## APPENDIX I

THE PLATONIC FOUNDATION OF MARGINALISM,
THE PARADOX OF WEALTH
AND
THE INFINITE DESIRE FOR POWER.

ὅταν μὲν τοῦτο (sc. τὸ ἔμψυχον εἶδος) φθείρηται, τὴν μὲν φθορὰν λύπην εἶναι, τὴν δ' εἰς τὴν αὐτῶν οὐσίαν όδόν, ταύτην δὲ αὖ πάλιν τὴν ἀναχώρησιν πάντων ἡδονήν. ["When the living organism is decaying, this decay is pain, while the path leading to its proper essential character, its own nature, this, again, return is pleasure"]

Plato, Philebus, 32b

Διψη γέ που λέγομεν έκάστοτέ τι; - πῶς δ' οὔ; - τοῦτο δέ γ' ἐστὶ κενοῦται; - τί μήν; - ἄρ' οὖν τὸ δίψος ἐστὶν ἐπιθυμία; - ναί, πώματός γε. - πώματος, η πληρώσεως πώματος; - οἷμαι μὲν πληρώσεως. - ὁ κενούμενος ἡμῶν, ἄρα, ὡς ἔοικεν, ἐπιθυμεῖ τῶν ἐναντίων ἢ πάσχει κενούμενος γὰρ ἐρᾳ πληροῦσθαι.

["We certainly in various instances call something being thirsty? - How else? - And this is being depleted? - What then? - Now then, is thirst not a desire? - Indeed, of a drink. - Of a drink or of replenishment by drink? - I think of replenishment. - He who is being emptied among us, therefore, as it appears, desires the opposite of what he is undergoing: being deplenished he longs for replenishment"].

Plato, Philebus, 34e-35a

οὐχ αὖται τῶν ἡδονῶν ὑπερβάλλουσιν, ὧν ἂν καὶ ἐπιθυμίαι μέγισται προγίγνωνται;

["Is it not the case that those pleasures exceed in intensity, which are preceded by strongest desires?"]

Plato, Philebus, 45b3-4

ntishenes (Fr. 82 Giananntoni) is proud of his wealth,  $oldsymbol{\Lambda}$  although he owns no discernible accumulation of goods (Xenophon, Symposium, IV, 34-45. For the context of this position v. supra, Chapter 6, n. [1]). Wealth resides in mind (in the soul), not in the amount of the actual possessions. The reason is that it measures not the quantity of physical things, but the quantity of satisfaction in man's mind (soul). Goods, we shall detail in the sequel, are utilities in satisfying human needs, wants and desires. To be wealthy, therefore, must result in a high degree of fulfilment; just as to be poor, involves being indigent, thus unsatisfied, and so at a low degree of fulfilment. But, Antishenes contends, it is a fact of experience that great accumulation of goods usually exacerbates the desire for more, thus increasing the feeling of deficiency and, therefore, of want of fulfilment. This intense feeling of want on the part of the rich people pushes them into extremities and enormities ordinarily associated to mischievous elements among human kind. It follows that common riches are no real wealth. By contrast, selfsufficiency at the basic level of human needs creates,

according to Antisthenes, the feeling of contentment which must, by definition, attend the possession of true wealth. Such attitude of frugality in the use of goods not only stabilises the individual in a state of fulfilment, but also produces more pleasure than exquisite utilities do offered to saturated, and yet ever insatiable, senses and mind. Antisthenes, speaking for himself as an exemplification of the genuinely wealthy man, expresses even his fear lest the pleasure he feels occasionally by simple utilities applied to his robust and unspoilt feeling-apparatus exceeds the limit set for what is fit and profitable (v. IV, 39 and 41). The wealth of mind which is meant by Antisthenes (§43), satisfies also the condition of all-sufficiency, as it remains undiminished (and indeed is rather increased and strengthened) by being expended. (Here is the source of the same point raised by Aelius Aristeides, referred to in Chapter 6 pp. 437-8 and n. [36]). Pragmatic knowledge, practical wisdom, correct in-depth understanding of reality  $(\phi \rho \acute{o} \nu \eta \sigma \iota s)$  suffices to all needs without suffering diminution, indeed it grows with and through use.

The Antisthenean position should be compared to Xenophon's on the same matter. Arguing that it is far from the case that, because a powerful autocratic ruler (a "tyrant") has much more possessions under his dominion than a private individual, he as a consequence must derive more enjoyment from them, Xenophon observes (Hiero, IV, 8-9): οὐ γὰρ τῷ ἀριθμῷ οὕτε τὰ πολλὰ κρίνεται οὕτε τὰ ἱκανά, ἀλλὰ πρὸς τὰς χρήσεις· ὥστε τὰ μὲν ὑπερβάλλοντα τὰ ἱκανὰ πολλά ἐστι, τὰ δὲ τῶν ἱκανῶν ἐλλείποντα ὀλίγα. τῷ οὖν τυράννῳ τὰ πολλαπλάσια ἦττον ἱκανά

ἐστιν εἰς τὰ ἀναγκαῖα δαπανήματα ἢ τῷ ἰδιώτῃ ["For what is great quantity and what is sufficient is not measured and judged according to number, but with reference to use; so that numerous are things which exceed what is sufficient (for a purpose), few are things which fall short of what is sufficient (for the purpose in view). So that to the "tyrant" a multiple amount of things is less sufficient for his necessary expenditure, than (the submultiple amount is) to the private individual"]. He goes on to explain that an ordinary citizen may curtail his spending in any way he may choose without essential detriment to his being, whereas the tyrant is bound to a high level of inelastic expenditure, among other things chiefly for his very security (§9).

The general view is attributed to the sophist Euthydemus by Xenophon (Memorabilia, IV, 2, 37-38). In his lengthy encounter with the sophist (towards whom Xenophon expresses a decidedly more favourable opinion (ibid. §§39-40) than Plato in the dialogue bearing his name; cf. Chapter 6), Socrates asks for a definition of wealth and poverty, of who are essentially wealthy, who poor. Euthydemus answers: τοὺς μέν, οἶμαι, μὴ ἱκανὰ ἔχοντας είς ἃ δεῖ τελεῖν πένητας, τοὺς δὲ πλείω τῶν ἱκανῶν πλουσίους ["poor are they who do not possess sufficient means for their necessary expenditure (for the sums they have to expend), rich are they who have more than enough (for that purpose)"]. Socrates then comments that upon this reckoning, people may be wealthy without possessing considerable property, if they manage well their assets (èàv οἰκονομικοὶ ὧσιν) and can make meet their means and ends, while, by contrast, others of extensive substance can be poor in that what they have does not suffice them for their expenditure (*ibid.* §§38-39). The same point is extensively made by Socrates in Xenophon, *Oeconomicus*, II, 2-8.

There can be no doubt for the Sophistic-Socratic origin and formulation of the view that according to nature  $(\kappa \alpha \tau \hat{\alpha} \phi \dot{\nu} \sigma \iota \nu)$ , if not according to man's ordinary position  $(\nu \dot{\alpha} \mu \dot{\omega})$ , wealth and poverty are defined relatively to one's needs, therefore to the utility offered by his possessions (i.e. with regard to use, not number, as Xenophon put it), and hence to the satisfaction accruing from that utility. Antisthenes concentrated and emphasised this last aspect of the identical conception (giving it, furthermore, a doctrinaire character by his unwarranted and extremely minimalist posture regarding self-sufficiency at the basic level of human nature - which turn does not concern us here).

Antisthenes' formulation, however, addressed more clearly a crucially important paradox felt acutely by the

classical mind. Since goods are utilities for the satisfaction of human needs, wealth, as a sum of utilities, must be a means of fulfilment. And yet it is often, indeed standardly, the cause of an *insatiable* desire for more wealth, beyond any correspondence to actual or possible, present or future, wants of the individual. This paradox Antisthenes sought to resolve by denying that the accumulation of goods in itself is real wealth. The inference is that such accumulation (overstepping a certain critical point defined by the objective needs of a fully developed human nature) is rather poverty.

