EVOLUTION

Small-town utopia

Kevin Laland commends a campaign to forge a better community using the principles of natural selection.

Mixing sociology, anthropology and psychology with evolution can be explosive. In 1967, Desmond Morris's book *The Naked Ape* created a furore by portraying humans as shackled by ancient animal instincts, and made contentious evolutionary arguments that, for instance, pornography is harmless. Edward O. Wilson's *Sociobiology* (1975) created another storm by proposing evolutionary explanations for xenophobia and religion. The fires were stoked a third time by evolutionary psychologists who proclaimed a revolutionary science of the mind.

Readers conscious of this backdrop might be forgiven for approaching *The Neighborhood Project*, by biologist David Sloan Wilson, with trepidation. Wilson, describing his attempts to bring evolutionary ideas to the streets of his home town, Binghamton in upstate New York, asserts that evolutionists must "walk the walk", not just talk the talk.

Ordinary people, Wilson maintains, will only take to evolutionary science when it is able to deliver practical answers to the issues that concern them, such as how to improve their children's performance at school. An expert in the study of cooperation, Wilson is acutely aware of how natural selection can favour both social and antisocial behaviour.

Some seven years ago he set out to see whether the residents of Binghamton could be made more caring by improving their environment using evolutionary principles. Wilson began with a survey, asking locals to what extent they agreed with statements such as 'It is important to help other people'. He combined this information with other measures of community spirit — from the number of people who display Christmas decorations, to the rate of return of deliberately 'lost' letters. Using technology based on geographical information systems (GIS), he turned the data into maps of the city, revealing caring and less-caring areas as nice 'hills' and nasty 'valleys'.

Child-centred learning follows evolutionary concepts.

The Neighborhood Project: Using Evolution to Improve My City, One Block at a Time
DAVID SLOAN WILSON
Little, Brown: 2011. 448 pp. $25.99

Wilson's studies of local schoolchildren showed that those with strong social tendencies hailed disproportionately from supportive neighbourhoods; statistical analyses confirmed that this relationship was not an artefact driven by another variable, such as income. He argues that children can be made into 'good Samaritans' or 'bad eggs' by their surroundings because, like other animals, humans are predisposed to cooperate selectively with those who are likely to reciprocate.

But Wilson is not content just to study good behaviour, he wants to engender it. *The Neighborhood Project* details his efforts to "raise the valleys of my GIS maps into hills" by forging alliances with local teachers, school superintendents, politicians and business people to create an evolution-inspired task force dedicated to beautifying the city.

The indefatigable Wilson does not stop there. He goes on to conceive several other ambitious projects, including The Evolution Institute, a national think tank designed to devise public policy based on evolutionary principles, focusing initially on childhood education. Undeterred by the graveyard of past attempts to improve schooling, Wilson assembles his dream team of evolutionists to sort out the problem.

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For more on David Sloan Wilson's urban experiment:
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He reaches several conclusions, including that educational practices such as learning by rote and grouping children in classes of the same age are unnatural, based on his assumption that learning in ancestral populations was much more spontaneous. He advocates other approaches that he feels more effectively exploit our evolved learning capabilities, such as the emphasis on child-directed learning in the mixed-age groups adopted by Montessori schools. His whistle-stop tour of evolutionary fixes then moves on to the global debt crisis and the nature of religion.

Will Wilson be more successful than his predecessors? One reason he might is his rich, well-informed interpretation of evolution, encompassing biological and cultural evolution, multilevel selection and a sophisticated understanding of how learning and culture build on genetic predispositions. However, it remains to be seen whether good science will translate into good policy.

Wilson writes well, and his monograph is an absorbing account of how an individual scientist can make a difference to their local community. He profiles the people he describes with great care, turning each character into a local hero. Wilson clearly has a gift for inspiring others with the potential of evolutionary science, but is sometimes in danger of getting carried away with his own zeal, even framing his ideas as 'parables' and 'commandments'.

Wilson's attempts to harness his research to improve society are admirable, but there are reasons to be cautious. Evolutionary theory is one of the most fertile, wide-ranging and stimulating of all scientific ideas, yet therein lies the danger: just about anything can be endorsed by an evolutionary hypothesis. For instance, at the first Evolution Institute workshop in 2008, one evolutionist claimed that knowledge that did not exist in ancestral environments, such as mathematics, can never be picked up spontaneously by children. Another claimed that all subjects can be learned readily in a supportive environment. Some advocated child-directed learning; others, direct instruction. Although Wilson is right to claim that evolution can deliver multiple solutions, it is also credible that some of these evolution-inspired hypotheses are wrong.

The Binghamton project is still too young to evaluate. But if Wilson succeeds, it will be a triumph for science, pluralism and common sense as much as for evolutionary biology. ■

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