

RESULTS

I. Demographic statistics

One hundred and fifty one evolutionary biologists answered invitations to participate in this study, a return rate of 55.7% of those on the List (Appendix II). Two of the scientists sent letters claiming that they could not accept the invitation to participate. One reasoned that “I am an anthropologist, not an evolutionary biologist.” The other scientist refused to answer because he had just published a large book that contained his views on evolution and religion: “They cannot be summarized by answering a questionnaire,” his letter stated. This left 149 participants who responded with answers to the questionnaire (Figure 1). These answers form the data of this project. 37 participants (24.8%) used the web site to answer the questionnaire while 112 (75.2%) returned their answers by postal mail.

One hundred and seven questionnaires were returned with names, amounting to 71.8% of the respondents (Figure 2), which illustrates the

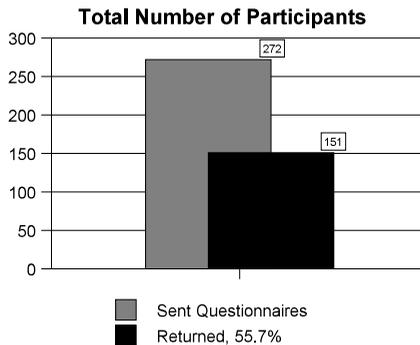


Figure 1. The ratio of responses to invitations sent to those on the List (Appendix II). The final number of participants in the study is 149. Two of the 151 returns were refusals to participate.

willingness of the respondents to list their beliefs without requiring anonymity.

The 27.2% who withheld their names are likely more private about their views on religious topics.

Since anonymity creates a dearth of auxiliary data, geographical information is incomplete. A certain amount of data can be generated, however, from information on the postmarks of the return envelopes from

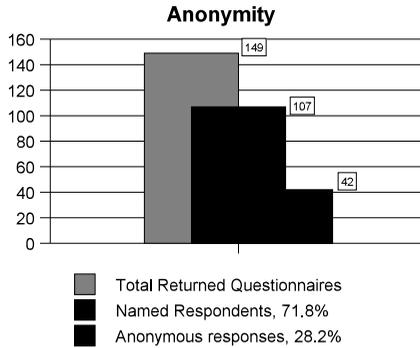


Figure 2. The ratio of anonymous to named questionnaires reveals that most participants did not require anonymity built in to the study.

those who did not provide their names. 14 anonymous respondents (9.3% of

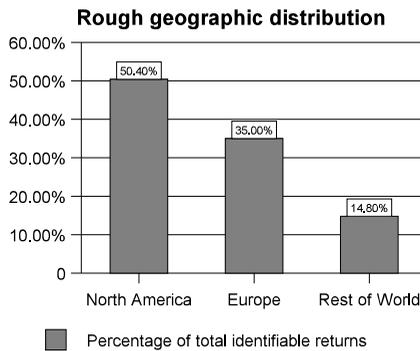


Figure 3. Roughly half the participants of this study come from outside North America.

the total) chose to answer on the web site, which of course provided the most geographic and biographical anonymity. All of the return envelopes reveal a postmark allowing for geographic separation. One hundred and thirty five of the 149 questionnaires can be grouped geographically, giving us a good

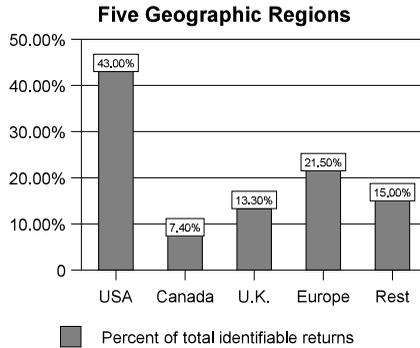


Figure 4. Members of the United States National Academy of Science make up 43% of the total number of evolutionary biologists taking part in this study.

estimate of the geographic breadth of the respondents. They can be coarsely assembled into three major categories (Figure 3): North America (USA and Canada, 68 respondents), Europe (U.K. and other European countries west of Russia and North of Africa and the Arabian peninsula, 47 respondents), and “Rest of World” (all countries falling outside the previous two categories, 20 respondents). North American evolutionary biologists make up 50.4% of the total participants in this study.