The formulation and articulation of this position has been sharpened by *Democritus*. He concisely stated (68B) 283 DK): πενίη πλοῦτος ὀνόματα ἐνδείης καὶ κόρου· οὕτε οὖν πλούσιος <ό> ἐνδέων, οὔτε πένης ὁ μὴ ἐνδέων ["poverty and wealth are names of want and surfeit; so that neither he who is in want may be wealthy, nor he who is not deficient can be poor"]. This presents the crux of the matter: insatiety in wealth is a contradiction in terms, something absolutely impossible like a square circle. Democritus amplified and explained (B219): χρημάτων ὄρεξις, ἢν μὴ ὁρίζηται κόρω, πενίης ἐσχάτης πολλὸν χαλεπωτέρη μέζονες γὰρ ὀρέξεις μέζονας ἐνδείας ποιεῦσιν ["the desire for goods (money), if it is not limited by satiety, is much more grievous than extreme indigence; for stronger desires make greater wants"]. This is a statement pregnant with developments that we find elaborated in Plato and Aristotle and touch the foundations of Marginalism. We shall follow the evolution of the idea in a moment (V. note infra p. 692).

Insatiety is the worst malfunction, a veritable cancerous condition, in money-making. B281: ὥσπερ ἐν [μὲν] τοῖς έλκεσι φαγέδαινα κάκιστον νόσημα, οὕτως ἐν τοῖς χρήμασι τὸ <μὴ λήγειν μέζονος πλούτου ἐπιθυμέοντα> (the addition as by Philippson but for the  $\mu \acute{\epsilon} \zeta o \nu o \varsigma$  which I think better to be supplied) ["as in ulcers the cancerous sore is the worst affliction, so with regard to capital (money, goods) is the insatiable desire for more"]. Such a desire is unreasonable: for human nature knows inherently how much it needs in each case; it is the particular (and mindless) man who may ignore it. B198:  $\tau \delta \chi \rho \hat{\eta} \zeta o \nu o \delta \delta \epsilon \nu$ , όκόσον χρήζει, ό δὲ χρήζων οὐ γινώσκει ["that which is in need knows how much it needs, but he who is in need does not know"]. "That which is in need" is the part or faculty of a man which is in want, in a state of deficiency, and wants to be satisfied; it is the body (so Zeller) or the soul of man (not animals, as Diels supposed). "He who is in need" is the compound individual man, body and mind as a whole, the integral of organism.

The insatiable desire for more wealth is self-defeating; B224: ἡ τοῦ πλέονος ἐπιθυμίη τὸ παρεὸν ἀπόλλυσι τῷ Αἰσωπείη κυνὶ ἰκέλη γινομένη ["desire for more destroys what is at hand, like the Aesopean dog"]. Human life is weak and short and burdensome; the necessary tribulations must be bounded by the necessities of life: so much hardship has to be endured by man as is required in order to supply himself with the means to satisfy the basic needs of human nature. In effect, Democritus upholds the "cynic" doctrine of maximal self-sufficiency through restriction to the basic level of human wants - which is easily satisfied

held the Cynics, which involves minimal suffering corrected Democritus. Probably, the difference had to do with a difference as to the level of human wants considered basic, the Cynics being the minimalists among the minimalists. Democritus B285: γινώσκειν χρεών ἀνθρωπίνην βιοτήν άφαυρήν τε ἐοῦσαν καὶ ὀλιγοχρόνιον πολλῆσίν τε κηρσὶ συμπεφυρμένην καὶ ἀμηχανίησιν, ὅκως ἄν τις μετρίης τε κτήσεως ἐπιμέληται καὶ μετρεῖται ἐπὶ τοῖς ἀναγκαίοις ἡ  $\tau \alpha \lambda \alpha \iota \pi \omega \rho i \eta$  ["it is incumbent to know that human life is feeble and of short duration and is kneaded together with many a calamity and a fill of helplessness, in order that one may take care of a moderate possession, such as the required hardship be measured against the necessities of life"]. What is more and what is less in possession of goods is determined not by any physical measure, but by the desire associated with it. A large amount of goods accompanied by intense desire for more entails penury. On the contrary, a small amount of goods attended by faint desire implies wealth. Β284: ἢν μὴ πολλῶν ἐπιθυμέης, τὰ ὀλίγα τοι πολλὰ δόξη σμικρά γὰρ ὄρεξις πενίην ἰσοσθενέα πλούτω ποιέει ["if you do not desire many things, the few will appear to you as many: for a weak desire makes indigence equipollent to wealth"].

We have reached the threshold of marginalism. Desire and satisfaction are opposite poles in the field of human feeling and motivation for action. The desire for something reaches its zero degree at saturation level; there is then satiety regarding the thing in question, and this means fulfilment. Strictly speaking, it is not the desire for it that is becoming zero, but the desire for more wealth at a given

level of wealth, i.e. the marginal desire for wealth at that level. Given some level of wealth for an individual, his desire for more measures the degree of satisfaction of this individual regarding wealth at that level of accumulation. The marginal desire for wealth of the individual in a given state of wealth is the amount the desire changes in consequence of some elementary change in the accumulation of wealth, or the incremental change in desire induced by an incremental change in wealth.

The paradox of wealth noticed above can be reformulated now in terms of these conceptions. For wealth being a sum of utilities, it should behave like them. Thus an increase in wealth must produce a corresponding decrease in the desire for more, or, in other words, the marginal desire for wealth should be a diminishing function of wealth. When the marginal desire for wealth becomes zero, wealth has reached its critical point beyond which it should turn into a disutility, like any other thing (goods). But the marginal desire for wealth ordinarily seems to remain positive, and even rather to increase, with the increase of wealth.

It should be noted that the Antisthenean - Democritean solution of the problem is no real resolution of the underlying difficulty. Assuming their inference (that, because of the paradox, common wealth cannot be real wealth), it is still to be explained how it happens that utilities in aggregation violate the general law of satiety which utilities in segregation inherently observe.

The classical answer to this abnormality is encapsulated in the doctrine of hybris ( $"\beta \rho \iota s$ ). Satiety may generate

insolence and outrage instead of satisfaction. Hybris covers all the semantic field of wanton violence, arising from the pride of strength, and perpetrated upon the natural order of things, on account of some extreme passion. It is evident, that once the level of satiety has been reached regarding any need, want and desire, the corresponding need, want or desire is annuled. There can only exist then a need, want or desire for something else, which has not yet been brought into satiety-level. In the case of wealth, however, there can exist no other desire for utility which remains unfulfilled. So that any remaining, and aggravating, insatiety cannot be the expression of normal deficiency regarding needs, wants and desires that goods (utilities) are intended to satisfy. The surplus, so to speak, of insatiety has no economic causation. It is the infinite craving for power that produces supervening insatiety even upon conditions of full satiety (actual and potential, present and future, within reasonable bounds of estimation and expectation). The longing for more power, when operating on a saturated particular desire, will pervert the natural schedule of the desire, in order to artificially revitalize it, despite its extinction as a result of its full satisfaction. To arouse satiated desire one has to create an unnatural field of this desire, not vet gratified. Correspondingly, the longing for more power, when operating on the aggregate of desires circumscribed within the confines of human nature, generates the perpetual desire for more wealth even beyond the satietypoint in wealth-possession. This is the fundamental explanation of the paradox of wealth.

