CHAPTER 5  DESIGN ETUDE

• PART 1: DECONSTRUCT

Observe and deconstruct an instrument into its input, output, and mapping. Do this for both a traditional acoustic instrument, as well as a computer-mediated one. For the latter, use our broad definition of a musical instrument “that which allows for intended expression of sound.” This includes everything from synthesizers to customer controllers to live coding as instruments.

• PART 2: SKETCH

Sketch out the design for a new interface for musical expression using the principles from this chapter as references, both to follow and for departure. Who is it for? Everyone? Expert? Yourself? For example, apply Perry’s principles of “Design a piece, not an instrument” to envision the output (e.g., a musical statement) and work backwards to tailor an instrument specifically to it. What does it sound like? How does it play? Or... apply the “re-mutualize” ethos to create a physical musical artifact.

• PART 3: PROTOTYPE

Prototype the instrument, using the design constraint of limiting yourself to what is available to you. This may require you to backtrack and rethink the fundamental vision of your instrument (which is okay, and often essential). Does it take advantage of whatever technology you intend to use? How would you map it? How would you create a sense of embodied interaction? How would you make the interaction satisfying and expressive to use?

• PART 4: DEPLOY

Design a performance with it. It does not have to be complex -- just has to do the instrument justice! Perform it live for someone (e.g., your friends, co-workers, strangers, or pets -- any audience) or record a video and post it. Put yourself out there. Think about the ways in which it will be experienced and design around that context and the aesthetics of that encounter. What are your metrics for success for the design of the instrument and the performance?