

# MODERN APPLIED ART STYLE OF JŪLIJS MADERNIEKS. INSPIRATION FOR CONTEMPORARY DESIGNERS AND MATHEMATICS

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Jūlijs Madernieks (1870–1955) is a unique personality in the history of Latvian art, who has purposefully dedicated his life to the creation of original sample compositions of applied art, which today can surely be called “the style of Madernieks” [1]. He has also been called the first Latvian designer. An innovator, since in his original compositions he combined Latvian ethnography, the mythically fabulous local nature, visualisation of his lyrically musical feelings in ornament and the latest findings in the art of his time. Madernieks’ ornaments might be interesting and “understandable” to nowadays mathematicians and programmers. Thanks to the ambitious project of the Institute of Art History of the Art Academy of Latvia at the beginning of the 21st century – to write the history of Latvian art in six volumes from prehistory to the present day – those interested have got the opportunity to see Jūlijs Madernieks’ creative heritage in the local and European context of art history. So far, three volumes of *Latvian Art History* have been published, revealing the artistic phenomena in Latvia from the end of the 18th century up to 1940 [2]. All volumes have been recognised by the Latvian Academy of Sciences as highlights of 2014, 2016, 2019 in Latvian science. The interpretations of the researchers published in these collective monographs also helped to shape this text.

## SEEKER OF NATIONAL IDENTITY IN THE ORNAMENT OF DECORATIVE ART

Jūlijs Madernieks was born in the family of a tenant of Vecgulbene manor. He attended Rīga Craftsmen’s Association School of Crafts (1891–1892) as a free listener where he studied with Oskars Felsko (1848–1921) with the aim of preparing for entrance exams at Baron Stieglitz’s Central Technical Drawing School. Madernieks entered the Stieglitz School in St. Petersburg in 1892. During the studies until 1898, he acquired the skills necessary for decorative art, specialising in decorative painting. In St. Petersburg he joined the Latvian artists’ group *Rūķis*, where he got acquainted with other Latvian art students and stabilised his main idea in art – to create original, however, Latvian art. In the history of Latvian art, we often call participants of the former group *Rūķis* the founders of Latvian professional art – the first painters, graphic artists, sculptors and designers. Immediately after graduating from Stieglitz’s Central Technical Drawing School in St. Petersburg, he got a scholarship and enriched his understanding of the possibilities of applied art in Paris (1899–1900), London and Munich (Fig. 1). In 1903, J. Madernieks settled in Rīga, where he developed projects of unified interior ensembles. In Rīga, which was subject to rapid urbanisation, at



*Fig. 1.*  
 Photograph of Jūlijs Madernieks. The late 19th and early 20th century. Art Academy of Latvia Information Centre. Folder No. 57

the beginning of the 20th century, apartment buildings were being built and had to be fashionably furnished. Jūlijs Madernieks created ornamental compositions mostly for Latvian customers, looking for solutions for visualisation of the national identity: wallpapers, ceiling paintings, furniture, and even clothing. Around 1904, he opened his drawing and painting studio for Latvian youth. In the studio, special emphasis was placed on creating original compositions. Many of Madernieks' students created the art environment of Latvia in the 1920s and 1930s; for example, Ansis Cīrulis (1883–1942) followed Madernieks' ideas and became a recognisable master of applied arts himself. He has designed the interior of the Ambassadors Accreditation Hall at the Rīga Castle [3]. Until 1937, in parallel with work in his studio, Madernieks has worked as a teacher of drawing in several secondary schools.

The artist has been called a master of ornament. Initially his work was dominated by a decorative line of sharp angles, while in the 1920s and 1930s the main means of artistic expression were colour contrasts, associative ethnic decors, pixel-like lines and square (Fig. 2). At the beginning of the 20th century, Madernieks' search of ornament can be seen in the artistic design of books, magazines and in the original compositions of ornament for applied art. Nowadays, mathematicians and programmers are able to notice reflection symmetry, parallel transfer or operational amplifier, the latest was invented only in the 1960s, some years after Madernieks passed away. Programmers might notice a visualisation of graph theory when looking at Madernieks' ornamental structures. Madernieks' visual insights, which have arisen at least since 1903 by analysing the ethnographic materials collected by the Rīga Latvian Society (nowadays they are in the collection of the National History Museum of Latvia), are compiled in the original