We detailed in a preceding chapter (Chapter 4, v. esp. nn. [26], [31], [32], [33]) Aristotle's solution to the same

perplexity. He gave an inner-economic account of the difficulty. Utilities taken as monetary valuations, instead of as direct or indirect means of need- and desire-satisfaction, loose their intrinsic reference to human nature and its needs relative to its capabilities. The accumulation of utilities is thereby severed from the natural purpose served by them (i.e. the satisfaction of human needs, wants and desires). Thus it comes about, that wealth (as an aggregate of utilities) does not comply to the condition met by any isolated utility (or sum of utilities of restricted variation), namely that the marginal desire for it dwindles with an increase in its amount.

Parenthetically, let me note that the distinction between possession and use of a utility will not help solve the paradox. Possession is security for future need, whether the utility possessed is a consumable or a stock with a flow of yields. In the idea of natural limit to wealth, the prospect of future requirements is incorporated by means of reasonable expectation as to their amount. The question is not how far to broaden the time- and dependency-perspective (how many dependent individuals and for how long should one take into account) in estimating total want, but how is it possible for the desire for more wealth to be above zero when the aggregate need, as liberally construed as is consistent with the realities of the age in which one lives, has been covered. To stretch the requirement for future security and circle of dependents beyond this point, is to indulge in imaginary constructs of safeguarding against indefinite eventualities, which is in fact a confused surrogate for something else and different.

The Aristotelian way out of the impasse is not ultimately convincing. Utility as power of exchange, i.e. concrete goods as store of value and money as abstract utility, should be as liable to the law of diminution (marginal utility being a decreasing function of (the amount of) utility) as concrete utility (goods) in its (their) primary capacity of usibility (of being usables). In so far as nothing extraneous to the purely economic functioning supervenes, there is no reason why there should remain a residual (let alone augmented) desire for more money (abstract utility), once the accumulation of capital has exceeded the critical point of satisfiability for present and future need. As I have observed just above, it is a completely different matter if there is an argument regarding the level of that satisfiability, something that has basically to do with the accuracy of rational expectations regarding future wants. The auri sacra fames (Virgilius), the sacred hunger for gold, is certainly not related to a calculated threshold for future uncertainties over the capability for meeting present and future need - and any theory that would reduce it to such factors is patently inadequate. (The notorious Vergilian dictum occurs in Aeneid, III, 57. Pliny also speaks borrowingly of auri fames, Historia Naturalis, XXXIII, 4, 21. Horace expands and aggravates: argenti sitis famesque ["the thirst and hunger for silver (money)"], Epistles, I, 18, 23).

Plato faced the same *paradox of wealth*, having articulated the foundation of marginalism implicit in the Antisthenian and Democritean positions. Pain and pleasure are feelings of the dissolution and, respectively, the reestablishment of the defining harmony and equilibrium,

the natural state in a thing capable of feeling, i.e. an animal; Philebus, 31d: λέγω τοίνυν της άρμονίας μεν λυομένης ήμιν έν τοις ζώοις ἄμα λύσιν της φύσεως και γένεσιν άλγηδόνων έν τῶ τότε γίγνεσθαι χρόνω ... πάλιν δὲ άρμοττομένης τε καὶ εἰς τὴν αὐτῆς φύσιν ἀπιούσης ήδονην γίγνεσθαι λεκτέον... ["I maintain then that the (defining) harmony being dissolved in living beings, there simultaneously occurs dissolution of the natural state and generation of pains at the time; ...and when again it is readjusted and returns to its natural state, we should say that pleasure is generated..."]. Pain is the concomitant of decay, pleasure of reverting to the natural condition; 32b: όταν μεν τοῦτο (sc. τὸ ἔμψυχον εἶδος) φθείρηται, τὴν μεν φθοράν λύπην είναι, την δ' είς την αὐτῶν οὐσίαν όδόν, ταύτην δε αὖ πάλιν τὴν ἀναχώρησιν πάντων ἡδονήν ["When the organism (the ensouled being) is decaying, this decay is pain, while the path leading to its proper essential character, its own nature, this, again, return is pleasure"]. For instance, hunger or thirst testify to a decaying process having started in our body, a temporary dissolution of our well-attuned organic order; they are thus painful. While eating and drinking repair the disequilibrium and damage being done, and are, therefore, pleasurable (31e-32a). Fundamentally, conditions engendering pain are such of want, of a certain *emptying* out which needs *replenishment*: desire is precisely the impulse towards replenishment of a wastage felt. 34e-35a: διψη γέ που λέγομεν έκάστοτέ τι; - $\pi\hat{\omega}_S$  δ' οὔ; - τοῦτο δέ γ' ἐστὶ κενοῦται; - τί μήν; - ἆρ' οὖν τὸ δίψος ἐστὶν ἐπιθυμία; - ναί, πώματός γε. - πώματος, ἢ πληρώσεως πώματος; - οἶμαι μὲν πληρώσεως. - ὁ κενούμενος ήμῶν, ἄρα, ὡς ἔοικεν, ἐπιθυμεῖ τῶν ἐναντίων ἢ πάσχει· κενούμενος γὰρ ἐρᾳ πληροῦσθαι. ["We certainly in various instances call something being thirsty? - How else? -And this is being depleted, emptied? - What then? - Now then, is thirst not a desire? - Indeed, of a drink. - Of a drink or of replenishment by drink? - I think of replenishment. -He who is being emptied, among us, therefore, as it appears, desires the opposite of what he is undergoing: being deplenished he longs for replenishment"]. What in the man who is thirsty feels the desire for replenishment cannot be that which suffers depletion. And since it is the body which undergoes the emptying out, there must be the mind (soul), not the body, which desires the filling up (35bd; cf. 42c-d). The desire is produced in the mind, while the pain originates in the body (cf. 41c). There are pleasures and pains purely of the mind as well, such as those of expected or recollected full-bodied pleasure or pain (32b-c).

The grand picture emerging from such analysis in philosophical psychology is as follows. There is for every thing a natural condition of its existence, and this is its stable state consisting in the fullness of its being, the full-blown harmony defining its identity. When for any reason there happens a falling apart of its determinative balance, a moving away from the natural condition of stability, the inner tension underlying its existence is activated in the opposite direction (according to the Heracleitean law, cf. supra, Chapter 5, pp. 293-7). In human reality, the dissolution of the constitutive harmony in any of its parts or aspects produces the desire for its reestablishment. Or rather, since not every change in the organism is being felt

by the mind as an object of sensation and awareness, a negative change (one corresponding to some decaying process in the living being), when felt, necessarily induces an impetus for the corresponding positive change (one consisting in the restoration of the normal condition which is currently being undone). V. 43b-c. The deterioration in the condition of the living entity, when felt, constitutes pain. The mental impetus towards its reversal is desire. The amelioration in the same condition, when felt, is expressed as pleasure. Being in the natural state of one's existence, there is neither feeling of pleasure, nor of pain (32e): the stable (normative) condition is neutral as to pleasure and pain. Even accepting the Heracleitean doctrine of a continuous flux in reality, small changes around the focal point of equilibrium are imperceptible, and, therefore, give rise to neither pleasure nor pain. One does not notice, then, the unceasing dissolutions and repairings of the constitutive harmony of one's existence; only when the processes of undoing and restoring are big enough to transcend the threshold of sensation, they then constitute the feelings of pain and pleasure.

It follows from this picture that the more one is being removed from his natural condition with respect to any part and aspect of his being the more pain he must experience. The degree of pain felt in a state different from the state of natural equilibrium is directly connected to the distance of the state from the state of natural equilibrium. For simplicity's sake we may take the connection as one of direct proportionality. In such case, and taking into account the fact that pain is felt when the distance of the corresponding

state from the natural state of equilibrium exceeds the threshold of awareness, the function of pain to the distance will be:

$$p_r = k(r-r_0)$$

Where p is the pain felt at a distance r from the natural state,  $r_0$  is the distance corresponding to the threshold of feeling, and k is a constant of correlation.

