

## A. Glossary

(Unless otherwise stated, definitions are taken from Chambers English Dictionary [44].)

1. **Audiation\*** - *n.* “the mental review of sonic experiences with an auditory display” (Kramer [94]). C.f. **ideation** - *n.* the power of the mind for forming ideas.
2. **Audient** - *adj.* listening; paying attention. - *n.* a hearer.
3. **Audification\*** - *n.* “the direct playback of data samples” (Kramer [93]): “the direct conversion of data to sound” (Kramer [94]). C.f. **sonification**.
4. **Audible** - *adj.* pertaining to hearing. - *n.* one inclined to think in terms of sound.
5. **Audio** - *n.* reproduction of recorded or broadcast sounds (also *adj.*).
6. **Audiolisation\*** - *n.* see **auralisation**.
7. **Audition** - *n.* the sense, or an act, of hearing.
8. **Auditive** - *adj.* of, or related to, hearing.
9. **Auditory** - *adj.* relating to the sense of hearing.
10. **Auditory icon\*** - *n.* “a mapping of computer events and attributes to the events and attributes that normally make sounds...In general, the result is to relate interface sounds to their referents in the same way that natural sounds are related to their sources and, thus, to allow people to use their existing everyday listening skills in listening to computers” (Gaver [68]): “a caricature of sounds occurring as a result of our everyday interactions with the world...mapped onto events and objects in the interface about which [it provides] auditory feedback” (Lucas [103]). Cf. **earcon**. An auditory icon is sound-effect based whereas an earcon is music-based.
11. **Aural** - *adj.* pertaining to the ear - *adv.* aurally.
12. **Auralisation\*** - *n.* “the auditory representation or ‘imaging’ of data” (Kramer [93]): “the representation of program data using sound...an auralisation is based on the actual execution data of the program” (Jackson [82]): “the use of non-speech audio for supporting the understanding and effective use of computer programs” (DiGiano & Baecker, [53]). C.f. **sonification**.
13. **Earcon\*** - *n.* “tone or sequence of tones as a basis for building messages” (Blattner [16]) : “a non-verbal audio message used in the user-computer interface to

provide information to the user about some computer object, operation, or interaction: the aural counterpart of an icon” (Blattner [17]). C.f. **auditory icon**.

14. **Sonification\*** - *n.* “a mapping of numerically represented relations in some domain under study to relations in an acoustic domain for the purposes of interpreting, understanding, or communicating relations in the domain under study” (Scaletti [141]): “data-controlled sound” (Kramer [93]): “Processes that disrupt the relationships of successive samples in favour of simplifying and enhancing features of the data, such as multiplying the data by a cosine wave, would be classified as sonification” (Kramer [94]).
15. **Synaesthesia**, in US *synesthesia* - *n.* (a) sensation produced at a point different from the point of stimulation: a sensation of another kind suggested by one experience (e.g. in colour-hearing). - *adv.* *synaesthetic*. (b) “the substitution of one sensory modality for another” (Kramer [91]).

\*These terms have been coined by researchers.