

FOREWORD

I can hardly recall. It was the winter of 1989 in Illinois. I was a student of the composer Roque Cordero for six months already. He insisted that I should concentrate on writing good music rather than any music. He said "There are thousands of composers and it's no point to become just one of them". It was frustrating, he could not proceed more than eight bars in any piece that I carried to him.

One night that winter, we went to the school cinema with a friend of mine, Maria. It was terribly cold and it was raining ice. After the movie, we took a short walk in the university squad. Everything was frozen, like an ice palace. The trees, the branches were shining with ice. We had difficulty walking on the ice, we held onto each other not to fall down.

I wrote the second movement of the Viola Sonata in three days after that night. Dr. Cordero was a little bit astonished and said "OK this is not bad but you should write it again and make it more elaborate and tender" moving his hands in parallel from up to down and showing elaborations by moving his fingers.

The Second Movement was performed as a standalone piece by Tuba Özkan(viola) and Seher Tanrıyar(piano) under the auspices of Teri Mason of BORUSAN Kültür Sanat Office in May 2000. It was one of the moments of my career as a composer that Viola artist Ruşen Güneş listened to. After the concert, he said he is arranging concerts of viola works and then asked me if I would write something. I said I would love to write a first and third movement and make it a Sonata.

Ruşen Güneş and Judith Uluğ(piano) played the Viola Sonata at BORUSAN Kültür Sanat Office in April 2001 for the first time.

INTRODUCTION

The first movement begins with a root position dominant ninth E chord. There are first a root position D seventh chord and then a second inversion c min seventh chord before the repetition of dominant ninth E chord. E ninth and D seventh chords are connected by the common F sharp pitch. D seventh and c min seventh chord are connected by the common C pitch.

The two E chords establish tonality as a minor or A major. The exact tonality is determined by the embellishment chords not the static pillars of E ninth chords. The passing chords of D major and c min have both c natural which determines the tonality as a minor.

The embellishment elements in the beginning of a piece whether it is music, or an article, book etc. may carry the function of preparing the ideas presented in the further instances. C sharp - D pitches trill introduces the nonharmonic tone C sharp pitch at the second bar. In fact it is the crucial and very last note just before the beginning of the second idea of the first department A of the piece. The connection is made with C sharp pitch to G min, an augmented fourth.

Anything we do not understand, that we can not put into a frame of reason or connection goes into our subconscious. The embellishment elements go into our subconscious because they are irrelevant to the strongly established initial chords, which are generally in root position and clearly identifiable.

Gestalt laws, Proximity, Similarity, Closure, Good Continuation apply not only to conscious perception but also to the subconscious processing. Transition in music, is a higher level abstraction of good continuation. The listening mind may not perceive the identity of sliding tonal centers. The sounds it hears go to the subconscious. But the good continuation principle works in the subconscious and at the end of the transition the listening mind welcomes the new tonality, similar to remembering something. The transition from the central department in c minor to the recap at bar 109 uses 12 tone motives of length 4 bars. The reference point of the 12 tone series slides half tone three times...

Schuman and Couperin wrote words in their works. The last movement of my work has two words scribbled on the side of the score. The word 'clairvoyance' is written on the side of bar 49. A new 12 tone passage begins at bar 47 with expression marks: 'meno mosso' and 'con precisione e susurrante'. The tempo at bars 26 - 36 is supposed to be tempo A. Then comes a 'poco mosso' passage which is faster. After this 'clairvoyance' passage comes where the tempo slows suddenly and the flow of temporary events is interrupted. It is the standing back of a person out of the hustle-bustle of instant action-reactions of the daily events and out of this moment, his looking at the whole, which is represented here through the 12 tone.

Normally word painting is the depiction of the meaning of the words that are being sung. The instrument part reflects the literal meaning of the song either generally or for a specific word. What happens if the words are written in the score but there is not any vocal part?

The listening mind hears the music but it can not understand it. The music goes to the subconscious of the listener.

NOTES ON THE INTERACTION OF SUBCONSCIOUS AND CONSCIOUSNESS

Whether it is the case of an air traffic controller or a violin player or even a heavy vehicle pilot, performing requires not only the skills to operate the instrument but also the ability to perform a task. To perform a task according to a given procedure, a score, a flight plan with strips requires accuracy and speed.

