

Accept-Reject Composing Assistant (ARCA)

Tom Collins

Sunday 15 March 2009

The user selects a database to work with, e.g. J.S. Bach's chorale harmonizations. When selected, a first *state* is chosen from the database randomly by the computer and presented to the user, aurally and visually. We see this in Figure 1, where a D-minor chord has been chosen. It can be auditioned by clicking on the third button from the left in the top panel.

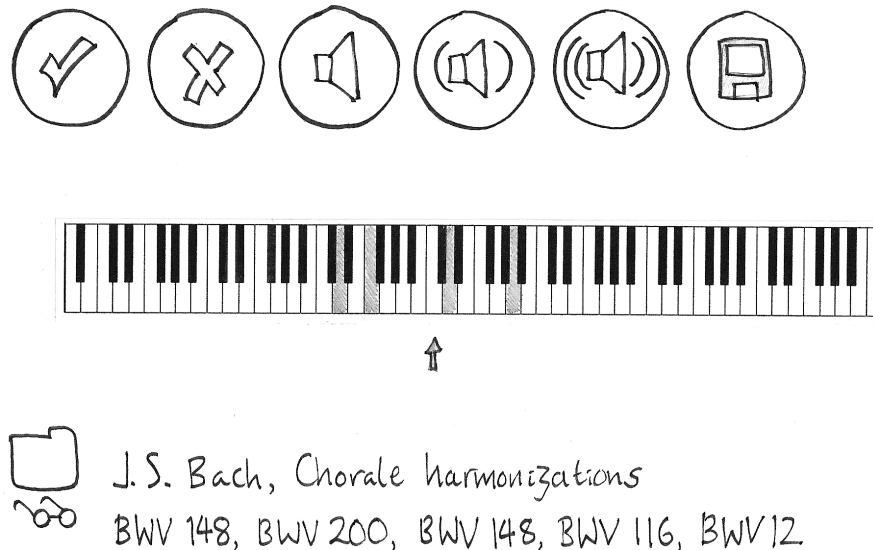


Figure 1: Sketch of the ARCA GUI.

The user can listen to this state again before accepting or rejecting it (clicking on the tick or cross button respectively). If it is rejected, another first state is suggested, otherwise a second state is suggested, again aurally and visually, etc. As more and more states are selected, the second and third buttons from the right in the top panel come into play—they allow the auditioning of the entire composition thus far, or just the last five states selected. If so desired, the user is able to return to the penultimate state by double-clicking the cross button.

Below the keyboard panel is a folder icon, reminding the user of the database with which they are working. And below this is a pair of glasses, followed by a list of the opus numbers from which the five previous states were chosen. This is an important aid for avoidance of plagiarism. Once the user is satisfied with the composition they click on the right-most button in the top panel, which saves all the selected states to a MIDI file. This can be downloaded to the host computer, left in a personal storage space on-site, or emailed as an attachment to the account holder. As MIDI files are compatible with sequencers and notation software, this is thought to be the most suitable form of finished article.