

rather reverses the balance found in cheaper video cameras (i.e. good-quality optics but scant regard for audio capability—discussed further in §1.3.2.5). Although no substitute for a good quality video/audio setup, such a recorder may provide a satisfactory solution for situations where good quality filming is not possible but where a video record would still be valuable for context.

Perhaps in due course manufacturers will also think of adding GPS logging to audio recorders (as they have for some still and video cameras). Such a capability would be well worth employing, since it would provide location metadata which can be difficult to reconstruct for audio-only recordings.

## **(ii) Direct to computer**

In general we would not recommend recording straight to the computer in the field, for both practical and technical reasons. A computer is more vulnerable than the average recorder and is likely to consume more power. Furthermore a typical PC will not have a built-in sound card of adequate quality. Although it is possible to upgrade this, internally or externally, this represents additional expense that could have been better spent on a dedicated recorder.

Nevertheless there are several situations where such a solution might make sense. Perhaps all recordings will take place in controlled indoor environments with AC power; or perhaps it is only feasible to carry a computer and a microphone. Another scenario where recording directly into the computer can make sense is where simplicity of the workflow is important. For example, when working with community members to produce audio materials (e.g. as teaching materials or talking books), it may be helpful if all processes are done on the same machine because you can edit sections on the spot by recording over them directly. Another reason could be if you wanted an uninterrupted recording whose file size will be too large for the recording device's memory. However, be aware that any long uninterrupted recording runs some risks. Depending on the equipment, the audio file may not be written to disk until you press stop, so if your equipment crashes halfway though you will lose it all.

There are two satisfactory options for direct recording. The better option is to use a USB pre-amplifier to bridge between a professional microphone and the computer. The simpler one is to use a special USB microphone—a type marketed principally for podcasting—which incorporates the necessary circuitry.<sup>12</sup> (Such microphones can only be used for direct input to the computer; they do not work for other recording devices.) Some solid-state recorders can also be used as a USB microphone (the 'Zoom H2' is an example), although in this scenario it is hard to see the benefit of making field recordings to a computer rather than to the recorder unit itself.

## **(iii) Compressed digital and older recording technology**

There may still be a place for machines which record compressed digital audio or use older technologies. One legitimate use for such equipment is as a low-energy and/or low-cost backup to the main recorder. The quality will likely be suboptimal but there are some scenarios where they can be useful. Machines for this purpose could be 'MP3', 'dictaphone', MiniDisc, or analog recorders.

Solid-state models are particularly handy as go-everywhere pieces. Just as one should carry a notebook and pencil everywhere, it makes sense to carry a small, inexpensive recording device, just in case.<sup>13</sup> They are ideal for trips away from the main field site where it may be too difficult or precarious to take the master recording machine. Such trips are often the situations where fantastic data comes one's way, such as animated conversations, impromptu singing, traditional speeches, or additional speakers one did not know about. It is great to be able to record when such opportunities arise.