The participants can be further separated into five regional categories resulting in finer geographic resolution (Figure 4): USA (58 respondents), Canada (10 respondents), United Kingdom (18 respondents), Rest of Europe - exclusive of U.K. (29 respondents), Rest of World - exclusive of all the previous geographic categories (20 respondents). The complete demographic breakdown appears in Appendix III.

II. Response statistics

The following figures represent the statistical tallies of respondents’ answers to the questionnaire. Unless otherwise noted, N=149.

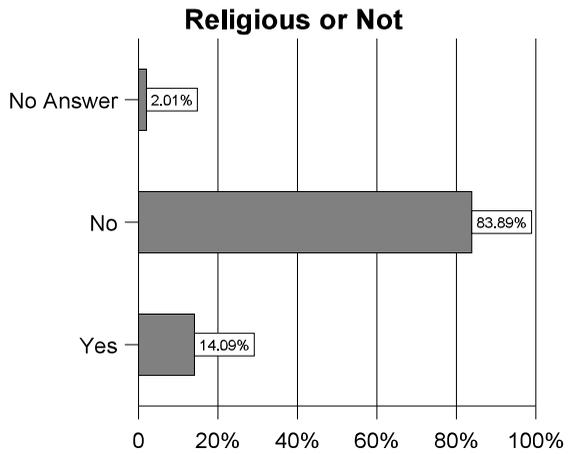


Figure 5. Responses to **question one**: “Do you consider yourself a religious person?”

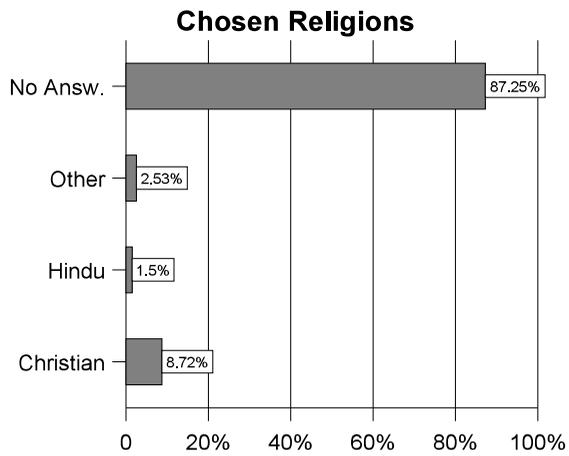


Figure 6. Responses to **question two**: “Which best describes your religion?”

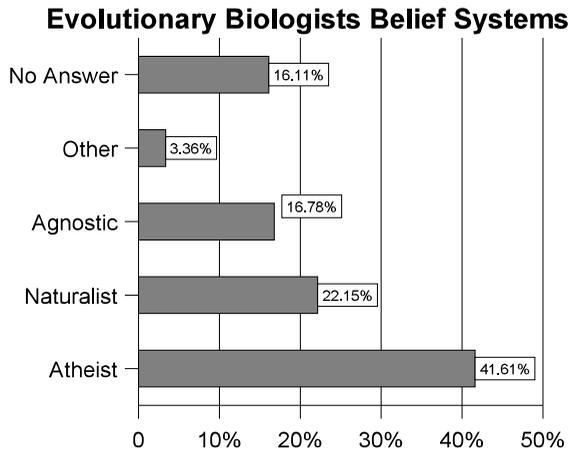


Figure 7. Responses to **question three**: “Which best describes your belief system?”

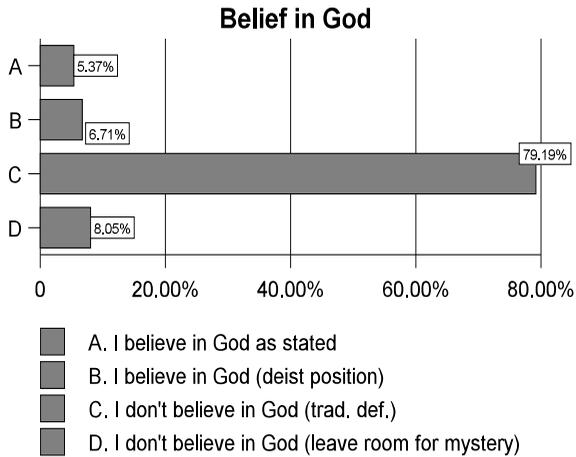


Figure 8. Responses to **question four**: Do you believe in God, or an entity that exists beyond the scope of our observations that is responsible for designing and maintaining life on earth? A. I believe in God as described in this question; B. I believe in God, but my God merely started the process of the universe, and of life on earth, and does not intervene on a day-to-day basis; C. I don't believe in God in any traditional sense of the word; D. I don't believe in God, but I do believe that there are entities in the universe that are beyond the scope of science and are forever going to remain so.

