(12 pts 30 minutes) Read Don Norman's critique of gestural interfaces at:  

Choose three of Nielsen's principles for heuristic evaluation (from the lecture slides) and, for each, briefly explain why it would be either much more or much less likely to catch interface problems in gestural interfaces than in WIMP interfaces. Think about the differences between gestural and WIMP interfaces.

Flexibility and efficiency of use
Accelerators — unseen by the novice user — may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.

In his article, Norman talks a lot about how gestural interfaces seem to have a lot of unintuitive gestures for basic activities. This couples with the fact that most gestural interfaces have less overall functions than WIMP, makes it tough for designs to truly implement both novice and expert user experiences. It would be easier for this heuristic to be mistaken for a simple lack of usability in gestural interfaces.

User control and freedom
Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue.

Almost all of the top gestural interfaces right now have a type of home button that brings you out of an application and back to the interface main menu. This makes it easy for users to get out of mistaken applications, and makes one less thing for app designers to worry about. However as Norman stated, these buttons do not always work as expected, do we call this heuristic on the application itself, or on the device overall?

Match between system and the real world
The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order.

This is one of the few heuristics that I feel should actually work better on gestural interfaces than on WIMP. A touch screen is meant to provide a simple system for connecting real world actions with navigation through an interface. Therefore, if a user does not understand what they need to touch to move forward, or are confused by what gesture to make next, this is clearly caught by this heuristic. However, on a WIMP interface one must first learn the way to use a pointing device and understand the concept of windows before they can start to judge the application itself on using real-world conventions and language.