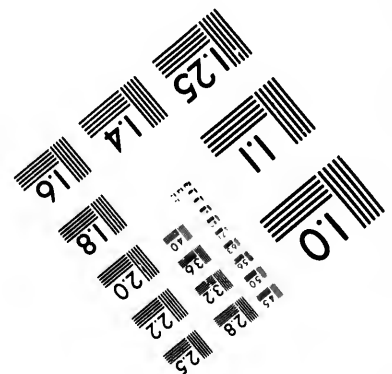
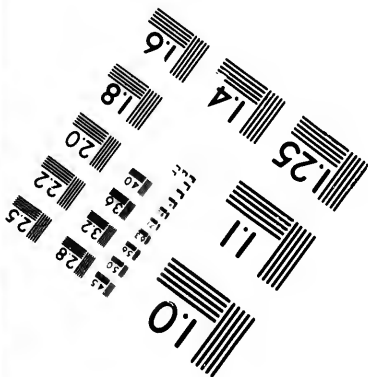
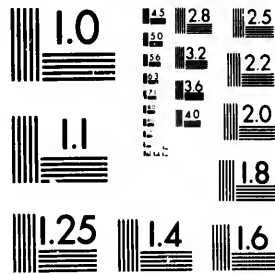


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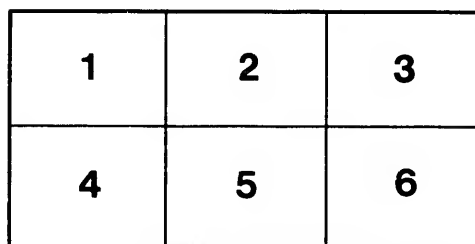
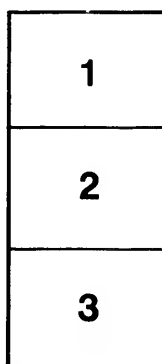
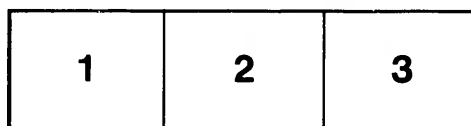
