Commentary to the Paper of Hellmut Wohl, University of Boston  
On Art and Neurobiology  

Is creativity automatic?

Violetta L. Waibel, University of Vienna

First, a provocation: Creativity is not automatic!

Secondly, a close inspection of the Hellmut Wohl's theses shows that this is an important modification and inversion of his points that is in agreement with the spirit of his main thesis. Hellmut Wohl's final conclusion in the paper is that creativity is automatic. This thesis is accompanied by two important restrictions: one is: creative processes function not as if creative subjects were programmed automatons; the other: creativity is, in a certain sense, implemented by conscious mind that is able to shape forms.

These restrictions are the reason why I maintain that creativity is not automatic. In my view, Wohl seems to use the term „automatic“ as the opposite of doing something by intention, doing something by in a conscious state would be directed by one’s aims, be it the production of an artefact, or be it the realization of a certain movement one intends to do.

I would ask whether it is an adequate alternative to describe creativity as either unconscious and automatic or conscious and intended. And what do we know, if we accept that creativity is automatic? This result expresses something in one term that is nothing more than the detailed examples of Beethoven, Duchamp, Fellini, etc. presented. In Kant’s words: the creativity of a genius is the genius' nature that gives the rules to his works of art. Fine, but we want to know more on the processes of creativity.

I would argue for the non-automaticity of creativity because each kind of creativity is a result of what we call spontaneity. What is spontaneity? It is a, let’s say, somewhat mysterious state of the brain associated with high and strong productivity. But we are not able to say where it comes from. For people like Kant, the idealist thinker Johann Gottlieb Fichte, or the romanticist Friedrich Hardenberg (Novalis), spontaneity is a first cause, an „Urhandlung“ (an absolute original act) that appears suddenly in a jump step. There is a deep gap between the nature of the body and its nerves and brain activity. These are fine metaphors for a deep problem of philosophy as well as of science. How can we bridge the gap between the nature of the brain and its mental acts of spontaneity and creativity? The only way is to accept that there is a gap. Creativity is a brain activity that we can not directly intend and set in action, but we can and must do it indirectly by creating the conditions for its expression. In my view, this indirect intentionality and spontaneity should not be called automatic for the following reasons.

- I agree with Wohl and the reports of many artists that creativity is a state of chaos. But why? I come back to this question.
- Further, since Plato we know that creativity in sciences and arts is a state of enthusiasm. In my view, this is a very important condition that Wohl did not take into consideration.
Enthusiasm is on one hand a state of consciousness, on the other hand it is a state of trance or let’s say, a state of unconsciousness, or I prefer better to say pre-consciousness. Enthusiasm, trance, sleep are states of the brain where it loses its control. In my view, to give up control is one of the most important processes or conditions that give way to creativity. Why are there so many artists who seem to be, or are really crazy? What is craziness? An important characteristic of craziness is its non-conformity with the rules of society. It is the refusal of external and extraneous determinations (Fremdbestimmtheit).

Our education is on one hand the training of rules of socially acceptable behaviour (sozialverträglichem Verhalten), the rules of ethics, the rules of knowledge and cognition, the rules to be conform to the modern „Leistungsgesellschaft“, the many rules of giving shapes to things of all kinds. This is in a certain respect good and even necessary for creativity. On the other hand education is the training of restriction, of censorship in a literally Freudian sense. It is the restriction of one’s individual freedom, the restriction of the free expression of one’s energies and interests. There are the disabling mechanisms of control (behindernde Kontrollmechanismen), the many chains of social rules that we surpass in states of chaos, be it in sleep, be it in enthusiasm, or trance. The production of creativity needs the loss of control. So, one condition to give way to creativity is the faculty to recognize and then consciously to neglect those rules in our brain and behaviour that hinder the free float of one’s creative energies.

