Homework 3

Due June 5th 2019

1. Read Gibson (1979) Chapter 8, Warren & Whang (1987) and Warren (1984). Then, answer the following questions.

(a) Define and explain the concept of affordance.

(b) Use the example of stair climbing (Warren, 1984) or aperture passing (Warren & Whang, 1987) to illustrate that affordance, as a property, is real, relational, function and perceptible.

2. Read Runeson (1977) and answer the following questions.

(a) What are smart instruments? What were the two reasons that made Runeson think there existed smart mechanisms in perception?

(b) Would Runeson agree that perception is experience-based? What analogy did he use to talk about perceptual development?

3. Read Warren & Hannon (1990) and answer the following questions.

(a) What do you typically do with your eyes as you locomote and what is the resulting effect on the optic flow projected to the back of the eyes? In particular, what happens to the FOE?

(b) What trick did Warren and Hannon (1990) use to eliminate the possibility of using oculomotor information to solve the rotation problem for heading perception? In contrast, how did they eliminate the possibility of using the subtractive process with depth structure to solve the problem?