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## ON ADAM MARTINAKIS'S DIGITAL SCULPTURE SAMPLES

### Adam Martinakis'in Dijital Heykel Örnekleri Üzerine

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#### ABSTRACT

Adam Martinakis, of Greek origin, was born in 1972 in Luban, Poland. Studying Interior Architecture, Decorative Arts and Design in Athens, the artist, after completing his education, worked on Graphic Design, Ceramic and 3D digital sculpture modeling and worked as an instructor in these areas in the same city. Since 2000, he has been producing artistic (3D digital image / processing - animation, digital sculpture, digital video, new media) and experiments over computer-generated digital art. Using technological possibilities in his original artistic production at an instrumental level, the artist reinterprets the sculpture forum within the field of digital art. Because the computer-aided technologies of digitalized art, which are used today, offer production opportunities in many art fields and can be used in the discipline of sculpture. While the traditional sculpture production method describes the process of creating a volume and mass from a formable material, digital sculpture involves the use of technological tools to manipulate virtual objects as if they were rendered. Although other art disciplines and methods such as painting, drawing, cinema and photography used digital technology in their fields in much earlier dates, the technology required to produce a digital sculpture is much more complex, as an artistic practice used in the digital world, unlike other examples. This research article focuses on the life and artistic examples of digital sculpture production of Adam Martinakis, one of the important artists of digital sculpture production. In addition, it is aimed to research and present the effectiveness of today's art, which is digitalized, in the discipline of sculpture, based on the examples discussed.

**Key Words:** Digital Art, Digital Sculpture, Sculpture Art, 3D Modeling.

#### ÖZET

Yunan asıllı olan Adam Martinakis 1972 yılında Polonya'nın Luban şehrinde dünyaya gelmiştir. Atina'da İç Mimarlık, Dekoratif Sanatlar ve Tasarım okuyan sanatçı, eğitimini tamamladıktan sonra Grafik Tasarım, Seramik ve 3 Boyutlu dijital heykel modelleme üzerine çalışmalar yapmış ve bu alanlar üzerine de aynı şehirde öğretmen olarak görevler almıştır. 2000 yılından bu yana, bilgisayar tarafından üretilen dijital sanat alanı üzerinden sanatsal (3 boyutlu dijital görüntü / işleme-animasyon, dijital heykel, dijital video, yeni medya) üretimleri ve deneyler yapmaktadır. Teknolojik imkânları özgün sanatsal üretiminde araçsal düzeyde kullanan sanatçı dijital sanat alanı içerisinde heykel forumunu tekrardan yorumlamaktadır. Çünkü dijitalleşen sanatın günümüzde kullanılan bilgisayar destekli teknolojileri pek çok sanat alanında üretim imkânı sunduğu gibi heykel disiplini özelinde de kullanılabilir. Geleneksel heykel üretim metodu, şekillendirilebilir bir malzemeden bir hacim ve kütle yaratma sürecini tanımlarken, dijital heykel sanal nesnelere sanki kılınmış gibi manipüle etmek için teknolojik araçların kullanılmasını içermektedir. Resim, çizim, sinema ve fotoğrafçılık gibi diğer sanat disiplin ve metotları dijital teknolojiyi çok daha eski tarihlerde alanlarında kullanmasına karşın, dijital bir heykel üretmek için gerekli teknoloji çok daha karmaşık olduğundan dijital dünyada içerisinde kullanılan sanatsal bir pratik olarak diğer örneklerin aksine görece daha yenidir. Bu araştırma makalesi de, dijital heykel üretiminin önemli sanatçılarından biri olan Adam Martinakis'in hayatı ve sanatsal dijital heykel üretim örneklerine odaklanmaktadır. Ek olarak, ele alınan örnekler üzerinden dijitalleşen günümüz sanatının heykel disiplini özelindeki etkinliğinin araştırılması ve sunulması hedeflenmektedir.

**Anahtar Kelimeler:** Dijital Sanat, Dijital Heykel, Heykel Sanatı, 3 Boyutlu Modelleme.

#### 1. INTRODUCTION

Sculpture is one of the disciplines of plastic (visual) arts that are able to produce and present through a three-dimensional representation. This discipline, which dates back to the known history of humanity, initially made use of particular materials such as stone, clay, and wood; and developed 'sculpturing' and 'throwing' techniques utilizing these materials. The art of sculpture, which has the potential of utilizing the technological improvements of the period within its production era, encountered the potential of molding technologies in the middle ages. It has developed new production processes by using this potential within its own discipline; and also by adding new techniques such as 'molding' and 'assembling' to 'sculpturing' and 'throwing' methods, it has maintained the production of art through figurative forms.

