

spotted fever, scabies, etc. Though the review is quite extensive in terms of the various arthropod-borne diseases that it covers, I was left a little unsatisfied, because from the title I had built up an expectation for a more detailed discussion on the socio-economic perspective of these diseases. But for anyone who is interested in just the biology, this review would be informative.

Forensic entomology has emerged as a useful branch of forensic science in the last three decades. Forensic entomologists are typically asked to judge the time of death by investigating arthropod development rates and community succession in corpses. Though the assessment of the time of death based on these evidences is accepted in the court of law, it is accepted by entomologists that such assessments are based on certain assumptions. The European Forensic Entomology Association recognizes that the onset of arthropod colonization does not necessarily coincide with the actual time of death, and hence, the time for which arthropods were present in a corpse should not be directly taken as the post-mortem interval. On the other hand, it has been suggested that the period of insect activity in the corpse, defined as the time from arthropod colonization until discovery of the remains, might be used by forensic entomologists. Tomberlin *et al.* have discussed the possibility of using the knowledge of arthropod behaviour in conjugation with molecular tools to bridge this gap between current practices in forensic entomology and basic research, so as to attain higher levels of accuracy in forensic analysis. The article is well written, and the arguments put forth by the authors are strong and clear. Since forensic research is a field that directly affects lives, the need to take stock of the current scenario and engage in more intense research is indeed high.

Having been trained in social insect behaviour, I have a soft corner for ants, bees and wasps, in spite of their bites and stings. Hence it is not surprising that I was attracted to the review by Roulston and Goodell, on the factors affecting the regulation of wild bee populations. Bees are major pollinators in various ecosystems, and also for many crop plants. In recent years, there has been a decline in wild bee populations in many countries, and this is an alarming situation for agriculturists and ecologists alike. This article discusses the various factors like

floral resource abundance, limitations of nesting sites, parasite and pathogen effects, etc. that are thought to affect bee populations in nature. Though such factors are generally considered to be important in the management of bee populations, controlled experiments in which the roles of the various factors are tested by manipulating some factors while keeping the others constant are lacking. There is a need to undertake such manipulative experiments that would enhance our knowledge of the ecology of the bees and hence manage them better.

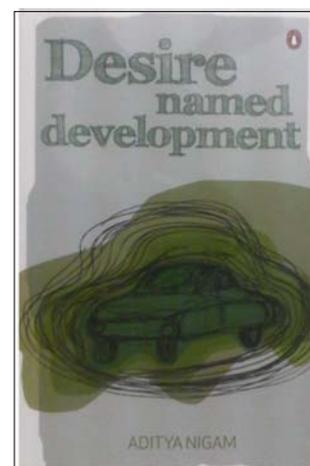
This volume has been highly informative and enlightening for me. However, I felt that the focus of the book is a bit skewed towards applied entomology, though the editors have made an effort to have articles on taxonomy, evolution, ecology, behaviour, molecular biology and medical entomology. The slight bias towards applied entomology is understandable, because worldwide there is more thrust on research in the field of pest management, climate change and disease management. I would have liked to see a review of the progress in the field of social insect behaviour in the last couple of decades, because this field has indeed expanded its horizons immensely in the recent past. One recent development in the area of social insect research has been the use of network theory to understand social systems, which has opened up new horizons for research where theoretical predictions can be tested using interesting model systems that can be manipulated easily. On the whole, I feel this volume would be a good addition to many university libraries because it can provide sumptuous food for thought to students of entomology.

I firmly believe in Theodosius Dobzhansky's statement 'Nothing in biology makes sense except in the light of evolution', and I would like to end this piece with a special mention of the review by Allen *et al.* that appears towards the end of this volume. Amongst a series of articles that discussed applied entomology from various perspectives, I was quite happy to find this outlier – a review of sexual dimorphism in Lepidoptera that discusses sexual and natural selection, and the interplay between the two in the evolution of the differences between the two sexes in moths and butterflies. I strongly recommend this article to anyone interested in the Lepidoptera sexual selection or evolution in general.

And of course, for the diehard taxonomists and evolutionary biologists there is dessert on page 487 – a detailed discussion of the last 25 years of research in the field of heteropteran systematics. Weirauch and Schuh take us on an enlightening journey from the slow days of comparative morphology to the modern-day molecular systematics to delve into the evolutionary history of the true bugs of the world.

ANINDITA BHADRA

*Behaviour and Ecology Laboratory,
C.V. Raman Building,
Department of Biological Sciences,
Indian Institute of Science Education and
Research – Kolkata,
P.O. BCKV Campus Main Office,
Mohanpur 741 252, India
e-mail: abhadra@iiserkol.ac.in*



Desire Named Development. Aditya Nigam. Penguin Books India Pvt. Ltd, 11 Community Centre, Panchsheel Park, New Delhi 110 017, India. 2011. 106 pp. Price: Rs 199.

