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| A glance at the issue of symmetry from outside a scientific perspective may help us understand the active role symmetry assumes in the associating art with science. In various fields and existing processes of art, it may be seen that symmetry and its associated concepts—both abstract and concrete—manifest themselves in different dimensions and geometries, with their fixed or loose characters. This may in general bring an explanation to the association of two things in terms of similarity or difference in a certain piece of artwork, and functions as some kind of a classification model. Accordingly, while taking a general approach to Joel-Peter Witkin and his works, is attempted to evaluate the mentioned concepts on the basis of such roles.

In the relationship between what Witkin thought/designed and the image he obtained (considering that no authoritative analysis may be made unless there is an explanation made by the artist on this and similar issues); we may speak of a symmetry as differences achieve an indiscernible level, of similarity when differences may be seen, and of dissymmetry when differences can be interpreted as variation. The relationship between the photographs of the living/non-living things used by the artist in his compositions and their originals may be viewed within this framework.

The concept of invers symmetry draws attention in terms of the roles it assumes in the photographs by Joel-Peter Witkin. The artist underlines this approach even more powerfully in his still life and portrait works. Images portrayed as living in still life and portrait paintings continue with their lives while in Witkin's photographs, they seem to continue to live in a period of recovery with their dead state. Therefore, death (cadaver) may be interpreted as a transformative mechanism where symmetry takes shape as it helps reach the desired meaning.

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<td>Symmetry, Joel-Peter Witkin, Automorphic, Similarity, Asymmetry, Invers Symmetry, Image, photograph.</td>
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A Brief Essay onto Joel- Peter Witkin from Symmetry Perspective

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Abstract

“If I am not mistaken the word symmetry is used in our everyday language in two meaning. In the one sense symmetric means something like well- proportioned, well-balanced, and symmetry denotes that sort of concordance of several parts by which they integrate into a whole. Beauty is bound up with symmetry.” [6] or “An expression of equivalence between things” [7].

The quotes above present us with two fine examples of how the concept of symmetry could be defined in contemporary language and theory. By employing a more mathematical approach to the same concept, another definition may also be made, as “it is the inalterability of an object, a set or a system in the face of a transition”. This explanation also helps us see that a set is not necessarily always inalterable under a transformation and that in addition to symmetry, other concepts including equality, equivalence, similarity, proportion and balance may also be relevant. Here; while invoking mathematical expressions such as symmetry leaving its place to similarity in its transition from Euclidean geometry to non-Euclidean geometry or the ornamental and crystallographic symmetry, which are the two geometric symmetries with highly symmetrical characteristics; the above-mentioned expressions should not be taken as relevant solely in mathematical terms.

A glance at the issue of symmetry from outside a scientific perspective may help us understand the active role symmetry assumes in the associating art with science. In various fields and existing processes of art, it may be seen that symmetry and its associated concepts —both abstract and concrete— manifest themselves in different dimensions and geometries, with their fixed or loose characters. This may in general bring an explanation to the association of two things in terms of similarity or difference in a certain piece of artwork, and functions as some kind of a classification model. Accordingly, while taking a general approach to Joel-Peter Witkin and his works, this article attempts to evaluate the mentioned concepts on the basis of such roles.

1. Image and Photos

It is obvious that one may draw a general analogy between the biological act of seeing and the language chosen by the beholder and technological imaging mechanisms used in an appropriate technology. It may also be argued that symmetry
occurs not only in the presence of equivalence and similarity but also when the differences are at an unperceivable level in the relationship between the aforementioned actions. And in such a case, seeing an object and viewing it with the use of an imaging tool may be interpreted as processes in which mechanisms of high similarity and symmetry are at work.

From left to right: Bursa- Türkiye. Photographer: Refik Kızıltepe.

Throughout history, scientific, technological and digital developments as well as their subsequent impacts on human life demonstrate that image takes part in art as a tool. In this process, the image produces its unique principles and terminology, which arises as a natural consequence of this situation. At this point, it will be appropriate to briefly tackle how to define image in art from the perspective of the examination.

From left to right: Karadeniz, Bursa- Türkiye. Photographer: Refik Kızıltepe.

Defining image in art as a main tool as a manoeuvre within time and space by Richard Leppert who also indicates that the image is a diagnosis, prediction and validation mechanism [1]. Thanks to the advances over the last century, and particularly its latter half, one can speak of a partial transformation undergone by the
concept of image due to dynamics including reality/virtual reality, production/consumption cycle, recording/reproduction. As a result of such changes, one may argue, the act of visualization has evolved through the use of imaging tools such as camcorders, analogue/digital cameras.

While images obtained by means of various recording tools such as camcorders and cameras are called technical images, the acquired images form a unique category inter se. Particularly photos obtained through the camera may be described as technical images that directly convey the thoughts/ideas of the photographer, providing for the representation of millions of images. Furthermore, photography, which has retained its overall structure within the existing developmental processes, could be said to have assumed a leading role in the changing understanding of image of the society. Therefore, it could be assumed, as also noted by Graham Clarke, the developments since the middle of the last century have carried photography to a privileged area that has been much more in demand and recognized than its predecessors.

From left to right: Bursa- Türkiye. Photographer: Refik Kızıltepe.

2. Joel- Peter Witkin and Symmetry

Capturing the moment and space in the flow of time, a photograph comes into existence based on light and darkness. Noting that the shadow factor was added to this duo by T.S. Eliot, Clarke compares photography, which he describes as a mirror reflection where images of the perceived world are at the forefront, to leaving one’s signature on the same world in a script of light [2]. And when we view the world of photography through this metaphor, Joel-Peter Witkin's signature can be seen to have a prominent place.