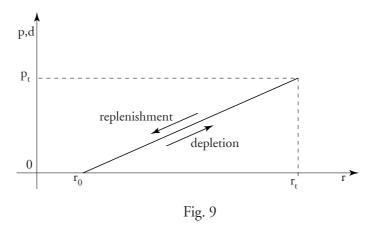
Let us employ the vocabulary of wastage/emptying and replenishment, associated in strict sense with conditions of hunger and thirst, to describe any situation involving desire and feelings of pain and pleasure. The desire for replenishment experienced in a state of waste must be exactly equal to the degree of waste felt, and, thus, to the intensity of pain. So that, switching back to the previous notation, the desire d<sub>r</sub> in a state at a distance r from the natural state will be:

$$d_r = p_r = k(r-r_o).$$

Pleasure, finally, felt at a given state of alienation from the natural condition obtaining in the connection considered, is necessarily given by the same formula as the pain in the same state; the difference between the two consisting in the difference of the direction of the current movement of change at the given state. If the movement is further *away* from the natural state, then the tension in the given state is experienced as (pure) pain; if the movement has been reversed and is towards the natural state, then the *same tension* is experienced as (mixed) pleasure. (Mixed

because the corresponding pain is not annuled, but coexists with pleasure). Pleasure and pain are intimately connected (cf. 31b5-6): they consist in the same instantaneous condition, and only the context within which this condition exists decides which of the two obtains, or rather whether pleasure is superadded to the feeling of pain. We shall note in a moment other aspects of their intrinsic coexistence, on which Plato expatiates (44d sqq.; cf., in conclusion, 50d3-6) analysing the "mixed pleasures", pleasures mixed with pain.

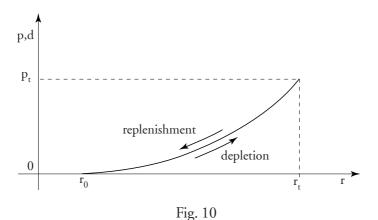
Under the simplifying assumption of a linear correlation between pain / desire / pleasure and distancing from the natural state, the function of their intensity to the distance will be represented as in the following diagramm (Fig. 9).



Where  $r_t$  is the terminal distance from the natural state at which the dissolution cannot be reversed as it has

irremediably damaged the part or function whose state is considered. The pain there reaches its terminal value pt, unless the injury suffered by the organism in the process of the particular decay has destroyed, or severely affected, the capacity to feel pain (and pleasure).

In reality, the general form of the function of pain / desire / pleasure to the distance from the natural state, will likely have to be as follows (Fig. 10).



At the vicinity of the threshold level the increase of the pain intensity (and, correspondingly, of desire and pleasure) with the increase of the distance from the natural state is rather smooth. But it takes momentum in the middle region of the curve, and finally approaches quasi-asymptotically its terminal value.

Pleasures of maximal intensity occur where desires are maximal; 45b3-4: οὐχ αὖται τῶν ἡδονῶν ὑπερβάλλουσιν,

ών αν καὶ ἐπιθυμίαι μέγισται προγίγνωνται; - τοῦτο μὲν  $\partial \lambda \eta \theta \dot{\epsilon}$ s. ["is it not the case that those pleasures exceed in intensity, which are preceded by strongest desires? - This is in fact true"]. Thus, most vehement pleasures will be found in conditions the further removed from natural states, such as conditions of sickness in body or depravity in mind. For instance, people who fall ill of a fever feel extreme thirst and shiver from cold and are found generally in conditions of multiple and utmost want, thereby undergoing also most vehement replenishments of what they lack, and, thus, experiencing also intensest pleasures (45b6 sqg.). Thus, the pleasure of satisfying thirst with cool water is multiple when one is suffering fever than when he is healthy, just as it is higher in health when he is tormented by excruciating thirst. Similarly, intemperate and wanton people feel extremer pleasures by creating situations of maximal violence to the natural state of things (45d-e). And so (45e5-7): δηλον ώς ἔν τινι πονηρία ψυχης καὶ τοῦ σώματος, ἀλλ' οὐκ ἐν ἀρετῆ μέγισται μὲν ἡδοναί, μέγισται δὲ καὶ  $\lambda \hat{v} \pi \alpha i \gamma i \gamma v v v \tau \alpha i$  ["it is evident that it is in a bad state or condition, not in one of excellence, that are generated maximal pleasures, but also maximal pains"].

The mechanism of intensification is clarified by reference to the condition of itching (46a): there is great pleasure in rubbing the ailing (as in mange) or, generally, the suffering part, the spot which happens to be itching. But this pleasure is mixed with the discomfort of itching: in fact, it is intense because it is inscribed within the disagreable condition of itching, with its very strong desire to get the suffering part rubbed. It is like scratching a

ripened wound. Plato would reduce all pleasures, pains and desires involving the body to phenomena of general *itch*.

What happens in the case of bodily pleasures and pains and of the desires associated with them is this. The farther one is removed from the natural state, the more unstable his condition is. This means that he is then subjected to violent and rapid changes of condition, whether he is, so to speak, falling sick or convalescing, whether, that is, he is in the process of emptying out or of replenishing, of creating more want or of satisfying it. Violent and rapid changes of condition by themselves generate intense feelings of pleasure and pain. Moreover, the subject is wanting to consolidate the changes in the positive direction (towards the natural state) and to get rid of the negative factors and processes. But it being in the condition of alienation from the natural state in which it is, the changes of direction persist and cannot be eliminated quickly, precisely because the distance from the natural state is (assumed to be) great. This fact produces additional irritation, and a consequent heightened vehemence of feeling. 46c: ὁπόταν ἐν τῆ καταστάσει τις η τη διαφθορά τάναντία άμα πάθη πάσχη, ποτέ ριγών θέρηται καὶ θερμαινόμενος ενίστε ψύχηται, ζητών οἶμαι τὸ μὲν ἔχειν, τοῦ δὲ ἀπαλλάττεσθαι, τὸ δὴ λεγόμενον πικρῷ γλυκὰ μεμειγμένον, μετὰ δυσαπαλλακτίας παρόν, άγανάκτησιν καὶ ὕστερον σύντασιν άγρίαν  $\pi o i \epsilon \hat{i}$  ["when one is subjected simultaneously to the opposite passions, whether he is in the process of reestablishment or of dissolution of the natural state, he is sometimes, for example, warmed up while shivering from cold, and also cooled down while being heated, wanting, I

take it, in each case, to take hold of the one opposite, while getting rid of the other, this mixed condition of the so-called bittersweet, being persistently present and hard to get rid of, produces irritation and, subsequently, a wild intensity of feeling"].

This necessary and intimate cohabitation of pleasure and pain may assume two forms, according to whether the pain or the pleasure predominates in the mixture. In both types, there is a tension between what happens internally and at the exterior layers of the body. If the seething and inflamed part is so much to the interior that our chafing and scratching cannot reach it effectively, but only disperses the concentration of humours on the surface, then by effecting an alternate application of heat and cold we may generate incredibly strong pleasures, or pains curiously fused with pleasures, depending on whether one brings first the exterior parts to a similar condition to that obtaining inwardly (i.e. heat) and then changes to its opposite, or the other way round, respectively. In both cases the vehemence of the feeling is due to the violent diffusion of what is concentrated or to the violent congregation of what is segregated. Such are the common cases of itch and tickling (46d-e).

When, on the other hand, the inflammation is nearer to the surface so that one may have direct access to it through rubbing and titilation, then the pain is underscored and just sufficient to create the environment of tickle and irritation within which the pleasure is aggrandized and so much intensified as to make one beyond oneself in hue and sound and posture - a state people commonly describe as "dying

from pleasure" (47a-b). Sexual pleasures are thought of, primarily, here.