“The sculpture has perseverated its classic structure which had been acknowledged in the Archaic period without changing it until the beginning of the 20th century. The structural alteration process in the art of sculpture has commenced from the beginning of the 20th century” (Karacan, 2013: 17). “Considering the history of sculpture, it is seen that the definition of art and sculpture has changed, particularly in the second half of the 20th century; and sculptors utilized the opportunities of various art fields by breaking with the traditional expression” (Uz, 2017: 473). Along with the increase of interdisciplinary interaction, the art of sculpture, starting to diverging from the subjects and terms of traditional production, has opened its doors to multidisciplinary processes with the conceptualization of the term technology.

By means of the digitalization in today's world, which has been ensured as a consequence of technological accelerations, it has started to benefit from the developing technologies in the art of sculpture as well as in several art fields in a multidisciplinary process within its own discipline. Along with the usage of programs (Zbrush, Blender, Sculptris, etc.) that can simulate traditional sculpting methods in digital media, some artists who are interested in this field, had the opportunity to create three-dimensional forms and virtual sculptures through this digitality. Adam Martinakis is an artist who is considered one of the most important representatives of this field.

Within the extent of the study, computer-based sculpture design samples of the artist who utilizes digital modeling programs at an instrumental level during the process of sculpture production will be examined. Additionally, it is aimed to investigate and present the efficiency of these opportunities which are offered by digital technologies in the sculpture discipline with deductions to be made through the artistic production samples of the artist.

## 2. DIGITAL SCULPTOR: ADAM MARTINAKIS

As stated in the biography of Adam Martinakis on his personal website, where his contemporary artworks and portfolio are published; the artist was born in 1972 in Luban, Poland. Martinakis, being of Greek and Polish descent, studied Interior Architecture, Decorative Arts and Design in Athens. Upon completing his education, he made artistic productions on Graphic Design, Ceramics, and 3D Digital Sculpture Modeling, and worked as an instructor in universities in the same city. Since 2000, he has been making artistic productions (3D Digital Modeling, Animation, Digital Sculpture, New Media) and conducting artistic experiments merely in the digital art field. Before passing on to Adam Martinakis' artistic works, it would be appropriate to mention the relationship between the term 'art' and 'technology' so as to make more efficient deductions about the extent of the issue.

According to Artut, author of the book “Technology and Human Relations”; “Technology has nourished the existence of humanity through being used by humanity, and it still has been developing its character by nourishing humanity substantially. Technology is the agent of a parallel universe that lives together with human beings. It is a phenomenon that alternates its situation and behavior consistently” (Artut, 2014: 12). This phenomenon, which nourishes human existence, has proceeded to create itself by virtue of the concept of art. In this regard, Sağlamtimur, who has scientific studies on the concepts of technology, art, and digital art, put forwards his ideas about the relationship between art and technology as; “Technology and art have developed in direct proportion to each other throughout history. Besides, these two terms have emerged as two basic elements that distinguish man from other assets. Thus, the emergence of technology in the production process of artwork has digressed from reflecting nature in art; instead, has appeared as the image of an experiment. The artist commenced producing his artistic works of art using computer technology as it is not possible to produce them with using other tools or techniques” (Sağlamtimur, 2010, p. 215). Regarding the history of art, we can clearly observe that art is part of the history of technological development. For instance, in the 15th century, Jan Van Eyck ushered a new age of painting with the exploration of oil-based pigments (oil-paint) (Yaşar, 2018). Another example, the invention of the camera has radically changed the artist's perspective on the world. “Due to the new perception of visuality that photography has introduced in the acquisition of real images, artists who have experienced the impact of light on human beauty, have tended towards the search for new visual forms (Tuğal, 2018: 24). It is possible to say that it is a phenomenon which is a field where original forms and ideas can be developed, and cannot be restricted to the concept of art, which has the potential to benefit from technical and technological innovations such as lithography, serigraphy, etc. used in our recent art history.