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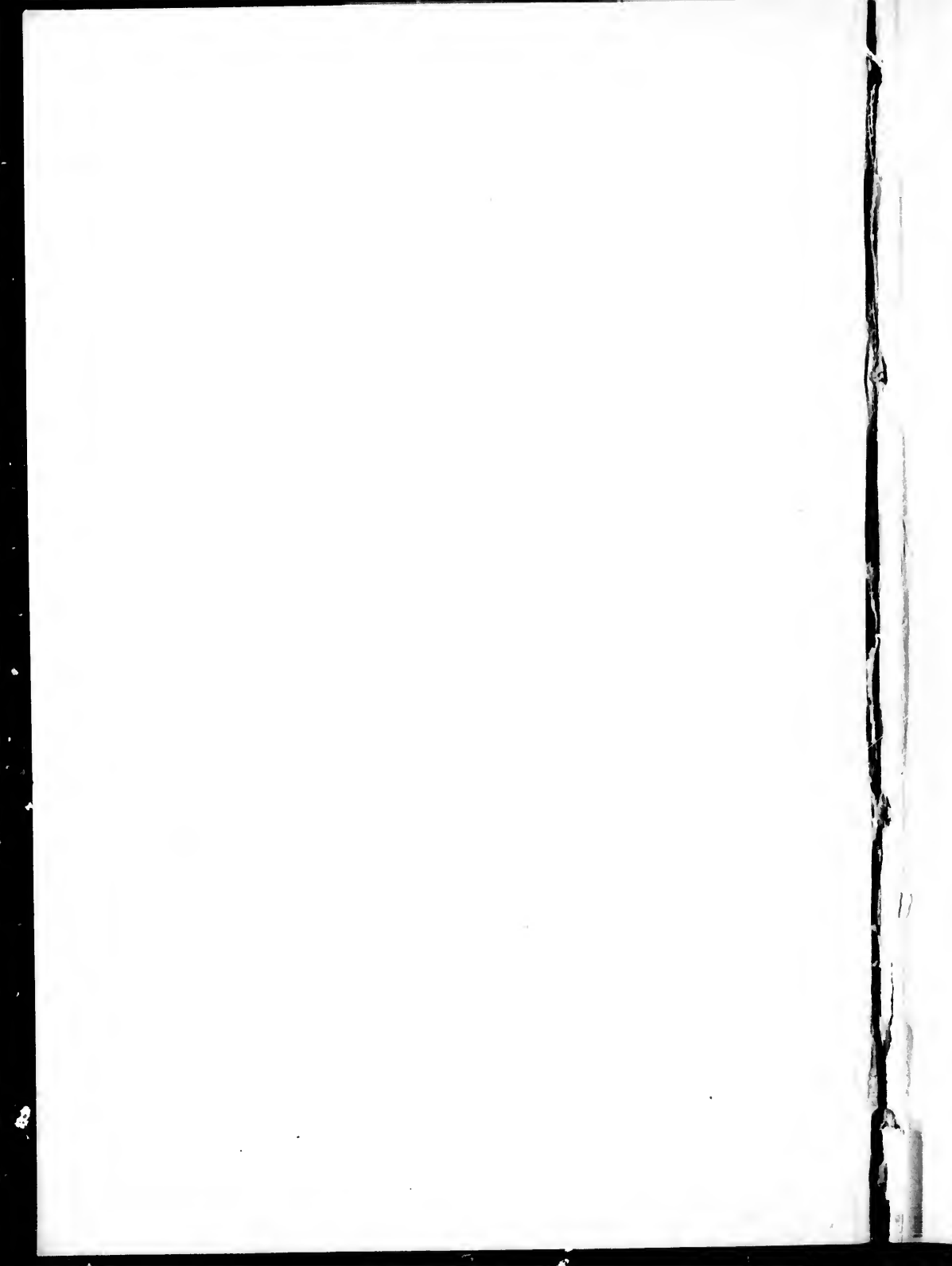
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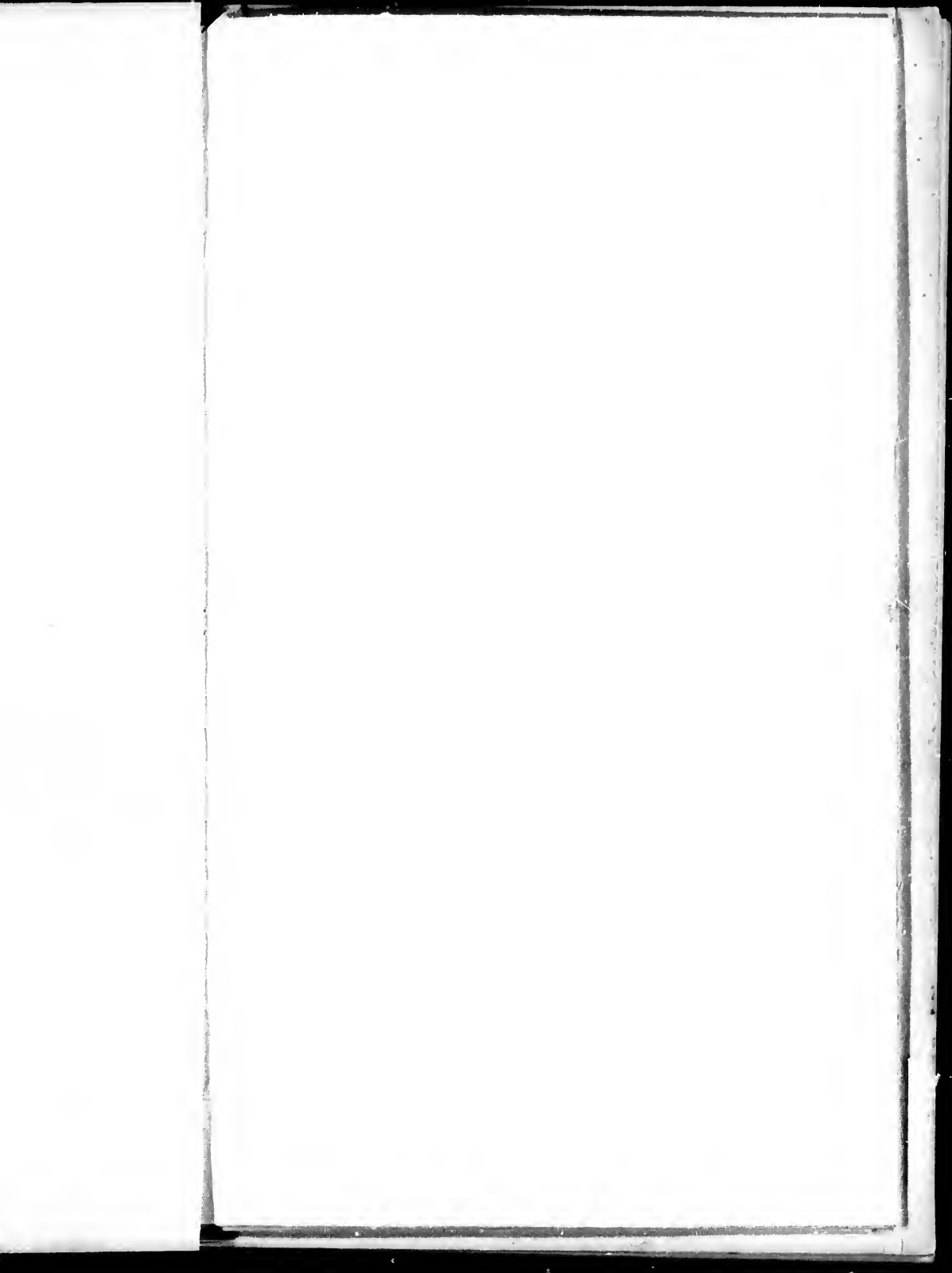
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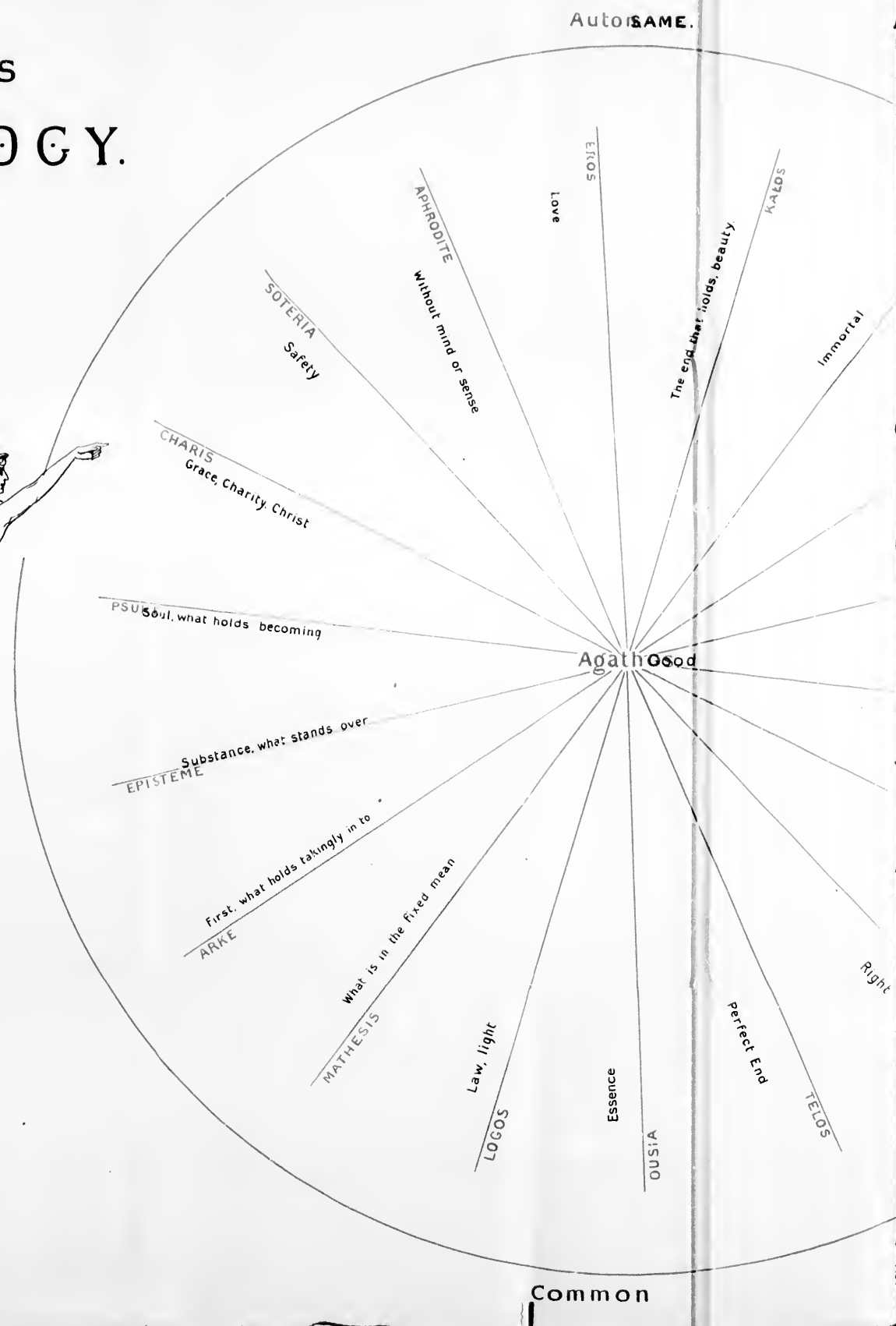
THE
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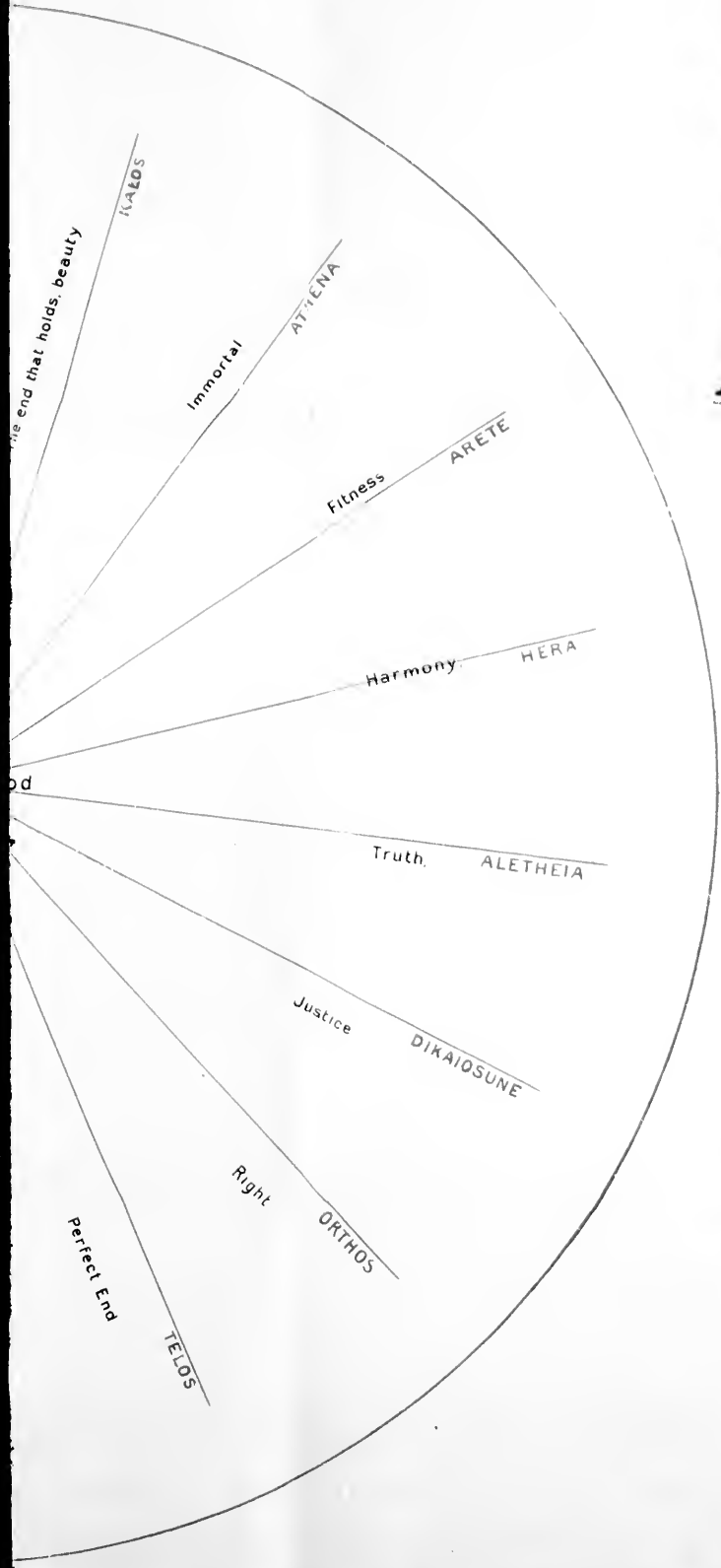




