

- more economic tension with China over the dollar peg and declining government bonds, possibly resulting in China refusing to recycle its dollars back into US government bonds
- a financial migration away from Wall Street and a hostile US population to more favourable locations in Europe
- collapse, implosion or revolution in the US, resulting in a smaller, more insular United States
- the rise of the Church and Russia to fill the void left by a weakened US and perhaps disbanded NATO.

(Concluded)

Your Letters



Articles by Brother L. G. Sargent

May I express my deep appreciation of Brother Geoff Henstock's review of *A Sound Mind* by Brother L. G. Sargent ([Nov. 2010, p. 357](#)). Of all the writers who have enriched our lives over the years, I would venture the thought that none had a deeper or more perceptive spirituality than Brother Sargent. Sometimes our Bible searching can be perhaps a little too information-driven, but his approach was always ennobling. Those yet to discover him have a delight in store.

I am making a list of all the articles that he published, and though it is not yet complete, may I offer a few titles that I consider truly outstanding? They are:

- “With God all things are possible” (*Christadelphian*, 1953, p. 65)
- “Visions of God” (1954, p. 257)
- “Fundamentalism” (1955, p. 367)
- “What is faith, and how may we have it?” (1956, p. 289)
- “Strong for truth” (1956, p. 324)
- “The only true God” (1959, p. 305)
- “Truth in Jesus (Eph. 4:21)” (1963, p. 529).

In 1957 he did a series on the Truth and its Eastern rivals, being an examination of some of the religions of the Near and Far East. His comments on the *Koran* are of particular interest.

Tom McCarthy
Newport

Science

The water of life

David Burges

IN SPITE OF the great advances in scientific knowledge, many mysteries remain, from the nature of ‘dark matter,’ responsible for the structure of galaxies, to the form of the fundamental particles from which all matter is constructed. But an equally perplexing mystery is to be found much closer to home in the remarkable properties of the substance on which all life depends: water. It is doubtful if any kind of life could exist without the presence of water, and consequently it is used in Scripture to symbolise the life-giving spirit by which God will bestow eternal life (for example, Jno. 4:14; Rev. 21:6; 22:1,17).

Unique properties

Many writers have pointed to the remarkable properties of water, which set it apart from other liquids, as evidence of the forethought and wisdom of the Creator. If we take a tall glass of water, throw in an ice cube and leave it to stand, we shall find that the temperature at the top, near the ice cube, will be around 0°C, but at the bottom it will be about 4°C. This is because water is most dense at that temperature, a strange attribute that sets it apart from other liquids and ensures that ice floats on water, allowing life to survive beneath frozen rivers, lakes and seas.



Water is denser at 4°C, which means that the colder ice will float on the surface.

Picture: Victor Blacus/
Wikimedia Commons

This property of water is familiar, but it has many other unusual traits that are less well known, though some are equally important.¹ For instance, water has an exceptionally high specific heat capacity, which means that it takes a lot of heat energy to raise the temperature of water by a given amount. This property enables it to act as a 'heat sink,' smoothing out extreme temperature variations and stabilising the world's climate. Also, water is the only common substance found naturally in all three normal states of matter: solid, liquid and gas. As a liquid it can be mixed with a large number of other liquids and is a powerful solvent. Water vapour mixes completely with air, allowing its transport by the winds and the formation of clouds and fogs. Water is particularly difficult to compress and actually becomes less viscous at high pressure, which helps to make life possible in the ocean depths.

Scientific explanations

Since water is ubiquitous and of such importance it might be expected that its structure would be well understood, but to date no single theory has been able to explain all of these mysterious properties. A new theory, put forward by scientists in the US and Sweden, proposes that in liquid

water the water molecules (H_2O) can be packed together in two different ways.² In ice, the H_2O molecules are arranged in groups of four in the shape of a triangular pyramid, or tetrahedron. The new theory, based on an analytical technique called X-ray absorption spectroscopy, suggests that liquid water consists of a mixture of these tetrahedral groups with more dense, randomly packed clusters. The strange properties of water are seen as the result of the differing proportions of the two types at different temperatures. Many scientists working in this field remain sceptical, however, and further work by different groups is required before it can be confirmed.

Water of life

It may seem astonishing that scientists still do not fully understand the amazing properties of this most commonplace yet wonderful substance, which we take so much for granted, but without which life could not exist. Yet everything about water suggests that its attributes have been carefully crafted to perform all the roles for which it is essential to life. Many scientists now accept that the fundamental laws of physics that control the universe at large are exquisitely balanced to provide all the conditions for life to exist, the so-called *Anthropic Principle*. It is those same laws that also dictate the properties of substances such as water.

All of this is testimony, for those with the eye of faith, to the handiwork of the Almighty Creator. He has made all things, and in particular He "formed the earth . . . to be inhabited" (Isa. 45:18). And He has promised, "I will give of the fountain of the water of life freely to him who thirsts. He who overcomes shall inherit all things, and I will be his God and he shall be My son" (Rev. 21:6,7, NKJV).

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1. 'Properties of Water,' *Wikipedia*.
 2. Edwin Cartlidge, "A drop of the weird stuff," *New Scientist*, 6 Feb. 2010, p. 33.

Darwin knew that his theory of gradual evolution by natural selection carried a heavy burden: "If it could possibly be demonstrated that any complex organ existed which could not possibly have been formed by numerous, successive, slight modifications, my theory would absolutely break down." It is safe to say that most of the scientific skepticism about Darwinism in the past century has centred on this requirement . . . What type of biological system could not be formed by "numerous, successive, slight modifications"? Well, for starters, a system that is irreducibly complex. By *irreducibly complex* I mean a single system composed of several well-matched, interacting parts that contribute to the basic function, wherein removal of any one of the parts causes the system to effectively cease functioning.

Darwin's Black Box, Michael J. Behe, The free Press, 1996, p. 39.