

Here are some sample questions for the Psyc 302 Spring 2010 final exam. The exam will consist of 5 of 7 short answers (10 pt each) and 1 of 3 longish answers (30 pt).

Our final exam will be on 17 June from 3:00-5:00 in room ESB 3-27 (NOT our usual classroom!).

Short Questions

1. Compare and contrast reciprocal altruism and competitive altruism. Explain whether or not they really are forms of altruism (according to the basic evolutionary psychology interpretation of altruism that we have discussed). If they aren't altruism, what are they?
2. Evolutionary theories did not start with Charles Darwin. People had been considering issues of evolution since at least the ancient Greeks. Discuss the following: What are the underlying issues that any theories of evolution address? And, with these issues in mind, how are Jean de la Lamarck's (i.e., Lamarckian) and Charles Darwin's (i.e., natural selection) theories of evolution similar and different.
3. Football hooligans are something of a problem in the United Kingdom and Europe. Football (i.e., soccer) is incredibly popular and fans will travel great distances to watch games. Not infrequently, the fans of the losing team will engage in widespread violence and vandalism, especially if their team loses when playing in a foreign city (i.e., at an "away game"); the property damage and physical injuries to fans and "innocent bystanders" can be quite severe. Using what you know from our discussion of human warfare, aggression, and social systems, and the information given here, provide an evolutionary psychology interpretation of the behaviour of football hooligans.
4. There's good news and bad news. The good news is that the odds of you being murdered are fairly low. The bad news is that if you are murdered, there's a good chance you'll be killed by a member of your family. Discuss issues of the murder of family members within the context of kinship.
5. Discuss the hypothesized role of social gossip in the development and maintenance of human language and social structure.

Longish Question

Sociobiologists and evolutionary psychologists argue that while animals (including humans) can not evolve quickly enough to deal with sudden environmental change, they can rapidly modify their behaviour patterns to adjust for alterations in their environment. Using examples from the text and/or class provide support for the position that behaviour change (be it at the level of the individual, family, culture, species, etc. is an important ability for human survival and that behavioural adaptability is an evolutionarily selected trait.

Short Answers

1: The basic definition of altruism is that a donor experiences a cost and a recipient receives a benefit. As such, neither RA nor CA meet this criteria. In RA person one experiences a cost and person two gets the benefit, but then in the future the roles are reversed and person one gets the benefit from person two (who now has the cost); thus, there is a balance of cost and benefit for the participants. In CA, an individual experiences a cost (i.e., does something that appears "altruistic") but actually receives a much greater benefit. As such, the cost doesn't exceed the benefit. In the case of CA, this is much closer to the definition of selfishness. For RA, one could argue that it is energy neutral, so neither altruistic nor selfish in nature.

2: Evolutionary theories address the issue of how and/or why organisms change. Addressing issues of change and modification are at the heart of all evolutionary theories. Both Lamarck's and Darwin's theories dealt with changes over long periods of time that would lead to speciation of organisms. Both suggest that environmental factors are important in influencing the specific changes. However, Lamarck argued that changes that an individual acquired during his/her life would be passed on to offspring; Darwin argued that changes during the lifetime of an individual are not transmitted across generations and that it is changes at the genomic level at the time of conception that lead to generational alteration.

3: Given that in the EEA you were probably closely related to other members of your tribe there is going to be a perceived inclusive fitness element with fans; coming from the same area, cheering for the same team, wearing similar team colours, etc. strengthens the "tribal" appearance and the ancestral assumption of kinship for tribal members. Having lost the game the fans may need to demonstrate that they aren't weak by wrecking the foreign city; in the EEA if a tribe lost a "choreographed fight" this meant they were weaker and might then be actually attacked in an all-out raid. Here, the fans demonstrate their prowess, despite the loss of the game (saying, in effect, "don't attack us, we're tough"). By fighting in a large mob of fans, each hooligan minimizes the actual risk to himself (also, his fellow fans will come to his aid if he's in danger). By only attacking at away games, the hooligans minimize damage to their own "territory" and minimize the risk of actually hurting anyone closely related to themselves. Also, by fighting in the foreign city individual hooligans can show their individual strengths, possibly increasing their dominance in their social group.

4: By family we mean both genetic relatives and relatives by marriage. If you are murdered by a family member it is likely to be by an in-law (roughly 4/5 times) and not by a biological relative. As such, this does not violate the EP principles of kin selected altruism. If you were to be murdered by a biological family member this still might not violate kin selected altruism; if the benefit to one's self (i.e., direct fitness) is high enough, this overwhelms the indirect fitness benefits of inclusive fitness via kin.

5: Social gossip takes the place of social grooming in non-human primates. Because one can converse with up to 3 others at a time, but only groom one other at a time, this allows the size of

the group to increase dramatically (perhaps to 150-200 individuals). This could have been a factor in the development of language; having a larger group is of benefit for a number of reasons: safety in numbers, access to more potential mates, assistance in hunting, gathering, child care, etc. In terms of maintenance, social gossip provides individuals with access to social cognition-relevant information. For example, individuals' placement in the social hierarchy, alliances, availability of specific individuals for mating, reputation management, and the identification of cheaters (although this last one is not generally seen in gossip).

Longish Answer

There are a variety of ways to approach this question and lots of examples that could be used. Basically, this question is asking you to consider the issue of the interaction between nature and nurture, that is, the environment and the genes. Such a question would be graded on the strength and development of your argument and the merit of the examples used to support your answer.