

CHAPTER 8

COMPETING VIEWS ON EVOLUTION

IS EVOLUTION UGLY OR BEAUTIFUL?

The mechanisms of evolution can sound ugly, particularly the idea of “survival of the fittest,” more properly called differential reproductive success. Evolution reminds people of competition and suffering, animals fighting and eating each other and “nature red in tooth and claw.” (This famous line comes from “In Memoriam,” a poem by Alfred Tennyson.)

But even these aspects of creation are governed by God. The psalmist reminds us that God is sovereign over the life, death, and birth of all creatures.

... all the beasts of the forest prowl.
The lions roar for their prey
and seek their food from God.

All creatures look to you
to give them their food at the proper time.
When you give it to them,
they gather it up;
when you open your hand,
they are satisfied with good things.
When you hide your face,
they are terrified;
when you take away their breath,
they die and return to the dust.
When you send your Spirit,
they are created, and you renew the face of the ground.

—Psalm 104:20-21, 27-30

Although animal competition and suffering can make the mechanisms of evolution seem ugly, they are all under God’s governance of creation.

If viewed from another perspective, the mechanisms of evolution can even look good and useful. Step back for a moment and consider the tremendous development that these natural mechanisms can accomplish over time. If a sea turtle swims to a remote island, finds food, and lays eggs there, her offspring may take up residence on that island. In turn, these turtles with genes that make them better able to find and digest island food will have more offspring. Eventually, the turtles on the island will become significantly different from turtles on the mainland and will be a separate species. Without evolution the turtle species might not be able to do well on that island. With evolution the turtles are able to adapt to a new environment and thrive there. With evolution the turtles increase the diversity of species on the island. The island might never have a turtle population if turtles were not able to adapt to new environments. As this example illustrates, through the mechanisms of evolution God provides for species.

Goldfinches are beautiful birds that have beaks well suited to gathering seeds and long legs and claws suited to perching on seed-bearing plants. Now consider: How did God give them well suited beaks and legs and claws? Scientific study of God's revelation in nature indicates that God used the mechanisms of evolution, mechanisms that God created and governs, to provide for the birds.

Scientists who study ecosystems are often amazed at how beautifully evolution functions. An ecosystem can have hundreds or even thousands of species of fungus, grass, moss, flowers, ferns, trees, worms, beetles, spiders, flies, ants, reptiles, birds, and mammals, all of them interacting in a complex web of relationships, each well adapted to its particular ecological niche. God might have chosen to design each species so that it was static, never changing. But then species would not be able to adapt, and ecosystems could never change. Instead, it seems that God designed the mechanisms of evolution so that species can adapt, and ecosystems can develop and become even more complex.

The mechanisms of evolution are also directly beneficial to humans. People have found clever ways to use random mutation to improve the species we rely on. For example, modern-day species of corn did not exist thousands of years ago. It is descended from species of grass that produced edible seeds, but those earlier species were less productive and less easy to cultivate. Over many centuries, clever and persistent humans watched for plants with mutations that made these grasses better for food, and they selected those seeds to cultivate. This cultivation led to modern-day corn varieties. Since humans played a role in the differential reproductive success (this is artificial selection in addition to natural selection), this situation is different from microevolution in nature. But it illustrates that random mutation and some form of selection can cause species to adapt in helpful ways. Humans have cultivated many species, selecting and breeding plants and animals that show useful mutations. The results include dog breeds that are excellent companions, cattle that are easy to herd and produce much milk, and food crops that have high yields and are easy to cultivate.