

The following experiments demonstrate how the sounds h, n, and m, which appear in the most basic mantras, are instrumental in forming mental settings and at the same time are also embedded in various parts of the body musculature.

### Experiment 1 - Correlation between the sounds /h/, /n/, and /m/ and the fingers

Gary Schweitzer Tong 2009

**Setup:** hold arm with forearm horizontal and hand palm up, **maximally** relaxed. Rotate forearm to enter range where fingers partly open. See figs. (a), (b) and (c).

(**Note:** More advanced meditators, or persons able to sufficiently relax, can observe these functions while keeping the hands in any position.)

**Action 1:** with attention on the fingers, but without looking at them, separately produce somewhat forcefully the three phonemes /h/, /n/, and /m/, without any vowels.

If this is difficult, produce the syllables /hi/, /n+neutral vowel) and /ma/.

**Observation 1:** each sound causes the **sensation** (or slight tensing) of particular fingers: /h/, /n/, and /m/ respectively affect the thumb+index, the middle, and the fourth+fifth fingers.

**Action 2:** merely produce each of the three sounds, and examine which of three mental contents, (a) perception of the outer world, (b) objectless attention, or (c) sense of the "I" (or "self") most spontaneously associates with which particular vocalization.

**Observation 2:** the following associations will occur:

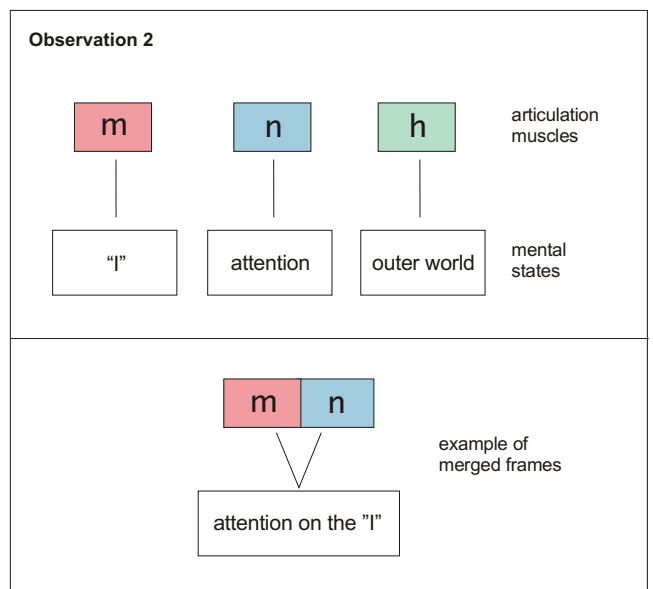
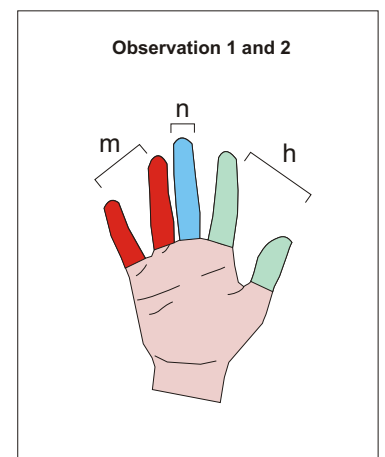
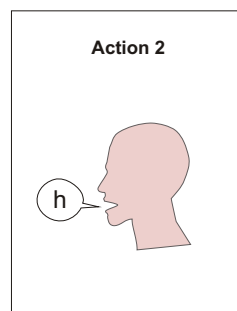
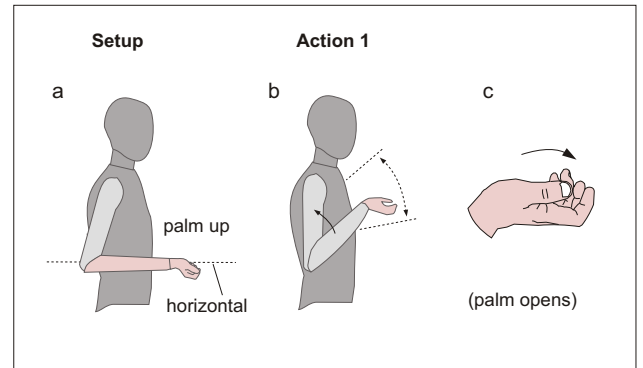
/h/ - outer perception

/n/ - objectless attention

/m/ - the "I" or "self"

Each of these mental, oral-articulative and finger coactions comprise a single particular frame of association. Combining two or three frames yields corresponding mergers, e.g., /m+/n/ = attention on the "I". This topic relates to religious and meditative vocalizations and hand gestures, communicative gesticulation, cognitive embodiments, cf. , "om-mani-padme-hum", "mu", "hoshannah", "halleluya", "amen", etc.

