

Avestan emphasis on right-handedness (right hand preference)

Like hand preference there are also foot, eye and ear preferences. The cliché - “put your ‘best foot’ forward” is known all too well (Grammatically, instead of ‘best’ the word really ought to be ‘better’...of the two feet). Even among the Zarathushtis of the Subcontinent it was not uncommon for elders to make sure the right foot was first used in any movement forward during auspicious rituals and while going up steps or entering a house.

Over the last 150 years, the link between *hand preference* and a possible functional specialization of the Brain Hemisphere has been seriously pursued. The significance of the exact relationship between hand preference and brain function remains somewhat unclear. Of importance is the Corpus Callosum, which lies below the two halves (Cerebral Hemispheres) of the Brain and connects the two halves by carrying over the bundle of nerve fibres for communication between the two. ***The Corpus Callosum is wider in the brains of women than in those of men to allow for greater cross communication between the hemispheres - possibly the recognized basis for women’s “intuition”.*** It also explains a predominance of single-task orientation of males, relative to female learners. The smaller Corpus Callosum in the male makes it harder for the left and right sides of the brain to work together. This explains the ***superior feminine ability to perform multitask actions*** with ease. Precisely, this very fact about a larger Corpus Callosum has been observed in persons of both genders who have a ***mixed hand preference***, which carries the ability to multitask performance. Further, in the congenital anomaly of partial or complete absence from birth of the Corpus Callosum there is gross impairment of hand-eye coordination, apart from the lack of mental and physical development and memory.

It is estimated that persistent, lifelong left-handed persons comprise only 2-3% of the population though ***left-handed persons*** generally comprise about 10% of the population because ***ambidextrous persons*** make up 70-80% of the left-handed population.

Nerve fibres from the opposite side of our Brain Hemisphere control our muscle movements on each side of the body. It has been observed that mixed handed persons are less likely to be creative but more likely to be hypochondriac. This can be explained by the observation that the ***left Hemisphere controls rational thought***, while the ***right Hemisphere is the world-view surveyor***, recognising the flaws when contradictory thoughts becomes apparent and eliminating entrenched ideas. In mixed-handed persons, a larger Corpus Callosum will help the right Hemisphere revise its beliefs more frequently. For example, in the case of hypochondriacs their reaction to a minor injury makes them dwell on the issue as if it were a major catastrophe. Apart from the widely accepted observations, whether and to what extent, these differences are associated with behavioral and cognitive differences between males and females is unclear.

Be that as it may, we are here more interested in our own Avestan experiences in a Zarathushti way of life. I am not fully aware this was so in the upbringing of children in Iran, although the experiences of a close friend of mine, from whom I gather valuable material about the Zarathushti way of life in Iran, reassures me the behavioral pattern of parents towards children was the same.

In those days it was not uncommon for a parent, grandparent and teacher to ***‘discipline (most times, quite strictly so, too) the left-handed child’*** to change over and literally force the child to use the right hand. The innocent child had no alternative but to obey the commands. In my early days as a medical practitioner I have myself advised mothers to try and use their left hand when offering anything to the child positioned in front of them. This was based on the premise that the child is more likely to pull out the right hand (being nearer to the mother’s left hand) to handle the offering rather than take the trouble of crossing over the left hand to take whatever is being given. This advice certainly helped the so-called ***‘learned’ left-handed*** children but not those born ***‘genetically left-handed*** (20% are believed to be genetically determined and some to a ***birth injury aetiology***, believed to be damage to the left Hemisphere sustained at birth since the right-handed person has the a much highly developed speech centre in the Left Hemisphere).

As a student surgeon in England trying to go through my paces in the operative procedures in the region of the face, nasal and post nasal passages, mouth, oral passages and prolonged cancer operative procedures in the neck I was taken to task very strictly by one of my determined senior superiors. He maintained that, since the operative work was performed in these very limited, cramped spaces in the face and neck with vital structures superimposed and in close proximity, it is of advantage to operate on the left side of the patient with the right hand and vice versa, thus keeping the operative field in the middle clear in full view at all times. For me it was an extremely nerve wrecking experience to change in the mid twenties of life. He seemed to have dedicated 'spies' in the operating rooms and word spread fast as soon as I reverted to crossing my hands during extremely crucial moments. It took 18 months of anxiety and sweat to develop the ambidextrous procedure of operating, which luckily persisted advantageously throughout my working life.

My thoughts thus veered towards seeking ancient evidence derived from our Avestan historical documentation. Manuscripts, pictures, bas reliefs and clay tablets point towards a culture, which presumed and promoted right-handedness as the expected norm. The sword always hung from its halter at the waist on the left side and the quiver with its arrows was always strapped to the left shoulder, clearly making them easier and quicker to draw with the right hand. The battle and hunting scenes are always depicted with the sword, spear, javelin...etc. in the right hand and the stretched bowstring and arrow held with the right hand.

Possibly, many a left-handed prince, who would otherwise have become a potentially dedicated and just ruler, may well have been demoted from ascending the throne for being 'clumsy' in daily practices and 'incompetent' to lead in warfare.

The following photos tend to illustrate hand preferences.

1 Sword halter:

Sassanian Coins showing the sword hanging from its halter at the waist on the left side and the short (9 inches) Barsom rods being held in the right hand in reverence. The right hand was also used as a sign of reverence when holding the royal 'Mace'. The larger bundles (3 feet and 5 feet) of Barsom rods were held with both hands.



2. Bundle of Barsom Rods & Dagger:

However, where the Fire on the Altar needed tending it had to be the right hand and the bundle of Barsom rods was transferred to the left hand. The dagger however was kept ready at the waist on the right side of the halter for urgent defence.



3. Maghavan & bundle of Barsom Rods:

Golden plaque showing a Maghavan holding a bundle of Barsom Rods in the right hand. A dagger hangs from its halter on the right side (in case of urgent defence). It would certainly be quicker to draw the dagger with the right hand than draw a sword hanging on the left side.



1.

4. Shooting an arrow:

Seal imprint on clay showing the bowstring being pulled with the arrow held by the right hand. The seal shows Darius the Great hunting lions in the inscription cuneiform script on the left. The metal seals were etched

cylinders, which were rolled on wet clay to create an impression in the soft clay, which was then baked. Once baked, the hardened clay tablet could never be altered.



5. Warriors from Darius I & Xerxes II Palace at Susa showing the quiver (containing the arrows) strapped to the left shoulder to make it quicker to draw an arrow with the right hand.



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