In the analysis of itching and its mixed pleasures (and pains), the fusion of the two opposite feelings occurs in the bodily processes themselves. But in every case of desire, generally, such mixture is operative and definitive, between the corporeal process and its mental complement. For instance in a pure case of depletion, the desire for replenishment involves the prefigurement of restitution to the natural state of fulfilment, and, thus, to the bodily pain of the one it is supperadded the mental pleasure of the other. Or conversely, in the process of replenishment a (decreasing) residual of emptiness exists which adds some amount of vexation to the gratification of restoration thereby enhancing its sensation (47c-d).

Finally, purely mental feelings as well are shown to be mixtures of pleasures and pains (47d-50c). The argument is conducted by analysing a darker case of such compound, namely envy, which involves the anatomy of the laughable (48b-50a). The inference is that in the tragedies and comedies not only of the dramatic works but of actual life as well, and in all such circumstances of life, pleasure and pain are intimately connected (50b). And the general conclusion provisionally reached, but with full rational belief in its capability to be completed, is that corporeal affections and mental emotions and feelings common to body and soul, all are essential mixtures of pleasure and pain (50c-e).

The upshot of all this is to confirm by analysis of experiential data the principles of the general theory of desire and gratification. Want is commensurate to the

distance from the state of natural fulfilment. The intensity of satisfaction at a given distance is equivalent to the want experienced at the distance, as is the pain felt at such want. Pain and pleasure are intrinsically correlated as the two aspects of the same thing, want. Pain is want debarred from satisfaction, whereas pleasure is want in the process of satisfaction. In such process of restoring the natural state, the want is diminished with each successive stage of restitution, and so is, consequently, the satisfaction felt, the pleasure experienced. As one approaches the natural condition of fulfilment, want and satisfaction tend to become zero. Notice that in this sense fulfilment is equivalent to satiety: there is then no need for an additional amount of replenishment to fill the lack experienced as want. An increment of replenishment at that point of natural equilibrium is not desired. Its enforced addition generates not satisfaction, but annoyance, not pleasure, but pain. The object effecting the replenishment (e.g. drink in the satisfaction of thirst, i.e. in the filling up with the liquid whose want is expressed as thirst) has become from utility a disutility. At the state of natural fulfilment, the marginal desire for more replenishment is zero; beyond that, it is negative. And so with the marginal pleasure at further use (consumption) of the object appropriate to the state of natural fulfilment in question; and so with the marginal utility of that object at that state.

This is the substance of Marginalism. In fact it gives the esssential character of Marginalism better than its modern versions. For these latter have to rely on the empirical fact that the satisfaction produced by the use of an object

diminishes with the increasing use of it. For instance, Marshall expresses in the following terms his law of satiable wants or diminishing utility (Principles of Economics, 1916<sup>7</sup>, p. 93): "There is an endless variety of wants, but there is a limit to each separate want. This familiar and fundamental tendency of human nature may be stated in the law of satiable wants or of diminishing utility thus: -The total utility of a thing to anyone (that is, the total pleasure or other benefit it yields him) increases with every increase in his stock of it, but not as fast as his stock increases. If his stock of it increases at a uniform rate the benefit derived from it increases at a diminishing rate. In other words, the additional benefit which a person derives from a given increase of his stock of a thing, diminishes with every increase in the stock he already has". Or, in still other words, having introduced the notion of marginal utility as the utility of one's marginal purchase or marginal production of a thing (i.e. the utility "of that part of the thing which one is only just induced to purchase" or produce, he being "on the margin of doubt whether it is worth his while to incur the outlay required to obtain it" or to make it) (ibid.): "The marginal utility of a thing to anyone diminishes with every increase in the amount of it he already has". This "familiar and fundamental tendency of human nature" is assumed as a fact of reality without any and, therefore, without any explanation understanding of its obtaining.

Similarly, Walras speaks of *postulating* "that intensive utilities always diminish from that of the first unit or fraction of a unit consumed to that of the last unit or

fraction of a unit consumed"; v. L. Walras, *Elements of Pure Economics or the Theory of Social Wealth*, (Engl. tr. by W. Jaffé) 1984<sup>2</sup>, p. 188. And again, ibid. p. 120: "We must *postulate*, I repeat, that rareté increases as the quantity possessed decreases and *vice versa*" (my italics).

Notice that the marginal utility in Marshall's sense is the entire utility accruing from the possession of a definite quantity of the thing in question, and is, therefore, to be distinguished from what he calls the marginal degree (i.e. intensity) of utility. In mathematical formulation, and assuming a continuous function of total utility (u) to the amount (x) of a commodity (for a given person at a given time), the marginal utility is [du/dx].δx, while the marginal degree of utility is du/dx (Marshall, op.cit. p. 838). Jevons calls the differential coefficient du/dx the degree of utility, while the degree of utility of the last infinitesimal increment to the consumption of a good (before reaching satiation level) he calls final degree of utility (v., e.g., The Theory of Political Economy, (Fr.Tr.) 1909, pp. 110-113). It is the same with the Walrasian rareté; v. L. Walras, op.cit. pp. 117-121 and esp. p. 119; cf. Jaffé's n. [9] ibid. pp. 506-7. The Grenznutzen of the Austrian School are by definition Marshall's marginal utilities rather than the marginal degree of utility, but in practice there are often used as equivalent to the differential coefficient itself.

Plato carefully distinguishes between *intensity* of pleasure and *quantity* of pleasures. Thus when he begins his penetrating analysis of mixed pleasures, he starts with the methodological principle that in order to decipher the inner nature of any thing, we should concentrate on its most

intense instances (44d-e). He then asks under which conditions are to be found the extremest (ἀκρόταται) and most vehement ( $\sigma\phi\circ\delta\rho\acute{\sigma}\tau\alpha\tau\alpha\iota$ ) pleasures (44e-45a), which he also calls greatest ( $\mu \acute{e} \gamma \iota \sigma \tau \alpha \iota$ ); ibid. 45a. He claims that such pleasures occur in states of illness rather than of health. The idea is paradoxical, and he endeavours to dispel its awkwardness by emphasising repeatedly that the question is not whether there is *more* pleasure in sickness, but whether sickness provides the fertile ground for the generation of greatest pleasures, the most excessive kind of them. Thus 45c: ὅρα δὲ μή με ἡγῆ διανοούμενον ἐρωτᾶν σε εἰ πλείω χαίρουσιν οί σφόδρα νοσοῦντες τῶν ὑγιαινόντων, ἀλλ' οἴου μέγεθός με ζητεῖν ἡδονῆς, καὶ τὸ σφόδρα περὶ τοῦ τοιούτου ποῦ ποτε γίγνεται ἐκάστοτε ["And take care not to imagine that I mean to ask if gravely diseased persons experience more pleasure (more pleasures in number) than the healthy ones, but consider that I am inquiring about the magnitude of pleasure, and of this concerning its vehemence, where and under which conditions, it is generated in each case"]. And again, 45d: ἀπόκριναι γάρ· έν ὕβρει μείζους ήδονας - οὐ πλείους λέγω, τῶ σφόδρα δὲ καὶ τῶ μᾶλλον ὑπερεχούσας - ὁρᾶς ἢ ἐν τῶ σώφρονι βίω; λέγε δὲ προσέχων τὸν νοῦν ["Now make your reply; do you see greater pleasures associated with wanton insolence or with a temperate life - I do not say more pleasures in number, but such as are in excess with regard to vehemence and intensity. Speak, with your mind paying full attention"]. It is clear that the Platonic analysis concentrates on the *intensity*, or *degree*, of want and satisfaction, not on the total amount of pleasure and utility. Mathematically

speaking, Plato handles the differential coefficient (p) of total satisfaction with regard to the distance from the natural state (r), i.e., in the above used notation, and with P signifying the total pleasure felt within a certain change of distance from the natural state, p = [dP/dr]. P is equal to the area included between the curve of p as a function of r, the horizontal axis and two perpendiculars corresponding to the extreme values of the interval of change of distance from the natural state which is in question - analogously to the case with the modern functions of, say, rareté to quantity of good consumed.