Artists got inspired by the potential technologies of their period in order for the production processes and the concepts they seek to express. Therefore, artists pushing the limits of the concept of art through every

new medium used have the opportunity to use an up-to-date style that reflects their perspectives on communal, social, religious, political, and other aspects of human life or the concepts and theories they seek to present. At the present time, one of the fields that lead to the emergence of this contemporary style is the 'Digital Art' field.

By means of the digitalization of technology with the electronic upheaval and having the individual use opportunity, digital art has become visible gradually at the conceptual and formal level. As for Christiane Paul, the author of the book "Digital Art", "digital art is defined as an art form performed by the production of non-physical objects in which the computer plays a role in course of its production in general terms" (Paul, 2003, p. 21). According to Paul, one of the most significant sorter distinctions about digital art is that technology is used as an "instrument" and "medium." (Sağlamtimur, 2010, p.220) In this sorting, Paul separates into two for the usage of digital technologies as an instrument: 'Digital Imaging: Photography' and 'Sculpture'. She examines its usage as a medium in six groups as: 'Installation Art', 'Film-Video and Art of Animation', 'Internet and Network Art', 'Software Art', 'Virtual Reality and Augmented Reality', 'Sound and Music Art' (Paul, 2003). Adam Martinakis seems to be an artist who utilizes the technology used in the field of Digital Art that is sorted by Paul at an instrumental level.

### 3. DIGITAL SCULPTURE AND DIGITAL SCULPTURE SAMPLES OF ADAM MARTINAKIS

The digital sculpture is an instrumental field of digital art that benefits from the improvements in data gathering techniques, computer-based modeling software, and rapid prototyping technologies. In order to visualize a digital sculpture, the numerical field of the computer is used; which offers sophisticated innovations and extraordinary opportunities to produce objects that are unfeasible to create by human intervention. This instrumentality, which has been used in the sculpture discipline since the beginning of the 21st century, is gradually developing, and also it contains dozens of programs including several modeling, creation, and design techniques. As an example of the softwares that allow digital sculpture production: programs such as 3DS Max, Blender, Maya, Zbrush, and Sculptris are used. "Yet, these programs resolve on various methods such as polygonal modeling, solid surface modeling, organic modeling, etc." (Ballı, 2020: 388). Artists, who aspire to produce by using the methods of traditional sculpture art, often use organic modeling software. As for the question: "What is digital organic modeling?"; can be answered as "It is an alternative method to digital models that can simulate reality for creating virtual representations of computer-based 3D forms." Contrary to polygonal modeling or solid surface modeling, this method does not work with numbers or data entries. The most significant feature that discriminates this method from other modeling methods is that it contains pressure-sensitive tools that simulate working with a virtual clay in digital media. (Honey, 2020: 388). Briefly, it is a modeling technology that can simulate the "throwing" technique, which is one of the traditional sculpting methods.

In the traditional sculpture throwing method, various production instruments are used depending on the medium, the size of the work, and the intended surface texture that is used. The artists, have to use many concrete tools of the discipline along with the potential of the substantial material (clay, plasticine, etc.) which is available to be shaped, and to create the principles of shape, form, texture, etc. use the Ebeşuar<sup>1</sup> (modeling pens) and to ensure that the composition to be formed based on the strength of the material can stand, tournaments to control the whole volume of the work, etc. However, a workshop opportunity that is formed in a virtual field within digital sculpturing is offered. In this virtual workshop, digital instruments that can simulate modeling pens, sculpture turn sets, figure armatures, and instruments that are needed by the sculptor are used. Additionally, together with these methods that contain traditional sculpture production techniques produced with clay, several unique skills such as the artist's muscle memory, handprint, ability to give volume, shaping ability, and so on are available to be simulated in the scope of the sculpture discipline by means of the organic modeling programs (Ballı, 2020: 390).

The technology of digital sculpture, used to create animations (animated 3-dimensional or 2-dimensional virtual objects) as well, provides considerable advantages for a fast and original production process. By contrast with the traditional sculpture production, the artist can work directly on the shape-form-volume engagement of the design regardless of the structure and maintenance of the material shaped in the course of the creation process. In addition, owing to this feature, the limits of the strength of the material are pushed and the circumstance of producing in a certain time in the traditional method (drying of the clay,

<sup>1</sup> Ebeşuar: A set of modeling pens, used in shaping materials in sculpturing.

deterioration of the clay, falling of the clay, etc.) is eliminated. A digital sculptor is able to store the virtual sculpture that he has produced, even a single polygon in net or external storage sites without deterioration. Besides, gravity, which is the main problem of the sculpture discipline in terms of providing the opportunity of production in a virtual field, is a vital feature with the fact that it enables new deductions and productions in point of sculpture art. It offers unlimited potential for scale in (+) and (-) directions.

