

THE DISTURBANCE

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“There is a great disturbance in the force,” is a line made famous by the Star Wars saga. With me, the line reflects much of my work as a scientist. For just over 30 years I practiced as a Successional Ecologist: a scientist who studies how disturbances affect ecosystems.

Today’s disturbance is analogous to a wave of several upheavals in our society. The first disturbance, which we ecologists might call a *Perturbation* or a lesser one, is the inexplicable level of hatred that arose in the summer and fall of 2016. That was followed by a much more debilitating one, which we would deem a *Catastrophic Disturbance*, that of the Corona Virus. The third wave is somewhere in the middle: the current civil unrest.

By comparison, the first social disturbance, rampant hatred, can be portrayed as being similar to an unexpected flood: a *Perturbation*. Wildlife is displaced. Plants are drowned or washed away. Sometimes the landform changes. The second one, the disease, is more like a volcanic eruption: a *Catastrophic disruption*. We temporarily lost our rights to assemble, to work in certain jobs, to wear what we want to wear, to travel to other states, and to go to church. When Mount St. Helens erupted, virtually everything within fifty miles or so changed, buried in the ash: the fallout of the eruption. The last example might be more similar to a series of forest fires: another *Perturbation*. Within certain areas, trees, meadows, thickets burn to the ground leaving intermediate areas largely untouched. Experiencing them all at the same time is monumental.

Again, in comparison to natural events, when an undersea volcano erupts and breaches the surface, forming a new island, the very base of the ecosystem is changed. The area is *Transformed* by the *Catastrophic* event from a submerged habitat to a terrestrial one.

In ecology, however, there is always going to be the next successional stage. The floodwaters recede, the ash turns to soil, and the fires die out. In each of these examples, the forcing elements of the prior habitat remain: seasons, soil, rainfall, climate, sunshine. The wildlife returns, the plants grow back, and after a time, the system is rejuvenated. In the last example, that of the formation of an island, the forcing element of being submerged is gone. In that case a totally new ecosystem must develop and populate the newly exposed land surface. While a new ecosystem will emerge, it can’t be the same as it was before.

The lesson in this comparison of disturbances is exactly that. A complete loss of the basis of society does not mean there won’t be a society, but it does mean that it will not, can not, be the same or even similar. If, however, we can maintain our society’s founding elements of Personal Freedom, Self-Reliance, Rule of Law, and a Common Concept of Spiritual Good, we will return stronger than ever. If we don’t, we will be fundamentally transformed into what is likely to be a devolved civilization.