The High Cost of Belonging

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Knowing about and thoroughly understanding biology can help one to understand all kinds of human affairs. Take the costly signaling theory of ritual, for instance (Sosis, 2004). When belonging to a group that conveys significant advantages (usually survival or reproductive advantages) to its members, there must be some substantial cost to join the group, some personal sacrifice that must be made, or the group membership advantages are likely to be diluted by members who use the benefits but who do not contribute to the group's well-being. These members are naturally called "cheaters".

The biological realm is replete with both intraspecific and interspecific cooperative groups for defense, hunting, or resource allocations. Social insects such as ants, bees, and termites do it; lichens, legumes and nitrogen-fixing bacteria, and grasses and endophytes do it; herds of bisons, lions, and chimpanzees do it; even religious and social human beings do it. In each of these cases, there has had to be some major cost to the individual organism for the group as a whole to thrive.

Without significant personal sacrifice, a large number of unsupportive cheaters can ruin the group. The group fails and disappears. Natural selection operates at the group level as much as it does at the organismal level (Johnson, 2011).

I was reading in *Time* magazine about the ongoing economic troubles in Europe (Foroohar, 2011). Stability of the Euro is being threatened by unsound economic policies by a handful of countries in the euro zone. These policies have led to the need to borrow huge amounts of money to stabilize their economies, but the risks to lenders are so high that the costs of borrowing have skyrocketed. Normally, countries with independent currencies can devalue their currencies, if need be, making things they sell cheaper and increasing their international economic competitiveness. That cannot be done within the euro zone with its common currency and monetary system.

What does all this have to do with biological groups and personal sacrifice for membership? It seems to me that there is a close parallel here. There was no costly sacrifice required to join the European Economic Community. Countries accepted for membership were not required to relinquish portions of their national sovereignty for the common good. Countries using the Euro could pursue national policies that eventually cost more than could be sustained.

There are few choices left. If it is not too late for the community to survive, then high costs of membership will soon have to be extracted. If not, then the Euro as it now exists is history. That's biology, but it's also economics.

A thorough understanding of the workings of biology imparts perspective relating to many diverse human affairs. It seems that few national leaders have this biological understanding. Perhaps it would be to everyone's benefit to elect as national leaders a few good bioengineers.

References:

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