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THE

EDUCATIONAL CHART:

BEING

A COMPARATIVE ABSTRACT OF TWO ANTAGONISTIC SYSTEMS OF EDUCATION,

THE MATHEMATICAL AND THE AESTHETIC.

BY

ANGUS DALLAS,

AUTHOR OF "LATIN LANGUAGE AND GRAMMAR, ADAPTED TO THE CAPACITIES OF CHILDREN, AND FOR THE USE OF PARENTS IN THE WORK OF HOME EDUCATION."

"What is, that ought to be."

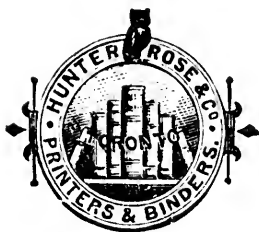
HOMER.

*"My highest wish is to find within,
The God whom I find everywhere without."*

KEPLER.

Toronto:
HUNTER, ROSE AND COMPANY.

1881.



Entered according to the Act of Parliament of Canada, in the year one thousand eight hundred and eighty-one, by ANGUS DALLAS, in the office of the Minister of Agriculture.

PREFACE.

THE object of this treatise is to give a bird's eye view of a deeply seated and confirmed literary disease, which requires something like a surgical operation to make even its symptoms apparent. Not being confined to one country more than to another, but general in its application, the writer trusts that it will meet with the indulgence which a candid statement of facts merits, when conforming to the truth and within the experience of the general public.

Specific diseases of the body politic are so numerous that a constitutional reformer does not know where to begin. Is it in the adulteration of food and drugs, in commercial irregularities, in the practice of the courts, in medicine, in official appointments, in church husbandry, or in municipal and parliamentary routine? Each has as many objectionable points as another; and it seems invidious and whimsical to single out one from the rest for the purpose of exposure.

While society sanctifies usage as the rule of conduct, there can be no standard of right. What is contended for here is, that the rule of conduct should have the divine sanction, as a common standard. And it is shown,

that, as the divine sanction is mathematical, and the way to the discernment of the divine sanction is also mathematical, it is therefore imperative that education, in all its branches, as these branches affect the different professions and interests of society, should be strictly mathematical.

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INTRODUCTION.

EDUCATION, as the word properly signifies, is a bearing out from a state of animal sensuousness to that moral elevation of which every human being is susceptible, when properly conditioned. In face of this truism, the first question that presents itself is : What are the necessary conditions ? And the second is : Why are they not recognised ?

That thousands and thousands of years should have passed, without any advance from the rude animal instincts of a primitive state of existence, is a startling problem to any one who has not been conventionalised to regard science, arts and commerce as moral results. Yet such is the fact, at the present day, that the world is governed by national, social and dividual antipathies. Judaism has no affection for Buddhism. As little has Protestantism for Romanism, or Presbyterianism for Episcopacy. Free Masonry and Orangism are types of every social organization. *L'esprit du corps* is the shibboleth of each. It means dividualism, which is the reverse of humanity and consequently is opposed to Christianity. The autonomy of the nation as well as that of the family should take its rule, not from what each thinks is good for itself, but from what is good for all nations and all

families. The departure from this rule is the more inexcusable, in view of the progress and magnitude of the existing civilization. Whence proceeds the anomaly? Is it an unavoidable accident emanating from uncontrollable circumstances, or is it produced by what is called education. It is necessary, at the outset, to know the cause and the conditions on which the anomaly is dependent for its existence. To determine this, the proper course is to contrast the educational requirements and practice of the ancient mathematicians with the æsthetic teaching of both ancient and modern times.

What we know of the history of education is limited chiefly to that of the early Greeks. From Thales to Aristotle, within a period of two and a half centuries, the brilliant array of original thinkers, astronomers, and mathematicians is somewhat exceptional, and has no parallel in the history of any other country. It is not to be supposed, however, that the primary elements of Grecian learning had not been borrowed from older countries such as Egypt, Persia, and India; for the old mythology, which is essentially mathematical, was the same in all these older countries as well as among the Greek mathematicians. Mythology was the higher educational connecting link between what were known as the wise men of Asia, Egypt and Greece. It embodied, as still it embodies, all that is valuable as a mathematical basis for moral and religious culture.

