Germany and made a free city under the protection of the League of Nations. Thereby, from 1920 to 1939, Danzig was a semi-autonomous city-state consisting of a port on the Baltic Sea and nearly 200 other localities in the surrounding areas.

¹⁹ Some of these buildings still remain at the villages of Nea Pella, Nea Axos and Aravissos. Houses of the third type were built in the colony of Nea Menemeni west of Thessaloniki.

²⁰ The Rabitz system was described in detail in the local newspaper *Makedonia*, 21.5.1925 (in Greek). The process was patented in 1878 by Carl Rabitz, a Berlin master mason. The Rabitz system is still in use, especially in interior design and monument preservation. https://second.wiki/wiki/carl_rabitz

²¹ Alternative panelling techniques were also considered (*To Fos*, 21.5.1925). The project was launched in early January 1925, in a meeting between Fred Forbát and the Colonisation authorities (*Makedonia*, 9.1.1925).

²² The fire of August 1917, five years after the port-city had become part of Greece, was another catastrophe with brought about radical change in a matter of years. In 1915, Greek Thessaloniki was the seat of a Provisional Government and a transit camp for the troops of the Entente. A seven-member international commission was set up to study the reconstruction plan. French planner Ernest Hébrard (1875-1933) - already on site when fire occurred as head of the French Army Archaeological Service - soon acquired a leading role.

²³ Now Nea Philadelphia.

²⁴ Forbát's wife filed the weekly reports for the police, listing workers' names and passports numbers.

²⁵ The logistics was coordinated by Fritz Dörpfeld, son of the famous archaeologist Wilhelm Dörpfeld, for which also worked Erich Kühn, a Poelzig student newly-graduated.

²⁶ The total expenditure amounted to £ 572,124.3 with an average cost of £ 55 to 77

per dwelling type (Notaras 1934, pp. 65-66).

²⁷ The high cost of the DHTG project, which according to Celina Kress (2008, p. 97) «made Sommerfeld, paid in English pounds, the largest foreign exchange earner of the Reich», caused the fierce critics of the anti-Venizelist Press throughout 1925 (*Empros* 9.6.1925, *To Fos* 21.5.1925).

²⁸ The average cost of these dwellings was 25,000 to 40,000 drachmas, depending of the dwelling type (Notaras 1934, p. 83).

²⁹ Via Egnatia was built by the Romans in 146 BCE as a military road, an extension of the Via Appia from the Adriatic to the Black Sea. In the plain west of Thessaloniki, Via Egnatia crossed the north-south route of the Vardar and Morava valleys, the same followed by Forbát to reach Thessaloniki by train.

³⁰ In 1926, Forbát joined the Association of progressive architecture *Der Ring*. His collaboration with Sommerfeld continued until 1928 as chief architect of the AHAG. In Berlin, he worked at the Ringsiedlung Siemensstadt (1929-1931) and at the multi-purpose Mommsenstadion (1930).

<http://architectuul.com/architect/fred-forbat> & <http://kg.ikb.kit.edu/arch-exil/312.php>

³¹ They developed plans for the new cities of Karaganda (Kazakhstan), Lopatinski (Volga) and Magnitogorsk (Ural).

³² The failed Moscow conference has received extensive scholarly coverage (Somer 2007, Mumford 2009, Flierl 2016). Andreas Giacumakatos (2003) instead reconstructed the complex interpersonal and institutional relationships that led to the choice of Athens as an alternative venue. On his part, Forbát attributed to Breuer the idea of a congress on board of a steamer travelling from Marseilles to Athens, where the international delegations were to meet the Greek group. This issue has been further explored by Maria Tassopoulou (2020).

³³ The event that marked the rise of National Socialism in Germany.

³⁴ Ernst Egli (1893-1974), an Austrian-Swiss architect and town planner, had moved to Turkey in 1927 where he was to realise most of his works and exert a decisive influence on the construction of Ankara as the new capital (1927-1938). Atatürk himself called upon Egli to modernise school architecture.

