

Math, Mind, and Music

Quiz 4

May 10, 2005

Solve 3 out of four questions for a 100% score. Extra credit is possible.

1. A psychological experiment suggested different sources for emotion in music.

- (a) Briefly report the experimental procedure and the results.
- (b) What is meant by *intrinsic* and *extrinsic emotions*?
- (c) Give an example for each.

(2+1+2)

2. There are two major theories of why some persons have absolute pitch: heredity, on the one hand, and some combination of learning, unlearning, and imprinting (early learning) on the other. Discuss the evidence from developmental psychology for either of these viewpoints. (5)

3. In class, we discussed the hypothesis that the primary adaptive function of music in the evolution of our species lies in *sexual selection* through mate choice. A possible counter-argument is that in most traditional tribal music and dance, every member participates, which suggests more a group than an individual level function.

How strong is this counter-argument? Find arguments in support or against the objection.

(5)

4. Esbjörn Svensson said in an interview that

“I play piano because we didn’t have any other instrument in the house. Actually, I would have rather played drums.”

Can you describe features in his style of playing which support this remark? (5)