These ancient astronomers and mathematicians were influenced by certain moral conditions, the knowledge of which became afterwards extinct, when patriotism as-

sumed the empire over the consciences not only of nations but also of individual citizens. Foreign travel had been a necessary preliminary to the study of nature; and was undertaken with no commercial motive; for literature was unknown in these early ages; there being few books and fewer stock writers. One object, so history records, was the bond of a common brotherhood, irrespective of country or kindred. To find the truth was more precious than gold. Distant travels were undertaken with no view of gratifying the senses; but to develop the inward thought. The Ionians, Thales, Anaximander and Anaxemenis sought to find the principle or original germ from which proceeded the volume of all composite forms. The Pythagoreans perceived in the harmony of numbers, the harmony of the universe. The Eleatics, Xenophanes, Parmenides and Zeno, ascended from the forms to the essence; from the primary germs and concrete, to the higher law, as an abstract conception. Like the Persian Magi and the Indian Brahmins, the design was to discern the natural law by which the phenomenal relations of mind and matter are dependent. The fixity of law and the invariability of its operations were admitted to be demonstrable truths. What was required was to ascertain the definite conditions of different classes of phenomena. A criterion was requisite to determine the right from the wrong course in human society and government. And as no system of government can be just which is not in accordance with fixed conditions, and no conditions are fixed which are not of divine origin, the endeavor on the part of the profound thinkers and therefore wise men of the

ancient world was to impress the constitution of society with a divine sanction. Their notion of religion was a reflex of the divine will or law in the practical affairs of life.

If we inquire whence these transcendental conceptions, the answer is found, in the matured study of astronomy and mathematics. For what could be more conducive to the perception of the necessity of fixity of conditions and consequents in human government, than the observance of the invariability of the relations of conditions and consequents in the movements of the celestial orbs. That an inconceivably long series of years must have elapsed before that astronomy and mathematics could have been so well understood, and in a period of the world when, so far as we are capable of conjecturing, telescopic and other appliances were altogether unknown or imperfectly used, is unquestionable. For the monuments which attest the antiquity of intellectual culture, as well of science and art, in Egypt and Asia, are voluminous and well authenticated. Diodorus says that, from the most remote antiquity, the Egyptian year was composed of three hundred and sixty-five days and six hours. It is in this fixity of the relations of conditions and consequents that astronomy and mathematics are valuable for moral guidance. They shadow forth the elements of logic, and, therefore, constitute the logical basis for the correctness of our thoughts. As wisely remarked by the Pythagorean philosopher Philolaus: "The mathematical intellect is the criterion of truth."

Now, in accordance with their moral and religious conceptions thus derived, these astronomers and mathematicians, who were regarded in their respective countries as being suprasensuously wise, were necessarily optimists. They believed that every created thing is good; that the tendency of every created thing has a good purpose; and that the whole of creation, in its elements, structure and operations, exists as multiplicity in unity. The supposition of evil originates through the disjunction of dividual entities from their correlative legitimate states. Good is what is so, in the composite relationship of all its members. Each member partakes of the common good. But a separate and dividual good, in which the other members do not participate, cannot be. Herein consists the nucleus of the Christian idea. What is good for the whole human race is good for each member of the race. But what is supposed to be good for one, but not equally so for all, is virtually not an absolute good. For this reason Heraclitus held that "it is not for man's good that his wishes should be obeyed." And Archelaus Physicus, while contending against the prevalent tendency to find fault with the plan of creation says that *our conceptions of good and evil are not by nature but by convention.* The apparent conflict between the natural forces which, in every age, has led more or less to misapprehension, was satisfactorily explained by the necessity of force to produce motion, and of various kinds of force to produce various kinds of motion. Heraclitus maintained that "all harmony is produced by the conflict of opposite impulses." And it is impossible to conceive of any good

which is not an outcome of the antagonism of opposing forces. But, as the common is dependent on the communal relation of all its parts, so it is a condition of dividual good, considered *per se*, that it contribute negatively to the promotion of the common good. Hence good and evil, the two opposing factors in the eastern mythology as well as in that of Egypt and Greece was the communalism of the good and the dividualism of the evil. Two words, the primary significations of which are God (*agathos*) and Devil (*diabolos*); the Ormuz and Ahriman of the Persians; the Tao and Yn of the Chinese; the composite Brahme or Indra of the Hindoos; and the Elohim and Satan of the Israelites. Nature (*physis*) is the generative process of the compound forms of the elements (*stoikeia*). Soul (*psyche*) is not the motive power by which these forms are produced. Its function is limited to the direction of all antagonistic combinations and processes to the ultimate and perfect, common, and good end. Every element, by the atomic theory, has a formative germ whose actions depend on definite conditions, so that the function of the soul is limited to the good tendency only, of the whole towards a common end. The conflicts of good and evil, dividentally, while they have thus definite conditions; in the aggregate, all conspire to the accomplishment of the same common end. Let it be observed, however that dividual good or evil is limited, at all times, to what each thinks is good or evil to himself; and does not apply to the common end, to which all the natural operations are directed. Dividual good, being selfish or, at best, an animal instinct, is shared equally by the vilest

of all the lower animals. The common good only, is Christian. The mythological criteria for good and evil being thus clearly elaborated, in the ancient cult, the nature of the divine order is thereby made manifest, whether as a dualism or as being monotheistic. Between the intellectual Magian and Gymnosophist, the popular æsthetic conception, on this head, could not fail of being proscribed. And so it happened that the mythology of the ancient world being one and indivisible, those who were known to adhere to its principles are represented in the ancient writings as being unanimous and devotional. The intellectual standard was optimism. That evil is only so in appearance; that it is a means to a good, and is therefore a good; and that goodness is limited, in its application, to the whole, and not to one or to a few, were established as cardinal doctrines of true religion. Hence the general inference that the work of creation is perfect and that there is no evil in the world; all which is comprehended in the fundamental postulate of Homer: "What is that ought to be."

Seeing that the soul of man is, thus, freed from the antagonism of the elemental forms; and, as a part of the universal soul, is pure and incapable of contamination; it follows that the soul of every child, from the moment of birth, remains as pure as the universal soul of which it forms a part. The sensuous faculties may be debased and corrupted by defective training; but the soul can never be so affected. This is the primary ground for the application of mathematics to the development of the intellectual faculty. If, as mythology assumes, the purpose

of intellect is to control the animal passions, the duty of conforming to this requirement is obligatory on the parent during the age of childhood and youth; for while the intellectual faculty of a child is undeveloped, it is the office of the intellectual faculty of the parent to control the sensuous passions of the offspring. There is no escape from the responsibility attendant on the neglect of this duty. That the intellect of the parent has not, itself, been developed is a misfortune and a severe reflection on the state of society in which such exists. But it is not an admissible plea; for it is the office of intellect to control the passions, whether of a nation, of a parent or of a child. A single glance at the invariability of the relationship of conditions and consequents should be sufficient to impress the truth of this unalterable law. No nemesis is independent of its conditions. There is no dividual affliction that has not its immediate or remote cause. Nor can there be a good that is not the product of a concurrence of corresponding motives and actions. The discord in heaven, if such had been possible, might be supposed to have been the initiatory cause of all the successive occurrences described by Homer. The sensuous passion of Paris might have been the ostensible and immediate cause of the Trojan war. Unprotected by Menelaus, the elopement of Helen was a necessary sequence. The misfortunes of the Greeks might have arisen from the abduction of Chryseis and Briseis. The forcible possession afterwards of Briseis, by Agamemnon, and the consequent estrangement of Achilles might have aggravated those misfortunes. The death of Patroclus might

