

Name _____

Motion Perception



1. Context Effects in Motion Perception

First, describe the nature of the Barber Pole Effect under the varying apertures. What factors seem to produce the effect? (Pay particular attention here to the information at IllusionWorks.)

What role does the aperture play in the Chopstick Illusion, the Sliding Effect, etc.? Are these effects similar to the Barber Pole effect? Why?

2. Implicit Figure Motion



What factors seem important in producing this illusion? What factors do you think influence the direction of motion?

How would you relate this effect to the Breathing Square?

3. Apparent Movement (Phi Phenomenon)

What factors seem crucial to producing smooth phi movement?

4. Wheel Motion

What do you think is the difference between the two displays? Why is a wheel easier to perceive in one demonstration than the other?



5. Ambiguous Motion

What might these three motion demonstrations tell us about the way we interpret motion. Pay particular attention to the second and third demonstrations, which are virtually identical. How might the addition of the square change your perception of the motion of the two dots?

Why might the direction of motion of an object be ambiguous? What do you think is responsible for the ambiguity of direction in these two figures?



6. Biological Motion

Note that we seem to be particularly well equipped to detect motion of a particular sort. How effective was the model that you could adjust? Were the changes in motion sufficient to change your perception of the sex of the model, etc.?

7. Motion Aftereffects

You should be able to articulate the ways in which these motion aftereffects are similar to the negative color afterimages:

8. Illusory Motion from Stationary Figures

What principles do you think are operating to give rise to motion in these stationary figures?

9. Color and Motion Together

a. What factors seem to produce the best color spread and motion? What might that mean?

b. Presuming that the yellow dots disappeared for you, why did they do so?

c. Why does the presence of the background have such a profound effect on the perception of the movement of the two squares?

d. Can you use what you know about negative color afterimages, peripheral receptive fields, etc., to posit an explanation for this demonstration?
