## 1. SCOPE INSENSITIVITY

**Our system 1 (intuition) is very bad dealing with big numbers.** How much would you donate to save 2.000 birds from drowning in oil ponds? How about to save 20.000? And 200.000? Three groups of people were asked these three questions, and they respectively answered $80, $78, $88.

This cognitive bias is called scope insensitivity or scope neglect. If a number is larger than 1000, the number just seems big. The feelings are almost identical with 2000, 20.000 or 200.000 birds, people visualize a single exhausted bird. This image evokes some level of emotional arousal that is responsible for willingness-to-pay and the image is the same in all cases.

## 2. THE MARTIAL ART OF RATIONALITY

**Rationality is the martial art of mind**. It's about training brain machinery we all have in common. Rationality is about fixing those systematic errors that human brains tend to make (like an insensitivity to scope).

Our ability to reason is much more recent than our ability to control our muscles. So, it's going to be harder to train and verify, but it's not by bigger muscles that the human species rose to prominence upon Earth.

Very recently the human species has acquired a great deal of knowledge about human rationality: heuristics and biases, the Bayesian systematization of probability theory and statistics, evolutionary psychology, social psychology.

Deliberately, we decide that we want to seek only the truth, but our brains have hardwired support for rationalizing falsehoods. We can try to compensate it, but we can't actually rewire the neural circuitry. Luckily, humans aren't reflectively blind. We do have a native instinct for introspection. **We need, then, to apply the science to our intuitions,** to use the abstract knowledge to correct our mental movements and augment our metacognitive skills.

## 3. AVAILABILITY