have been the cause of the destruction of Troy. The death of Hector and the extinction of the dynasty of Priam ; these, with the episodes of the death of Achilles, the murder of Agamemnon, and the adventures and ultimate fate of Ulysses are consequences that have little moral significance if not associated with the suppositious discord in heaven, as the primary cause. The mythological interpretation of the Iliad is a suppositious conflict between the intellect of the soul and the sensuous passions of the mind. Had heaven, the soul, not been pure it must have partaken of the impurities of the mental passions. And while the intellect remains imperfectly developed by mathematical training this is precisely what takes place within the cranium of every human being. So that the narrative of the Iliad, the most divine of all the Grecian records, conveys this most important announcement that the mathematical development of the intellect, is a necessary condition of the moral government of a nation, of a people, of a parent and of a child. There can be no practical intellect without the development of the faculty. And that development is not possible unless on a mathematical basis. The existing state of society, its different forms of government, contradictory codes of national and municipal enactments and ecclesiastical institutions are all accidents of the conflict of the animal passions ; and produce, in their turn, the animosities, the offences, the crimes and wars which everywhere disgrace society and degrade the human race. Yet they are exactly the counterpart of what is observable in children trained to exercise their sensuous appetites only. As, in the one case, society has to be coerced

into the observance of conflicting statutory enactments ; so, in the other, the child has to be tortured by corporeal inflictions for not conforming to the capricious teachings of parents, nurses and tutors. Viewing these sensuous results cursorily, we are apt to regard them as evils ; and seldom or never perceive that they are means to a good end, and therefore are good. The reason of our misconception is that we have been so trained ; and, consequently, have not been taught that the destiny of man is to work out his own redemption, for the doing of which he possesses the means within himself.

As force is necessary to produce motion, and different kinds of motion are required to produce antagonism, so antagonism is necessary to produce the successive vibrations of the social pendulum which marks the difference between antagonism and equilibrium. The functions of sense and intellect have different purposes to serve. That of one is only to feel the difference between pleasure and pain. Of the other, to discern the causes and their conditions. As there can be no pleasure without pain ; and pleasure comes from having remembered how much pain we have endured ; so, it is necessary, while we are governed by our aesthetic senses, that thousands of years should elapse, in order to produce, sufficiently, a permanent and everlasting impression, which history and the stage should continue to perpetuate. The aesthetic faculty of sense has, thus, its use. But the mathematics of mythology has yet to be learned and to be publicly recognized, before that the government of the senses by the intellect can possibly commence. Nevertheless, this is man's destiny. Between the two dispensations, the last is that by which the world is to be redeemed.

From what has been said, it follows that mythologically there can be no moral responsibility when the faculty of intellect, which is the only moral faculty, has not been developed. Wickedness and vice have their conditions. Whatever the degree, they owe their existence to the absence of the moral censor. A man may be a burglar, or assassin, while his soul remains as pure as the universal soul of which it is a part. He is immoral because he has been trained to govern his conduct by his individual desires and lusts ; subordinated, in a certain measure, to another class of desires and lusts enacted by the national constituted authorities. In each case, it is the aesthetic-sensuous faculty, exclusively, that exercises control. A whole is such by virtue of its partaking of the attributes of its parts ; and, similarly, a part is such because it embodies the essentials embraced in all the other parts and in the whole. How then can a member of society be moral, in a society which is altogether immoral ? Wherein merit consists, not in acting according to the sanctions of the divine law, but in the prudential study of not being caught violating the national customs conventionally established ? The only real difference in the reputation of character, being not the non-transgression or transgression of the conventional customs ; but the not being caught, and the being caught. For this is the sum of what passes in the world under the name of national ethics. No man, therefor, can be held to be morally accountable before that he has been instructed to understand what the divine law is. And, on the other hand, a soul that has been inspired by morality, can scarcely escape being sacrificed by this so called national ethics. Socrates had to drink hemlock ; and Jesus suffered on the cross.

ORGANIZATION OF THE BRAIN.

Organically, the mythologists held to a series of faculties, distinct from each other ; namely, the aesthetic, the geometric and epistemic, as marked on the chart. In correspondence with which, they held also the progressive development of these faculties, the separate stages of progress, and thence the progressive stages of education ; commencing with the aesthetic, next the geometric, and finally the epistemic. In corroboration of the validity of this progressive series of development, they showed how the spinal marrow is first formed in the foetus ; how the medula oblongata is formed from the spinal marrow ; how the cerebellum and cerebrum are successively formed from the medula oblongata ; and, finally, how the leaflets of the cerebellum and convolutions of the superior hemispheres of the brain are the last developments of the perfect organism.*

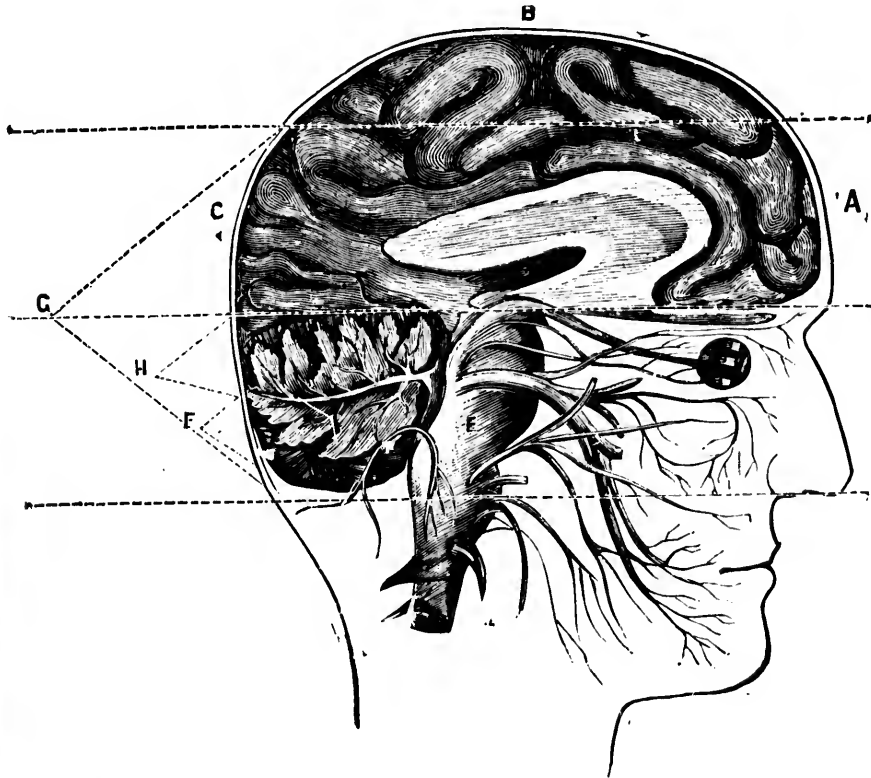
By a careful examination of the accompanying chart, it may be seen that the nerves of sense all spring from the medula oblongata. It therefore follows that all our sensations of sight, hearing, feeling, tasting and smelling are immediately connected with this organ, which being situated in the base of the brain and on a level with the cerebellum is, together with the cerebellum, the region and seat of the animal passions. This region, being the first formed, is the first to exercise its functions. Hence, the first manifestations of its exercise are those of pleasure and pain, of love and hatred. During the earlier

* The anatomy of the Foetal Brain—by F. Tiedemann.

