

CPSC 625-600 Paper Commentary: Instructions

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1 Goals

The main purpose of this assignment is to expose you to recent literature on AI and related fields. Another major goal is to help you build the ability to actively understand, analyze, evaluate, and critique other people's ideas, not just passively absorb knowledge. Finally, this assignment will help you organize your thought and express your ideas in a coherent manner, through writing.

2 Selection of a Paper

Read the instructions in <http://courses.cs.tamu.edu/choe/689-reading/> if you want to select a paper on your own. Otherwise, select one from the following.

1. Symbol grounding and natural semantics (Cohen and Beal 2000; Choe and Bhamidipati 2004; Philipona et al. 2003)
2. Imitation (Rao et al. 2004)
3. Dynamical systems approach in cognitive science (Beer 2000).
4. Cognition and self-organization (Langlois and Garrouste 1997).
5. If you want to read something else, please obtain permission from the instructor.

3 Content of the Review

Each paper review must address the factual content of the paper and your interpretation and critique. More specifically, it should contain all of the following aspects:

1. **A brief summary of the paper:** What did they do it and why did they do it? (1 paragraph)
2. **Main contribution of the paper:** What are the main contributions of the paper? (1 paragraph)
3. **Limitations and future directions:** What are the limitations of the approach and what kind of issues need to be addressed in the future? (1 paragraph)
4. **Relevance:** How is the work different from (or similar to) the AI methods we studied throughout this semester? (1 paragraph)

All parts of the review should be in your own words: You should not use verbatim copy of the abstract or conclusion or any other part of the paper. The review should not exceed one, typed, single-spaced page.

4 Grading Criteria

The submitted reviews will be graded according to the following criteria:

1. **Clarity:** Is the review clearly written? (30%)
2. **Succinctness:** Is the review brief and to the point (i.e., no redundancy)? (10%) It should not contain unnecessary or redundant passages.
3. **Accuracy:** Does the review accurately represent the factual content of the paper? You should make sure that you understand the paper well, and when you say something about the paper, it should be factually correct. If the paper uses too many technical terms and you need help, please let me know. (25%)
4. **Depth and originality of the analysis:** Is the interpretation and analysis presented in the review insightful? Is the argumentation sound? (20%)
5. **Organization:** Is the review well organized? This does not mean pretty formatting using word processors. Organization is how the chunk of ideas are ordered and structured. (10%)
6. Remaining 5%: see below (Submission section).

Note that grammatical errors will generally *not* influence the grade unless they are severe. (This is not an English writing class.) However, typographical errors will, because it shows the lack of your attention to detail.

Also, be aware that your opinion can differ from mine, and that's fine as long as you present a reasonable argument. Simply reiterating what the author's view is does not automatically guarantee you a good grade.

5 Submission

The paper review is due on:

1. 12/9/2005 (Fri): Bring it to the final exam.

For the paper review, you need to submit two things:

1. **Printout of an early draft, with your editorial corrections on it (written on the printout):** You should carefully read your whole commentary at least once and revise it at least once based on your comments. After you revise, read it again to make sure you didn't introduce any further error. Your initial version with your own comments written on it will serve as an evidence that you did revise it at least once. This will account for 5% of the grade. **Note: Do not use MS Word's change tracking function as a substitute for this requirement.**
2. **Printout of the final version and submit it as well.**

Note that electronic submission **will not be accepted.**

6 Reviewing Tips

If you are not sure what is a good review, take a look at this book review by Cosma Shalizi:

<http://cscs.umich.edu/~crshalizi/reviews/how-the-mind-works/>

References

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- Cohen, P. R., and Beal, C. R. (2000). Natural semantics for a mobile robot. Technical Report 00-59, University of Massachusetts, Department of Computer Science.
- Langlois, R., and Garrouste, R. (1997). Cognition, redundancy, and learning in organizations. *Economics of Innovation and New Technology*, 4:287–299.
- Philipona, D., O’Regan, J. K., and Nadal, J.-P. (2003). Is there something out there? Inferring space from sensorimotor dependencies. *Neural Computation*, 15:2029–2050.
- Rao, R. P. N., Shon, A. P., and Meltzoff, A. N. (2004). A bayesian model of imitation in infants and robots. Cambridge, UK: Cambridge University Press. In press.