...And thus, one day when the rich are richer, when corporations make super profits, when we achieve 10 per cent decennial growth, we will find that wealth will trickle down and that day the people at the bottom of the pile will also start getting the benefits of growth. The unemployed will find jobs and the hungry will have food... But for that to happen, in the

BOOK REVIEWS

meantime, we need to take away their land and their livelihoods.

(Extracted from
Desire Named Development)

In this book, Nigam talks of how the desire for development has led to the development of desire. According to the *Concise Oxford Dictionary*, *desire* is 'an unsatisfied longing or craving', *develop* is to 'make or become bigger or fuller or more elaborate or systematic', *developing country* is 'a poor or primitive country that is developing better economic and social conditions', and *development* is 'a stage of growth or advancement'. In the context of sustainable development, *desire* is associated with 'comforts or luxuries' (e.g. entertainment, public comforts) as against *needs* – resources that are 'absolutely fundamental to life and survival' (e.g. food, water) and *necessities* that are essential to maintain a particular lifestyle or a minimum standard of living (e.g. primary education, basic health services)¹.

The gross domestic product (GDP) and the number of cars per family are indicators of the fulfilment of *desire*¹. Nigam talks of the fear that simple living and affordable buying might put the economy in crisis and of how the GDP could continue to rise even when the nation is at war. He focuses mainly on India, observing that 'what we know as "Development" today, in twenty-first century India, is a story of the production of the "consumer" so that something called "the economy" can flourish – which, incidentally, has very little to do with people being fed and clothed.' Here, one begins to question what was meant by 'of the people, by the people and for the people'.

The discussion on the automobile, featured on the cover page, takes up a substantial portion of the book. Nigam uses interesting phrases such as the 'automobile of desire' when dealing with how automobiles drive humans and how in the 1960s and 1970s, the automobile gave many working women a sense of liberation and how, for men, the car became 'a vehicle for the display of sexual prowess and, probably, displaced sexual gratification through speed'.

He explains how automobiles 'gobbled up' and colonized land meant for relaxation, and led to the parking facility becoming the unique selling point of a business; how cities were restructured to

accommodate automobiles. When the author talks about road expansion, one is hit with the reality in Bangalore where inefficient construction of metros and road-widening projects have recently created many one-ways, traffic jams and cut down several trees. Nigam describes how new diseases 'trace their lineage back to...the desire for the automobile' and how increasing automobiles lead to depleting oil resources and a shift to bio-fuels that in turn causes an increase in food prices and food insecurity.

Nigam has adopted an unusual style in using words and phrases – different from regular usage and making a new kind of sense. For instance: 'That was also the point when the car became critical in the production of the mass consumer' and '...another grammar of power appeared on the streets and public spaces.' He puts across his concepts of the 'dreamworld of consumption' in the easy-to-read narrative form of an imaginary story.

The text starts with the traditional fairy tale opening 'Once upon a time...' and flows seamlessly though the author puts forth various concepts ranging from the change in production and consumption to automobiles to land acquisition for industrialization to disappearance of groundwater and water shortages to green revolution and a different economy.

Some of the points that stand out are the dispute between land for industrial development and agricultural use, and crops and land for food versus oil. The author gives a case study of how environmental activists defending their homeland against multinational oil giants have been executed in Nigeria (in 1995), and how employees of oil companies have been kidnapped and oil pipelines blown up (in 2006) by militants of the Movement for the Emancipation of the Niger Delta. He highlights how most of the armed insurgencies in India are 'now crucially about controlling local resources and exercising local control over them'.

Nigam talks of the existing argument that industrialization might be part of the problem, rather than the solution to poverty and unemployment. He elucidates capital formation versus inviting capital from other countries, and the Nehruvian state versus global hypermodernity. The Nehruvian state is characterized by 'curtailing current consumption and saving for the larger good' and hypermodernity with buying and consumption. He shows

how the Indian 'globalized urban middle class' has followed a path of buying and consumption, inviting capital from other countries by providing them with 'cheap labour and natural resources'.

He explains how capital 'had to' produce labour and how peasants were converted to factory workers so that capitalism could survive. This might remind one of a recent television advertisement portraying a tribal woman having 'progressed' from normal village life to that of an earning, vehicle-driving and western-clothes clad lady! The author also highlights the possibility of an agro-industrial cooperative by the locals focusing on less ecologically destructive business, as against an industrial project by multinationals who have dispossessed the locals of their land and livelihood for their private profits.

