## Reading Assignment 1 - Hyemin Chung

[Reading Assignment 01-1] The evolution of the music faculty: A comparative perspective by Marc D Hauser and Josh McDermott.

Every culture in the world has its own forms of music. Although those musical arts are originated and developed independently in the different places by different races, people can share and feel them even if they are from the different cultures. On the other hand, some kinds of music such as heavy metal and modern atonal music require training for people to get used to the kinds of music. Thus, we can imagine that there might be some common and innate factors about music in human kind while the other factors should be educated and trained.

The article, the evolution of the music faculty: A comparative perspective by Hauser and McDermott, addressed this issue with three questions: the innate state of knowledge of music, transforming of the innate state to the mature state, and the evolutionary history of the musical knowledge. He introduced several researches and experiments about those questions and discussed them, but did not answered to the questions.

Among the researches, the most impressive parts are that the monkeys recognized the same melodies with different octaves as same while they did not the same melodies with different keys because we can see the same tendency in the music of the world in different cultures and places. For examples, we can find that the concepts of octaves of the Western music and the Eastern music are same even though those two big categories of music were originated absolutely independently. Putting those facts together, octaves could be innate factors of human being and even other animals. Then, it is natural to wonder that how they could be innate factors.

The octave means the notes with the exactly doubled and half frequencies. Although it obviously has meaning in the physics, it is interesting that the doubled or half frequencies also have meaning to our brains directly as to categorize them as the same thing without any training or previous experiences. It could be guessed if our brains have deep relation with innate physical factors in recognition and analysis not only in the case of music but also in the other fields and areas.

The researches about innate factors of music in this article were very interesting, and invoked me to think about the fundamental physical factors of our brains' recognition and analysis of information.

[Reading Assignment 01-2] Music Lessons Enhance IQ by E.Glenn Schellenberg

The article, Music Lessons Enhance IQ by Glenn, addressed the relation between musical education and improvement in the general IQ. His experiment was designed as below. He grouped children into four groups. Two groups were for experiments, and taught musical lessons. The other two groups were control groups. In one of the control group, children received the drama lesson which was not related with music but also had factors of extracurricular lessons such as practice, rehearsal, memorization, expressing emotion, and so on. The other control group received no lesson. After one year of education and experiments, the children who had received music lessons showed the most impressive improvement in the IQ test, and the drama group showed the improvement in the social behavior, while the no-education group showed the least improvement in both sides. The author concluded that the music lessons could affect to enhance IQ.

In my opinion, almost all the extra-curricular activities themselves are helpful for people, especially for children, because they offer many opportunities to face new experiences and new problems which make the brain work, exercise and learn. Thus, it seems natural that the groups with those lessons improved much better than the group without any lessons. However, it is an interesting result that the groups with music lessons showed better performance than the group with drama lessons even in the areas which do not seem to be related with music such as the Freedom from Distractibility and the Processing Speed, because it could mean that the music were more closely related with the general human abilities than other activities.

However, for the discussion written above, we have to do more experiment for data, because we could not know from where the improvement in those areas such as the FD or PS; it could be

from the music itself, or the methods. Although the experiment by Glenn included two different methods in music lessons, both two methods could include the concentration and repeated practice which might cause the improvement in the Freedom from Distractibility. Also, because there was a report that the finger exercise could help to enhance IQ, the motion of playing keyboard (which includes finger exercise) itself could cause the result.

The author concluded the article with the conclusion that music lessons were effective to enhance IQ, but it will also be interesting topic whether the music itself, not lessons, is effective to enhance human abilities or not.