³⁵ Giaur (infidel) Izmir was wiped out by fire in September 1922, ten month before the compulsory population exchange ratified by the Treaty of Lausanne. As for Thessaloniki, rebuilding Izmir in Atatürk's Turkey meant erasing the cumbersome memory of the multi-ethnic Ottoman city. On opposite sides of the geo-political scene, both reconstruction plans envisaged a functional city featuring an administrative centre, the port, the university and the trade fair (Hastaoglou-Marinidis, Pallini 2013).

³⁶ Forbát's considerations were confirmed by the CIAM delegates visiting the Cyclades islands: the anonymous architecture, with its white walls devoid of decoration and multi-level sections, anticipated the principles that had been distilled for about a decade.

³⁷ In 1933, due to his Jewish origin, Adolf Sommerfeld moved to Switzerland and thence to France. In 1935 he immigrated to Palestine and in 1938 to Britain, acquiring the British citizenship. After 1945 he returned to Berlin and retrieved his activity in the postwar reconstruction of Berlin and southern Germany. <http://www.tagesspiegel.de/berlin/mann-des-moertels/4682584.html>.

³⁸ In 1938, due to the political situation, Forbát emigrated to Sweden where, in the 1940s and 1950s, he worked in urban planning, teaching at the Royal Institute of Technology in Stockholm.

³⁹ Seven years from the establishment of the RSC in 1923 to its dissolution in 1930.

⁴⁰ Rural development schemes implemented in Mussolini's Italy marked a milestone of a debate dating back to the years after unification (1861). «Integral reclamation» concerned the obligation to reclaim land for agriculture upon completion of hydraulic works, along with the urgency to fight malaria, a basic condition for permanent settlement.

⁴¹ The mutual interaction of town planning and architecture in the Italian new towns of the 1930s has fascinated many scholars (Mariani 1976, Nuti and Martinelli 1981, Besana et alii 2002, Pellegrini 2005, Caprotti 2007). Diane Ghirardo (1989) ventured to compare Fascist Italy and the American New Deal. Italian writer Antonio Pennacchi (2008) proposed an itinerary in discovery of Mussolini's new towns. Armiero et alii (2022) focused instead on fascist approach to environmental change.

⁴² The journal of the Technical Chamber of Greece TEE.

⁴³ The arengario tower reinterpreted and evoked the place reserved for public assemblies and administration of justice in the Italian cities of the Middle Age.

⁴⁴ In general, the number of plots per block ranged from 6 to 8 with an area varying from 500 to 800 square metres. In the village of Axos, the blocks consisted of 4 plots, Nea Pella instead was characterised by oblong blocks of 12 plots.

⁴⁵ Farm parcels granted to each family were scattered in various locations according to the quality of land and type of crop.

⁴⁶ Of which 628,071,472 drachmas in Macedonia and 94,190,959 in Thrace (Notaras 1934, p. 22).