Note: One respondent left this question blank. This amounted to 0.67% of the total number of answers for this question.

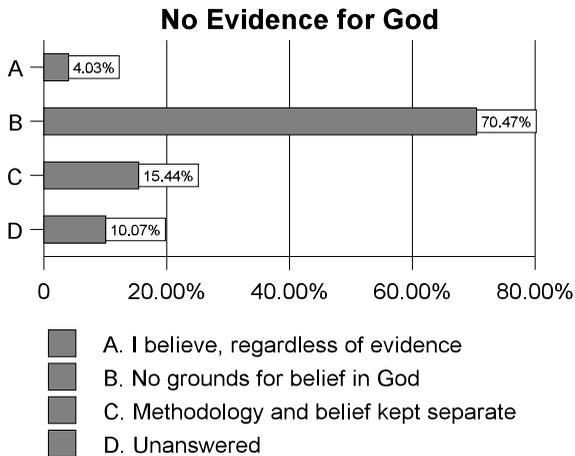


Figure 9. Responses to **question five**: “What role does evidence play for you in determining your belief in God?” A. I believe that there is a God no matter how insubstantial the evidence; B. I believe that there is not enough evidence to justify a belief in God; C. I don’t apply scientific methodology or principles to my beliefs.

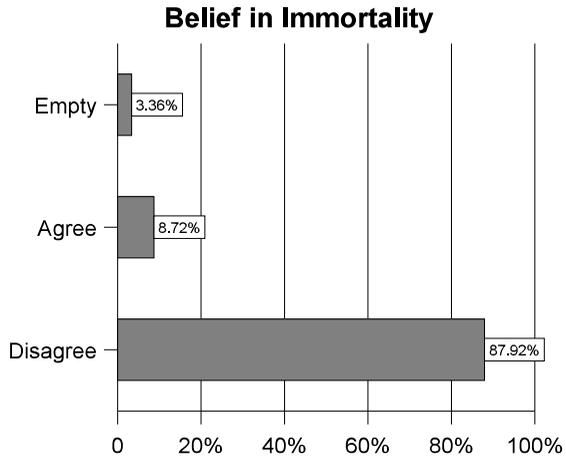


Figure 10. Responses to **question six**: “I believe that there is something, not known to science, in human beings that lives on after the body dies.”

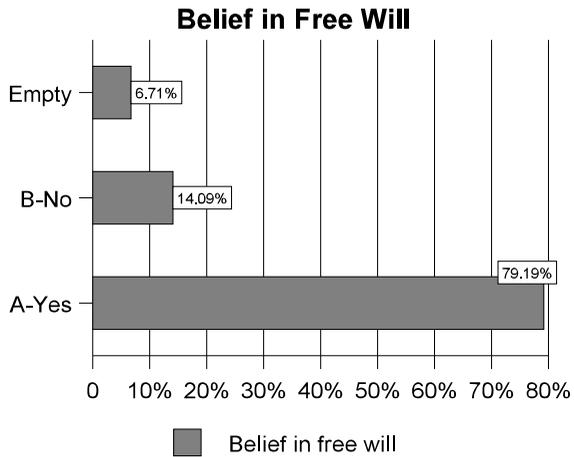


Figure 11. Responses to **question seven**: “Please choose one of the following: A. All biological organisms are locally determined by heredity and environment but humans still possess free will; B. All biological organisms are locally determined by heredity and environment and humans have no free will.”

