The Economic Naturalist Paper

This assignment is designed to get you to apply the abstract theories that you are learning in class to the real world in which we live. Your task is to observe a phenomenon in the world that may seem quizzical, paradoxical, or just plain weird and explain it using economic theory. Papers are not to exceed 750 words, although many of the best papers are substantially shorter, and there is no book-based research involved (no references!!).

This assignment was first designed by a professor at Cornell named Robert Frank (for whom I was a teaching assistant) and was inspired by research showing that writing about a subject is an unusually effective device for learning more about it. So, as an experiment he told his students to submit a short essay using some idea or ideas from the course to help explain something they had personally observed during the course of their daily experience. In the course of completing this assignment students learned a lot more about general aim of the program helped them understand economics at a much more fundamental and practical level. He called it the Economic Naturalist paper, and the specific challenge we pose for students is to use a basic principle, or principles, of economics to construct an explanation of something they have personally observed. One of his students, Bill Tjoa, submitted a 100-word paper entitled “Why do the keypad buttons on drive-up automatic teller machines have Braille dots?”
A plausible answer, he reasoned, is that once the keypad molds have been manufactured, the cost of producing buttons with Braille dots is no higher than the cost of producing smooth ones. Making both types would require separate sets of molds and separate batches of inventory. If the patrons of drive-up machines found buttons with Braille dots harder to use, these extra costs might be worth incurring. But since the dots pose no difficulty for sighted users, the best and cheapest solution is to produce only keypads with dots.

The Economic Naturalist paper is a device that attempts to recreate for economics students the stimulating and illuminating experience that we continue to enjoy as a result of having taken college biology. You know a biology course has worked when it enables students to observe and marvel at many details of nature that would otherwise have escaped their notice. For example, while the novice may see only trees on a walk in the woods in early April, the biology student notices many different species of trees and understands why some are already into leaf while others still lie dormant. Similarly, the novice may notice that in some animal species, males are much larger than females, but the biology student knows that pattern occurs only in species in which males take several mates. Natural selection favors larger males because their greater size helps them to prevail in the, often bloody, contests among males for access to females. By contrast, males tend to be roughly the same size as females in monogamous species, in which there is much less fighting for mates.

In similar fashion, learning a few simple economic principles enables us to see the mundane details of ordinary human existence in a new light. Whereas the uninitiated often fail even to notice these details, the economic naturalist not only sees them, but becomes actively engaged in the attempt to understand and explain them.

To illustrate, an economic naturalist is someone like Bill Tjoa who drives up to an automatic teller machine and notices the Braille on the keypad. Instead of dismissing it as an odd quirk, he is able to understand the economic forces at work that make the existence of the
Braille dots not a quirk but a rational response to those forces. Another example of an economic naturalist is Nobel prize winner Gary Becker who noticed that households often act in ways that are in accordance with economic principles, for example in the number of children a couple decides to have. Or Amartya Sen, the brilliant Indian economist and Nobel prize winner, who noticed that famines are caused as much by economic forces as by acts of nature.

You, of course, are not expected to write about such large issues, but once you begin to see the world through the lens of the economic naturalist, you will begin to notice economic forces at work everywhere. Your task is to come up with a simple, everyday example and show how economic principles can explain the phenomenon you observe.

The attraction of such examples is that once you have been exposed to them, you hopefully will begin generating new ones of your own. I want to give this natural process a little push by requiring you to submit a brief (750 words maximum) written assignment that uses basic economic principles to explain something that you personally observed or experienced.

In response to this challenge in the past, students have tackled a host of fascinating questions. Some recent examples from past classes:

• Why do brides spend so much money on wedding dresses, while grooms often rent cheap tuxedos, even though grooms could potentially wear their tuxedos on many other occasions and brides will never wear their dresses again?

• Why, despite the proliferation of electrical appliances in the last century, do electrical outlets in newly built houses still have only two receptacles?

• Why do top female models earn so much more than top male models?

Once you realize that you can pose and answer such questions on your own, I hope you become hooked, and that a lifetime trajectory will begin in which your mastery of
economic principles not only does not decay with each year since completion of the course, but actually soars higher.

Again, this assignment is not a research assignment per se, meaning that there is no library work involved nor any book-based research involved. This is also not an assignment that expects you to draw fancy graphs or use any fancy math. I just want you to observe something and describe in words how economic theory can help explain what is going on.

The two key aspects of this assignment are: one, the quality of the paper really depends on the quality of the question you ask (and in general, the more paradoxical or puzzling the question is, the more interesting), and two, that most economic principles come down to some kind of cost versus benefit analysis that usually does not require much sophistication.

You are welcome to talk to me about ideas you have and/or send me an e-mail with one or two questions and a one or two sentence explanation of what you think is going on for each. I am also happy to look at drafts of your papers as well, but these must be given to me at least a few days in advance of the due date. To give you a taste of what the paper should be like, I include an example below. This is a brief, but succinct paper, remember it does not have to be long, just as long as you ask a good question and give a good answer based on economic principles.

An example of an economic naturalist paper:

**Why does the government require safety seats for infants who travel in cars, but not for infants who travel in airplanes?**

A mother cannot legally drive her 6-month-old son to a nearby grocery store without first strapping him into a government-approved safety seat. Yet she can fly with him from Miami to Seattle with no restraining device at all. Why this difference?
In case of an accident—whether in a car or an airplane—an infant who is strapped into a safety seat is more likely to escape injury or death than one who is unrestrained. But the probability of being involved in a serious accident is hundreds of times higher when travelling by car than when travelling by air, so the benefit of having safety seats is greater for trips made by car. Using safety seats is also far more costly on plane trips than on car trips. Whereas most cars have plenty of extra room for a safety seat, parents might need to purchase an extra ticket to use one on an airplane. Most parents appear unwilling to pay $600 more per trip for a small increment in safety, either for themselves or their child.

**DUE DATES**

First paper is due in class, Monday, August 6th.

Second paper is due in class, Wednesday, August 15th.