

Interactive Perception of Art: The Fusion of Art and Science for Health and Spirituality

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One of the major causes of anxiety and mental disease is the person's inability to release the internal tension within the socially prescribed range of acceptable actions. Infinitesimal frustrations may be hidden from the person's self-awareness, but the lack of active release results in various kinds of peripheral malfunction which accumulate to the degree of losing the due physiological balance, and thus the development of organic or mental disease.

The creative attitude to one's own activity may prevent the accumulation of stresses by inventing new ways of self-expression in the situations where there are no more socially admissible ways of activity. The individualised directions of activity thus obtained avoid social restrictions since they need not be generally accepted and recognised. Hence creativity will be able to extend the range of possible actions, so that no internal tension could be suppressed giving way to health disturbances.

There are many psychological techniques aimed to restoring mental balance and overcoming stress. A number of useful procedures are being exercised by various religious schools, especially those of the East-Asian origin. However, these exercises generally concentrate on the personality and self-regulation and do not imply any change in the modes of external activity, this activity being intentionally suppressed in some meditation techniques. As a consequence, meditation may be quite efficient as a way to hide the manifestations of stress, but it cannot lead to its actual dissipation. Internal tensions can only receive a true release in a productive activity, when the external world is changed along with the person's organic and mental state.

To control one's affective reactions the person may resort to any kinds of creativity. However, some of them can only provide a temporary relief, while the others might become the source of a long-term satisfaction. The more universal is the result of the person's activity, the more efficient it will be as the means of psychological self-regulation. One can hardly have too much pride about a momentary product being of use for a limited group of persons only, in very specific circumstances. What is required for one's subjective stability is the feeling of their importance on a larger scale, comparable with the development of the humanity as a whole.

Art has always been one of the most efficient means of affective control. However, its therapeutic power could be significantly increased if the traditional passive contemplation of the masterpieces gave way to active co-creation, including the observer's own interpretations of the work of art. While passive observation and mute adoration emphasise the distance between the artist and the observer, and thus enlarge the social gaps, the freedom of touch and transformation eliminates the borders between the author and the audience, stimulating people's self-confidence and making them more self-assured. Therefore, aesthetic education must be organised in a way preventing the formation of psychological barriers hindering active attitude to the works of art; people must be encouraged to be active, and they need examples of such an activity, to get free from their usual timidity and fear of intrusion. The artists and scientists can provide that help and discover the most efficient ways of eliminating psychological discomfort through interactive perception of art.

Creative perception is apparent in the arts, since artists often get to work in response to somebody else's findings, developing and transforming them in an individualised way. The traditional idea of the "sensitivity" of the artist implies the transformation of any kinds of impression into artistic images. The emotions of everyday life, the reactions to the others' art, the subjective response to the discoveries of science or political events — everything can become a source of inspiration. When a work of art appears under the influence of another work of art, an internal dialogue gets established, when interactive perception cannot be separated from creation.

One could recall many tales about how the artists fought their pain and misfortune with the passionate work producing the immortal creations of art. But one does not have to be an artist to creatively transform everything observed and profit from the positive influence of that creativity on mental and organic health. Of course, practising painting, music, dancing etc. can be quite captivating. Still, many people are not subjectively inclined to amateur art, which may even cause repulsion due to its apparent difference from the works of the professionals. To serve people's health, their self-expression should in no way compete with other people's activities and be free of any obligation. To provide that, there must exist commonly accessible tools of creative transformation of observed reality capable of expressing the fine peculiarities of individual attitude in a readily controllable way.

One of such tools is suggested by modern computer technologies and the development of software for sound and image processing, which may provide a way for creative communication through the works of art. Thus, some prototype could be transformed using a number of standard procedures until the result of transformation is felt self-contained enough to satisfy the individual's sense of completeness. Such transformed image can be added to the pool of available prototypes to be used in further transformations. If the reference to the original(s) is attached to each image, the authors of the originals get a good feed-back and may profit from the interpretations of their works they could not preview. However, the pool of the possible transformations of the original image may annihilate the very notion of the original, since every one of these representations might serve as the prototype for the rest. Participating in such an activity would give people the sense of equality, annihilating the differences between the author and the interpreter, since professional artists may contribute their works as well as those who had never dealt with art at all, and are not going to. On the other side, this is a kind of communication that permits most flexible ways of self-expression, allowing, for example, scientists to transform their attitude to the world into artistic forms, while artists might stimulate the scientist's intuition through their interpretations.

For interactive perception of art to be used for stimulating general creativity, the procedures available must be efficient enough, being based on the objective laws of human perception and aesthetic perception in particular. Aimless wandering among images may only be of a limited value for mental health, and the variety of possibilities may be discouraging. The scientific study of human creativity must indicate the directions of the development of the interactive perception of art, which would be most suited for therapeutic and stimulating purposes. Additionally, other ways of automated image production could be suggested, which would stimulate people's creativity providing powerful and easy control over the process through few enough parameters.

To explore the possibilities of using interactive art perception for health support, the possibilities provided by the Internet could be used. A number of special WWW sites could be created containing the materials aimed to stimulating and developing people's creativity as one of the means of restoring the internal balance and hence mental and organic health, including:

1. An expandable collection of images, or other works of art, free from any legal protection against possible changes and version exchange. The images may be changed or merged until the result is satisfactory for the creative observer. The author of this new version must be able to submit it as new prototype to the same pool.
2. A collection of the tools of creative transformation, so that any version could be specified by the prototype and the parameters of the transformation; this collection may include both original software for free distribution and the information about the commercial software available and the ways of its using for creative perception.
3. The examples of the interactive perception of the works of art and the indications of how to get started. The process of co-creation must be public and open to study.
4. The guidelines for using co-creation for overcoming stress and improving health, as well as the information about any research in this field.
5. To simplify the subjective transformations, a few standard *zone scales* can be provided, so that any transformation would combine the discreteness of switching from one zone to another and the continuity of the fine adjustment of "intonation" within the zone.

6. The parallel informal exchange of opinions and ideas could be one more source of free creativity. Such discussions must be free from criticism, and no product may be said to be better than any other one. The comparisons of the qualitative type may, however, be allowed: the difference between the products has to be understood as the difference in their emotional contents and subjective attitudes.

The materials to be presented on such Web sites must be of a non-profit nature, and free for downloading. Every person must be able to try the procedures described and add their own contribution to the site. Such contributions might include new images or variations, new ways of creative transformation of images (up to transitions between different kinds of art), as well as the links to related projects or useful software.

It is important that professional artists participate in these activities along with the persons far from the arts, encouraging their perceptive experiments. The artist's consent to arbitrary transformations of their images would also remove any legal limitations concerning image morphing. On the other side, the experience of such online co-creation might provide a new source of scientific ideas too, opening new prospects for the scientific investigation. The collection of the examples of the influence of art and its creative perception on health would become useful experimental data for further analysis, and eventually developing new therapeutic or educational techniques.

In a somewhat different aspect, this work could be considered a part of the general process aimed to the fusion of art and science for the progress of human spirituality, when art would use science as methodological resource and the source of inspiration, while science would use art as creativity resource, exploring fundamentally new modes of perception and inventing new conceptual frameworks, thus acquiring more conceptual freedom. Spirituality, concerned with meaning, with significant values and a sense of purpose, would be enhanced by the fusion of art and science, thus bringing us the serenity we need to survive in a human society beyond control.

<http://unism.pjwb.net/arc>

<http://unism.pjwb.org/arc>

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