



Plant culture: thirteen seasonal pieces

Introduction – plenty has made us poor

Nicholas H. Battey

This introductory piece begins with a quotation from the poet Edmund Spenser (~1552–1599) that refers to the story of Narcissus, who was so enamoured with his own reflection that he died of self-love. Science is also inward-looking, with an exclusiveness that, while necessary to the way it works, creates a problem for its diffusion into society at large. In the forthcoming seasonal pieces I examine this narcissistic character of science, and reconcile wider concerns to those of science. The articles use the seasonal cycle as both a mirror and a window, showing the many ways the seasons influence life and society. These influences are found in literature, mythology, religion, history, and plant lore, as well as plant science; together they make up plant culture.

Diggons Embleme
Inopem me copia fecit

This is the saying of Narcissus in Ouid. For when the foolish boye by beholding hys face in the brooke, fell in loue with his owne likenesse: and not hable to content him selfe with much looking thereon, he cryed out, that plentye made him poore. meaning that much gazing had bereft him of sence. But our Diggon vseth it to other purpose, as who that by tryall of many ways had founde the worst, and through greate plentye was fallen into great penurie.

Spenser, *The shepheardes calender*

Science is great. The rigorous thinking, rationality, the weighing of ideas, and careful interpretation that characterize the best science, all have a fundamental appeal that draws us to them. But science also has a problem: its exclusiveness. To be a scientist you have to exclude many other things, because science is fast-moving and demanding. You need to specialize to have any chance of making a contribution. This naturally excludes others, and is why there is a problem with the communication and/or public understanding of science. To overcome the problem requires more than scientists just talking more. A new way of thinking about science is needed, a language that puts it alongside other aspects of the world. This will involve a change greater than genomics, molecular biology, or even evolution has wrought on scientific thinking, because the issue is not education of the public, but the end of the Science Nerd. In the twelve

seasonal pieces that follow I explore what this might involve. The seasons are an apt vehicle because they are subject to many diverse interpretations, and feed into both science and non-science by presenting questions for all, from the mechanistic reductionist to the truth-seeking poet.

The change in the seasons is an inspiration, simultaneously emphasizing recurrence and the irreversible passage of time. In Edmund Spenser's *Shepherd's Calendar*, published in 1579, the months of the year provide a basis for twelve 'eclogues', moral, plaintive or recreational. The calendrical structure was intended to give unity to these monthly commentaries, emphasizing a permanence that underlies the transience of the passing year. Writing at the dawn of the era of modern science, Spenser was conscious of the tumultuous changes in thinking that science would bring about, the threat to the assumptions of stability in a divinely ordered universe.

Later, at the end of the 19th century, James Frazer published *The Golden Bough*, a classic study of ritual and religion. In it, he linked customs that centred on the periodic need to replace the king or tribal leader to the seasonal cycle of vegetation with its pattern of life, death and resurrection. Because the most striking influence of the seasons is on plant life, Frazer argued that the dramas enacted by humans to ensure the return of spring would naturally lay emphasis on plants. This ritual celebration was very pronounced in the early civilizations of the Eastern Mediterranean—peoples of Egypt and Western Asia personified the yearly decay and revival of vegetation as Osiris, Tammuz, Adonis, and Attis, all gods who annually died and rose from the dead (Fig. 1). Every midsummer the departure of Tammuz was mourned. He is found in Babylonian hymns, where he is a plant that fades:

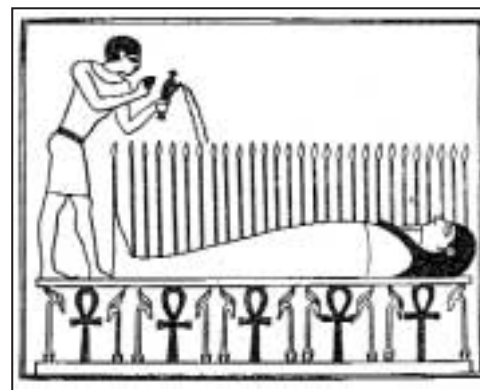
A tamarisk that in the garden has drunk no water,
Whose crown in the field has brought forth no blossom.
A willow that rejoiced not by the watercourse,
A willow whose roots were torn up.
A herb that in the garden had drunk no water.

Developing Frazer's theme, Mircea Eliade has suggested that biology creates one cyclical idea of time; but that at some point societies become aware of history—the irreversible dimension. This awareness provokes a need to try and abolish history by ceremonies of regeneration, often associated with the New Year. An example is the Babylonian *akitu* festival, which re-enacted the Creation myth at the equinox.

In contrast to Frazer's factually-based accounts of human behaviour in relation to plants, Robert Graves' description of the seasonal cycle in *The White Goddess* derives much from imagined relationships between plants and man. Graves interpreted the year as a cycle of thirteen, 28-day months, each month represented by a consonant from an ancient Irish alphabet called the

Fig. 1. Osiris. A cereal crop grows from the body of Osiris, symbolizing resurrection.

Source: *Egyptian Religion*, Budge W, 1997, p.31. Reproduced with kind permission from Citadel Press.



Beth-Luis-Nion (after the first three consonant names). The names of the consonants refer to plants which are associated with seasons and are tied to mankind and the year. Five vowels are associated with plants at key stations of the year (equinoxes and solstices).

Although unreliable as a work of anthropology, mythology and plant lore, Graves' book is, nevertheless, instructive as an interpretation of the seasons. As he describes it, the theme is 'the antique story, which falls into thirteen chapters and an epilogue, of the birth, life, death, and resurrection of the God of the Waxing Year; the central chapters concern the God's losing battle with the God of the Waning Year for love of the capricious and all-powerful Threefold Goddess, their mother, bride and layer-out.' Mumbo-jumbo? Maybe, but Graves saw the need to reconcile the human mind to the natural world, connecting internal (subjective) and external (objective) realities, recognizing that every individual creates their own world. Because of this, he argued, a poetic/mythological interpretation of the natural world is central to our response to it, even though it is unscientific.

The White Goddess represents the antithesis of scientific thinking. Yet scientists must embrace its ambition of reconciliation if they are to address the root problem of communication. This need for reconciliation has a strong influence on the seasonal pieces to be presented over the coming months.

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