*Fig. 2.*  
 "Organ's" pattern designed by Jūlijs Madernieks. Until 1930. Decorative Arts and Design Museum, Rīga

sample composition album *Ornaments*. In the creation of manual graphics, black-and-white depictions of graphic ornaments have been developed in the ink technique. Jūlijs Madernieks is the first representative of Latvian applied art to have developed his own sample album of original compositions. The artist offered a new form to the Latvian alphabet as an alternative to the Gothic font. Madernieks' sample compositions are distinctly geometric, rhythmic, dominated by sharp line solutions. By his sample compositions, Jūlijs Madernieks wanted to offer an alternative aesthetics to masters of handicrafts. These sample compositions of ornaments aroused interest and were used to decorate various materials in the woven and embroidered fabrics of the arts and crafts, metal, wood and ceramics. In the compositions of the ornament, Madernieks has attached great importance not only to decorative lines, but also to colour combinations, gaining inspiration in the ethnographic textile art – basic colours and harmonious halftones [4]. In the 1920s and 1930s, Jūlijs Madernieks created ornaments and forms of model compositions, continuing with the compositions of the geometric ornament (Fig. 3).

The basis of Madernieks' style is the logic of the combination of rhythmic geometric elements, at angles of 45 and 90 degrees, analytically evaluated at the beginning of the 20th century and taken over from the knitted mittens, embroidered woollen shawls, woven sashes and fabrics for skirts of the 18th and 19th centuries. The style of Madernieks is dominated by a language new to the Latvian art – the language of an associatively imaginative graphic ornament, created by expressive angular lines. There should be the publishing house *Zalktis* (grass snake) and the visual language created for it. The image of *zalktis* has a meaning in Latvian mythical thought and in the 19th/20th century it became a symbol of wisdom. Atis Ķeniņš (1874–1961), a Latvian lawyer and promoter of education, was the editor of *Zalktis* and advocated especially for Latvian art and artistically high-quality books, that can be seen in the graphic solutions of *Zalktis* created by Madernieks. Jūlijs Madernieks worked as a teacher of drawing at Atis Ķeniņš School, which was located in a specially designed national romantic style building by Konstantīns Pēkšēns (1859–1928) and



Fig. 3. Photograph of Jūlijs Madernieks in his studio. 1941. Art Academy of Latvia Information Centre. Folder No. 57

Eižens Laube (1880–1967) [5]. It was opened in 1905, and Jūlijs Madernieks developed sketches of the sample interior composition of the building. A characteristic feature of the turn of the 19th/20th century was a request for applied art artists to develop a stylistically unified interior ensemble – ceiling and wall decorations, furniture. The ornamentally saturated wall and ceiling ornament sketches created by Madernieks were implemented by professional craftsmen: painters and carpenters. The first interior design was accomplished in 1903 by order of the lawyer Fricis Alberts for his Rīga apartment. Madernieks had created sketches for wall and ceiling paintings, furniture shapes and decor, and eventually they gained attention as a modern solution. Until the First World War, unified interior ensembles for Madernieks were ordered by the wealthy layer of Latvians living in Rīga. For example, the family of the Latvian lawyer Friedrihs Grosvalds (1850–1924). In the 1920s, Madernieks designed the interior (wall paintings and furniture) for Sigulda Writers' and Journalists' Palace. Nowadays, Gulbene Municipality History and Art Museum displays the interior design that Madernieks designed for his own apartment. For the interior of the State Chancellery (today – Ministry of Foreign Affairs), J. Madernieks developed a wall and ceiling painting



