

Week 2 (9/23/02)

### **Green-eyed dragons**

You visit a remote desert island inhabited by one hundred very friendly dragons, all of whom have green eyes. They haven't seen a human for many centuries and are very excited about your visit. They show you around their island and tell you all about their dragon way of life (dragons can talk, of course).

They seem to be quite normal, as far as dragons go, but then you find out something rather odd. They have a rule on the island which states that if a dragon ever finds out that he/she has green eyes, then at precisely midnight on the day of this discovery, he/she must relinquish all dragon powers and transform into a long-tailed sparrow. However, there are no mirrors on the island, and they never talk about eye color, so the dragons have been living in blissful ignorance throughout the ages.

Upon your departure, all the dragons get together to see you off, and in a tearful farewell you thank them for being such hospitable dragons. Then you decide to tell them something that they all already know (for each can see the colors of the eyes of the other dragons). You tell them all that at least one of them has green eyes. Then you leave, not thinking of the consequences (if any). Assuming that the dragons are (of course) infallibly logical, what happens?

If something interesting does happen, what exactly is the new information that you gave the dragons?