In his 1969 essay “Art After Philosophy,” Joseph Kosuth commented Marcel Duchamp’s influence on art: “All art (after Duchamp) is conceptual (in nature) because art only exists conceptually.” Duchamp’s *Fountain* astonished the world in 1917 and had thereafter aroused fierce debate. I believe the main reason behind the turmoil is that the work symbolized a milestone that art does not have to serve any particular purpose: art does not have to be supported by any aesthetic agenda and art needs not to be craft. The emancipation of art has freed artists in many ways. One of the most noticeable impacts is that people no longer need to be equipped with special techniques in order to become an artist. Or, instead of hailing the emancipation of the known artists, maybe we could put it this way: it is the people traditionally defined as non-artists (people without craftsmanship or training) that now enter the gate of art. It should be noted that human senses take an important role in the process of discovering and appreciating the nature of art, for awareness of beauty and pleasure (or displeasure) influences the way people define art. Is art a skill? Too many times we would readily disagree the statement with a clear mind. However, when presented a fine and delicate work, we would often hesitate. Is art craft? Maybe not. However, many touching art pieces in the past may be the works of a skilled craftsman. Is art the transcendental and ultimate reference? In many ways, people believe that when it comes to art, beauty is something which is self-evident, pure and formative. It does not concern self-cultivation or any philosophy. However, it is also too often that after being overwhelmed by a piece of art, we come to believe that there is something out there
which is beyond human power. Whether it is coincident or simply the corollary of digital technology, conceptual art has become the key to interpret software art. Also, the once ignored thesis proposed by Carl Jung, who happened to be Duchamp’s contemporary, has became an indispensable item on new agers’ bookshelf today. For Sol LeWitt, conceptual art means to separate the concept and the execution of art; he lifted “concept” as the most important element of art. Following his own theory that concept is the machine that helps produce artwork, LeWitt came up with sets of written instructions and had them executed by people other than himself. While scientists and engineers in the 1960s had been working on the Turing machines, the prototype of today’s computer, artists in the same period gave the world the conceptual and instruction art that was emerging and thriving. Still, although it is hard to ignore the linkage, we may never know whether it was science that first influenced art or the opposite. Perhaps Jung’s synchronicity and collective unconscious were indeed in force.

If we agree that it is the artists who propose a “concept,” then, a mathematician should be the first one in line to be taken as an artist, for “numerals” are pure concepts and the concepts of concepts. When there is a concept, zero becomes one.

If we agree the so-called instruction art is about editing “instructions” and assign it to be executed, then, a programmer should be the first to be recognized as an artist, for all he/she does every day is editing instructions and leaves integrated circuits to carry them out.

Obviously, the two optimistic deductions do not become reality too often. Technology professionals do not recognize the importance of expression. Likewise, artistically trained persons usually lack the ability of computation. To make a simile, DBN is like the sketching training in software art and the foundation of expression. Rather than a platform for interdisciplinary cooperation, DBN is the basic training that helps
individuals to discover their inner inertia of computing. It should be done alone.

Recently, I shared an experimental class with the students from the Department of Computer and Communication Engineering of Ming Chuan University. The class could not be simply reduced as a session during which the supervisor used specialized knowledge to lead the students. Software art is still a relatively young and undefined discipline that everyone is a beginner. The class was full of new challenges and experimental endeavors. Very often, I would review Johannes Itten’s *Design and Form: The Basic Course at the Bauhaus* on nights before class. I would then be able to invent new class exercises based on the teaching methods and the designs of the Bauhaus School. Sometimes, after reading George Lakoff’s *Metaphors We Live By* repeatedly, I would be inspired and suddenly find new teaching directions. My goal was for the students with information technology background to learn the true spirit of DBN. Sometimes, we failed. Sometimes, we succeeded. While the students and I all learnt a lot, it was in fact me who gained the most. I was provided a field to run and experiment freely. I had a group of students who trusted me and followed me wherever I went. It was such a wonderful class and it would be impossible for me to take all the credits. I would like to share some of the works of my students. Below are some fragments of the students’ journey of calling inner inertia of computing. On their way to becoming artists, all I did was occasionally providing some thoughts while remained silent as much as possible.
Early Term Assignment by Ci-hong CAI (蔡奇宏)

Early Term Assignment by Siang-yi HUANG (黃湘尹)

Early Term Assignment by Jyun-ye HUANG (黃俊業)

Mid-term Assignment by Ci-hong CAI
In the last part of the essay, I shall present some methods of metaphor interchange I wrote on the whiteboard in the classroom along with some contemporary examples. My observation may require further research. However, it represents the conclusion I reached after striving hard to understand modern “interactive design” and “digital art”.
MusicBottles~MIT Media Lab

Steps of Metaphor Creation

Sculpture by Richard Long: England 1968

Toast~ Apple Software