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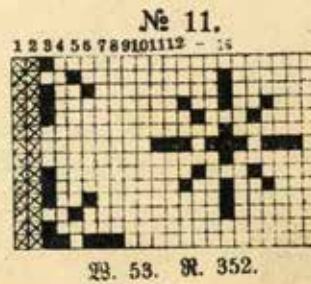
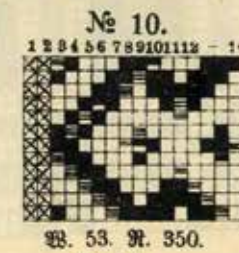
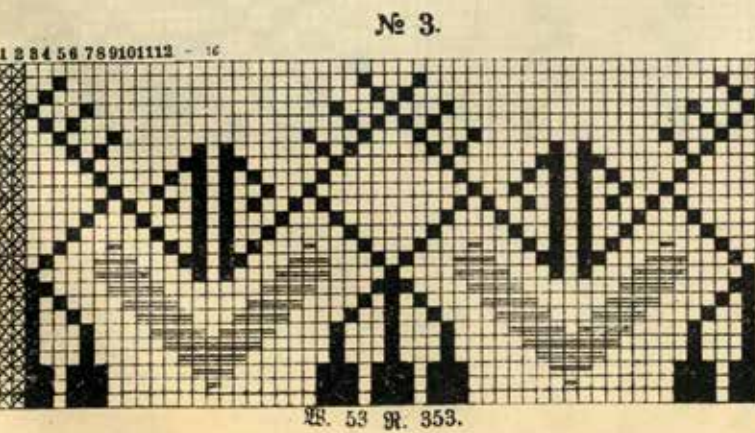
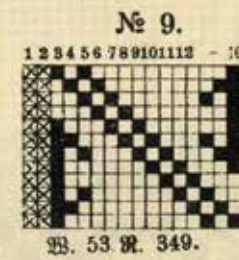
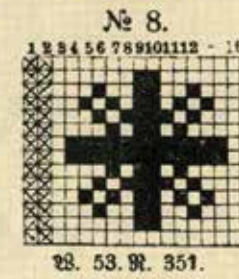
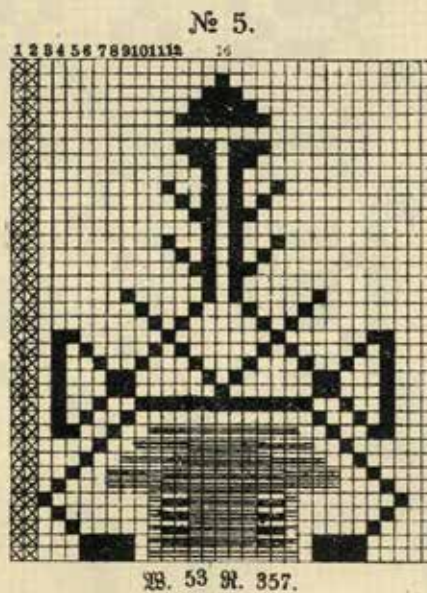
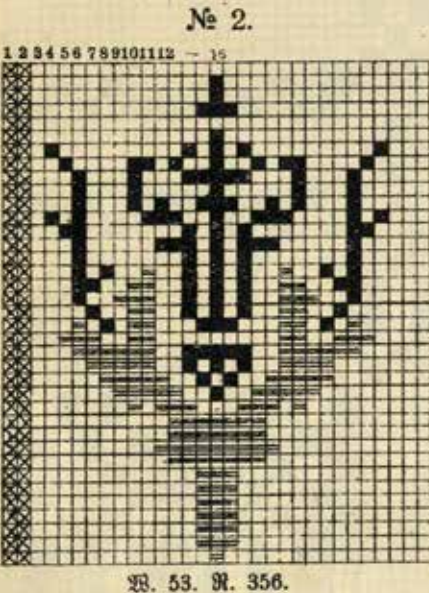
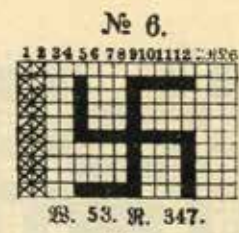
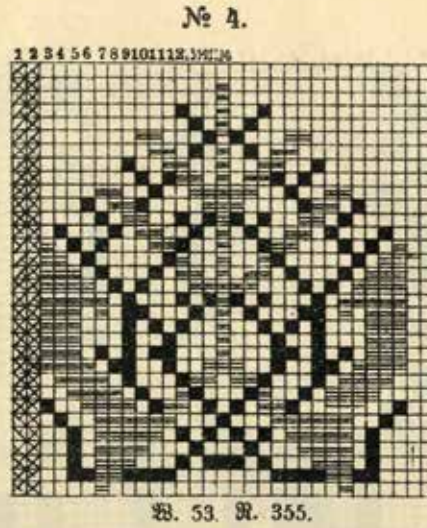


Fig. 4. Patterns (1–5) made by Jūlijs Madernieks. Pēteris Viļumsons sample book published in 1905, *Trešdienas rīts jeb trešā musturu grāmata audējiem* (Wednesday Morning or the Third Pattern Book for Weavers).



saturated with ornaments, as well as furniture. Unfortunately, this work of art has not survived to the present day.