References

- AA.VV. (1933) – *La Grèce actuelle*. Ministère des Affaires Etrangères, Athènes.
- AIGIDIS A. (1934) – *Greece without refugees: a historical, fiscal, economic and social study of the refugee issue*. Alevropoulos, Athens (in Greek).
- ALLEN H. (1943) – *Come over into Macedonia*. Rutgers University Press, New Brunswick.
- ANCEL J. (1930) – *La Macédoine; son évolution contemporaine*. Delagrave, Paris.
- ANDERSON B. (1983) – *Imagined Communities*. Verso, London-New York.
- ARMIERO M., BIASILLO R. and GRAF VON HARDENBERG W. (2022) – *La natura del duce. Una storia ambientale del fascismo*. Einaudi, Torino.
- ATHANASSIOU E., DIMA V., KARALI K. and TOURNIKIOTIS P. (2019) – “The Modern Gaze of Foreign Architects Travelling to Interwar Greece: Urban Planning, Archaeology, Aegean Culture, and Tourism”. *Heritage*, 2, 1117-1135. <https://doi.org/10.3390/heritage2020073>
- BALTA E. (2014) – *The Exchange of Populations. Historiography and Refugee Memory*. Istos, Istanbul.
- BARDI P.M. (1933) – “Cronaca di Viaggio”. *Quadrante*, 5, 1-35.
- BERDINI P. (1983) – *Walter Gropius*. Zanichelli, Bologna
- BESANA R., CARLI C. F., DEVOTI L. and PRISCO L. (edit by) (2002) – *Metafisica Costruita. Le città di fondazione degli anni Trenta dall'Italia all'Oltremare*. Touring Club Italiano, Milano.
- CAPROTTI F. (2007) – *Mussolini's Cities. Internal Colonisation in Italy, 1930-1939*. Cambria Press, Youngstown (NY).
- CHATER M. (1925) – “History's Greater Trek”. *National Geographic Magazine*, 5, 533-590.
- COLONAS V. (2003) – “Housing and the Architectural Expression of Asia Minor Greeks Before and After 1923”. In: R. Hirschon (edit by), *Crossing the Aegean: an appraisal of the 1923 compulsory population exchange between Greece and Turkey*. Berghahn Books, New York.
- CUPERS K. (2021) – “The Global Age of Mass Housing”. In: D. Stratigakos (edit by), *A Cultural History of the Home in the Modern Age*. Bloomsbury, London.
- ERCOLE G. (1922) – “En avion, au-dessus de la Trace”. *L'Illustration*, 4157, 437.
- FLIERL T. (2016) – “The 4th CIAM Congress in Moscow. Preparation and Failure (1929-1933)”. *Quaestio Rossica*, vol. 4, 3, 19-33. DOI: 10.15826/qr.2016.3.173
- FORBÁT F. (2019) – *Erinnerungen eines Architekten aus vier Ländern*. Bauhaus-Archiv, Berlin.
- GHIRARDO D. (1989) – *Building New Communities. New Deal America and Fascist Italy*. Princeton University Press, Princeton.
- GIACUMACATOS A. (2003) – “The 4th CIAM and international relations in the 1930s”. In: A. Giacumacatos, *Elements for Modern greek Architecture*. The Cultural

- Foundation of the National Bank of Greece MIET, Athens (in Greek).
- GILBERT H. (1978) – *The British Contribution in the Nineteenth Century*. The Johns Hopkins University Press, Baltimore.
- GLENDINNING M. (2021) – *Mass Housing: Modern Architecture and State Power*. Bloomsbury, London.
- HASTAOGLOU-MARTINIDIS V. and PALLINI C. (2013) – “Identikits of Smyrna at Turbulent Times through Surveys, Plans, Reference and Projects”. *Città e Storia*, 2, 379-404.
- HOPE SIMPSON J. (1929) – “The Work of the Greek Refugee Settlement Commission”. *Journal of the Royal Institute of International Affairs*, vol. 8, 6, 583-604.
- KONTOGIORGI E. (2006) – *Population Exchange in Greek Macedonia: The Rural Settlement of Refugees 1922-1930*. Clarendon Press, Oxford.
- KRESS C. (2008) – *Zwischen Bauhaus und Bürgerhaus. Die Projekte des Berliner Bauunternehmers Adolf Sommerfeld. Zur Kontinuität suburbaner Stadtproduktion und rationellen Bauens in Deutschland 1910-1970*, PhD Thesis, TU Berlin. DOI: 10.14279/depositonce-2012.
- KRESS C. (2011) – *Adolf Sommerfeld – Andrew Sommerfeld. Bauen für Berlin 1910–1970*. Lukas Verlag, Berlin.
- KRITIKOS G. (2005) – “The Agricultural Settlement of Refugees: A Source of Productive Work and Stability in Greece, 1923-1930”. *Agricultural History*, 79, 3, 321-346.
- MARIANI R. (1976) – *Fascismo e città nuove*. Milano, Feltrinelli.
- METALLINOS M. (1931) – *Commission d'établissement des réfugiés: Comptes rendus du service sanitaire. Juin 1925 - Décembre 1929*. Imprimerie Française Le Progrès, Athènes.
- MORGENTHAU H. (1929) – *I was sent to Athens*. Doubleday, New York.
- MUMFORD E. (2009) – “CIAM and the Communist Bloc, 1928–59”. *The Journal of Architecture*, 14:2, 237-254.
- MYLONAS H. (2012) – *The Politics of Nation-Building. Making Co-Nationals, Refugees and Minorities*. Cambridge University Press, Cambridge.
- NIERENDORF K. (1923) – *Staatliches Bauhaus Weimar 1919–1923*. Bauhausverlag, Weimar-Munich.
- NOTARAS M. (1934) – *The Rural Settlement of the Refugees*. Chronika Press, Athens (in Greek).
- NUTI L. and MARTINELLI R. (1981) – *Le città di strapaese: la politica di fondazione nel ventennio*. Franco Angeli, Milano.
- OSAYIMWESE I. (2017) – *Colonialism and Modern Architecture in Germany*. University of Pittsburgh Press.
- PELLEGRINI G. (edit by) (2005) – *Città di Fondazione italiane 1928-1942*. Novecento, Latina.
- PENNACCHI A. (2008) – *Fascio e martello. Viaggio per le città del duce*. Laterza, Bari.
- PENTZOPOULOS D. (1962) – *The Balkan exchange of minorities and its impact upon Greece*. Mouton, Paris.
- RIFKIN D. (2012) – *The Battle for Modernism. Quadrante and the Politicization of Architectural Discourse in Fascist Italy*. Marsilio, Centro Internazionale di Studi Andrea Palladio, Vicenza.
- SIRVIN P. (1938) – “Grèce”. *L'Architecture d'Aujourd'hui*, 10.
- SEELOW A.M. (2018) – “The Construction Kit and the Assembly Line - Walter Gropius' Concepts for Rationalizing Architecture”. *Arts*, 7 (4), 95. <https://doi.org/10.3390/arts7040095>.