Expressing his view of life with the lines "Between the advent of pain / which is Birth, and apotheosis / which is Death, there's convalescence / which is Life." [3], Witkin is an artist who photographed the world he sees with his extraordinary perception. Witkin did his military service in Vietnam as a war photographer, and a traffic accident he witnessed at a very young age is known to have played a large role in the development of his extraordinary perception [4]. The artist, who was reportedly influenced by photographers such as Diane Arbus and Arthur Felling, significantly differs from them as he addresses similar issues at the extremes through art and
photography. With a great sense of humor, the artist wanders on the aesthetics of the evil, ugly, rejected, and dark side, and while ensuring that his photographs are seen as harmonious and flexible, he always maintains his tenderness also in his relationship with the body and spirit. Noting that everything in his works, good or bad, represents him, Witkin compares the unification of the eye with the viewfinder to the unification of body and soul [5] This relationship established by Witkin reminds the audience of Dziga Vertov.

As a photographer that has questioned and transformed art history, Witkin carefully takes Rubens, d'Agoty, Delacroix, Ruysch, Gericault, Goya, Velasquez and similar artists as a reference while maximizing his own freedom. Resembling Peter Greenaway in his blending of technical images with art and the relationship he established with classical art history, the artist has a symbolic language like Greenaway. The images Witkin extracted from of the dark side reminds the audience of Bosch paintings, while they are also associated with artists such as Allen Poe, Baudelaire, de Sade, and their works.


When a picture taken by the artist comes to daylight as a Witkin photograph as a result of his meticulous work in his dark room, it may be argued that they are highly similar only with each other as they are unique in the art of photography. The resulting photograph may be interpreted as symmetrical to itself under a one-to-one and onto transformation that maintains the existing structure (in the event that differences are at an indistinguishable level). In other words, that photo may be said to be automorphic.

In the relationship between what Witkin thought/designed and the image he obtained (considering that no authoritative analysis may be made unless there is an explanation made by the artist on this and similar issues); we may speak of a
symmetry as differences achieve an indiscernible level, of similarity when differences may be seen, and of asymmetry when differences can be interpreted as variation. The relationship between the photographs of the living/non-living things used by the artist in his compositions and their originals may be viewed within this framework. For example, anyone who sees his work, titled the "Feast of Fools-1990," will obviously not confuse the grapes used here with any other fruit. Therefore, an equivalence relation may be established in terms of meaning between the grapes on the photograph and actual grapes. This equivalence relation may be interpreted as a symmetric (Topologically Homeomorphic) match in terms of meaning. In addition, when we examine it looking at basic elements such as the sizes and colors of displayed grapes, it can be said that real grapes indicate a class in themselves. On the other hand, there is a formally symmetrical relationship between the image covered by the angle of the lens and the image of the developed film (in those cases where differences are indiscernible) and an anti-symmetric relationship in terms of values it contains such as color and brightness. A similar assessment may be made for the existing relationship between the film’s negative and print. Here, considering Witkin’s unique printing process, there may obviously only be a similarity in the relationship between the film's negative and print. Furthermore, unless there is a change of measure between the reproduced photographs, we may speak of symmetry, a similarity resulting from scaling-contraction in small-sized prints, and from scaling-homothetic transformation in large-sized prints.

From left to right: Still Life, Marseilles, 1992 [5]. Anna Akhmatova, 2003, Thames & Hudson Ltd.

Overall, the concept of inverse symmetry draws attention in terms of the roles it assumes in the photographs by Joel-Peter Witkin. The artist reinterprets artworks such as Botticelli’s ‘The Birth of Venus’ and Diego Velazquez’s ‘Las Meninas’, through a different expressive tool by reversing their inherent abstract and concrete elements. The artist underlines this approach even more powerfully in his still life and portrait works. The portrayed game animals depict values such as power and aristocracy while they are ugly carcasses with Witkin. Classic portraits often depicted people at an ideal level, more beautifully and with their human feelings obscured. People in such portrait paintings come from wealthy upper class families. This and similar values are completely reversed with Witkin; mathematically speaking, their inverse symmetry is taken. Images portrayed as living in still life and portrait paintings
continue with their lives while in Witkin’s photographs, they seem to continue to live in a period of recovery with their dead state. Therefore, death (cadaver) may be interpreted as a transformative mechanism where symmetry takes shape as it helps reach the desired meaning.

Finally, in Witkin’s photographs, beautiful is frequently replaced by ugly, male/female with hermaphrodite, healthy with unhealthy, complete with incomplete, living with the dead. While such contradictions may be inverse symmetrical in terms of the value they contain, depending on the content of the works, this approach may be taken as helping reach the same meaning from opposite directions. Therefore, when we tackle such contrasts in terms of meaning, they may be interpreted as a transformative mechanism that carries scenes into a symmetrical image as a result.


3. Conclusion

Briefly discussed within the boundaries of this article, Joel-Peter Witkin and his works are the last ring in the attempts to approach the domain of art from a mathematical framework. Findings similar to those obtained in studies on the 15th & 16th century Ottoman Iznik tiles / Ottoman architecture, M.C. Escher’s works, Peter Greenaway films, or Frank O. Gehry’s architecture, which were also carried out with a mathematical perspective, are observed in the early results of the Witkin study tackled here. And the concept of symmetry seems to bring two fields, which at first glance, are thought to bear no relationship, in an unexpected order, appearing before us as a significant element in this approach attempt as well. In general, the findings reached in these demurely conducted studies confirm the existence of symmetry and its associated concepts in the field of art. Consequently, we believe that a review of these concepts, which are studied actively in physical sciences, in terms of their forms of expression, structures and relationships in the field of art may make various contributions in the field.
References