

Guru Granth Sahib and Numbers

*Iqbal Singh Manhas**

One God (Waheguru), one Guru (Siri Guru Granth Sahib), One Man (yet Many), beams out the message from the Sikh Scriptures to the whole Universe. Before Waheguru created the universe, the galaxies and the planets including our Mother Earth, there was Nothing but Him. This concept of One, Many and Nothing was alive in the mind of the early man. The hunter gatherers used this in relation to the number of fruit they ate, to herds of animals, or the number of pebbles they played with by the lakeside. Bones and wooden sticks have been found in archaeological digs having notches indicating their records of such counting.

As man started living in groups and evolved into civilisations, the numbers and the way counting was done became sophisticated. For example, the Babylonian numbers were generated from a system of wedges and angles using a base of ten or sixty and were recorded on clay tablets. One was signified by one wedge, three with three wedges, four with one large wedge overlain by three smaller wedges, nine with three layers of three wedges and ten with an angle. The Roman number system for counting indicated numbers one to ten by I, II, III, IV, V, VI, VII, VIII, IX, X and 50, 100 and 1000 by L, C, M, respectively. However the Roman numbering system was cumbersome for writing out the very large and complicated numbers used in astronomy and, increasingly, in other branches of science, and the invention in the early 17th century of logarithms finally ended its general use.

In the world of today, the Arab numerals i.e. 0, 1, 2, 3, 4, 5, 6, 7, 8, 9 (to the base 10) thought of by Indian mathematicians around 500AD, are the most widely used representation of numbers (except in computers) to carry out counting. The Arabs learnt this system of numbers from the Indians and took it into Europe during the Middle Ages. Although this system was further developed and revolutionized commerce, science and technology in the western world, it was thought to be cumbersome for use in the twentieth century computers. It is the simplicity and strength of Nothing (zero) and One (the so called binary system in which $1=1$, $10=1010$, $100=1100100$ and so on) that kindled the imagination of the early man all that time ago that has been harnessed by computers to exchange and process information in ones and zeroes of today at a very phenomenal speed. Once a computer is switched on, a click of the mouse would let you watch your favorite TV program or start chatting with a friend on the other side of the world. A satellite in the sky can beam a signal to unlock a car door. A cell phone from the middle of nowhere can access the desktop computer at home for information that you so badly need to make a decision. Day to day shopping from the comfort of our home using a computer has become a reality. You can manage your bank account or pay your bills or find a new mate online. Digital television, books and photography have arrived. In short, computers have transformed our commerce, education, transportation, science, technology and society in general to a new level and helped us not only to do things which we could not do in the past but also to do them quickly making modern life much faster yet providing greater leisure time which we can gainfully employ in remembering God and doing his Simran and reciting Bani.

The numerals which have been used in Siri Guru Granth Sahib (SGGS), however, are not Arab but Gurmukhi (Sifr, Ik, Dho, Tine', Char, Punj, Chhe', Sat, Aath, Nau , Das) which are based on the Indian (Devanagari) numbers, although we must note that this is still a decimal system. These numerals have been used in numerous ways throughout SGGS.

Firstly, Gurmukhi numerals make the layout of SGGS scientifically precise so that it can be followed with ease by everybody. SGGS has 1430 pages and 33 sections. The section at the beginning contains Japji Sahib (pages 1 to 8), a morning prayer of Pauris numbered 1 to 38 and 1 Salok, composed by Guru Nanak. The end section is a collection of miscellaneous verses including the Slokas and Sawayyas of Bhattas. The remaining 31 sections are the Ragas and their divisions, with Sri Rag being the beginning and Jaijawanti at the end. At the beginning of each Bani, the name of the composer and the Rag in which it is to be sung is given. For example, on page 917, before the start of the composition, Anand Sahib, the line says Ramkali Mahala 3 Anand. This means that this Bani has been authored by Guru Amar Das, the third Guru (Guru Nanak is referred to as Mahala 1, Guru Ram Das, Mahala 4 and so on) and is to be sung in Raga Ramkali.

Secondly, words representing numbers have been used throughout SGGS to convey various forms of thoughts. A few examples are given below.

On page 1035, line 10, Guru Nanak, while considering the creation and evolution of the universe, states *Nā d̐in rain na c̐hand̐ na sūraj sunn (zero) samā d̐h lagāi d̐ā*. This means that there was no day or night, no moon or sun, God sat in his primal or sunn (zero) state. And when the Guru says *Ik (one) sansārī ik b̐handārī ik lāē d̐ibāṇ* (page 7, line 2), he refers to the Ik (one) Godhead, the creator of the world, the sustainer and the destroyer. The Guru goes on to say: *Sasai sab̐h jag sajh upāiā t̐in(three) b̐havan ik jo t̐* (page 930, line 3), meaning He created the entire universe with ease and his light permeates the three (time) worlds. Guru Ram Das reasserts that God created the earth, and the due' (two) lamps of the sun and the moon in *Fu d̐h āpē d̐har t̐ sājīai c̐hand̐ sūraj d̐uē (two) d̐ivē* (page 83, line 6).