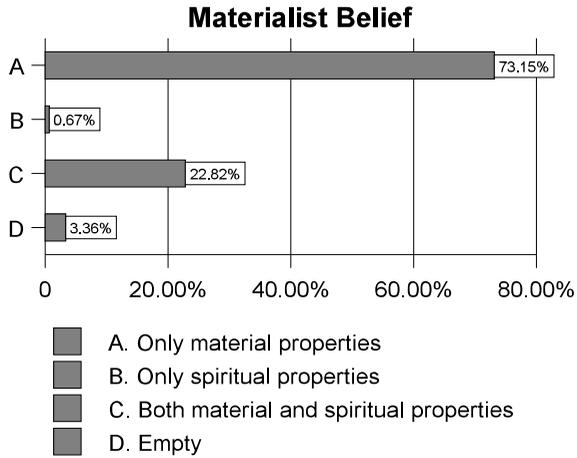


Figure 12. Responses to **question eight**: “Organisms, including humans, consist of the following:” A. Material properties; B. Spiritual properties; C. Both material and spiritual/non-material properties; D. Questionnaires returned empty on this question

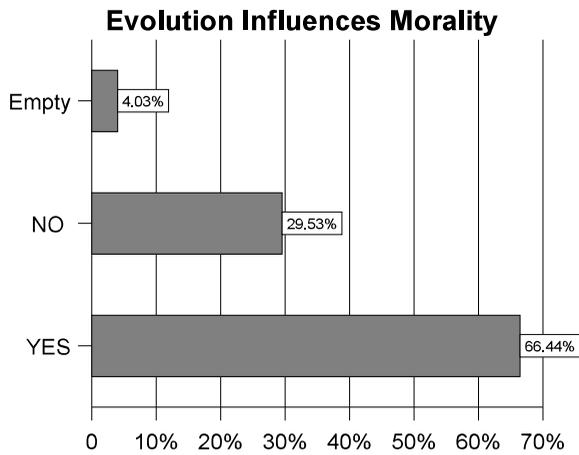


Figure 13. Responses to **question nine**: “I believe that the findings of evolutionary biology can influence and alter morality.”

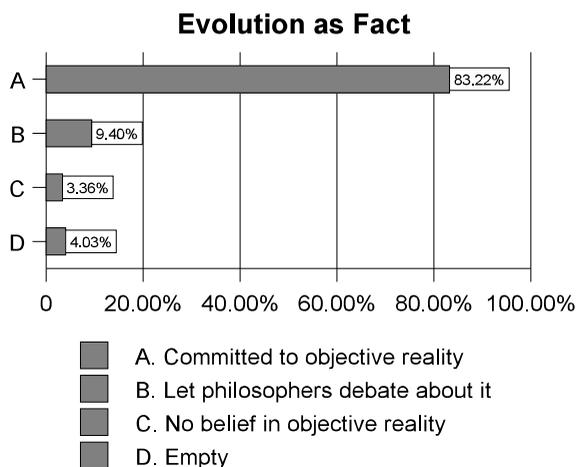


Figure 14. Responses to **question 10**: “Do you believe that evolution teaches us something about the objective reality of life on earth or is such a topic better left for philosophers to debate?”

A. I am committed to teaching about the objective reality of life on earth; B. I am content to let philosophers debate about objective reality, without addressing it in my teaching; C. I don’t believe that there is such a thing as objective reality, we all create our own reality; D. Questionnaires returned empty on this question.

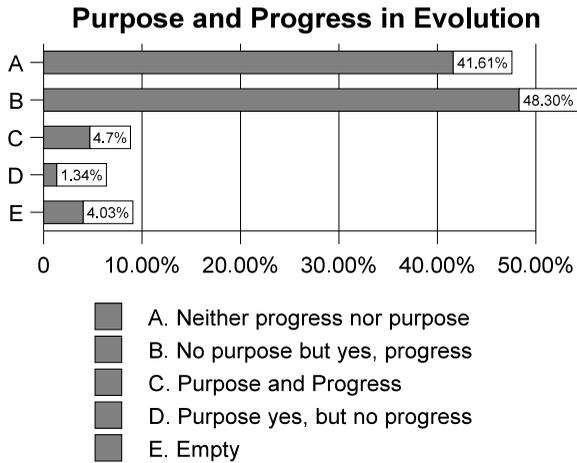


Figure 15. Responses to **question 11**: “What is your view of purpose and progress in Evolution?” A. Neither purpose nor progress plays any ultimate role in evolution; B. Evolution exhibits no ultimate purpose, but progress does occur in evolution; C. Ultimate purpose plays a role in evolution and progress is a part of that purpose; D. Ultimate purpose plays a role in evolution, but it doesn’t entail progress; E. Questionnaires returned empty on this question.