Now, to return to the point of the optimal formulation of the Law of Diminishing Utility. Marshall's "familiar and fundamental tendency of human nature", and Walras' "postulate", state an empirical fact which has to be assumed without explanation, i.e. without the reason of its obtaining. The cause of this unillumined factuality is the fact that, in stating the fundamental economic law, they take the quantity of goods used, i.e. consumed, as the ultimate independent variable. Marshall compounds this with treating (more consistently, it is true) as the dependent variable of the fundamental law the utility of goods (in fact, primarily, total utility for the matter of that). Reality here becomes intelligible and no mere factuality, however, if we assume with Plato as basic independent variable the distance of a given state from the natural equilibrium, and take correspondingly, as dependent variable (intensity of) want (deprivation) and satisfaction, desire (with the pain implicit in it) and pleasure. For then, it is self-evident that the intensity of deprivation in a given state is directly correlated to the distance from the natural state. And so is the intensity of satisfaction in it, once the process of restoration has set in.

That this is in fact the fundamental law is implicitly recognised by Marshall's insightful but inarticulate appellation of his basic principle "the law of satiable wants". Walras' rareté, furthermore, is more determinately defined as (op.cit. p. 119) "the intensity of the last want satisfied by any given quantity consumed of a commodity" (my italics). Walras' curves, moreover, of quantity to rarete cut both axes, as they should - against the commoner practice, following Jevons, which has them hang on the air (Contrast Walras, op.cit., Fig. 12 p. 119, to Jevons op.cit. Fig. IV p. 109 of the Fr.Tr. Chapter III, Theory of Utility).

From the Platonic formulation, the fundamental principle of modern Marginalism can be easily derived. For the quantity of a good capable of satisfying a want (the quantity of a utility) is proportional to the distance of the state of want from the natural state of fulfilment. One, for instance, needs so much liquid to replenish a depleted reservoir, as is proportional to the level of the depleted condition relative to the level under full capacity. And again, on the other hand, the (intensity of the) utility of the good in question at a given distance from the natural state (i.e. at a given level of depletion) is equivalent to the (intensity of) want a satisfaction corresponding to that point. So that, consequently, the intensity of utility to an individual of a commodity at a given point of his consuming it, is directly correlated to the amount remaining to be consumed for full satiation (for the

realisation of the natural condition of fulfilment); and so it is inversely correlated to the quantity of the commodity (of the utility as thing) consumed so far up to the point in question, assuming the process of restoration is under way.

In foundational problems, the selection of the basic variables is crucial. Walras has to "assume the existence of a standard measure of intensity of wants or intensive utility, which is applicable not only to similar units of the same kind of wealth, but also to different units of various kinds of wealth" (op.cit., p. 117, italics mine). He is taken to task by Jaffé (op.cit., n. [7] to Lesson 8, pp. 505-6) on the ground that the intensity of want or desire "is a derived and not a fundamental dimension", since it is measured by the derivative of (total) utility with respect to the quantity of commodity affording the utility. The quantity of the commodity being assumed as a basic independent variable, Walras, the argument concludes, should have adopted as this "standard measure" (total) utility and not intensity of desire.

This is formalistic. Just as the intensity of desire is measured by the derivative of total utility with respect to the quantity of commodity, so, from a mathematical point of view, is the total utility the integral of the intensity of desire over a certain difference in the quantity of commodity. On the real level, furthermore, what is fundamental is the intensity of want at a given state of deprivation of the individual, not the total satisfaction experienced when he moves from that state to the natural condition of fulfilment, or to any other state of want. For this total satisfaction up to satiety depends on the particular

form of the curve representing the function of intensity of satisfaction to the degree of deprivation, i.e. to the distance of the initial state from the natural state. The particular form of the curve for a given desire expresses the correlation of intensity of want with degree of deprivation in reference to the corresponding state of fulfilment. On the other hand, a genuine criticism addressable to Walras is that having correctly signalled intensity of want and desire as the universal measure of all utility, he did not integrate this choice with the complementary adoption of some measure of depletion for the other (and independent) variable of the fundamental law.

The failure to adopt such an independent variable as will provide the means for the formation of a theory explaining a pervading empirical fact (the failure, in other words, to treat scientifically the subject) is at bottom connected with the subjectivist turn of modern neo-classical Economics. By contrast, classical objectivism, and indeed essentialism, helps to hit the mark more accurately in an otherwise common endeavour. Plato (Protagoras, 352a-357a) expressly institutes a calculus of satisfaction dissatisfaction, of feelings welcome of gratification and unwelcome of annoyance, of pleasure and pain or however else one may refer to the varied spectrum of affiliated species of feelings positive and negative (cf. *ibid.* 358a-b). This inaugural mathematization of satisfaction (and, therefore, of want and desire) - which is naturally paralleled by modern neo-classical theorising - stemmed from the fundamentally Pythagorean outlook that pervaded and propelled the great outburst of knowledge theoretical and applied during the Age of High Classicism, and that formed the core of the Platonic theory of reality.

But Plato proceeded a step further. He distinguishes clearly two types of Mensurative Art (τέχνη μετρητική): one which is concerned with the relative measurement of quantities of whatever kind may be; and another which searches for absolute mensuration, i.e. measurement relative to the "privileged" determination in each particular field of variation (Politicus, 283b-285c, esp. 284d-e). It is one thing, for instance, to know that the temperature of a human body is 38°C (measured against an artificially selected point of reference and according to an artificially stipulated scale); it is another thing to know that the temperature of a human body is, say, 1°C above the normal condition of health (in which case naturalness has been restored with regard to the point of reference but not to the scale); and it is still another thing to know that the temperature of that human body is (let us suppose) 15% above the point of health along the road to terminal condition. One may still further render the picture of reality more naturally complex, and, thus, more adequate, by applying his mensuration technique to the individual nature under examination, rather than to human nature in general or under broad categories of division. Then the "same" temperature could be very different for different individuals - as it is only too reasonable to be expected. (What is insufficient nutriment to Milo, the famous alltime ancient athlete, is more than enough for an ordinary man). [Similarly, the measurement of time in antiquity followed the annual (apparent) course of the sun: an hour

was 1/12 of the daytime; it was thus different in abstract duration for each day of the (half) year. By "abstract" duration, I mean duration calibrated to some more general principle of periodicity than that which is concretely proper to the field where the measurement is meant to apply. Significantly, clocks had to be devised accordingly, showing the variation in abstract terms of the concrete hour with the day of the year. What had to be kept constant was the relative position of a given moment to natural limits, in our case, sunrise and sunset. What I needed to know immediately by being given the hour of the day, was how far am I from the dark of the night or from daybreak - just as in the case of a natural reading of temperatures in the above imaginary example].

Coordinates in rerum natura are no arbitrary matters: (each) reality requires its proper system of coordinates in order to be rendered intelligible, i.e. in order to be represented to man as scientific knowledge. The Platonic point consists precisely in asking for the more scientific applied theory of mensuration to refer to the point of normalcy in each field of mensurability. (In our case, this is the state of natural fulfilment in relation to which every need, want, desire and satisfaction in man is objectively measured). The assumption is, of course, that such a point of optimal determination always exists (with reference to which all other possible determination of the same field of variation is a deviation). And here it is that Essentialism comes into the picture. For this consists in the view that reality is not a continuous flux (wave like), but it is organised round definite centers displaying strong persisting

identities whether on the generic and specific, or the individual level: such identities are established by optimal resonances, by "privileged" determinations of *continua*. For such determinations are characteristically *stable*.