**Conclusion:** this experiment documents inherent coactions between particular phoneme articulations, finger movements and mental settings. Hand settings in meditation (mudras), etc. are connected to this matter.



**Experiment 2 - some facial muscles associated with mental states**

**Action:** locate and familiarize with the muscles indicated. With eyes closed, and body, head, upper visceral region neutralized continuously press with fingers the symmetrically paired points. Observe which of the following mental states most spontaneously associates with a particular muscle: (a) perceiving the outer world, (b) objectless attention, or (c) the "I" sense.

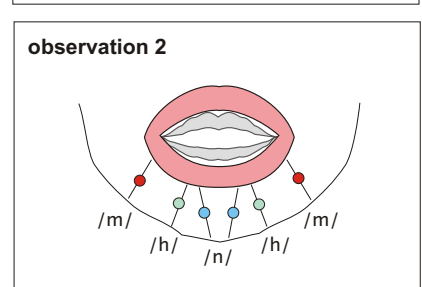
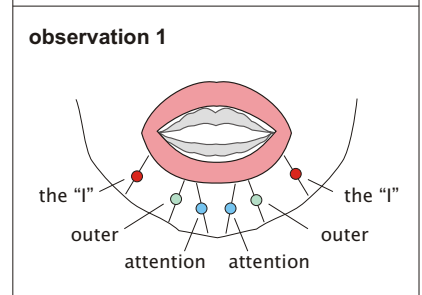
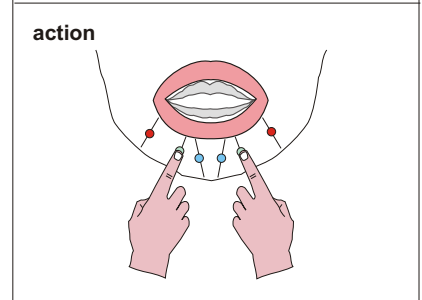
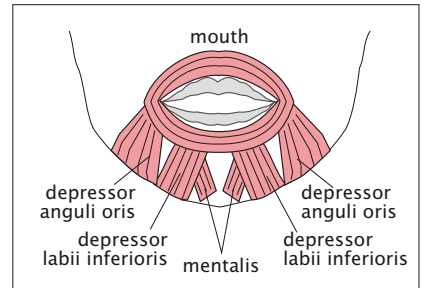
**Observation 1:** (a) pressure on the *depressor anguli oris* associates with the "I" sense

(b) pressure on the *depressor labii inferioris* with outer perception

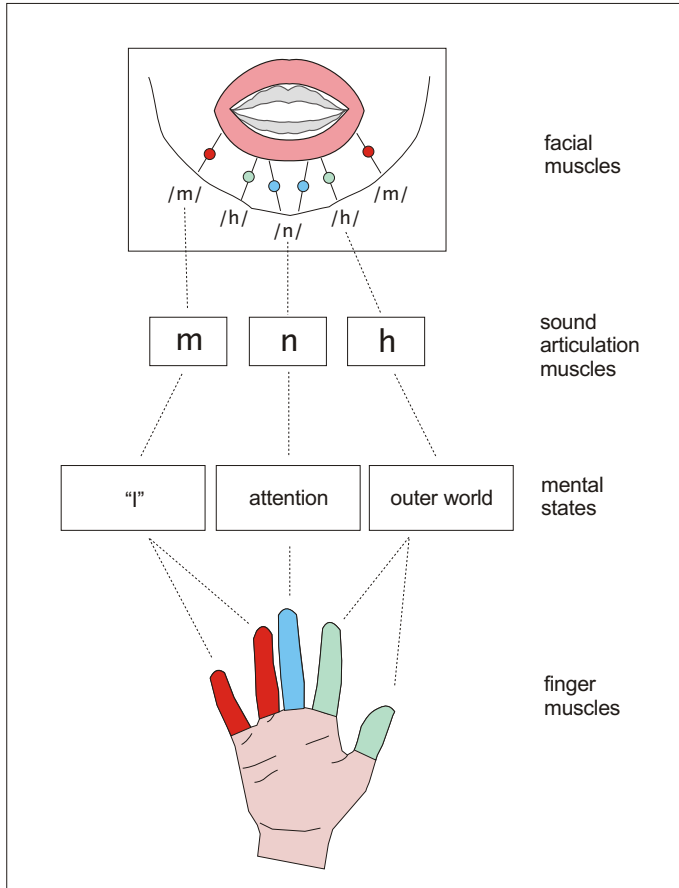
(c) pressure on the *mentalis* with objectless attention.