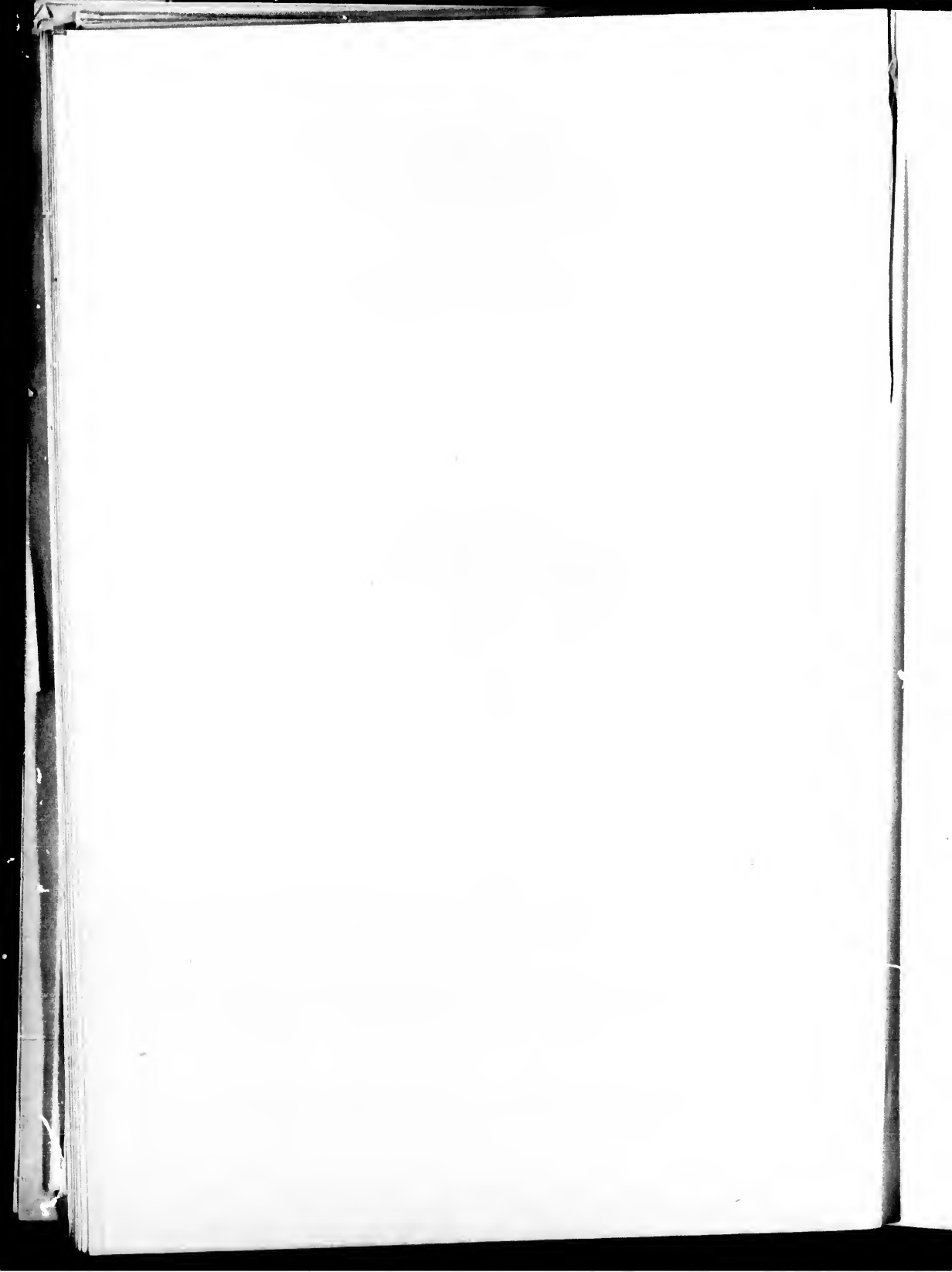
ORGANIZATION

OF

THE BRAIN.



- | | |
|----------|--|
| A B C, | Cerebrum. |
| H and F, | Cerebellum. |
| E, | Medula oblongata. (Communicates with the cerebellum and cerebrum.) |
| B, | Epistemetic faculty, or intellectual region of the brain. |
| A C, | Geometric " scientific " " |
| H and F, | Aesthetic " sensuous " " |
| B, | The seat of the epistemetic passion, Noesis. |
| A C, | " " geometric " Dianoia. |
| H, | " " gnostic " Pistis. |
| F, | " " conjectural " Eikasias. |
| O, | Phren, the region of the mind. |



years of life, both of infancy and youth, the actions are governed exclusively by these animal passions. Friendships are formed and enmities are engendered, in the nursery and on the play ground, by the gratifying or repulsive effect of contiguous objects of whatever kind.

The geometric faculty, or that which measures generated things, exercises its functions at an early age. Placed between the lowest and the highest, it is the bridge to the assent from the one faculty to the other; and, as a connecting link has a double duty to perform. On the one hand it has to shape the course of the passions and bring them into subordination to reason. On the other, its work is to discipline its observations of the senses, so as to form the mathematical habit of generalization.

Reason is not a faculty of either the mind or soul. It signifies, primarily a ray of light. The verb comes from the Sanskrit *rayon*, as the verb light comes from the Sanskrit *loka*. Rays or reasons are the elements of science; that is, they are the separate mathematical conditions of isolated facts; such as of the invariable reciprocal action of oxygen and carbon, or any other combinations of the chemical compounds; such as of the principle of gravity; or how the tides are produced by the action of the moon. The solution of a scientific problem imparts, in this way, the eidea of a truth, which truth is a ray of light. And the accumulation of these rays, on any particular subject, enables the scientist to form a generalization on such subject. The geometric faculty, it will thus be seen, is that which is chiefly operative in the work of education. It first determines the conditions of separate sensuous facts, and thereafter classifies them by a generalizing process.

The epistemetic faculty, when energised is the perfect intellect. Its office is not to measure generated things, nor yet to generalize their conditions; but only to note the conditions in the suprasensuous types, named ideas. It is not occupied in any way, either directly or in-

directly, in the acquisition of knowledge. It simply notes the abstract types. When the intellect is so developed, the mind is then in harmony with the soul. Every act and thought is thenceforth under the control of the perfect guide; and the moral responsibility then exists in full force. But not before then can a human being be said to be morally responsible. Before its development, the epistemic faculty exists in a latent state. And so it continues throughout life, unless energised by educational appliances.

Subordinate to these three faculties is the enumeration of the passions by which they are actuated. *Noesis* or the notative passion is limited to epistemy. *Dianoia* or the noting of mathematical generalizations, from the comparison and measurement of sensuous facts, is limited to the geometric region. The functions of the cerebellum are divided. The upper portion *pistis* (faith), which has a discernment of real external objects, and consequently acquires knowledge, has faith in what it knows. The lower part *eikasia* (likeness), sees shadows and resemblances of objects indistinctly; and has no certainty whether they have or have not real being.*

Phren (mind) distinguishes the portion of the brain that is occupied about sensuous objects, from *episteme* which is occupied exclusively about ideal types, or perfect abstract generalizations.

EDUCATION.