Also, Martinakis, who adopts the approach of simulating the traditional techniques of plastic arts virtually via a figurative expression style, utilizes the above-mentioned features of digital organic modeling technology in his artistic productions. Producing through these features that offer the opportunity to use the knowledge from traditional sculpture education, Martinakis describes his style in artworks as a combination of conceptual, futuristic, and surreal elements; and thus, he prefers the creation process in a 3-dimensional virtual field offered by digital modeling technologies (Schesel, 2016). Additionally, he assumes that there are dozens of new potentials in this technology for contemporary art production and emphasizes that it provides a significant opportunity to combine technology with art (Schesel, 2016) (Image 1-2-3-5).



**Image 1.** Adam Martinakis, *The nature of the golden age*, 100 x 100 cm, Archival Pigment Printing Limited Edition 3/1, 2012.

**Source:** <https://www.martinakis.com/2009-2012/image/16>



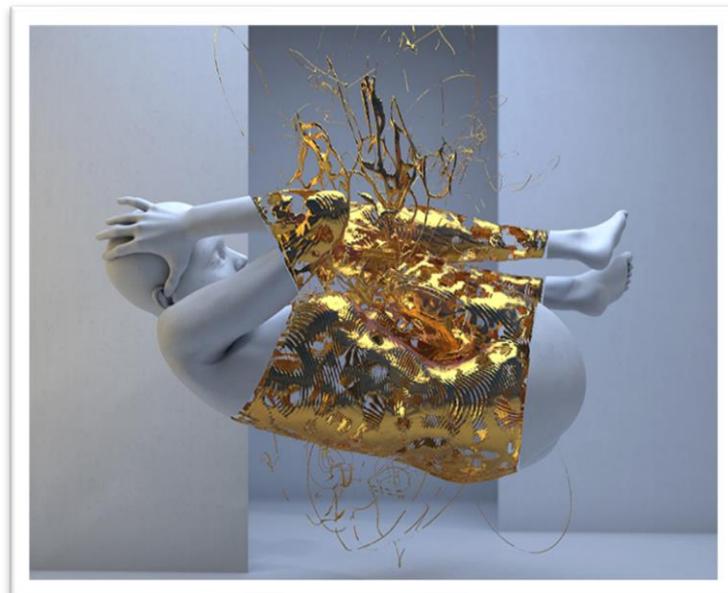
**Image 2.** Adam Martinakis, *The divisions of pleasure*, 90 x 120 cm, Archival Pigment Printing Limited Edition 3/1, 2012.

**Source:** <https://www.martinakis.com/2009-2012/image/17>



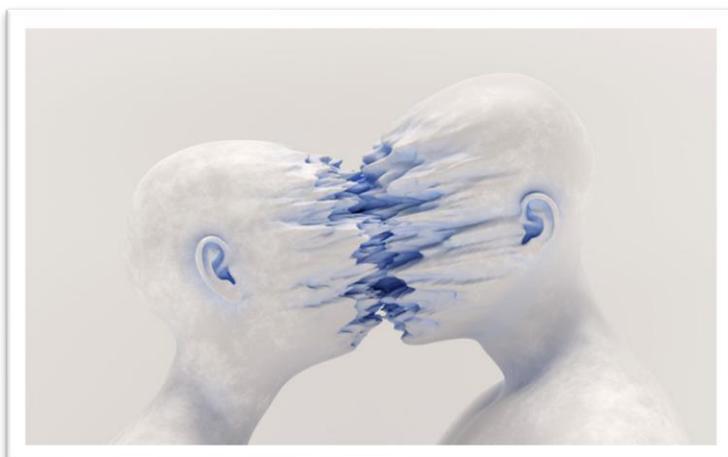
**Image 3.** Adam Martinakis, *The inevitability of time /Pietà*, 120 x 77 cm, Archival Pigment Printing Limited Edition 3/1, 2013.

