

# Human Instruments

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There is a surprisingly large number of ways around the world in which the human body can be a musical instrument. Some of them are as a direct generator of sound without the use of any other object, some of them are by using the body to make a sound, and some are by manipulating the body to vary a sound.

The most obvious way of using the body to generate a sound is by singing, and this is a worldwide universal.

The most obvious way of using the body to make a sound is by hitting it, usually with the hands.

And the most obvious way of manipulating the body to vary a sound is by shaking it or shaking one or more parts of it.

One should remember, too, that the body contains hollows and these hollows, sinuses, throats, lungs, and even stomachs, are also resonance chambers and that controlling them and manipulating them are factors in producing many ways of making sounds.

All of these or combinations of them we shall meet below.

Starting at the bottom of the body, the feet can provide coincidental sound simply by dancing, amplifying this by stamping, adding counter-rhythm with tap-dancing accompaniment, and by clog-dancing. It can also add simple rhythm to music by marching in time to the music.

One of the oddest ways of using the body to make sounds was that of a French man, Joseph Pujol, who in the latter part of the nineteenth century was said to be able to imitate the sounds of musical instruments by farting, though it would seem that when he actually produced musical pitches it was via an ocarina blown from his anus by a rubber tube.

The use of the hands is an universal. There are ancient Greek pots illustrating dancers slapping their bottoms, and the same can be seen and heard in any dance hall today. There are peoples, in Sumatra for example, that slap their chests, controlling the sound quality by the ways in which they breath and also by varying the shapes of their hands. The two hands can also be heard all around the world by varying the hand-shape while clapping one hand against the other. Hands in some places also clap against the pits of the arms, which form a natural resonance hollow. Hands, too, can clap against other objects, though this may be thought to be beyond our subject here, but slapping water while standing in a pool or a river, again varying the sound by hand-shape, may be permitted, whereas striking boards, drums, and so on with the hands is perhaps beyond our remit.

Snapping the fingers in time to, or in contrast with, with the music is a form of accompaniment, though more tiring to the hands than simply clapping.

Singing is of course affected by the body cavities. It is they that add to the resonance of the voice, marking the differences of tone quality between the head-voice and the chest-voice. It is holding them wide that increases the volume and the resonance of the voice, which is why one so often sees a singer with hands clasped before the chest and with the elbows outspread; keeping the arms close to the body contracts the lungs and decreases the resonance, just as holding the chin up opens the throat, whereas with the chin down the throat is pinched shut. Both these affect all wind players too. It is also the conscious vibration of parts of the body that is the curse of the modern use of incessant vibrato in singing, either the addition of a continuous beat or pulsation, analogous with the bleating of a goat, or the wide variation of pitch that can range between a semitone and a fourth, obscuring whatever pitch the composer prescribed.

Yodelling is a form of singing, but, as with a form of whistling below, this more of a signalling practice than a musical one, though it is sometimes incorporated into a piece of music.

Overtone-singing is rather different. Here the body is working in the same way as a jews harp or a mouth-bow, producing a vocal drone and varying the mouth-shape and the position and shapes of the tongue to elicit the overtones

of the drone. As with some types of the mouth-bow and with multiple jews harps, the vocal drone-pitch can be varied, so allowing a selection of different series of overtones. This technique of overtone-singing is well-known from Mongolia and in parts of Siberia. A different style is heard from some Tibetan monasteries, where instead of the drone being emitted from the throat and what seem to be the cavities of the head, the drone seems to come from the pit of the stomach, or at least to be far lower in pitch. The result serves to imitate the pitches of the long Tibetan trumpets.

More towards the front of the mouth is tongue-clicking. The pitches produced are controlled by the positions of the tongue against the palate and to a lesser extent by the shape of the mouth, and the pitches are less precisely discerned than by overtone-singing.

Less successful, unless done with considerable skill, is slapping the cheeks with a hand or tapping it with pencil or similar object, but it is something that almost every child has experimented with at one time or another. Again the pitch is controlled by altering the shape of the mouth in the ways in which one would pronounce the various vowels of speech.

Blowing between the knuckles of the thumbs of the cupped or the intermingled fingers of the hands produces what is often called an owl-hoot. This is a human ocarina or vessel flute, the basic pitch being that of the volume of the cupped hands, varied by slight movement of the fingers controlling the area of open hole.

A very frequent way of making music from the body is by whistling, most commonly by pursing the lips and blowing out. Another way is bending the tongue up against the palate to produce a hissing whistle that can be varied in pitch, and another, less musically as a rule, by putting two fingers between the lips. Has whistling died out in our culture? In my youth, almost every boy could be heard whistling as he walked – ‘every boy’ because it was then felt less respectable for girls to whistle, and equally something that respectable grown-ups should not be seen or heard to do. It was accepted for a man who was driving a cart, but not while he was driving a motor car. Today I hardly ever hear anybody of any age whistling in the streets; perhaps children grow up too

early nowadays. But there are professional whistlers in the musical profession and they are often required in the studios, so presumably some do acquire the skill and retain it into adult life.

Various forms of whistling are also used for signalling, but along with yodelling, this is the subject of another paper on this website.

Finally, and verging into the use of other instruments, comes shaking the body or parts of it in order to make objects sound that are attached to the body. Dance anklets, Morris dancers' bells, leg-attachments of all sorts from many parts of the world, cattle-bells attached to waist-bands and other clothing, and so on and so forth, all sound when the appropriate parts of the body are moved. Although these are not the body-parts themselves sounding, if the body is still, the instruments are silent, and so the bodily movement is responsible for the sound.

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