How Evolution and Religion Relate

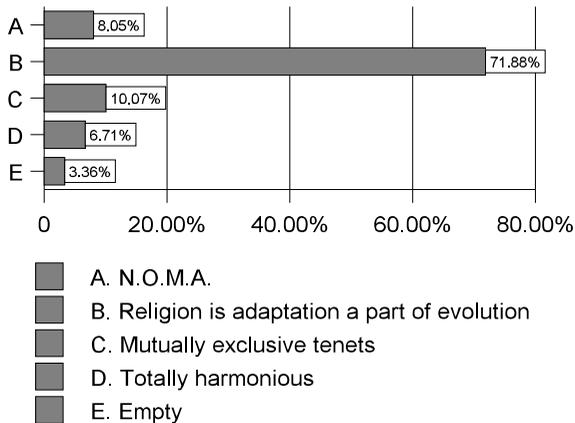


Figure 16. Responses to **question 12**: “ What is your opinion on the relationship between evolution and religion?” A. They are non-overlapping magisteria whose tenets are not in conflict; B. Religion is a social phenomenon that has developed with the biological evolution of *H. sapiens*. Therefore religion should be considered as a part of our biological heritage and its tenets should be seen as a labile social adaptation, subject to change and reinterpretation; C. They are mutually exclusive magisteria whose tenets indicate mutually exclusive conclusions; D. They are totally harmonious. Evolution is one of many ways to elucidate the evidences of God’s designs; E. Questionnaires returned empty on this question.

Moral Beliefs and Evolution

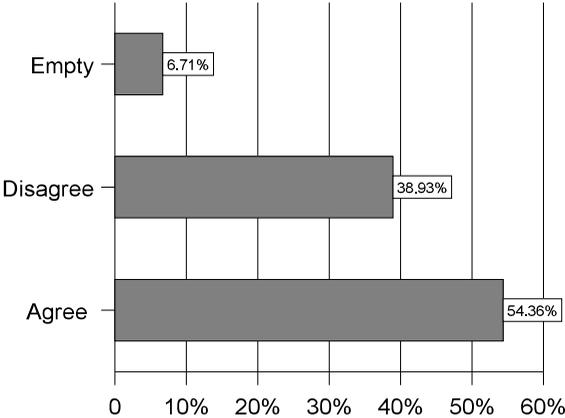
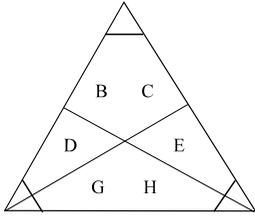
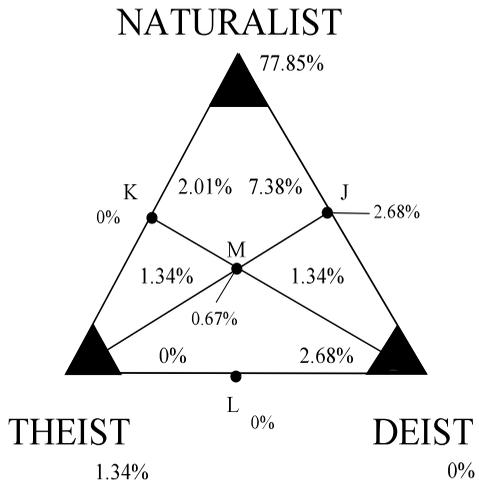


Figure 17. Responses to question 13: “I keep my beliefs about morality and ethics separate from my practice and teaching of evolution.”



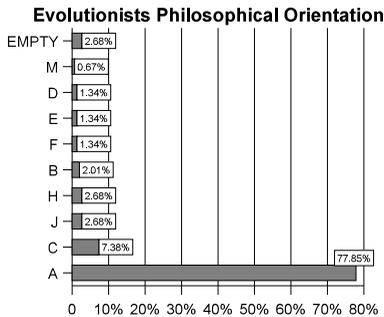
a.