**Source:** <https://www.martinakis.com/2013-2016/image/3>



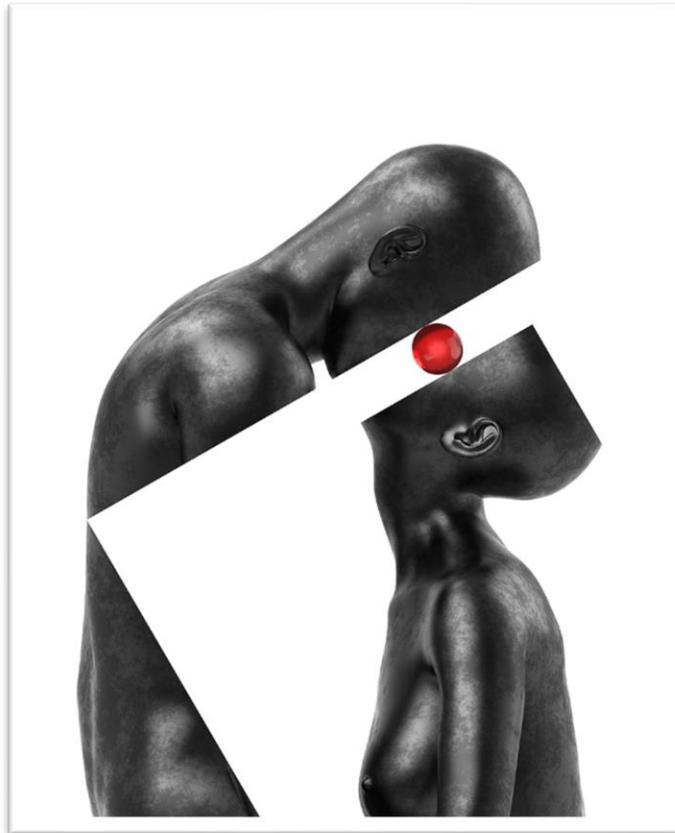
**Image 4.** Adam Martinakis, *Materialized\_v01*, 100 x 100 cm, Archival Pigment Printing Limited Edition 3/1, 2013.

**Source:** <https://www.martinakis.com/2013-2016/image/7>

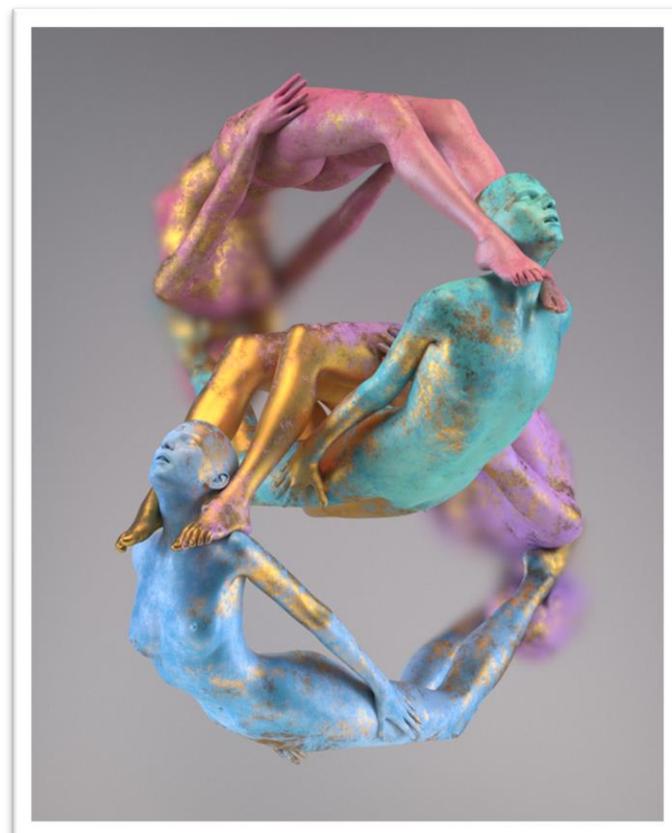


**Image 5.** Adam Martinakis, *Alien\_software*, 120 x 80 cm, Archival Pigment Printing Edition 1/1, 2016.

**Source:** <https://www.martinakis.com/2013-2016/image/17>



**Image 6.** Adam Martinakis, *Don't let me down*, 120 x 125 cm, Archival Pigment Printing Edition 1/1, 2016.  
**Source:** <https://www.martinakis.com/2017-2020/image/5>



**Image 7.** Adam Martinakis, *4ever8*, 120 x 96 cm, Archival Pigment Printing Edition 1/1, 2016.  
**Source:** <https://www.martinakis.com/2017-2020/image/9>

Considering the nature of digital art, samples of artworks that are produced in this field are often presented online and can be examined on individual computer screens, phones, tablets of the audience or on specially designed screens for these works in the case that they would be presented in a private context. In this sense, digital sculpture productions, one of the instrumental representations of digital art, are displayed with the above-mentioned opportunities in social media, and also on the official sites of galleries and museums. Martinakis is an example of a sculptor who is acknowledged as a pioneer in this field. In addition to displaying his works in digital mediums, he is able to embody them using archival pigment printing technology.

