Reading Assignment 5
"Animate Vision" by *Dana Ballard*
"The Polly System" by *Ian Horswill*
Due: *Wednesday, March 3rd, 1999*

The following questions are intended to stimulate your understanding of the assigned reading material. Many of them have no "right" and "wrong" answers.

1. How does Ballard use a world-centered frame of reference and motion parallax to measure depth in real-time?

2. Describe a traditional vision problem in which the independent behaviors location and identification may combine to search physical space rather than image space. In what situations might the animate version be preferable to the traditional and vice versa?

3. Ballard's location/identification example uses known objects arranged roughly in a circle. Name at least three properties that make this a particularly easy task.

4. Polly is claimed to have exploited "environmental specialization". Briefly describe what this is, and show how it was (or was not) used by Polly.

5. Polly uses an active vision methodology to achieve its behavior. Describe a more traditional (i.e. non-active) approach to solving the same problem. Compare this to Polly's solution, highlighting the differences. For each of the major differences, say which system you think is better.