SOMMER K. (2007) – *The Functional City. The CIAM and Cornelis van Eesteren, 1928-1960*. Rotterdam, NAI Publishers.

TADASHI OSHIMA K., WAERN R., BERGDOLL B. and CHRISTENSEN P. (2008) – *Home Delivery: Fabricating the Modern Dwelling*. MoMA, New York.

TASSOPOULOU M. (2020) – *The common ground of Modern Architecture. The Functional City*. PhD Thesis, NTUA, Atene (in Greek).

TOURNIKIOTIS P. (2019) – “Fred Forbát in Greece. Thessaloniki, Athens, Olympia”. In: A. Giacomacatos, S. Georgiadis (edit by) *Bauhaus and Greece*. Kapon, Athens, pp. 234-238 (English and Greek).

VOUTIRA E. (2003) – “When Greeks meet other Greeks: settlement policy issues in the contemporary Greek context”. In: R. Hirschon (edit by), *Crossing the Aegean: an appraisal of the 1923 compulsory population exchange between Greece and Turkey*. Berghahn Books, New York.

YIANNAKOPOULOS G. (1992) – *Refugee Greece*. Centre for Asia Minor Studies, Athens.

Official documents

Government Gazette, 1923 (Legislative Decree On rural resettlement of refugees, Government Gazette, No 190, 13 July 1923)

RSC, Eighth Quarterly Report, 5 December 1925

RSC, Twenty-second Quarterly Report, 27 May 1929.

RSC, Twenty-fourth Quarterly Report, 6 December 1929

RSC, List of the refugee settlements in Macedonia with their new names, 1928

RSC, Twenty-seventh Quarterly Report, 25 August 1930

Newspapers

Empros, 9 June 1925

Makedonia, 28 November 1924

Makedonia, 9 January 1925

Makedonia, 21 May 1925

To Fos, 21 May 1925

Sitography

<http://www.tagesspiegel.de/berlin/mann-des-moertels/4682584.html>

https://www.getty.edu/research/exhibitions_events/exhibitions/bauhaus/new_artist/body_spirit/architectue

<http://architectuul.com/architect/fred-forbat> & <http://kg.ikb.kit.edu/arch-exil/312.php>

https://second.wiki/wiki/carl_rabitz

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