accompany a world view formed by the Scandinavian experience, the editors attribute the popularization of the term "sustainable development" to the work of the WCED, and suggest that it is "leading to a historic shift in all of our societies". Scandinavian countries have certainly taken a lead in championing special issues raised in the aftermath of the 1992 United Nations Conference on Education and Development. Finland, for example, has undertaken an excellent research programme to investigate the implications of sustainable development on a social dimension. Norway has taken a special interest in the issues of production and consumption.

In her contribution to the volume, Gro Harlem Brundtland, who chaired the commission named after her, explains how a transformation in the political climate in Western countries has helped to extend this change in the fortunes of the sustainable-development agenda beyond Scandinavia. The WCED reported during a period of political conservatism and economic liberalism in Western countries, and few governments supported the calls for stronger governance in their economies. The recent ascendancy of social democratic-led coalitions, in some cases including Green Party representatives, marks a dramatic shift in Europe's political and democratic landscape, and transforms the prospects for policies of sustainable development.

These prospects are also investigated in the context of the developing countries. Madhav Gadgil observes that, while the globalization of the flow of goods and services has not reached poorer countries, better access to information can make it easier for ordinary people to be involved in planning and managing change, contributing to a shift from control-and-command structures to a culture of inform-and-share.

Gadgil cites the example of the Kerala Sastra Sahitya Parishat (KSSP), a popular-science movement in India which focuses on health and environment issues and invites ordinary people to question accepted patterns of development.

The importance of institutionalizing new approaches to knowledge and learning by society is a recurring theme of this volume, which is a galaxy of potential thesis topics and book projects.

In a section on production and consumption, John R. Ehrenfeld highlights the importance of indicators as a means of maximizing the chance that societies will be able to make the necessary changes. Such indicators, together with institutionalized learning, he argues, are essential if sustainable patterns of production and consumption are to be achieved. □

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Science in culture

Sexy stamens and provocative pistils

The taxonomic science of the flower bed

Martin Kemp

For centuries the study of flowers and the cultivation of gardens were deemed to be safe pursuits for young ladies. The behaviour of animals, by contrast, was all too likely to provoke difficult questions about sexual activity. Carl Linnaeus's sexual system for the classification of plants, based on stamens and pistils, changed all that.

Introduced to a worldwide readership in his *Philosophia Botanica* of 1751, Linnaeus's principles attracted fervent adherents and keen opposition. Among the devotees was Erasmus Darwin, Charles's grandfather, who was an enthusiast of the French Revolution and adopted a radically libertarian stance on social matters. Erasmus's scientific poem, "The loves of plants", published in 1789 as part II of *The Botanic Garden*, blends sober scientific analysis with poetic rapture, the latter typified by his evocation of the polygamy practised by *Gloriosa superba*:

Proud Gloriosa led by ***three*** *chosen swains,*
The blushing captives of her virgin chains ...
When time's rude hand a bark of wrinkles spread
Round her limbs, and silver'd o'er her head,
Three other youths her riper years engage,
The flatter'd victims of her wily age.

If this should sound like a perversion of Linnaeus's method, we may recall that the great Swedish botanist had written that "The flower's leaves ... serve as bridal beds which the creator has so gloriously arranged ... and perfumed with so many soft scents that the bridegroom with his bride might there celebrate their nuptials with so much greater solemnity. When now the bed is so prepared, it is time for the bridegroom to embrace his beloved bride and offer her his gifts."

Unsurprisingly, religious and conservative organizations began to express alarm. Most notably, the *Encyclopaedia Britannica*, published from the Calvinist redoubts of Edinburgh in 1768, railed against the "disgusting strokes of obscenity" with which Linnaeus had disfigured the picture of nature's innocent beauties.

The illustrated book that best captured the tone of Darwinian rapture was Robert Thornton's majestic but failed enterprise, the *New Illustration of the Sexual System of Linnaeus*, first advertised to subscribers in 1797 and appearing in parts from 1799. The illustrations ranged from tabular and diagrammatic representations of Linnaeus's system, to romantic pictures of particular plants in evocative landscapes and highly charged allegories of nature. For example, *Strelitzia reginae* or 'queen plant', named after Charlotte of Mecklenburg-Strelitz, George III's queen, is soberly anatomized in one plate, depicted in an exotic setting in another, and features as the target of Cupid's arrow in the allegorical image of "Cupid inspiring the plants with love" from the pictorial part of the *New Illustration* — re-titled in 1804 as *The Temple of Flora*.

Philip Reinagle, "Cupid Inspiring the Plants with Love", from Robert Thornton's *Temple of Flora*, 1804, plate III.

However, lest we should think that Queen Charlotte was being encouraged to distribute her favours with Darwinian profligacy, Thornton is at pains to eulogize the royal patron of his enterprise as a "bright example of conjugal fidelity and maternal tenderness". Unshakeably pious, staunchly monarchist and very English, Thornton would have nothing to do with Erasmus Darwin's dangerously French attitudes.

Thornton argued that the mathematical, logical character of taxonomy was a "noble exercise" which was eminently suitable for the training of the minds of the young, who are all too easily seduced by pastimes that "inflame the passions". By stressing the dispassionate character of classification, he was consciously confronting the accusation that the sexual basis of Linnaeus's method was an obscene perversion of the innocence of plants and besmirched botany as a study unfit for young ladies. Thornton was determined that the Linnaean binomial system should serve as the taxonomic science of the flower bed and not as a justification for abandoning the proper regulation of the human nuptial chamber. □

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