Nigam also reveals why the economy seems to be more important than the well-being of people. He talks of a choice of not following and re-evaluating the standard and violent Western model of industrialization. Work by scholars show that China's Industrial Revolution covered 1500 years, ~600 years before Britain entered its industrialization phase'. Markets, trade and industry could exist together with agricultural and peasant life before the 18th century (beginning of the Industrial Revolution) as opposed to the 'violent destruction' of 'earlier modes of living' during the Industrial Revolution.

The author goes on to explain how the green revolution has led to groundwater depletion and soil degradation, and how transnational corporations seek to overcome these problems through genetic engineering and biotechnology. He talks of hunger as a political problem, of problems of inequalities and access, which cannot be tackled through 'techno-fixes'. He also describes the inequalities between the North and South, and rich and poor countries of the world; and conflicts in oil, water and 'environmental' and 'carbon' spaces.

Finally, he says 'another world is possible' and that economy should be recognized as a subset of ecology and not vice versa. He talks of concepts related to that of a 'green economy', which is defined by the United Nations Environment Programme (UNEP) as one that results in 'improved human well-being and social equity, while significantly reducing environmental risks and ecological

scarcities². The UNEP report² says that 'the main indicators of economic performance, such as growth in Gross Domestic Product (GDP) need to be adjusted to account for pollution, resource depletion, declining ecosystem services, and the distributional consequences of natural capital loss to the poor'.

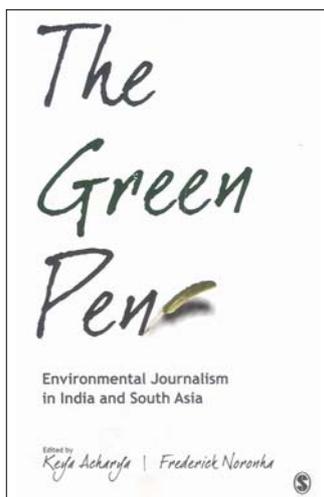
Nigam further indicates that the subject of economics is to undergo a major reconfiguration in the future. He also points out that India can shift to a more ecologically sustainable and sensitive, carbon-poor 'development' strategy without any major damage compared to American cities, and that it is important 'for the Indian (and other Southern) economies to delink from the pace and demands of the global economy'.

Desire for Development is one among the rare books that spark an interest in the reader who is least interested in the subjects of economics and development.

1. Monto, M. *et al.*, *Sustainability and Human Settlements: Fundamental Issues, Modeling and Simulations*, Sage Publications, New Delhi, 2005.
2. UNEP, *Towards a green economy: pathways to sustainable development and poverty eradication*, 2011; http://www.unep.org/GreenEconomy/Portals/93/documents/Full_GER_screen.pdf

GEETHANJALI MONTO

S. Ramaseshan Fellow
e-mail: geethum@hotmail.com



The Green Pen: Environmental Journalism in India and South Asia. Keya Acharya and Frederick Noronha (eds). SAGE Publications, B1/I-1 Mohan Co-operative Industrial Area, Mathura Road, New Delhi 110 044. 2010. xviii + 303 pp. Price: Rs 395.

As the name suggests, *The Green Pen* is a book about environmental reporting. Lyla Bavadam's first write-up in the book goes to show what makes environmental reporting the most challenging. Kunda Dixit argues that creating this separate category of reporting has affected environmental protection, and that there can be only two types of journalism – good and bad. Writing on similar lines Kalpana Sharma adds that the skills needed for environmental journalism are the same as those needed for good journalism.

Devinder Sharma justifies why he believes that the media is no longer the 'fourth estate'. He exemplifies issues that are mostly untouched by the media such as farmer suicides, which make only occasional headlines and the enormous

consumption of water by the automobile industry.

Frederick Noronha raises concerns surrounding tourism in Goa, and Ahmed Zaki Nafiz presents a glimpse of environmental reporting in the Maldives, acknowledging that even though the media has its spotlight on environmental issues, the reportage is mostly 'superficial'. The need for collective environment and health reporting, mostly done by separate reporters is expressed in the book. Disaster reporting (earthquakes and floods), and reporting on water, agriculture and wildlife are discussed too. There are other articles authored by well-known names in the field of environment/journalism, including Richard Mahapatra, S. Gopikrishna Warriar, Pallava Bagla and Sunita Narain.

The book explains how reporting on environment cannot be done in isolation; it is connected with political and economic dimensions. It calls for journalists to have a scientific understanding of the environment to be able to report credibly. There are essays on photojournalism, gender and environment issues, and environmental movements. One section, 'An Anil Agarwal Reader' is devoted to the late environmentalist Anil Agarwal's selected writings.

All the essays represent strong views and first-hand experience of the active contributors in the field. *The Green Pen* is a must have for all journalists, not particularly for those reporting on the environment. In the words of Darryl D' Monte, 'The admonitions that several contributors to this book address to environmental journalists actually apply to all scribes'.

RICHA MALHOTRA

e-mail: rchmalhotra@gmail.com