Funding the Future

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I posted another in the Quantum Essays series a couple of days ago. That one was about the meaning of life, negentropy, and the politics of staying alive. It arose from discussions between my wife, Jacqueline, and me, who is also an editor of this blog.

This Quantum Essay reflects our further discussions on negentropy and the political economic consequences of the analogy between these issues.

Other essays in this series are noted at the end of this post.

Erwin Schrödinger, in his 1944 book *What Is Life?, said that living systems survive by feeding on "negentropy", which he described as the flow of energy and information that resists the natural drift toward disorder and death. Without it, systems close, stagnate and decay.*

That idea, it seems to me, is just as true of societies as it is of cells.

Fascism, in contrast, might be best understood as entropy masquerading as order. It creates the illusion of control by shutting down complexity. It divides people into categories of worth and unworthiness, citizen and enemy, insider and outsider. It rewards obedience, punishes doubt and destroys the very diversity that keeps a society alive.

In physical terms, fascism is characterised as a low-energy state, being cold, rigid, and brittle. It suppresses movement and silences feedback. The result looks stable, but is, in reality, the first step towards social death.

Democracy, on the other hand, is a high-energy, open system. It survives only by the constant flow of information, participation and dissent. It draws strength from the noise - the arguments, elections, protests, journalism and art that keep its feedback loops alive. Every act of questioning adds energy to the whole. Every compromise renews the possibility of cooperation.

Democracy, in that sense, is society's negentropy - the "juice in the system" that stops us sliding into chaos or tyranny. It is, to borrow Schrödinger's language, the process of "drinking orderliness" from a chaotic world.

That also explains why authoritarians always begin by closing the channels through which that energy flows. They attack the media, muzzle universities, criminalise protest, and turn political opponents into enemies of the state. Trump's order NSPM-7, which redefines dissent as terrorism, and the silencing of voices such as Jimmy Kimmel's in the US broadcast media, are recent examples. These actions are not about stability. They are about killing the feedback that keeps the system alive.

And once the flow of information and empathy stops, decay follows. The system may still have elections or parliaments, but it has lost its capacity for self-correction. Equilibrium, in Schrödinger's terms, has been reached. And equilibrium, in any living system, is indistinguishable from death.

This is where Erica Chenoweth's research becomes so important. She has shown that when roughly 3.5 per cent of a population engages in sustained, non-violent resistance, even the most repressive regimes can be forced to change. That threshold is not magic: it is physics. It represents the critical energy input required to reopen a closed system.

Non-violent resistance matters because it introduces energy without replicating the violence of authoritarianism. It destabilises oppression not through destruction, but through creativity, moral imagination, courage and collective solidarity. In thermodynamic terms, it restores negentropy to the social body.

We might, then, see Chenoweth's figure as the measure of how much life a democracy needs to renew itself. The 3.5 per cent are not rebels on the margins; they are the pulse of the system when the heart falters. Without them, the civic metabolism slows and the body politic cools. With them, energy returns through protest, art, journalism, teaching, organising, even the stubborn act of truth-telling when lies are fashionable.

At present, both the US and the UK are running close to the edge of this threshold. In the US, Trump's creeping normalisation of repression, censorship and revenge politics is already freezing democratic motion. In Britain, the criminalisation of protest, the assault on judicial independence and the erosion of media plurality serve the same purpose. Each of these is an act of social cooling, a deliberate effort to drain energy from public life until obedience feels safer than hope.

Democracy, then, is never self-sustaining. It requires constant work and constant energy. Its natural tendency, like that of all complex systems, is toward decay. What prevents that decay is not law, or a constitution alone, but people, and most especially those willing to speak, organise and care when silence would be easier.

Fascism is the politics of death because it promises stillness and simplicity. Democracy

is the politics of life because it insists on movement and complexity.

Our task, if we are to remain alive as a society, is to keep the system open to allow information, compassion, and participation to flow. That is the work of negentropy. It is also the work of citizenship.

Other essays in this series:

* **The Quantum Economics series** **(this link opens a tab with them all in it)**
* **The Quantum Essays: Observing and Engaging**
* **The Quantum Essays: Quantum MMT: The wave function of sovereign spending**
* **The Quantum Essays: Is equilibrium only possible in death?**
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