**Observation 2:** Note that pressure on each muscle is also associated with germinally or fully articulating one of the phonemes /h/, /n/ and /m/.

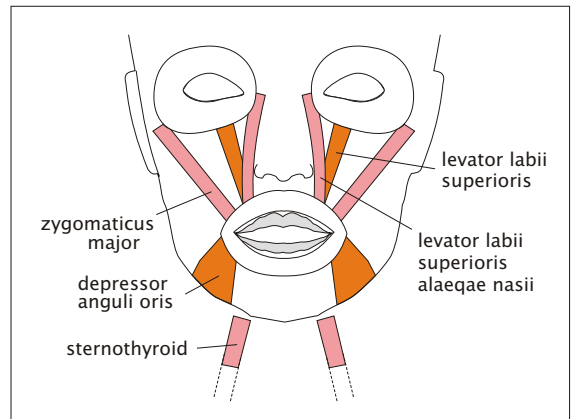
**Conclusion:** experiments 7 and 8 integrating four frames: (a) sound articulations; (b) facial muscles; (c) finger movements; and ((d) mental states document monadism, frame organization, and connection of mental and bodily functions. The mapping of these frame associations necessarily reflects a corresponding **neuromuscular** dimension of this map.



Map of four frame associations

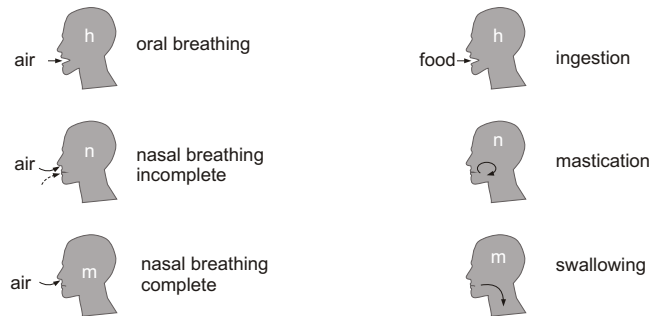


Some additional parts of extended /m/ frame



Since the respiratory-feeding tract is the essence of the visceral body and is directly cerebrally connected, the mental states expressed as /h/, /n/ and /m/ have other bodily manifestations. One appears in the anatomic distribution of division of respiratory movement.

The sounds /h/, /n/ and /m/ are not merely phonemes: they are vocal aspects of specific respiratory-feeding tract shapes (frame configurations) that also manifest in specific functions of respiration and feeding. The articulation of these phonemes is germinally embedded in the other functions.

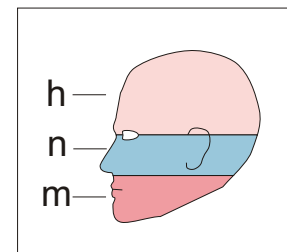
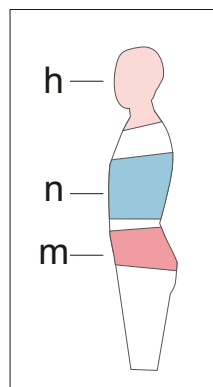


The sound producible in oral respiration is /h/. In incomplete nasal respiration (where the mouth may be opened) it is /n/ and it is /m/ in full nasal respiration (where the mouth must stay closed.)

The sound producible in ingestion is /h/. In mastication (where the mouth may be opened) it is /n/ and it is /m/ in swallowing (where the mouth must stay closed.)

**Experiment 3: to demonstrate that mantra sounds are physically associated with breathing in body regions.**

**Action:** isolate respiration to one of three regions: (a) upper thorax+head, (b) mid-thorax, and (c) abdomen (diaphragm). This may be done by keeping two regions slightly tensed, while the third one, well relaxed, is inflated. More precisely, each region has both muscles of inspiration and expiration and in relaxed respiration while the muscles of inspiration move, the expiration muscles are neutral, and vice versa. These three respirational frames contain subframes that appear to be those of the three *gunas* of Indian yoga.



The trimeric respirational division of the body is projectible on the head and on other body subdivisions. The nature of this action is analogous, though not identical to holographic projection, and is the basis of reflexology.

**Observe:** the head-upper thorax region, mid-thorax, and dia[h]ragmatic regions associate, respectively, with /h/, /n/ and /m/ and with their particular phonetic articulations and mental states.