We saw that the Platonic account provides the reason behind the principal law of economics, just as this marginalist law, explains the classical law of supply and demand. The Platonic formulation explains the general fact expressed by the law: pleasure is directly correlated to the degree of wastage suffered by someone, i.e. to the distance of his actual condition from a state of natural fulfilment. A utility is precisely an object which can fill up the emptiness of the depleted condition. The Platonic theory offers, also, the explanation for the form of the fundamental correlation, the form of the function of the intensity of pleasure to the distance from the natural state. The two diagrams drawn above correspond to the two initial formulations of modern Marginalism, the more primitive one by Gossen and the more articulate, say, by Jevons. The former gives a linear relationship of the degree of satisfaction to the amount of the utility consumed, while the latter provides the well-known curvilinear form. V. H.H. Gossen, The Laws of Human Relations and the Rules of Human Action Derived Therefrom, (tr. by R.C. Blitz), 1983, e.g. Fig. 1.13 in p. 36; but, of course, Gossen allowed for the possibility of a curvilinear decrease of the intensity of pleasure with the increase in quantity; and Jevons, op.cit., Fig. IV, p. 109 (Fr. Tr.).

With such insightful formulation of the doctrine of Marginalism, the *paradox of wealth* was bound to be felt

the more acutely. For desire is inherently bounded by satiety. There can be no infinite desire of satisfaction, i.e. there exists no unsatisfiable desire. Wants are satiable (Marshall). Even on the extremest perversion intensifying pleasure by creating enormous artificial desires (and such enormities must needs, according to the Platonic analysis, involve directly or indirectly heightened pain), there is a natural limitation to satisfaction: the one provided by the natural state of fulfilment. For all desire has to be measured by the distance of the want underlying it from that natural condition of equilibrium. Since the end point is determined and finite, however much one manages to move away from it, desire and satisfaction are limited. To perpetuate a state of intense pleasure one has to deny himself total satisfaction. This is artificial and no matter of necessity, for total satisfaction exists and is available, by reason of the intrinsic satiability of all human wants. The cessation of desire and pleasure is the achievable end of human activity, provided it is directed to the natural condition of fulfilment and equilibrium. A life of exceedingly vehement desires and intense pleasures, is a life in which the natural end of human existence is violently and artificially abnegated.

Even on such conditions, the aggregate of really possible pleasures is finite in both number and intensity by the very nature of the case. And so is, consequently, the required aggregate of utilities (concrete and abstract), the amount of wealth adequate to the realisation of that constellation of pleasures. There is no internal escape from the paradox of wealth, short of the vacuous formalism of postulating the supervening existence of a desire to go on accumulating

utilities beyond the bound of all possibility of usefulness in the actual realisation of satisfaction. The pragmatic classical mind could not accept such devious ways of an imaginary cancellation of the order of reality: there simply is, no infinite desire - and there cannot be. It is an absolute impossibility. We see, by the way, how successful ancient Normalism and Essentialism are to get mind out of the labyrinths of thought: the crux here is the understanding of a natural state of fulfilment and equilibrium.

But the fact is that boundless process of wealth accumulation does occur, even on the part of individuals, whose potential for satisfaction is necessarily limited, however artificially intensified, and whose store of value (their treasurehouse) need not, consequently, extend beyond a certain limit, sufficient to sustain all that potential. This paradox of wealth cannot, further, be resolved by the expansion of the horizon of the individual's concerns to cover the needs of his future descendants, or of his country, nation or class in their historical development, or of his fellowmen in general, and of humanity at large and its destiny. All this is pretence, wishful thinking and moralising or rather ideologising, of the worst kind. The individual may feel actively as "his own", and thus be seriously concerned about, the condition of such descendants of his as they can physically coexist with himself, i.e. up, normally, to grandchildren. So that, even if we allow such concerns to substantially influence current economic decisions on the part of the individual, and his overall pattern of activity (something which is extremely unlikely in all but a few rather special and highly untypical

cases), even then we are still left with a bounded potential of want, desire and gratification, and thus with a *limited and definite* (however enlarged) maximal requirement for wealth. Since there is a natural state of *fulfilment* in all constituents, parts and aspects of human nature, there is *satiety*. Since there is *satiety*, want and desire, and so deprivation and gratification, are inherently *finite*. Since they are *finite*, the maximal requirement for wealth is, in each case, *limited and definite*. But the individual accumulation of wealth may nonetheless proceed indefinitely, as if there was an absolute desire for more wealth independently of the natural limit to the potential for gratification.

One possible exit-strategy from the impasse might appear to be presented by the Pythagorean basic structure of reality, adopted by Plato with modifications in its articulation (cf. on this last subject, A.L. Pierris, The metaphysics of Politics in the Politeia-, Politikos- and Nomoi-Dialogue Groups, in A. Havliček - F. Karfik (eds.), The Republic and the Laws of Plato, Proceedings of the First Symposium Platonicum Pragense, 1998, pp. 117-145). Reality is dualistic: there are two ultimate principles, Finiteness or Limitation ( $\Pi \epsilon \rho \alpha s$ ) and Infinity or Indeterminateness (" $A\pi\epsilon\iota\rho\sigma\nu$ ). In Philebus Plato adds as third Principle the Cause which synthesises limit and indefiniteness so that the multiplicity of recognizably determinate empirical reality may come into being. Things are such mixtures of the two Pythagorean Principles, which come about by the operation of the Causal Principle (23b-27b). The Principle of Indeterminateness accounts for all fields of variation that exist in, and partly constitute, reality, for all dimensions of determinability, such as magnitudes, temperatures, humidities, abilities, organic conditions etc. The Principle of Limit gives the definite measure to any existing variability in each case, it determines in a definite way the field of indeterminacy in question. For instance, on the thermic Dimension operating Determinability, produces a definite thermic condition, a certain temperature. Limit, more characteristically and essentially, generates such determinations of underlying fields of variation as are stable and focal, that is, as constitute essential determinations of the nature of being. For example, Limit operating on the thermic Dimension of Determinability with regard to the human composition defines the temperature of natural equilibrium, i.e. of health; while the same operating on the same generic field of variation but with regard to the cycle of annual seasons, gives the seasoned seasonal focuses of the main episodes in the yearly drama of existence, and, chiefly, constitutes the optimal thermic condition for growth (springtime temperature) and for maturation (summertime temperature).

Pleasures (and so wants and desires as well) as such belong to the progeny of the Infinite Principle: pleasure represents a field of variation, as it admits of more and less, of intensification and relaxation (27e); pleasures and pains belong to the genus of the Limitless (28a:  $\tau \hat{\omega} \nu \ \hat{a} \pi \epsilon \rho \hat{a} \nu \tau \omega \nu \nu \hat{\epsilon} \sigma \tau \omega \nu$ ). And in the conclusion of the passage developing the application of the fourfold division of realities (limited, indeterminate, mixtures, causal), it is categorically stated (31a):  $\dot{\eta} \delta o \nu \dot{\eta} \delta \hat{\epsilon} \ \ddot{a} \pi \epsilon \iota \rho \acute{o} s \ \tau \hat{\epsilon} \ a \dot{\nu} \tau \dot{\eta} \kappa \alpha \hat{\epsilon}$ 

τοῦ μήτε ἀρχὴν μήτε μέσα μήτε τέλος ἐν αὐτῷ ἀφ' ἐαυτοῦ ἔχοντος μηδὲ ἕξοντός ποτε γένους ["pleasure is then itself infinite (indefinite, indeterminate) and belongs to the genus which has - in itself and by its own proper nature and power - neither beginning nor middle nor end, nor will it ever have"].

