

Modular art

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SUMMARY

20th century is a period that contemporary art movements begins to come in view intensively. The emergence of modular designs also happens in the same period.

The concept of modular system takes its place in the literature with designs in industrial and architectural designing.

Modular systems can be defined as the system of arrangement of the units that make up the whole, the orders, connections to each other, the shape of unit and relation with the system.

In post-modern artistic narratives these systems can be created using all kinds of materials. In this study, examples of contemporary ceramic art works are examined by emphasizing the principles of forming modular systems.

As a result, it is possible to create artistic forms in ceramic art in light of the principles of modular systems.

DEVELOPMENT

Modular systems can be defined as arrangements, sequences, internal connections, unit-shaped and orderly relations of unit-building units that form the whole.

According to Slavik Jablan's definition Modular Systems can be defined "As the **modularity** will be considered the use of several basic elements (modules) for constructing a large collection of different possible (modular) structures. In science, the modularity principle is represented by search for basic elements (e.g., elementary particles, prototiles for different geometric structures...). In art, different modules (e.g., bricks in architecture or in ornamental brickwork...) occur as the basis of modular structures. In various fields of (discrete) mathematics, the important problem is the recognition of some set of basic elements, construction rules and an (exhaustive) derivation of different generated structures."ⁱ

In almost all areas, it is seen that sometimes modular systems are often used as a means of production, sometimes as a function, sometimes as a design, sometimes as a decorative element and sometimes as a purely artistic expression.

For example, "Building stones, roof tiles and prefabricated house constructions are just a few of the consequences of people doing their work by organizing units. The same systems are used in the industrial and technical field".ⁱⁱ

Children's toys designed on the basis of modular systems can be evaluated in a way that allows for a large number of new combinations and contributes to children's creative thinking.

"Ensuring uniformity in storage containers brings order and prevents loss of space. Systems need systems consisting of electronic and computerized units."ⁱⁱⁱ

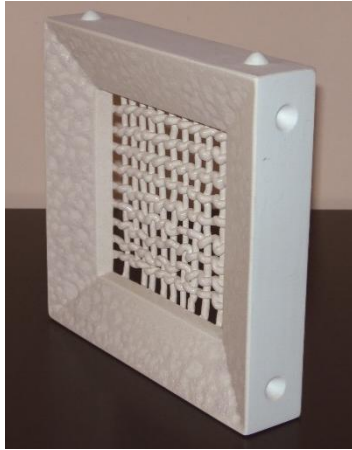
In the production of furniture, a design made in the direction of modular systems, ease of production, cost-effectiveness and multi-purpose ease of use with various combinations are provided. Heating units, children's toys, packaging designs, seating units, lighting analysis designs, staircases, bridges, space crafts are mostly considered and implemented in the direction of modularity.

Basic Principles in Modular Art and Design

A- Construction units (modules) should be uniform and simple.

B- Contraction of increasingly changing or growing modules, mathematical proportions and relationships in connection systems and side-by-side arrangements.

C- Connection analysis that allows the units to be side-by-side to form the whole can be either the units themselves or a separate connection element.



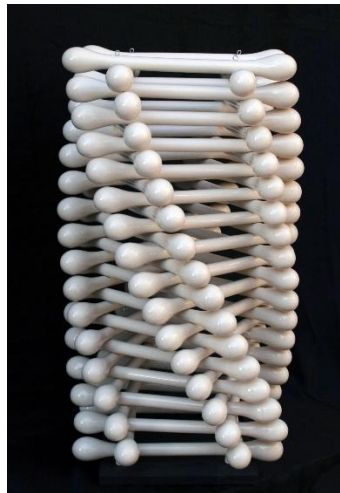
Picture 1: The unit is solved by itself Connection System, "Mystery" Lale Demir Oransay, 2003



Picture 2: Modular system with different connection element, "Structure 2" Lale Demir Oransay, 2006

D- In each modular formation, there is a connection system between the units that make up the formation.

E- The form, the connections, the side-by-side systems and the sizes of the units bringing the whole to the square can be designed so that the sizes can grow forever.

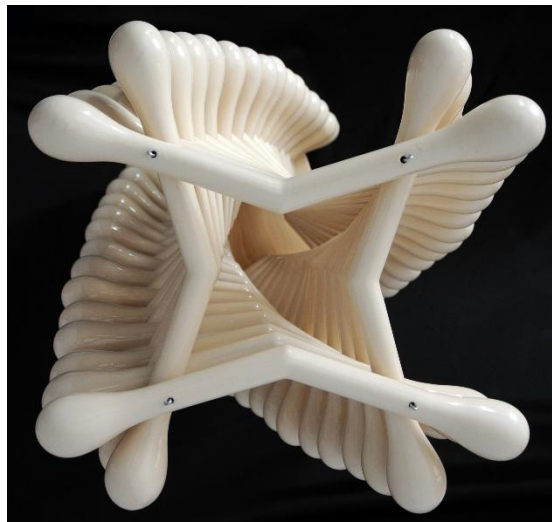


Picture 3: "Structure 4" Lale Demir Oransay, 2006

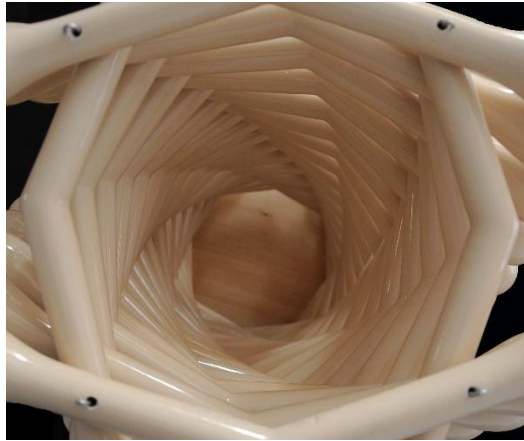
F- The form of units, connection scheme and side-by-side systems can be designed to form a whole. The roof system in the form of a sphere or a dome is the best example.

G- In the case of functional design or creating a modular system related to pure arts, the necessity of harmony between the forms of units, connection schemes and side-by-side systems and the main structure of the material to be used may be the subject.^{iv}

In almost all areas of ceramic art, both superficial and even three dimensional design solutions are based on modular systems. For example, in the design of wall tiles, the form of the unit made by considering the wall covering, a motif or motifs on the form, determines the system of bringing these units side by side, and new forms, motifs and effects are formed by these units side by side. Another example is shown in picture 4-5. In both structures, the same unit was used, but the direction of the unit was changed and different forms and effects were obtained.



Picture 4: "Untitled" Lale Demir Oransay, 2013



Picture 5: “Untitled” Lale Demir Oransay, 2013

As a result, while modular systems provide rich analysis possibilities in more functional ceramic designs, there are a large number of ceramics artists in the artistic ceramic art that have made themselves unique by producing unique works on the basis of modular systems. By combining units designed on the basis of modular systems in many different combinations, it is possible to produce a large number of complex works which have different effects with the same units.

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- ⁱⁱⁱ Ibid., p.6
- ^{iv} DEMIR ORANSAY L. "Doku, Strüktür ve Tekrar İlkelerinin Seramik Alanında Kullanım Olanakları, Unpublished Doctorate Thesis, 2007, Eskişehir, Turkey, p. 36-38

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