

Always Two Equal Forces in Dynamic Tension in All of Existence 2013

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Fundamentally at all levels of existence there are in reality two opposing forces – joining together and tearing apart, or integration and disintegration, or unification and division, or creation and destruction, or order and disorder, or aggregation [accumulation] and separation [dispersal], or contraction and expansion. We name these forces in different ways when we encounter them in different domains, and thereby language tends to obscure their underlying commonality. Even the notions of “arrival” and “departure,” or “life” and death” reflect the tension between these forces. Whether in shorter or longer time frames, all phenomena exhibit these forces at work. From the Multiverse, to our Universe, to galaxies, to solar systems, to planets, to plant and animal species, to cells, to atoms, to quarks, all participate in the overall dynamic between the force for integration and the force for disintegration.

In the truly big picture these two fundamental forces that define the essential force dynamic in all of existence seem to be essentially balanced, a situation that accords with Newton’s Third Law – for every action there is an equal and opposite reaction. It seems likely that we also should hold that the forces of attraction and repulsion are universally equal, though not found to be necessarily equal when we look at particular phenomena in limited and specific [local] situations. Another basic principle that seems to inform this force dynamic at the essential level is that the elements that are freed in the destruction/disintegration of one phenomenon become the seeds for creation/integration for other phenomena. This principle accords with the First Law of Thermodynamics where energy and matter are convertible but overall conserved.

At the level of the universe, the forces of gravity [attraction/unification] and dark energy [dispersal/separation] are in dynamic tension. From the view within our known universe the current understanding is that the expansion effect of dark energy is winning in this contest of forces, but from a multiverse perspective this may only appear as a local phenomena in a larger dynamic of equal attractive and expansive forces across universes. Indeed, super massive black holes, with their insatiable appetite and from which nothing escapes, may be the portals carrying energy from our universe to other universes. The overall principle of balanced dynamic tension among attractive and expansive forces, which we have discovered to be pervasive in our own universe, should suggest caution in favoring any

theory that claims an end point with either the attractive or repulsive force “winning.” Instead we should expect that the expansion we currently posit for our universe is in response to an attractive force at a scale of which we are not yet aware. Drawing universal conclusions from observations in any “local” perspective – even when “local” is as vast as our universe – can be both limited and deceptive.

Complicating this situation is the fact that when we observe specific phenomena within any one domain of existence and especially when we observe these phenomena at the more local level, we see the dynamic tension between these two forces not as equal but as differential depending on the particular immediately surrounding circumstances. In this framework we see a continuum where either the force of attraction or of separation usually prevails. And we may encounter extremes where one force on either side nearly negates the other [e.g. supernovas]. But in the main from within this local perspective we discern continua. In the social world one way we carve up this continuum to reflect the degree of attraction or repulsion among individuals is to identify the enemy, the stranger, the fellow citizen, the acquaintance, the friend, the intimate, and the soul mate. But underlying this continuum is the differential influence of the two fundamental forces for attraction and for separation.

Within a local reality understood in terms of continua, we can “discover” laws that define under what conditions one force or the other tends to dominate. Confirming this local sense of reality is the fact that these laws are very useful and reliable for predicting the results of the interaction of these forces. So, at this local level of consideration, these laws and the continuum to which they refer seem fundamental. And since most humans live their lives at this level of existence, this is the view of reality that most humans assume to be accurate and complete. Our problem is that when we step back and look at this same continuum of events from a greater or lesser position or scale of inclusiveness, the continuum tends to dissolve, and it is the basic equality of the forces of attraction and separation that emerges. From within the more limited “local” point of view, we just could not see that these forces equal out in the larger or smaller context. Though very useful, our “laws” defining differential interaction of these forces are in fact specific to a local context. And this local context can range from an atom to a galaxy.

So, the paradox for humans is to realize that at the most fundamental and universal level the two forces of existence are equal, but at the local level they frequently are observed to have differential impact, depending upon

the local circumstances. To survive and prosper in the greatest sense, humans need to live with both understandings. And fortunately humans are endowed with the two mental capabilities – the intellectual and the intuitive – that allow them to understand and experience existence from these two different and apparently contradictory points of view. When the intellectual [analytical tool to understand the force for separation] and the intuitive [the synthetic tool to understand the force for unification] are equally developed, they reveal respectively the objective/material and the subjective/spiritual dimensions of reality. Humans are designed for comprehension and participation in existence in both ways. Unfortunately, culture infrequently assists its citizens to develop equally and to a level of sophistication both their intellectual and intuitive capacities. The result is impaired or lopsided populations and societies that reflect and suffer from their over emphasis on one or the other of these capacities and the worldview that credits it. Moreover, while it is no small feat to become intellectually aware of the challenge this condition of imbalance poses and to understand where it comes from, it is quite another to live a life and experience existence from within an awareness of the underlying dynamic of fundamental forces as they manifest themselves in the local events of everyday life.