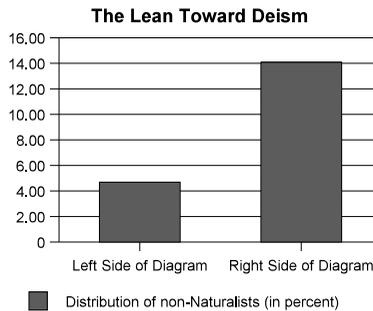
b.

Figure 18. (Caption on next page)

Figure 18 a. Original ternary diagram as it appears in the questionnaire **number 14**; b. Diagrammatic statistical representation of the choices for each region; c. Statistical distribution of the data shown in b.; d. statistical distribution of those who didn't choose "naturalist." The right side of the ternary diagram, toward "deist," is heavily favored over the left



C.



d.

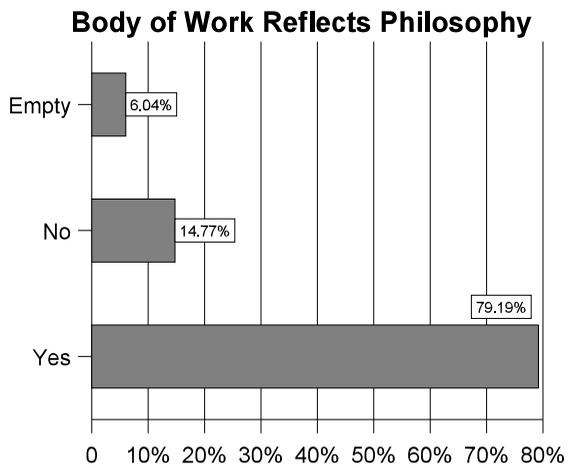


Figure 19. Responses to **question 15**: “Do you think that your body of work in evolutionary biology reflects your position on the diagram of #14?”

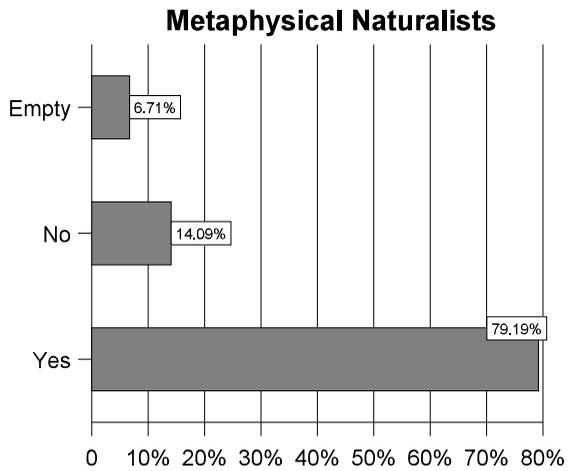


Figure 20. Responses to **question 16**: “Do you consider yourself a naturalist in the metaphysical sense?”

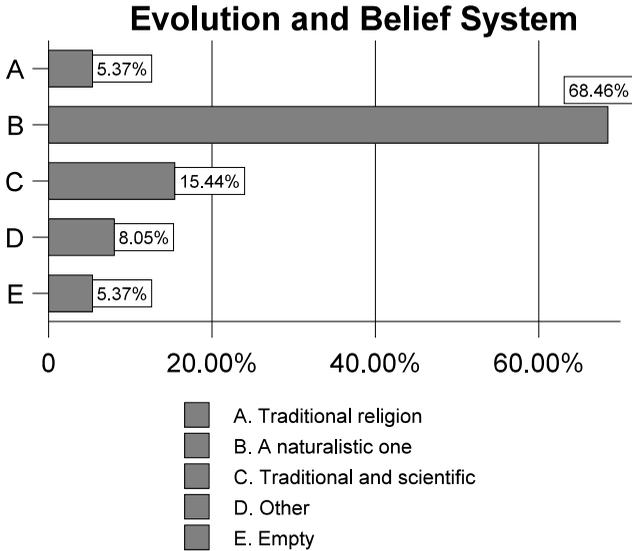


Figure 21. Responses to **question 17**: “What kind of a belief system would you advocate, if pressed, as being the most consonant with a lifelong practice of evolution? A. One of the traditional religions (i.e. Christianity, Islam, Judaism, Buddhism etc.); B. A naturalistic one that is based on materialism, and incorporates advances in scientific knowledge; C. One that incorporates some aspects of traditional religion and some aspects of modern science; D. Other; E. Questionnaires returned empty on this question.