
What philosophy can't answer, biology might

Margaret Clark; Columnist; mclark@imprint.uwaterloo.ca

Once upon a time, biology and philosophy were kith and kin in the eyes of the world's great thinkers. Aristotle treated both the study of aesthetics and of the animal kingdom with the same self-assurance; early doctors once attributed illnesses of the body to deficits of the spirit; the social inferiority of women was deemed a biological truth.

But over the centuries, biology and philosophy took different paths. Sir Francis Bacon introduced a concrete, observational approach to scientific analysis and René Descartes followed with his *Discourse on Method*, a treatise on the scientific method. In 1878 Charles Peirce developed the objective hypothesis model that is still used in science today, and like twins separated at birth, biology and philosophy went their separate ways.

Well, almost. The problem is that when we look back at the way science and philosophy used to commingle, we cannot help but view the meeting of their two worlds as primitive and unscientific — in a word: medieval. Their eventual divergence was absolutely integral to the pursuit of new knowledge, with its benefits amply demonstrated in the advent of new and better medicines, the success of the human genome project, and the real world application of philosophy through refined discourses on political theory, psychology and sociology.

But in the contemporary world, there are times when no amount of "objectivity" will provide answers to the questions with which both philosophy and biology now grapple. These, of course, include matters of moral imperative and "bioethics" — whether it is "right" to pursue stem cell research, for instance, or to introduce bioengineered foodstuffs into the general marketplace.

Then there's the question of love, and with it the whole matter of human sexuality, pursuant to the longstanding feud of "nature versus nurture." Though no absolute answer about the "why" of sex and sexuality will ever be accepted by the species as a whole, in *The Red Queen: Sex and the Evolution of Human Nature*, author Matt Ridley at the very least offers a good introductory outline to the extent of this bio-philosophical question — and so demonstrates precisely why this topic crosses into both fields of study.

Other topics for cross-subject consideration are those that question long-standing classification models — what makes a biological species, for instance, and are there other possible hierarchies for biological difference? What about the question of "race," to what extent is it biologically justified, especially where medical sciences are concerned? Moreover, is there a biological imperative for reason, and if not, how and why did we as a species develop the logic systems that we did?

As of yet, these and similar questions cannot comfortably be solved by either biology or philosophy, which leads me to reconsider the socially-accepted divide between the two: did they ever really go their separate ways?

Certainly, there are compelling reasons for why biology and philosophy took different paths centuries ago, as more objective approaches were needed for the advancement of both. Yet as the questions raised by new human advancements become exceedingly complex, it seems the question of objectivity itself has changed — and with it, all old oppositions between the fields of biology and philosophy.

Businesses often call in external consultants to highlight the failings their own personnel can't help but overlook, on account of over-familiarity with the subject matter; similarly, so long as one refuses even to consider other approaches to a field of study as broad and socially-affective as biology, in our contemporary, ever-questioning society, how can true scientific objectivity ever really be maintained?