There are references to the art subjects of the past in the artist's works as well. His work named *The nature of the golden age* which is seen in the Image 1 is one of the samples of products that would support this argument. "The creation epic of Adam and Eve, the ancestors of humankind, their expulsion from heaven, the forbidden tree (fruit), the temptation of the Devil and their exile to the earth have presumably been the most popular topics written about throughout history" (Bayrak Kaya, 2020: 206). In his work, named *The Nature of the Golden Age*, Martinakis reproduced the phenomenon of Adam and Eve, which has been discussed for centuries in art history, through a digital medium. Hence, it appears with the irony that the technological medium in which he produces his work may be built in a way that followed in the art history formerly. Martinakis creates a similar art style and concept in his work *The inevitability of time / Pietà* (Image 3), which can be observed that he has a post-modern attitude along with these features. In these two samples, the kitschy representations of the works he has made references are created in particular due to the artistic digital principles he follows. In this sense, a discourse has been constructed over the relationship between the artwork used in post-modern art productions and kitsch, and these two phenomena are presented by melting them in a pot. Within this context, the artist tries to break the path between traditionalism and modernism, which are well-accepted as fine and high art, and digital culture products and considered as part of low and popular culture.

In his original digital productions, he utilizes these opportunities originally offered by technology in the sculpture discipline. Martinakis have the ability to produce several figurative forms that cannot be created concretely in real life by means of modeling software, and his works are concerned with gravity, form-texture, and virtual material relations, and feeds upon figurative expression on which the sculpture art has developed as a discipline for many years. The artist also makes up-to-date deductions of space and volume concepts in the virtual field that he produces art along with this figurative expression. "Not only the sculpture has a feature that concretely meets the concept of the object with its three-dimensional structure and traditional solid materials, and it also has the feature of questioning the space by objectifying it with its concrete existence." (Karacan, 2014: 78). Martinakis creates digital spaces by associating them with virtual fields with his figures in his digital works. Martinakis, who produces his art by using the "throwing" technique, one of the traditional sculpture production methods, makes use of the potential of simulating current digital technologies, and displays his digital sculptures on group and solo exhibitions in many galleries and art festivals from Athens to Paris, from New York to London; also, he has introduced his works to hundreds of thousands of people through the social media.

## CONCLUSION

Adam Martinakis is one of the notable examples of artists who produce digital sculptures through the instrumental usage of today's digital art. In this sense, while a traditional sculptor who has concrete materials and concrete tools; Martinakis performs an artistic production in a digital field by using virtual instruments that simulate the above-mentioned methods. He benefits from these advantages of this opportunity;

- ✓ To work at a small scale,
- ✓ To scale it up to the desired scale (by maintaining the proportions or by resulting conscious deformation),
- ✓ To study in areas such as locally enlarged area, surface, volume, etc. in more detail,
- ✓ To copy an action (texture, shape, volume, etc.) simultaneously without losing proportions and values by means of its symmetry feature,
- ✓ To gain time and speed,
- ✓ Not to lose the endurance or perishability of the concrete material,

- ✓ To save the work in the virtual field not losing even a single polygon, as it exists virtually unlike the concrete material which requires maintenance and repair,
- ✓ To produce new shapes and forms by eliminating the gravity factor that is exposed to in the traditional production process, even it is applied digitally,
- ✓ To benefit from limitless material variety through its feature of creating an illusion by simulating concrete materials, etc.

In all, considering the discipline of sculpture through the digital artworks produced by the artist Martinakis; today, the art of sculpture has included an up-to-date technique to traditional production methods. Apart from this thrilling and new opportunity that is created by our digitalized culture, the sculpture discipline that concerns with space and volume has reached a virtual field and volume where the artworks are able to be produced.

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