

Downsize or Die

According to one of the laws of large numbers – do not confuse me between ‘strong’ and ‘weak’ laws – 253 comparatively rare events with a one-in-a-million chance of occurring can happen in America in the course of a time-span equal to an average lifetime.

As the size of the number of elements in a finite set increases, so also does the number of elements at risk from a probable disaster also increase and the probability of the disaster occurring at least once in that set also increases. The bigger that the population of a set is, the more certain it is that the event will happen to at least one individual in that set. If that event is contagious, the effect will increase geometrically and, in the limit, the increase will become exponential. If we put all our eggs in the one basket, are they sure to get cracked and make the allegorical omelette?

In the days when cottage hospitals were accepted as the best medical practice, we never heard of the MRSA epidemic. The danger of the causal soup generating MRSA was confined to limited populations. Nowadays, by concentrating large numbers of patients in hyper-hospitals, larger populations of people are exposed to the MRSA bug. Did the historical randomisation by scattered geographical replication of small clinics increase the odds of immunity? As the world becomes more and more a global village, do the dangers grow of epidemics becoming pandemics?

Ecosystems that can regenerate themselves despite suffering losses can be defined to have a degree of inherently viable redundancy. Because infection has a greater target in larger biological populations, such systems could well have a lesser proportion of such redundancy than smaller populations might have and so might not be able to regenerate as fast.

By closing the smaller parish schools of two generations ago and by building centralised colleges, the number of congregated pupils at risk from a small number of disruptive classroom thugs increased. In a smaller school, teachers could cultivate latent genius. Packing rural pupils into large buses to ferry them to the nearest big town increased the numbers at risk in the event of a road traffic accident.

If a very large aircraft crashes, there are more passengers at risk than if a single-engined aeroplane crashes. How many people were on board the ‘Titanic’? How many are usually aboard a fishing trawler? If two cars collide, have the motorists a greater chance of survival than if they were hit by an articulated lorry travelling at the same speed?

Super-trucks (and, in my opinion, double-decker buses) slow the flow of road traffic compared with a number of smaller trucks carrying the same goods. Convoys of those leviathans can really foul things up, especially when bad weather is thrown into the mix.

Is there a limit to the supposed efficiency of size? Did the dinosaurs become extinct because eventually they could no longer move under their own weight? Does infinite

size guarantee maximum inertia? Are there limits to the expansion of the universe?

If one or two major clubs dominate a football league, then the other clubs are left to squabble for the scraps of third and fourth places. The opportunities for growth, development and cost-effectiveness in the smaller clubs are stifled by monetary inequality. Should the laws concerning monopolisation be more rigorously administered for the greater good of sport?

World history over the last forty years seems to indicate that super-powers are no longer certain to win wars against small countries. If two (or more) super-powers were pitted against each other in a doomsday stand-off, they would cancel out one another in mutually assured destruction.

Is modern humankind obsessed with size simply because mediocrity concentrates the elements of its skulking bulk to defend itself fearfully against the challenges of singular genius.

Somebody famous once wrote that 'small is beautiful'. They may well have been more than right. Where did we go wrong? What can we do to go right again? The hardest thing for us to do is to admit our basics were wrong. The next hardest thing is to change our stubborn mindsets. An ounce of simple common-sense may be cheaper, but it is far more valuable than a ton of bad infrastructure. I say that we should bring back the cottage hospitals and the small schools.

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