Corresponding with the arrangement of the organs and the process of their structure described above, the mythologists adapted the successive stages of the educational curriculum. The one object aimed at throughout was the formation of habits. In childhood, youth and manhood, nothing was to be left to fortune. Education was to be

* The Polity of Plato, B. vi., c. xx, — Stallbaum's text,

conventional. But this conventionalism was based on the divine law, visible in and by its natural operations. In the first stage, that of the education of the aesthetic faculty of children, the habit was to be formed of choosing between the common good and the individual evil. In the second stage, that of educating the geometric faculty of youth, the habit was to be formed of measuring the relation of the particular to the universal. And, in the third stage, that of the education of the epistemetic faculty, in manhood, the habit of noting the invariability of the external ideal types. The course, however, contemplated from its commencement, was the energising of the epistemetic or highest faculty. In the earlier stages, every appliance was directed to this one great end. At the same time, each faculty should do its own work in accordance with its purpose; and not attempt to do the work of either of the other two faculties. This connection of each faculty with its particular work indicates the separate educational conditions required in each case.

Home, the cradle of the future citizen, has its pleasures, its duties and its responsibilities. Herein is the source of his future happiness or misery. On matrimonial selection on the part of the parents themselves, his organization is in a particular measure dependent. On the number of children in the family, compared with the means for their support, lies the chance of that organization being sufficiently or imperfectly developed; besides the contingency of accidental circumstances in connection with his mental training. It is fashionable to ridicule these considerations, as being beyond the scope of what is strictly educational. But there can be no greater mistake committed. The best evidence of which is the number of malformations, cripples, hunch-backs, deaf and dumb, insane, nervous and debilitated persons unnecessarily existing in every community; without including the swarms of paupers, and others incapacitated on account of their ignorance from earning an honest livelihood. On economical and pru-

dential considerations alone, the observance of material conditions is not to be overlooked. Hesiod, who may be regarded as an authority, allows one or, at most, two children in a family. Plato is authoritative on the limitation of children. And no less is Aristotle. But, as on this head, our subject precludes any consideration which is not limited to the means necessary to the educational development of the child, it is sufficient to point out how defective must be the mental training when the necessary conditions of food, clothing and shelter do not exist. To the political economist as well as to the educator, too many children is as great a misfortune as too much of any thing else; for in either case, excess precludes the possibility of legitimate control.

The object of the mythologist, however, did not permit of so narrow an economic consideration. He held that as the soul of every child is pure at birth, and though for a time existing in a latent state, it is capable of being energized, so as to fit it to control the acts of the body and, consequently, the passions from which those acts emanate. And, moreover, that it is the duty of the parent and of the state to provide the conditions by which such soul can be fitted. It was not considered sufficient to educate the cerebellum, by quickening the animal instinct; a practice too common in every age of the world; nor yet to cultivate metrical science exclusively for professional practice, apart from the higher considerations of humanity. The aesthetic faculty being subordinate to the geometric, and the geometric to the epistemetic; not only was it considered necessary that the order of development should be begun from the lowest and be directed upwards; but it was indispensable that the whole three faculties should be fully energized. As religion is the basis of morality, and morality is the basis of conduct, nothing less than a moral and religious education can enable any member of society to perform his moral and religious duties on the humanitarian ideal. Aristotle agrees with the mytholo-

gists, "that the money-getting life does violence to our natural inclinations." In consequence of this conception, they distinguished the epistemically educated by the term *charientes*, meaning those who are incarnations of the divine *charis*, an attribute of the common category, as may be seen on the chart. All those not so epistemically educated were stiled the many (*hoi polloi*). This conspicuous separation of the human family into two classes, on the basis of culture, demonstrates of what importance the energizing of epistemy was considered. With Socrates, all men are ignorant, who are incapable of suprasensuous conceptions; and accordingly he classes the sophists, literary men, scientists, orators, office-holders and office-seekers together, on the lower platform. Homer is no less discriminating; for what is the Iliad, if not a satire on human ignorance. Nor Aeschylus, for what is the Trilogry, else than a dramatic representation of human conduct directed by the aesthetic passions; conflicting; and followed, in all cases, by the inevitable nemesis, as the penalty of being ignorant of the suprasensuous. Thus, as the mythologists all testify, humanity is an exotic, not capable of being acclimated, before that the epistemic soil has been suitably fitted to receive it. Yet, humanity being the essence of morality and religion, it is the desideratum, the one thing necessary to transform the world from being a chaotic agglomeration of discord, into the paradisaic state which, notwithstanding, is the destined end of all human aspirations.

The application of mathematics to education, on the principle of the humanitarian idea, has been fully expounded by the ancient mythologists without distinction of country. The teachings of the Greeks are more familiar to us; but seeing that Greece derived its population, its language and its religion, whether esoteric or exoteric, from beyond the Euphrates, we are required to widen the sphere of observation so as to embrace, not only the Eastern cults, but all such as have been derived from

them ; and, though modified by distance and climate and political institutions, retain still the essential mythological elements which identify them as being derived from the same parent-stock. The Persian Vesta and Hindoo Vedas will continue sealed books to Europeans, so long as they continue to be examined by unmythological interpreters. As in the Platonic dialogues, so with these Eastern treasures, the truth is concealed under mythological verbal signs. They embody all the teaching necessary for understanding the means to be employed, logically and mathematically, for educating the three faculties so as to produce an intellect capable of discerning the beauty of the divine law. Their rule of moral conduct when contrasted with authorised national customs and institutions, is impressive. It is evident, therefor, that, to produce such a mythological intellect these cults have to be consulted, with the view of determining what the conditions are to which it is necessary to conform. Now what are these conditions ?

The symbols of language and grammar have to be fixed and determinate. To effect this, they must have external and invariable patterns. For example, the word cow signifies an animal of a particular kind, and horse signifies another kind of animal, differently formed. Now the one is not to be used to signify what is understood by the other. This seems an extreme case, because the two words refer to things that are different to the sight ; and, therefor, it may be said that such a confusion could not possibly occur. The objection is tenable on the ground that both animals are familiar to the sight, and their names equally so in the popular language. Notwithstanding, the case is not more extreme than what occurs in the use of words which represent thoughts and occurrences that are inappreciable to the senses. And, as it is in this latter case that the greatest and most frequent errors occur, it is to them the mathematical rules are chiefly applicable. The old Latin masters employed

appello to signify (I call). And because they did so, we are taught to do the same even at the present day. We are not permitted by our teachers to interpret the word properly ; and the proper interpretation, when attempted, is denounced as bad Latin. Now, in this case, we apply the mathematical rule, thus :

Appello=*ap*+*pello*.
Now, as *ap*=*to*,
and *pello*=*I put*,
therefore *appello*=*I put to*.

By this process every compound word in Latin, and in every other language, is to be interpreted. Otherwise the rule could not be mathematical. Again *incolo* is made synonymous with *inhabito* ; and in such manner, derived from such examples, very many important significations in the various European languages are misapplied. Errors of this nature are of less consequence when they occur with respect to words and things that are popularly so expressed. It is on questions involving the principles of law, of ethics, of science, of being and causation that right interpretation becomes indispensable. What can be more illogical than to say that reason is a faculty of the mind ; that a myth is a fable ; that epistemy means science ; that conscience is the moral sense. The primary signification is what determines the propriety of the definition. A verbal factor may have twenty secondary meanings ; but it is the primary meaning that is the criterion of its mathematical value. Therefore, to determine the rule by which to find the primary signification, in every conceivable case, is the first lesson to be learned by the mathematical student.

