Artful Design Ch4 pp 160-185 writeup Jack Atherton

The part of chapter 4 I found the most provocative / interesting is the idea of programming that comes from the etymology of *ordinateur* – that the programmer is the master of their universe, that they control every aspect of what is made, and then hand it to someone else to use without modification. It's very easy to think of programming in this way. I guess, at a certain level, you can't escape the paradigm of making things for other people.

But, if you're very intentional, then you can create something which allows creators to exist at the same level in the hierarchy as the experiencers, or to do away with there being a hierarchy at all. Imagine a live coding concert where everyone in the audience can participate equally in the code being produced. Imagine a SLOrk concert where any audience member could walk up to a performer and mess with their Chuck code and gametrak. (Apart from coding, imagine a crowd-based karaoke night without a mic!)

A previous effort of mine to foster audio-first programming from within VR took an approach that is less hierarchical than it could be. There's no top-down "god view" of the world; as a programmer of this language, you take the same view as someone who walks by your program later (and indeed, when they walk by, they can also change and add to your program to their heart's content!).

It takes much more work to conceive of creation in this way, with no or diminished divisions between creator and experiencer. Affordances for breaking down such hierarchies have to be built out of a medium that is very implicitly built around the idea of a separate coder and user. But I think it's worth it, at least sometimes, to try to work in this way, and to acknowledge alternative attitudes toward programming (and creative endeavors in general!).