If you live through all the chare' (four) ages (One Age = millions of years) since creation began or dasuni (ten) times longer than the sum of these ages, living the life is worthless if you do not receive the blessings of God Himself with the glance of His Grace says Guru Nanak in Japji Sahib as referred to in *Jē jug c̐hārē (four) ājā hor d̐asūṇī hoē* (Page 2, line 13) and the verses that follow it.

On page 20, line 1, Guru Nanak says *Panch̐ (five) b̐hūt̐ sach̐ b̐hai rat̐ jo t̐ sach̐ī man māhi*. In this and the preceding verses the Guru reminds us that man is made of panch (five) elements i.e. air, water, fire, earth and ether and remembering Him will colour your mind with His thoughts and memories thus lighting you forever. He also says on page 61, line 14 *Asat (eight) d̐hāt̐ pāṭ̐isāh kī g̐har̐tai saba d̐vigās* that when making of the human body with the eight metals is done by saying Guru's word, it will live in happiness. However, He reminds us on page 12, line 16, *Ch̐hia g̐har ch̐hia gur ch̐hia up d̐ēs*, that man is subject to Ch̐hia (six) schools of philosophy written by six teachers and six teachings – Jaimini's Mimamsa (Interpretation), Badarayana's Vedanta (knowledge part of the Vedas), Kapila's Sankhya (theoretical knowledge), Patanjali's Yoga (Discipline of Achieving Liberation), Gutama's Nyaya (Logic), Kaanada's Vaisheshika (Pluralistic Metaphysics) but in subsequent verses He makes it crystal clear that the forms may be many but Guru of all is One (God).

Guru Ram Das on page 84, line 4 refers to *Sapaṭ̐ (seven) d̐īp (islands) sapaṭ̐ (seven) sāgrā (seas) nav (nine) k̐hand (continents) c̐hār (four) vē d̐ (Vedas) d̐as asat (eighteen) purāṇā* but goes on to explain that God lives in all these and He is most loving. All living beings and the

world around is His creation and they all do His jaap. Guru Nanak adds that God can be seen in all ten directions and in all the variety of nature and He will carry you across with his Pauri *Das* (ten) *aṭṭhār mai aprampro cḥīnai kahai Nānak iv ēk ṭārai* (page 23, line 19).

Thirdly, and most uniquely, a Gurmukhi numeral forms the first mark in the first verse (Pauri) of the first bani, Guru Nanak's Japji Sahib, in SGGS. This numeral is Ik (one):

Ikoankār (There is only one God) *saṭnām* (Truth is His Name) *karṭā purakh* (He is the Creator) *nirbhāo* (He is without fear) *nirvair* (He is without hate) *akāl mūrāṭ* (He is timeless and without form) *ajūnī saibḥaṇ* (He is beyond birth and death, The enlightened one) *gur parsād* (He can be known by The Guru's Grace)

With the Gurmukhi numeral one, Guru Nanak proclaims right from the beginning, the strict monotheism of the Sikh religion. The structure of the Gurmukhi numeral one contains the Gurmukhi sifr (zero) at the top with a vertical notch coming out of it from the right side which is reminiscent of the old mark of one by the early man all those years ago. The Gurmukhi numeral one, can accordingly be taken as a duality of zero and one. It represents Waheguru in its Nirgun (Zero) state and Sargun (1, one) state: *Sargun nirgun nirankār sunn samāḍḥī āp* (page 290, line 16). The transformation of zero into One occurs with his Word and gives birth to the universe and everything in it (Many) with the God in the center of it: *Kīṭā pasāo ēko kavāo. Fis ṭē hoē lakh ḍarīāo* (page 3, line 17). When He contracts himself into the Zero state the universe and all the things in it are absorbed back into Him (One): *Āpē joṛ vicḥḥorē karṭā āpē mār jīvāiḍā* (page 1034, line 7). This game (leela) of Zero, 1, Zero, 1 is played as He wills: *Jā ṭis bḥāṇā ṭā jagaṭupāiā* (page 1036, line 6). In terms of the binary number system, whether the scientists with their clever programs will be able to produce computer simulations of the birth, expansion and contraction of the universe and subsequent births and deaths, nobody on this earth knows.

*Retired Chartered Civil Engineer, Woodley, Reading, Berks, UK. E-mail: paldi@bigfoot.com

References:

- 1 Siri Guru Granth Sahib (SGGS): Translation by Singh Sahib Sant Singh Khalsa MD
- 2 Book of Numbers: J H Conway, R K Guy, Springer-Verlag, NY, 1996.
- 3 Sikh religion and Science: G S Sidhu MA; FIL. (London), 2003.