Of all the applied arts, Jūlijs Madernieks has created the largest number of sample sketches in textile art and textile crafts. In 1904, the women's Song Festival costume offered by J. Madernieks caused great discussions and controversy. Just like a fashion designer, Madernieks designed a modern Latvian woman's costume inspired by ethnographic heritage, which was not acceptable to Rihards Zariņš (1869–1939), the founder of Latvian professional graphics, who believed that during Song Festivals participants should wear the 19th century festive costumes. Paradoxically, the former controversy of both graduates of Baron Stieglitz's Central Technical Drawing School, although both of them considered the importance of ethnographic heritage as the basic resource of national identity, permeates the views of the contemporary Latvian art history

writers [6]. The ideas of both artists are topical also nowadays: at the Song Festival, participants dress in as authentic folk costumes as possible. The Latvian Culture Canon records the tradition of wearing folk costumes as a symbol of Latvian identity, but at the same time Latvian designers find inspiration for creating new and modern items by continuing the ideological path of the first Latvian designer, Jūlijs Madernieks [7].

Jūlijs Madernieks was attracted by the idea of the ethnic identity of progress in art, so it is natural that he collaborated with the professional weaver, entrepreneur and inventor Pēteris Viļumsons (1872–1939). Around 1900, P. Viļumsons set up a weaving mill in Jelgava, patented a single-spin semi-mechanical (with a prism and card system) weaving loom or weaving machine *Lielupes viļņi* and published sample books specially suitable for these looms. In the sample book published in 1905, *Trešdienas rīts jeb trešā musturu grāmatā audējiem* (Wednesday Morning or the Third Pattern Book for Weavers), you can see five original ornaments invented by J. Madernieks (Fig. 4). The idea of developing original compositions that could replace the ornamental samples imported from abroad was relevant to Jūlijs Madernieks before the First World War.

The artist studied ethnographic textiles at the Museum of the Rīga Latvian Society, getting acquainted with Latvian ornaments, colour combinations and composition. The ethnographic heritage entered his work in a modernised way, combined with the current art trends of his time. He wrote in the press that the textiles composed by craftsmen and handicraftsmen according to the abstract geometric principles of artists' sketches are similar to paintings [8]. In his autobiography, J. Madernieks pointed out that he gained increased interest in creating textiles while being in Moscow as the First World War refugee, where it was stimulated by the invitation of the Tatiana Aid Committee to submit samples of drawings for implementation in material [9]. In the 1920s and 1930s, the artist abundantly created textile compositions for the interiors of modern people: carpets, wall coverings, pillows and curtains (Fig. 5). Symbolic textile works for organisations were also made – flags embroidered in art salons. In craft and handicraft schools, students acquired



Fig. 5.  
Carpet pattern for the cabinet of the Minister of Education made by Jūlijs Madernieks. Published in *Sievietes Pasaule*, 1936, No. 18, September 15, p. 30.

skills working out textile compositions by Jūlijs Madernieks in material. Madernieks' geometrically abstract, colourful and associative sketches of Latvian textile compositions were purchased for the collection of the Latvian National Museum of Art, exhibited in the exhibitions of the artists' association *Sadarbs* and abundantly published in Latvian women's favourite magazines such as *Sieviete*, *Sievietes Pasaule*, *Atpūta* and *Zemnieku Saule*. According to the textile sketches there were created works in weaving, embroidery and crochet techniques using woollen, linen and cotton fibre. In the 1920s and 1930s, the style of Madernieks entered almost every Latvian apartment, wherever a woman was engaged in handicrafts, becoming a part of popular culture. Textiles and Madernieks' modern Latvian style were so popular that in 1930 a book of sample sketches, *Raksti*, was published.

From 1904, Jūlijs Madernieks began to publish his thoughts on the current processes of Latvian art and artistic crafts. Madernieks has had the courage to be ruthless against poorly grounded, non-original artistic expressions. Art criticism, in parallel with the work of the teacher and the development samples of applied art, was an integral part of his creative activities until the 1940s. Rūdolfs Pelše (1880–1942), a contemporary of Jūlijs Madernieks and the founder of the speciality of ceramics at the Art Academy of Latvia, eighty years ago pointed out that “there is no field in our applied arts that Madernieks would not have touched upon” [10].

When we turn back to ornamental patterns made by Madernieks, Mārtiņš Ratnieks, the designer of the exhibition “The Style of Madernieks” [11], stated on the opening day of the exhibition that it was impossible to transfer algorithmic Madernieks' ornaments. Mārtiņš Ratnieks is a member of RIXC Centre for New Media Culture and made visual identity for the exhibition inspired by Madernieks' patterns, but this is something new, based on mathematical algorithm. It is impossible to copy Madernieks' style as he drew his ornaments by hand on paper. It is a human-made unique ornament based on an ethnic metaphor.

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