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Comments for week 8 (3/29/2005)  
Augmented Reality

Despite all technical challenges, I think AR is very useful to annotate the reality to provide valuable information, such as descriptions of important features or instructions for performing physical tasks like machine maintenance. KARMA – Knowledge-based Augmented Reality for Maintenance Assistance is a good example of exploring the AR technology that explains complicated maintenance and repair tasks. Many other useful applications can be imagined: e.g. an AR system that combines with a location-based messaging tool, which tourists can see recommendations and graffiti left by other people through a special device.

On the other hand, when annotations is overlaid on the physical world and seen through an AR device, whether it's a pair of glasses or a head-mounted display, it is unavoidable to use it to annotate people, as we are part of the world. However, this may arouse many social problems when using it to interact with other people, for example the social issues we have discussed about the remembrance agent. AR systems provide extra information of the physical world to your vision by wearing a special device, but this information is only private to you while others can notice your device as a public display of knowing something extra. What if this extra information provided by the system is about them? I think the AR system is like someone whispering to your ear while you're talking to another person, the one you're talking to would be offended or feel uncomfortable talking with you in such situation. Unless we can have an AR system that is totally invisible to others, otherwise AR might only be practical in personal domains or collaborative tasks where users can share the same AR vision.

When talking about VR or AR, it always reminds me about George Berkeley's notion of subjective idealism where he said, "To be is to be perceived", the existence of the material world is only because we (and God) perceive it. But do we perceive the same world as everyone else? I think if one day, with the prevalent use of VR or AR devices (assumes that the technology is mature enough), the answer should be apparently negative. When many of our concepts and imaginations are visually seen through our eyes, and we notice that we are seeing different worlds, we would definitely interact with each other in a different way.

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