

WOULD WE ALL BEHAVE LIKE ANIMALS?

Evolution and Ethics



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DOES A "BELIEF" IN EVOLUTION LEAD TO A LOSS OF MORALS AND ETHICS?

- This is not Biological Evolution, but
- "Social Darwinism,"
 - coined by Herbert Spencer (1820-1903)
 - extension into human social systems
 - both naive and oversimplified
- Popular with eugenicists and Nazis



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DOESN'T "EVOLUTION" = "SOCIAL DARWINISM?"

- No. "Survival of the fittest" should be
- "Survival of the fit enough"
- Still, "fitness" has many measures and meanings,
- Not often equivalent to physical strength or the use of force or coercion.



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“BIOLOGICAL FITNESS” MEANS?

- “The long-term ability, compared to others, to leave offspring or descendants [or relatives].”
- Communication and cooperation appear to be important human survival traits.



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COMPETITION > COOPERATION?

- Insects and flowering plants.
- “Cleaner” fish or shrimp don’t get eaten.
- Altruism works among relatives
 - Social mammals generally protect young.
 - Elephants aid sick and injured members.



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BUT ARE WE JUST ANIMALS?

- What *is* “behaving like an animal?”
 - Porpoises are gregarious, fun-loving.
 - Gorillas are family-oriented vegetarians.
- Humans, like all other species, are unique.
 - Our behaviour is our own, whether similar or different from that of other species.



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HUMAN EVOLVED BEHAVIOUR

- We are a highly social species.
- Most of our behaviour is learned,
- Influenced, but not determined, genetically.
- We can “unlearn” instinctive behaviour that no longer is adaptive.
- Morals and ethics are adaptive traits!



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ISN'T THIS HOW EVOLUTION IS TAUGHT?

- Anti-evolutionists promote misinformation.
- Science teachers can be poorly prepared.
- Specialization in college can neglect evolution.
- Often there is no course in evolution for non-majors or education majors!



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A QUESTION OF EDUCATION

- "Nothing in biology makes sense except in the light of evolution."-- Theodosius Dobzhansky, 1973
- William Thwaites, 2005, "Would We All Behave Like Animals? A Conversation," Reports of the National Center for Science Education, 25(3-4), p27.
- http://www.ncseweb.org/resources/articles/5249_would_we_all_behave_like_anima_12_7_2000.asp



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