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THE STABLE CYCLICITY OF NATURAL EQUILIBRIUM

οὕτως ἡι μὲν ἐν ἐκ πλεόνων μεμάθηκε φύεσθαι ἠδὲ πάλιν διαφύντος ἑνὸς πλέον' ἐκτελέθουσι, τηι μὲν γίγνονταί τε καὶ οὔ σφισιν ἔμπεδος αἰών· ἡι δὲ διαλλάσσοντα διαμπερὲς οὐδαμὰ λήγει, ταύτηι δ' αἰὲν ἔασιν ἀκίνητοι κατὰ κύκλον. [«So, in so far as they (sc. existing things) are wont to grow into one from many,

and again, when the one is sundered, are once more many, thus far they come into being and they have no lasting life; but inasmuch as they never cease from continual alternating interchange,

so far are they ever changeless in the cycle of existence»]. Empedocles, 31B17.9-13=B26.8-12 DK. Reality is for the classical world-view inherently dynamic. Power is the defining characteristic of beingness (cf. Plato, *Sophist*, 247d-e). Existence consists always in an integral of diversity. Being is a tensional harmony of opposites. (Diversity presupposes otherness, and this is resolved ultimately into opposition). At a certain rate of mixture, in a certain proportion *(ratio)*, the opposing elements fit together without loosing their character. Harmonization is not homogeneization: the former raises the potential of existence, the latter depresses it. The tension of opposites in being gives it power; the harmony of their blend gives it stable identity.

Neither addition of external violence nor of internal force can hold things together better than their naturally fitting arrangement. The cohesion of being consists in the perfect fit and adjustment of its constituents: it needs neither support nor glue to keep itself whole. As with an ancient Greek temple, the harmony of proportions, the rationality of its structural "refinements", the balance of spatial elements, and the precision of its members' fitting (accurate to the thousandth of a millimeter in Parthenon), hold the edifice together, physically and aesthetically simultaneously. Being requires no sustaining hand, nor any

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connective material, in order to exist. The world-order consists in the faultless adaptation of the world's parts and components. Reality is structured according to precision proportion-patterns. Harmony is a question of acute tuning.

The tensional harmony of being (heightened in the case of being's perfection) gives to existence *maximal potential combined to maximal stability*. This optimal combination is necessarily impaired by any artificial form of cohesion diverging from the natural harmonization of constitutive elements and structural parts. But perfect fitting cannot be maintained in *rerum natura* as an immutable state. The dynamism of actual existence incorporates movement and change without having to be thereby destabilised. It is as if the classical ideal of perfection was endowed with living force. In mathematical terms, the result is oscillation around a normative value.

Suppose the simplest case of a thing consisting in a certain proportion between two opposites, or, what comes to the same, in a certain determination of the field of variation (the *continuum*) corresponding to the opposites. (For example, the opposites may be heat and cold, the field of variation temperature, and the thing health). Being exists with an absolute precision of definition as it consists in an acute tuning to a creative proportion. But such precision reflects an ideal essence and cannot be preserved in the real world, save as the median line of an oscillation. The mechanism by which stability can be maintained in a reality existing in a state of in constant flux may be described as follows in Heracleitean terms. One or the other of the opposite elements will start gaining preponderance in the mixture. The very dynamics of its increase will

automatically generate and strengthen the opposite tension. The more the thing will deviate in one direction, the more the momentum will be stronger towards the opposite direction. *Movements of decomposition (deharmonization) are thus self-corrected.* The harmony of being is potent and self-sustainable. The inherent opposition of being keeps it into existence. The behaviour of the thing thus resembles the movement of a pendulum. And the law of its change can be expressed accordingly as a sinusoidal oscillation between the extreme values in the relevant field of variation. The median line of the oscillation is then the normative proportion defining the vibrant harmony of the thing.

The amplitude of the oscillation may be considerable, as in the case of the annual cycle of seasons. Or practically imperceptible, as the minute vibrations in bodily temperature resulting upon the operation of the chemical reactions which keep it constant. Constancy in this world of reality is a continuous process of deviation and correction by opposite deviation. It is only a question of the width of oscillation and of its regularity. For a dynamic conception of being intrinsically involves its periodicity. Hence the prevalence of cyclical effects in reality, not least in economics. Where there is a balance between opposing factors to be struck, there must needs work a cycle. Knowledge of the corresponding structure of reality can only help to dampen the oscillatory amplitude, and this only by a prudent strengthening of the natural process of automatic adjustment. For left to its natural equilibrium a system will oscillate as smoothly and as (normally) moderately as possible. Interference into a natural system, i.e. an artificial determination of some of its parameters

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(variables), causes irregular movements and violent swings in its behaviour, while in the long-term depressing the level of aggregate energy in the system. All constraints in the freedom of movement of a system keep bound an amount of energy which may prove destructive, and which, in any case, could have be put into use if released.

Dynamic equilibrium is thus necessarily cyclical. There is no static equilibrium in reality. The cyclicity of natural equilibrium is stable.

All interference working in a sense diverging from the inherent dynamics of the system, all interference untuned to the natural harmonies of the system, destabilise its function, impair its efficiency and threaten its cohesion - to a degree dependent on the degree of divergence and unresonance introduced. By the same token, beneficial action can be exercised on its general state (minimising the breadth and irregularity of its oscillations), merely and only through improved harmonisation of the system's long-term and overall constitutive coefficients of correlation.

The implications of these theses are far-reaching. We shall see in Volume III of this work that they tally perfectly to the realities of a developed classical economy. Furthermore, they are of diachronic relevance in all fields of reality and inquiry. For instance. Right monetary policy (i.e. one maximising result) can only be to merely create and sustain conditions within which the money supply corresponds to the long-term intensity of real economic activity, letting free market movements to effect the necessary adjustments in the detailed functioning of the economy. For this is what an unregulated system will do naturally.