Performing is an episodic act in which time and location of events are crucial. In contrast, creating, composing, writing, designing are batch tasks in which the final output is more important than when, where they are done.

The common point between these two, namely performing and creating is; they are all about the human being and more specifically the human mind.

Sartre engages with the world pre-reflectively while writing: *“For example, at this moment I am writing, but I am not conscious of writing. ... In reality, the act of writing is not at all unconscious, it is an actual structure of my consciousness. Only it is not conscious of itself. To write is to maintain an active awareness of the words as they come to birth under my pen.”*

Hemingway advises a novice writer: *“The most important thing I’ve learned about writing is never write too much at a time,” Hemingway said, tapping my arm with his finger. “Never pump yourself dry. Leave a little for the next day. The main thing is to know when to stop. Don’t wait till you’ve written yourself out. When you’re still going good and you come to an interesting place and you know what’s going to happen next, that’s the time to stop. Then leave it alone and don’t think about it; let your subconscious mind do the work. ...”* [Ernest Hemingway Creates a Reading List for a Young Writer, 1934 http://www.openculture.com/2013/05/ernest_hemingways_reading_list_for_a_young_writer_1934.html]

Judith ULUĞ who played the piano in the first performance of my Viola Sonata advised me: *“Let it go where the music leads.” during the rehearsals.* This is pretty similar to an Anatolian Hittite King’s thousands of years old advice: *“Mein Sohn! Tue das, was in (deinem) Herzen (ist) (My son! Do what in your heart is.)”* [Daisuke YOSHIDA, *“Die Syntax des althethitischen substantivischen Genitivs”*, page 5] Both of these advices suggest the use of subconscious and there is a slight difference between them. ULUĞ’s advice is based on good continuation where as the ancient advice is related with conscience.

The success in creating or performance depends on the personal balance in using not only consciousness but also unconscious capabilities of the mind. Gestalt laws, Proximity, Similarity, Closure, Good Continuation apply not only to conscious perception but also to the subconscious processing.

According to Baars “brain is a large group of separate, specialized systems that are unconscious mostly during their operation. Some of these processes may become conscious in sequence and this process constitutes a conscious experience. Only one process can be conscious at one instant of time.” [Baars, *“A Cognitive Theory of Consciousness”*, 1988]

A huge variety of things can be experienced consciously, but an unconscious specialized processor can perform a limited range of tasks. This is related to the necessity of focusing to do high speed or specialized difficult tasks.

When a music performer plays a piece, although he/she is conscious of a single note at a certain point of the piece the previous and successive notes are in his subconscious and they do priming effects to the performance of the current note. This is similar to Tanenhaus’s word example. [Tanenhaus, Seidenberg’s *‘Do listeners compute linguistic representations?’*, 1985.]

While conscious processes are consistent, the collection of unconscious processes are not. There has to be an internal consistency of conscious experience.

Conscious events are shaped by unconscious factors where as unconscious processes are not context sensitive. Conscious processes are inefficient and error prone. During the learning process we use conscious processes but once learned the task is unconscious and performed with comparative speed and accuracy.

Consciousness can relate two separate conscious events. Any conscious stimulus may serve as a signal for any other event. The unconscious processes are closed boxes that can not relate. This requires the performer to manage unconscious events and conscious events at a higher level of consciousness. [Josh McDermott, *Global Workspace Theory: Consciousness Explained, Harvard Brain, 1995.*]

“Only with the flowering of higher-order consciousness and linguistic capabilities does a self arise that is nameable to itself. Consciousness of consciousness becomes possible via the linguistic tokens that are meaningfully exchanged during speech acts in a community.” [Edelman, *Naturalizing consciousness: A theoretical framework, PNAS, 2003, <http://www.pnas.org/content/100/9/5520.full>*]

“consciousness is an ... internal functional state modulated, rather than generated by senses”.

“the thalamocortical resonant column is the functional architecture of the active state that generates consciousness”.

“high frequency oscillations (20 – 50 Hz) show a pattern of coherence that is either restricted to its immediate vicinity or occurs between distant discrete areas” [Llinas, et al., “*The neuronal basis for consciousness*”, *The Royal Society, 1998*]

“consciousness arises as a result of integration of many inputs by reentrant interactions in the dynamic core. This integration occurs in periods of < 500 ms.” [Edelman, “*Naturalizing consciousness: A theoretical framework*”, 2003, *Proceedings of Natural Acedemy of Science USA*].