Further complicating our awareness of the fundamental dynamic of unification and separation in existence are the positive and negative perspectives that humans can bring to bear on either. This perspective dynamic is of course just the attractive-repulsive dichotomy of forces at work in the domain of human mental evaluation of events. But it greatly complicates the situation and obscures our awareness of the underlying force dynamic. The positive-negative perspective dichotomy means that we can view positively [gain] or negatively [loss] the same phenomenon whether the phenomenon is the aggregation/unification of hydrogen atoms into helium, or dust particles into asteroids, or cells into organs, or individuals into groups, or nations into international organizations. And the same applies to the consequences of the forces of separation at all levels. What is a gain [positive] from one perspective can be seen as a loss [negative] at another level or perspective. The loss for the prey of one species is the gain for the predator of another species. The despised terrorist from one nation's perspective is the heroic freedom fighter from another nation's point of view. History is most often written from the perspective of what has been gained or preserved by the winners. But this same history can also be written from the perspective of the glorious possibilities that were lost by the losers.

In almost all cases, our act of assessing the effects of the events caused by the underlying attraction/repulsion dynamic is partial and limited since these assessments rarely offer judgments that consider equally both the gain and loss perspectives. In the ideal sense this is what is required by objectivity, but it is infrequently sought and even more rarely achieved. Even scientists are commonly bound by the singular perspectives of their paradigms, theories and hypotheses. Bias is the norm because individuals and groups carry as part of their essential survival baggage a vested interest in a gain perspective for themselves and their “limited” points of view.

Culture/worldview is a magnificent tool to assure this bias is fundamental for groups and the individuals who dwell within them. And within cultures, two pervasive ideologies vie with one another reifying either the unification/communal perspective or the separation/individual perspective. Thus we get the communally and cooperatively oriented liberal perspective and the individually and competitively oriented conservative point of view. Again, this liberal-conservative dichotomy is just the underlying unification-separation forces being expressed in one way in the socio-economic-political domain.

Objectivity, justice, fairness, and balance are admirable goals expressed within some cultures, but they are always in tension with self-interest, and they are most often obscured by the limited view of what these goals mean as defined within cultures themselves. After all, it is culture that defines the foreigner, the stranger, the enemy, the infidel, etc. and promotes behavior directed at those placed in these categories that would never be tolerated in the “in” group. Even bullying emanates from this core limitation in the subculture of peers.

For humans, it is the social world that is mostly too immediate, presentistic and self-interested to exhibit true awareness of the requirement of respect for the alternative perspectives that must apply in assessing all events – all events being the consequence of the interplay of attractive/repulsive forces. We-me, cooperation-competition, communal-individual, social good-personal gain, unification-division, cohesion-separation, democracy-authoritarianism, socialism-free enterprise, needs-wants, justice-tyranny, community-person, spiritual-material, love-hate, sacred-secular, liberal-conservative are all dichotomies that reflect at their root the underlying, universal forces of integration/attraction-separation/repulsion. These dichotomies inform all cultures. We just use different terms to name and

offer alternative positive or negative perspectives on these dichotomies as the underlying force dynamic evidences itself in different domains.

However we name it, all of existence – encompassing the domains of the cosmological, energetic, material, biological, social, and spiritual – is defined by the competing forces of the singular attraction-repulsion dynamic. The commonality, centrality, and equality of these forces at work are obscured 1) by the huge variety of terms we use to name these forces for attraction-repulsion, integration-disintegration, unification-division, in the many different domains of our consideration, 2) by the great range of different levels or scopes of consideration we utilize in assessing the specific [local] events that transpire in these diverse domains – suggesting that continua are fundamental, and 3) by the positive and negative perspectives that we bring to bear in assessing the consequences of the diverse events that “express” these forces in these different domains. Our presentistic and self-interested biological orientation as human beings as well as the filter on existence that our cultural worldview provides also limit our ability, even as scientists, to penetrate to the universal force dynamic that underlies it all: coming together and coming apart. Ironically, while it is so simple, it is very hard to discern.