

Protocol for conducting playback experiments on Cayo Santiago

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There are many different kinds of playbacks that we conduct on Cayo. Each has its own particular design features, but there are also commonalities across designs. The following are some of the general things to keep in mind.

Before you conduct playbacks, you need to check to make sure that all components of the system are working, and that you have backups of each component. The general components are: speaker, battery, 25-50 ft cable, device to generate sound (CD player, laptop). Make sure the battery is fully charged and holds a charge. Make sure that when the entire system is connected and ON, that there is no hum or other sound coming out of the speaker. If there is, there is either a loose connection, a bad cable, or some interference coming from the playback device. Once all components of the system check out, you are ready to go.

When setting up a playback, it is critical that you place a speaker out of sight from the test subject, and as much as possible, out of sight from all other individuals. The speaker should be in dense vegetation. Make sure the speaker is on and set to the appropriate volume. The volume should be set to match the natural intensity levels of the caller, and you should record the sound pressure level with a meter. Record this information, along with the volume set on the speaker. Unravel the cable, making sure that it doesn't pinch, and let it out to the playback area. At the point of entry of the cable into the speaker, it is good to tie a knot such that if a subject should pull on the cable, the knot will tighten but the plug won't yank out of the speaker's input.

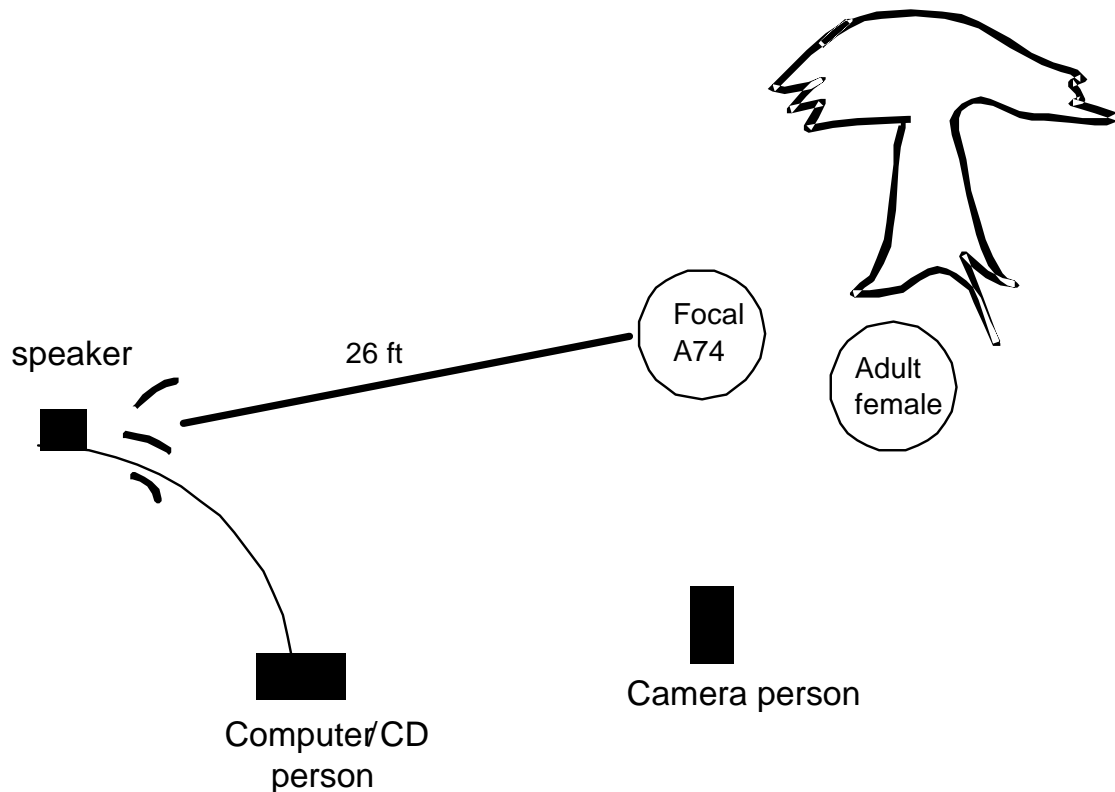
If you are running off the computer, check the Sound control level panel before you plug in the cable. This will engage the computer's sound card before you run. Then plug in the cable and you are ready to run.

The speaker should always be placed in such a way that it faces 90 degrees to one side of the subject. The person filming should be stationed straight on so that when the recording occurs, the subject must turn an unambiguous 90 degrees toward the speaker. Note on the video record which direction the subject must turn to orient toward the speaker so that coding is facilitated. The person running the playback equipment should be about 25 or more feet from the speaker.

When the person filming is ready, he/she should cue the playback person with a hand signal. This will indicate the start of filming. Once the filming person moves into position, there should be no talking.

For every experiment, the filmer should note the experiment number, the type of experiment, the subject's ID if known, and the position of the speaker.

After an experiment has been completed, the experimenters should draw a map of the playback setup, including the position of the speaker, the focal subject, the playback apparatus, the film recorder and all other individuals within a 5m radius. They should also walk off the distance from the subject to the speaker (see Figure schematic below).



Once the speaker has been placed, experimenters should wait at least 5 min before starting a playback in order to make sure that if any subject saw the placement of the speaker, that attention to this area is no longer heightened. No playback should be run if there are fights in the area, or if the target playback call type has been heard in the last minute. If the subject's ID is not known prior to playback, try to obtain it immediately after the playback. Never conduct more than one playback in a given area in less than 30 min, and usually more. It is far better to cycle to different parts of the island.