This, however, will not do as a way out of the impasse which I have called the Paradox of Wealth. For pleasure in itself simply does not exist as a concrete reality, but only stands for a principle of a particular variability. In every field of variation there is an infinite (assuming the field to be continuous) possibility of determination. But what exists is this or that determination. Moreover, among the infinite possibility of determination, there is one privileged determination which gives the stable condition with regard to the field of variation under consideration. This definite condition is opposed to the rest, on account of its inherent stability. Thus, for instance, health as a determinant condition of equilibrium in man is opposed to sickness which allows of an infinite variation in its determination. Nonetheless an empirically real sickness, at a given span of time, is also determinate. And similarly with pleasures. Pleasure in itself is a field of variation that does not exist as a concrete reality. In order for pleasure to thus exist, it must accept some determination or other: e.g. the satisfaction corresponding to such and such a distance from the natural state of fulfilment in the respect considered. The determination of a dimension of indefiniteness (whether the privileged stable fixation or any unstable determination) sustains it in concrete existence. Opposites (like health and sickness) belong to the same field of variation. (This is in Platonic mixture of Pythagorism Heracleitism). As much is stated in *Philebus*, 26b-c: ὕβριν γάρ που καὶ σύμπασαν πάντων πονηρίαν αὕτη κατιδοῦσα ή θεός, ὧ καλὲ Φίληβε, πέρας οὔτε ήδονῶν οὐδὲν οὕτε πλησμονῶν ἐνὸν ἐν αὐτοῖς, νόμον καὶ τάξιν πέρας ἔχοντ' ἔθετο καὶ σὺ μὲν ἀποκναῖσαι φὴς αὐτὴν, ἐγὼ δὲ τοὐναντίον ἀποσῶσαι λένω ["For this Goddess (sc. Venus), handsome Philebus, having perceived the wanton insolence and general depravity in all these indefinite variations, there being no limit either of pleasure or of repletion and satiety, inherent in all these, she instituted lawfulness and order which bring limit (to their indefinite variations). And you say that this is to wear it (the pleasure) out; while I maintain that this is to save it"].

Actual or really potential desire cannot be infinite. Hence wealth for an individual must be limited so far as the economic motives of his activity are concerned. The auri sacra fames, therefore, must have a different motivation. The Platonic expedience of ascribing it to the relapse from the state of order in the field of want and satisfaction to the disorder of indefiniteness inherent in desire and pleasure, will not do. For even so, even effrenated - if only real - desire is limited.

The different factor sought for is revealed by the Pythagorean construal of reality employed by Plato in his analysis of the phenomena of desire and pleasure. For the Principle of Indefiniteness is the Principle of Power. Limitation and order constitute the stable character of a thing, its essential nature, the form of its being. But the

potency of its being, the fertility of its existence is due to the other Principle, the one of dark, irresistible power. Indefiniteness in the primary and original conceptions of thought, is not something negative, mere privation of determination; it is rather the power to display a multiplicity of forms, the capacity to exhibit a huge variety of alternative characters - it is Protean in nature. Cf. A.L. Pierris, *The Origin and Nature of Early Pythagorean Cosmogony*, in K. Boudouris (ed.), *Pythagorean Philosophy*, 1992, pp. 126-162.

In this way we deduce from general principles what was reached earlier proximately from the facts of the case, namely that the infinite desire for wealth is in reality an infinite desire for power. Notice that power in this connection should not be construed as some utility, i.e. as an economic good; because in such a case, it is, it also, naturally circumscribed: there is a limited magnitude of power which is requisite for the satisfaction of human wants in any given individual. The infinite desire for power which I mean, concerns power as non-economic factor. The pursuit of sheer power is unlimited, because it has no proper end (in both senses, of purpose and of termination). It reflects simply the dynamism inherent in being by reason of its constitutive Principle of Infinity. This dynamism pushes forward towards higher and higher levels of selfaffirmation, whereby the identity of a being is stamped on larger and larger spheres of its environment.

Power is a non-economic factor that is intrinsically and crucially implicated in economic activity, or rather in the furtherance of economic activity. Without it, little occasion would have presented itself for an economic activity aiming

beyond the supply of the more basic necessities of life and the catering for the paraphernalia of social status. Staples and luxuries would then be the only economic goods, the former mainly produced for self-consumption, the latter exchanged fundamentally for protection, i.e. in effect payed for, primarily, against services rendered rather than against commodities offered. Even in such primitive state of human cohabitation, *luxus is a symbol of power* above everything else. The boundless craving for power is inwrought in being by virtue of its very constitution in existence; it appears at the earlier stages of a thing's development, right from its inception.

Power, appropriately enough, is the driving force of all progression, the motor for all development. Implications of the utmost importance follow upon this insight, both for individual motivation and State strategies (raison d' État). Cardinal in the latter regard is the understanding that optimal economic functioning is not self-sustainable but requires the, external to it, exercise of power. A free and open market is upheld by the Power (a State Power) that keeps a certain geopolitical field together while maintaining the market processes free and open, uninterfered with and barrierless. The Market needs a (State) Power to sustain it: in fact, as we saw above for Plato and Aristotle (v. Chapters 1 and 2), the State organisation of society was originally instituted precisely for the purpose of securing the right context for exchange, i.e. the market, and this constitutes the basic reason for its existence.

Power in man, however, I have argued, is ultimately reducible to (pragmatic) knowledge, to ability flowing from

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knowledge and from knowledge ensconsed in ability. Which is as it should be expected, since it all yields the virtual tautology that progress is due to knowledge. In the last analysis, the capitalist's craving for immeasurable wealth is at bottom every entity's craving for unlimited power-affirmation, is finally the wise man's craving for absolute knowledge, for the errorless understanding of reality.

## **NOTE**

Notice, however, meanwhile, that the polarity want-satiety exerted such powerful fascination on the ancient mind that it was audaciously projected by Heracleitus to cosmic reality. Applying his general theory of the unity of opposites (that the self-adjustable tension of contrariety constitutes existence itself as well as the power and perfection of being, the hidden harmonies of reality) to the ultimate substance of the World itself, Fire eternal whose measured life becomes the rational order of reality, Heracleitus described two opposite basic cosmic conditions: one when Fire has been transformed into the orderly multifarious configuration of the World as we experience it (διακόσμησις, Cosmos as adornment of existence); the other when all things have been consumed up by the Ur-substance, Fire, out of which they have been shaped according to its inner law of development. These two polar states of the World Heracleitus called χρησμοσύνη (want) and κόρος (satiety): Fire is in want when it exists in forms other than itself, when being exhibits the manifold order of a developed world-state; fire is satiated when it has consumed everything, by turning all into itself at the ultimate conflagration of the World (ἐκπύρωσις). So Fr. 65DK = 55 Markovich: καλεῖ δὲ αὐτὸ (sc. τὸ πῦρ) χρησμοσύνην καὶ κόρον· χρησμοσύνη δέ έστιν ή διακόσμησις κατ' αὐτόν, ή δὲ ἐκπύρωσις κόρος ["and he (sc. Heracleitus) calls this (Ur-substance, Fire) by the names of want and satiety; want is according to him the ornate cosmic order, while satiety is the conflagration"]. Philo expresses this idea by characterising the state of the World when Fire has reabsorbed into itself all things as mastery of that one existence over all others, while the developed cosmic order he describes as an equilibration of all elements, granted by all to each other in common as right to existence (de Specialibus Legibus, I, 208). Plutarch (de E apud Delphos, 389c) gives the reputed ratio of duration of the two alternating world-states in the Great Cosmic Cycle: it is three to one in favour of satiety. He also gives an application of this cosmic drama to the annual sequence of seasons: the condition of need corresponds to winter, while that of satiety to the rest of the year (ibid.).