Nietzsche’s Geburt der Tragödie aus dem Geiste der Musik, the Naissance of the Tragedy from the Spirit of Music is relevant here. In this essay, in short, Nietzsche maintains that our creativity is the result of an art motivation or drive (Kunsttrieb) that has to be seen as a double-faced coin: the apollonian drive is the one side of images, of dreams, of socratic wisdom, of culture in a general sense, and the dionysiac drive on the other side includes the energies of music, of enthusiasm, of immediacy. The apollonian drive is the principle of individuality (principium individuationis), of consideration, of reflexivity and of control. The dionysiac drive is the principle of prereflexivity, of uncontrolled energy, of present and immediate vivacity. We have to accept that prereflexivity can be, but is not necessary unconscious.

The realization of creativity requires an augmented vivacity and activity far from a strict control. It is well known that the mechanisms of social control in our brain (Freuds Über-Ich) tie up much energy that could be better used for creativity. Even if it is true that creativity itself is a state of creating rules, giving shape to things we have to create the conditions of a sort of tabula rasa from given and customed rules to be able to create new rules. The relative refusal of rules and the successive neglect of control can be produced by different means: by a recovering sleep, by enthusiasm, by craziness, or by defining one’s own rules. There are other means. Schiller, be it true or not, needed the smell of rotten apples to be creative. The American expressionist Marc Rothko lay for hours on his sofa listening to Mozart, or Beethoven to "create" for his next painting.

Therefore, I maintain that creativity is an oscillating interplay between consciousness and unconsciousness, and between reflexivity and prereflexivity. Further, it is an interplay between control and loss of control. The famous automatic writing of the surrealists is not in a literal sense automatic, it is a production far from cultured and educated control.

But how can creativity shape things far from control? My thesis is as follows. In analogy to Nietzsche’s two drives, or better the two aspects of the one drive of art (Kunsttrieb), reflexivity follows the principium individuationis (the apollonian drive) that is, it follows the direct intentionality of our will to solve a task or a problem by focusing on a certain faculty of our brain according to the causal mechanism. Creativity or prereflexivity (the dionysiac drive) claims the integrative totality of the mental faculties. The philosophical tradition knows two sorts of causality, the causa efficiens and the causa finalis. The causa efficiens works linearly. The causa finalis focuses and arranges the many parts of a
totality. Kant described it as a mutual determination and interaction between the parts and the whole. According to Kant, only the causa efficiens is a principle of cognition. The causa finalis is a principle of mere judgment, the judgments of the beauty, the sublime and the teleology. The Post-Kantians were not completely content with Kant’s answer. They are right. In my opinion the causa finalis is the principle of creativity, or of what I call indirect intentionality and indirect spontaneity.

- How does the principle of causa finalis work in creativity? I would reconstruct it as follows. There is no preference or predominance of a certain faculty, all faculties have the same value. The neurologist Antonio Damasio is right to criticize the development of culture in modern times since Descartes, who paradigmatically stood for the one-sidedness of the faculties of cognition and the idea of an hostile antagonism between emotion and cognition as a misleading product of man’s education. Damasio provocingly calls one of his books: Descartes’ error. Descartes’ cogito ergo sum must be replaced by a senso ergo sum (Ich fühle also bin ich; I feel so I am). Martha Nussbaum and others are right to claim not only the cognitive but also the emotional intelligence. Besides the emancipation and the free access to all faculties of the brain (reason, understanding, power of judgment, power of imagination, feeling, emotion) creative processes claim a high level of alertness and of free floating attention for the aim, or the interest of a certain task of creation. Then, an interplay of all faculties occurs, a free association of new combinations, of surprising relations, or whatever. In the end of the creative process, it is the power of judgment that is struck by the discovery that the problem, the intended task have been solved. Indeed, it is an interplay of directed activity and of a floating „laissez faire“. This floating „laissez faire“ is what we call in other words a chaos, a state of indetermination. Should we call this automatic? I say, no or at least I suggest, we should not. I call creativity a spontaneity of indirect intentionality were we can intentionally produce the framework, to give way to the making itself of the free floating energies of creativity. Spontaneous subjects organize the self-organization and making itself of creativity. I hold that once, the process of creativity is in motion, it is a continued interaction of the direct spontaneity of the power of judgment, of consideration, and of reflection on the one hand, and the indirect spontaneity of the making itself of the process on the other.