Robotic engineering

The robotic engineering field is an ever expanding field with newer innovations coming forth every year. Robots in the home have already begun with robot-like machines like the robotic vacuum and automated coffee machines. Now the everyday folks, non-specialists outside the field of robotics, need a spokesman in the field to break it all down in laymen terms and illustrate some concepts and ideas of robots in the future and what one's home may include in the future. Donald A. Norman does just that in " Emotional Robots", an excerpt from his 2004 book Emotional Design: Why we love (or hate) everyday things.

His concepts and ideas for the future of robots are designed to enlighten the non-specialist by using simple language, specific evidence and personal claims. Different writing strategies are employed to reach a certain kind of audience be it a specialist in the field of the topic written or a non-specialist. Reaching the audience one is targeting is quite difficult. One must keep in mind the target audience whilst writing. The specialist is an audience in the field for which one is writing. A non-specialist is a rather broad term, but the non-specialist can be categorized as a general audience or the average reader.

The non-specialist expectations are rather low compared to a specialist who expects a lot of detail and will question the facts. A non-specialist will be satisfied with the information given and will generally take the authors word on the topic. " Emotional Robots" by Donald A. Norman is an excerpt found in Arguing Across the Disciplines: A Rhetoric and Reader from his 2004 book Emotional Design: Why we love (or hate) everyday things. This short excerpt describes the possible uses of robots in the home and their possible designs.

Norman communicates his ideas of how robots may look, function, see, move and work with other robots to complete daily household chores and activities. Norman discusses how technology has forced mankind to adapt to new and ever evolving technology. He also discusses how robots of the future will influence the design of homes and their capacity to accommodate resting or charging stations for differently designed robots. In addition to his own ideas he discusses and elaborates on some of the design ideas of a few other scientists and engineers.

In the excerpt “ Emotional Robots”, Norman chooses to employ the simple language strategy to communicate his ideas to a broader, non-specialist, audience. In an interview conducted by Technical Communication Quarterly, they also point out that his writing is geared toward “ a general audience” (Zachery), in other words the non-specialist. Although the text is about robots functions and designs, Norman stays away from technical details and opts to instead use simple and non-technical words. For example, Norman states “ Suppose we wish to build a robot capable of living in the home” (526).

One would not need a technical or field specific dictionary to decrypt what Norman is saying here. Using simple words like “ build” and “ robot” instead of possibly more difficult words like construct and fabricate or automation and android, reveals his intentions of getting through to the non-specialist. Norman describes many different types of robots one may see in homes of the future. When describing these different types of robots and their functions, he stays away from too much technical and hard to understand details.

In his text Norman states “ The drink robot would slide open its door, push out a can, and close the door again: no complex vision, no dexterous arm, no forceful opening of the door” (528). The choice of words or the lack of technical detail used helps the non-specialist audience comprehend what was read. Words like “ door” and “ can” are everyday words every English reading person knows and understands. “ Complex” and “ dexterous”, though a little less common, are better understood by non-specialists than their synonyms: multifarious or byzantine and adroit or deft.

Norman’s use of a simple language writing strategy helps the non-specialist audience with the understanding and comprehension of the excerpt. Norman’s keeps his ideas of robot designs simple and easy for the non-specialist to understand, but there are others who discuss robot design in a much more technical approach. In an article written for Machine Design, author Leland Teschler quotes Andrew Goldenberg’s ideas on a robot design from a technical standpoint.

For example, he states “ It uses a planetary wheel to control its center of gravity” (22 Goldenberg) which is much more technical than Normans descriptions in the sense that Goldenberg is discussing actual technical details of the robots rather than Norman’s simple design discussion. Goldenberg’s audience is likely to be specialists in the field rather than that of Norman’s non-specialist audience. An effective essay is written with a good amount of supportive evidence. Although Norman’s ideas and designs are mostly hypothetical, he does a really good job of keeping the evidence specific enough to satisfy the non-specialist audience.

Norman also discusses how past technologies have altered the way we build and design things from homes to freeways. At one point Norman discusses how the automobile system significantly changed many things in our society. For example, Norman writes “ homes to include garages and driveways… massive worldwide highway system, traffic signaling systems, pedestrian passageways, and huge parking lots” (527). Norman provides evidence of the changes made to accommodate the automobile system by stating examples of the things changed. Providing evidence in this format helps the non-specialist to understand and leaves no room for doubt in their minds.

The robot designs Norman describes are in great physical detail leaving out all the behind the scenes technical detail. For example, Norman writes “ we can expect the first legged robots to have only four or six legs: balancing is far simpler for four- and six legged creatures than those with only two legs” (530). Norman describes through simple language how he thinks robots may be designed in the future. Describing their detail in such an easy way to where the non-specialist can imagine exactly how a robot may look and function.

Though the evidence he is providing comes from his own imagination, one does not have a hard time accepting Norman’s ideas as a possibility. The evidence provided by Norman is greatly detailed so as to help in supporting his claim for the future of robots. Norman states “ I do predict that robots will blossom forth during the first half of the twenty-first century” (526). Norman also mentions before he makes his claim that Sony predicts “ this to be the decade of the robot” (526). By borrowing Sony’s claim and creating his own

claim he is letting his reader, the non-specialist, know what his outlook is on the future of robots.

Personalizing his claim allows him to divulge his ideas and personal opinion based off his experiences. As stated in the example provided, Norman writes “ I do predict” (526) which assures one that this is his personal claim. One can now assume that everything written after this statement, if not cited to another author, will be his own thoughts and ideas to support this claim. “ Emotional Robots” by Donald A. Norman is an excerpt found in Arguing Across the Disciplines: A Rhetoric and Reader from his 2004 book Emotional Design: Why we love (or hate) everyday things.

His concepts and ideas for the future of robots are designed to enlighten the non-specialist by using simple language, specific evidence and personal claims. Norman’s ideas and design concepts are all very easy to read and comprehend for the non-specialist. Norman’s uses of simple language in order to attract non-specialist are very effective in getting his ideas out to the general public. The evidence Norman presents is sufficient in supporting his claim that robots may be more prominent in the near future.