



# CALIFORNIA STATE SCIENCE FAIR 2006 PROJECT SUMMARY

<b>Name(s)</b> <b>Sabrina J. Russo</b>	<b>Project Number</b> <b>S0314</b>
<b>Project Title</b> <b>Correlations between Motion and Music: A Study of the Human Mind</b>	
<b>Objectives/Goals</b> The objective of this Science Fair project is to determine whether the human mind classifies information based on pre-conceived notions, or archetypes. This is done by examining the human interviewee's interpretation of equine motion in relation to different types of musical meter.	
<b>Abstract</b>	
<b>Methods/Materials</b> Video Camera, Notebook, Batteries, Equine test subjects, 20+ human test subjects, Video editing software, Computer, Sound clips (2/4, #, 4/4 meters), Headphones (for noisy environments) Setup: 1. Secure resources. 2. Prepare a section of the notebook for notes on variables. 3. Ensure computer software compatibility with camera. Eliminate irregularities in gaits for best test experience. Gather Data: 1. Setup video camera with clear view of the span of the arena. 2. Observe/Video the horses in natural gaits. 3. Take notes. 4. Acknowledge horses and owners for help. Making Tutorial: 1. Upload video to computer. 2. Create a simple tutorial using video editing software. 3. For each sound clip, insert a clip of each equine gait. 4. Create disc. Application: 1. Take tutorial to a public place with computer access. 2. Find and instruct WILLING subjects. 3. Stress ONLY music beats, but no further clues. 4. Show subject tutorial. 5. Thank subjects. 6. Plot results.	
<b>Results</b> The results of this experiment show that the human mind actually tended to interpret equine motion and musical meter in different ways, depending on the individual's exposure to different experiences. Individuals with more musical or experience working with equines tended to relate musical meter with beat. Individuals with less of this exposure drew his/her own conclusions based on experience.	
<b>Conclusions/Discussion</b> The ability to classify has helped the Human race survive. Detailed tests have been performed in the past to explore this field, esp. studies of the #archetype,# developed by Carl Jung (psychologist). Essentially, music is an auditory form of expression. The rhythmic beat of a horse can be considered music. I hypothesized that the information I gathered from my test subjects would curve around a certain definition of music. However, this information was proved to be inaccurate. Through this experiment, I learned that interpretation of motion and music is a developed trait. It changes based on experience, and that experience influences conscious decisions made by each individual.	
<b>Summary Statement</b> This project is designed to test the way a human mind associates music with motion by comparing sound clips and videos of equines in motion.	
<b>Help Received</b> Mother helped proofread and format essay ; Father and Brother helped with tech support and proofreading, extra information on archetypes provided by Mr. Robel (teacher of English H-1)	