When the consciousness takes control of the mind, unconscious processes do not stop working. As Baars stated above, the unconscious processes have priming effect on the active conscious process.

Classical theories of cognitive control, therefore, propose that only conscious processes depend on capacity-limited attentional resources and can be modulated by executive control.

(1) *Unconscious stimuli influence executive control settings. Several experiments showed that subliminal stimuli can modulate shifts of spatial (Ansorge et al., 2002; Scharlau and Ansorge, 2003) and modality-specific attention (Mattler, 2003, 2005) as well as task-specific control operations (Mattler, 2003, 2005, 2006) and task sets (Reuss et al., 2011; Wokke et al., 2011).*

(2) *Furthermore, the relation between executive control and unconscious processing is bidirectional because top-down factors such as attentional resources, stimulus expectations, action intentions, or task sets, all factors that are typically considered to involve executive control mechanisms (Norman and Shallice, 1986), modulate unconscious stimulus processing (Jaśkowski et al., 2003; Ansorge and Neumann, 2005; Kiefer and Martens, 2010; Wokke et al., 2011). ...*

[Markus Kiefer “*Executive control over unconscious cognition: attentional sensitization of unconscious information processing, Front Hum Neurosci. 2012; 6: 61. ”*]

To become conscious of something the brain needs <500 ms to highlight all the existing semantic relations in the cortex. In a 60 Metronom number tempo this corresponds to an eighth note. This means you can hardly become aware of every and each of the individual notes in a sixteenth notes sequence. Conscious perception is helped by beats which differentiate between all the notes of a bar. The gestalt laws of proximity and similarity may help to explain this but there is also an other aspect of consciousness: it is the unity of consciousness.

“At any given time a subject has a multiplicity of conscious experiences. A subject might simultaneously have visual experiences of a red book and a green tree, auditory experiences of birds singing, bodily sensations of a faint hunger and a sharp pain in the shoulder, the emotional experience of a certain melancholy... These experiences are distinct from each other.... But at the same time, the experiences seem to be tied together in a deep way. They seem to be unified, by being aspects of a single encompassing state of consciousness”. [Bayne et al., *What is consciousness?*“, 2003,]

Pitch, duration, rhythm, harmony of a single beat is perceived as a single unit, as different aspects of the unity of their consciousness. Motives, sentences, forms, other higher level entities in music form ‘object unity’. We perceive music by grouping things that we hear because of the bottleneck of our perception. [Miller, “*The Magical Number Seven, Plus or Minus Two: Some Limits on Our Capacity for Processing Information*”]. The unity of consciousness may also be based on ‘Subject Unity’, ‘Subsumptive Unity’, ‘Access Unity’ or ‘Phenomenal Unity’.

Consciousness is the activation of semantic relations to an input sense. Seeing a red object activates the color red in our mind. There exists no way to exactly determine what the mind's encoding that corresponds to the color red is. Hence, it is also not possible to claim what I see as red is what you see as red. The encoding for the color red in our minds is called quale. *"In any presentation, this content is either a specific quale (such as the immediacy of redness or loudness) or something analyzable into a complex of such. The presentation as an event is, of course, unique, but the qualia which make it up are not."* [Lewis, *Mind and the World Order*, 1941]

Qualia belong to not only simple things such as pitch, loudness, usw., everything we are conscious of has a qualia in our mind. In order to be conscious of something what we think and perceive must be consistent as stated above. If we do not understand something or get conscious of it, it goes to unconscious. If a performer cannot activate a quale about a situation he/she faces it will not be possible to handle it. This happens in airplane accidents when the pilot cannot find the emergency situation in his training knowledge or reference book. The composer has to write his work in such a way that he has to activate at least some qualia in the minds of the performers and the audience. There has to be a decent balance between consciously and unconsciously perceivable elements of the composition using also priming by subconscious.

The semantic tree of our knowledge and the way we utilize it through qualia are formed by experience and education. Qualia is the combinations of the parts of the semantic tree that are highlighted by the consciousness. Consciousness may be the qualia formed by the combination of memory, emotions and it may be triggered by the recursive sensitivity of the thalamus like the vibrating flame of a candle.