

Christopher Wickens – okay, alright, first of all Chris, again I want to thank you for putting this together, it's a wonderful opportunity and we hope the second part does involve a lot of audience participation. I think to a large extent for all of us we are in part what we were and so I'd like to start with just a little personal history of how I got to where I am. I was a geology major in college, I took a course from George seven plus or minus two Miller, was absolutely turned on to the psychology, I went to graduate school in Michigan and Dick Pew turned me on to both experimental psychology as well as the applications of experimental psychology and when I got the job at the University of Illinois in 1973 I kind of worked as a standard experimental psychologist, but gradually expanding my interest from beyond some toy tasks in the laboratory and a lot with the late Stan Roscoe's influence, he was really my mentor at Illinois and I think I certainly own him a tremendous debt of gratitude as I think does the whole society. I became more and more fascinated with aviation and particularly the complexity of aviation tasks. The number of tasks that pilots have to do, sometimes sequentially, sometimes concurrently and you know realized that simple theory testing which is what experimental psychologists do isn't adequate to handle that level of complexity of a typical work environment, for us it was the pilot in the cockpit. And so this has kind of led to some philosophical views that our profession in human factors should not be about theory testing and those who are experimental psychologists interested in application should not focus their human factors interests on theory testing but rather understanding what the limits of application of each different theory are and how multiple theories can work together accounting for complex performance of people in real tasks. Occasionally you find people doing a single task in an area where a single theory may nicely account for variance, but more often the case that's not, that is not the case. Um another thing I think I have a problem with so much of traditional theory testing is its emphasis on right and wrong. A theory is proven or disproven. I hate those words, I really hate them, and it's not what we should be about, we should be about the degree of rightness or wrongness in particular theories in accounting for performance and cognition in certain circumstances. I think a couple things that I, I'm probably addressing my words more to those of you who like myself came from the tradition of experimental psychology than to the engineers that started with the complex world, but we need to avoid becoming paradigm bound. Becoming fascinated with a paradigm whether it's change blindness or recency in working memory and just say lets do lots of experiments to study the paradigm without stopping for a moment and considering where that paradigm may be manifest in real world behavior and where it may not and that keeps us from getting our nose heavily in sort of basic laboratory research. We need to avoid over control, too much of experimental psychology is focused on controlling every single variable and yet in the real world obviously variables are not controlled and what values does the contributions of experimental psychology in effect that exist when that control is removed, not when it's applied. And that's why studies of naturalistic behavior in real worlds of behavior and complex simulations are so important. Finally I think what has emerged probably over the last ten to fifteen years in my own study of human factors and part of this came from writing the textbook, our introductory textbook to human factors, has emerged the understanding of really what I think is the moral good, the moral value of our profession of human factors and certainly Jeff Kelly very eloquently presented this this morning that we do good, we do good in safety and improving the quality of workers and that is a

major, major thing that makes me feel good about being a human factors professional. That and the fact that our profession had such diversity within it in terms of different approaches and I think that's, it's that diversity of approaches and methodologies and so forth that's going to, in the long run, contribute to that, that moral good of making life better for workers.