Because it is the most simple and, for this reason, the most easily understood, we shall begin our illustration with the numerals. The unit is the starting point. Two is the sign of two units, three of three units, and so on, But the verbs one, two, three, are arbitrary signs, conventionally adopted, and could have been used to carry

the significations of different values from what they actually do, had it been so decided at first. The same with the numerals 2 and 3 which, in like manner, have no intrinsic values. Not so with the unit, which is a mathematical point or number and, therefore, is inflexible. Thus :

$$\begin{array}{r}
 1=1 \\
 \left. \begin{array}{l} 1 \\ 1 \end{array} \right\} =2 \\
 \left. \begin{array}{l} 1 \\ 1 \\ 1 \end{array} \right\} =3 \\
 \hline
 \left. \begin{array}{l} 1 \\ 1 \\ 1 \\ 1 \\ 1 \end{array} \right\} =6=1+2+3=1+11+111
 \end{array}$$

Here, the figure 2 is equal to two units; and 3, to three units. That is, the figure 2 or 3 has to be resolved into two units $1+1$, or three units $1+1+1$, before its value can be determined. Take the case of two men of different countries and speaking different languages; one of whom proposes to trade with the other, two horses for two cows. A horse and a cow being shown, the articles of merchandise are clearly perceived. But when the number of each is stated, as in Sanskrit *dvau* and German *zwei*; the Hindoo not knowing the value of *zwei*, nor the German that of *dvau*, the number would have to be explained by holding up two fingers, or making two marks alongside of each other on a plane surface, as 11. Travellers and missionaries narrate how this is done among the aboriginal tribes in the uncivilized portions of the globe. The figure 1, as a unit, has the same value everywhere in all times and on all occasions. It is not a conventional value. It is a natural value. And it is by virtue of this natural value that it is mathematical; for nothing can be mathematical which is not natural. With the unit, then as a common measure of value, we have the following comparative results:—

Sanskrit	1—	{	ainan	11=	{	111=	{	treja, tri	
Greek			en					dvau	treis
Latin			unum					duo	tres
French			un					deux	trois
English			one					two	three
German	ein	tzwei	drei						

Now, if ainan = 1 = en
therefore " = "

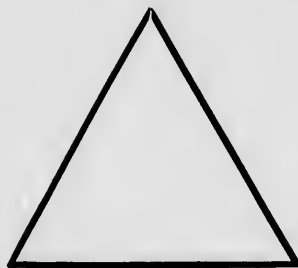
Here *ainan* is equal to 1, and *en* is equal to 1; and it is for this reason, and no other, that *ainan* is the equivalent of *en*; in conformity with the mathematical rule by which, *things that are equal to the same thing are equal to one another*.

What the student is required to distinguish here chiefly, is the difference between law and custom, the Greek *logos* and *nomos*, the Latin *lex* and *consuetudo*, the French *droit* and *coutume*, the German *gesetz* and *gebrauch*. Law means the divine law, or law of nature, which never changes. But custom, being national and political, and having no sanction beyond the national or popular will, is ever changing and unstable. The numeral unit 1 is by nature; but the verb (one) is not. Linear mathematics might be of great use if directed in this way to distinguish the eternal law from the inscribed diagram. In the collegiate institutes of our day, if not taught for use in professional business, linear mathematics has no ulterior object to serve beyond being that of a mental gymnastic. It was not so estimated by Aristotle, who says, "the carpenter and geometrician examine a right angle with different views; the one so far as it is useful for his work, while the other investigates its nature and properties for the purpose of finding the truth."* Plato, who was ever merciless towards the Sophists, ridicules, with the bitterest irony, this practice of amusing themselves with diagrams, in place of ascending to the universal laws, as the eternal patterns.† The

* Ethics, B. I. c. vii. 14.

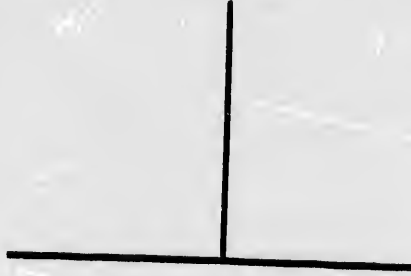
† Polty, B. VI. c. xx.

common use of arithmetic is not to huckster among merchandise. It was never so regarded by any mythologist. Much less is linear mathematics to be diverted from its legitimate use, which is the psychical conception of the higher laws by which angles, squares, cubes have proportions that are fixed and invariable; and, for that reason, is named the higher or psychical mathematics. There should be no mistake in distinguishing between the two departments; nor can any satisfactory cause be assigned, why psychical mathematics should not form the concluding discipline of the university course. Linear mathematics is conversant about the copies; psychical mathematics about the patterns. A few examples will illustrate this:

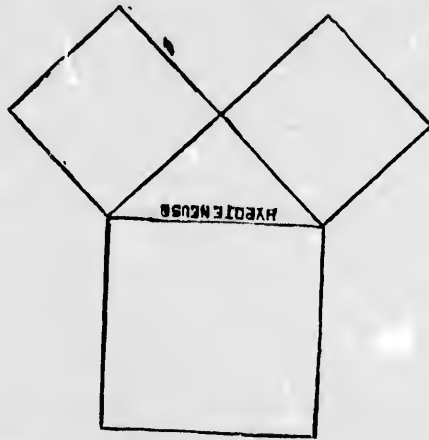


An equilateral triangle, such as here described, has three equal sides and three equal angles. Of which we are perfectly satisfied, when describing it on paper or in any other way. But whence comes the necessity that three equal sides must have three equal angles, and three equal angles must have three equal sides. Has it been so from all eternity, and shall it be so to all eternity? The answer is in the affirmative; because it is not possible to conceive the negative of the proposition stated. By this means, we get at the conception that the principle on which an equilateral triangle is constructed is natural and, therefor, is a law of nature. If variable it could not be that of an equilateral triangle or a natural law;

for all equilateral triangles and all natural laws are invariable.



Another principle of natural law is that, when a straight line, as above, is drawn perpendicular to another straight line, the angles on each side are right angles; which cannot vary, and can never vary from being right angles.



Again, by the above diagram, there is another natural law, that the square of the hypotenuse of a right angle triangle is equal to the squares of the other two sides; and it does not matter what the lengths of the other two sides may be, the proportions are in all cases the same. In a diagram, it may be possible to satisfy ourselves that our delineations and proportions are as exact as, with

comparatively clumsy instruments they can be made. But not that they can approach the exactness of the ideal. Still, it is not this difference of the perfect pattern from the imperfect copy that characterises the erroneous-ness of aesthetic interpretation. The error is chiefly in mistaking one thing for another of quite a different kind, between which there is no resemblance whatever; as of a fixed law for an ordinary custom; or the mistaking one faculty for another; or not knowing the difference of a primary from a secondary signification. As all the laws of nature are perfect and invariable, we are not to suppose that they could be altered without detriment to the integrity of their universal goodness. If made perfect, God could not alter his laws without making them imperfect. This is a logical inference that puts an end to the question of variability. An eternal principle has no resemblance to the fleeting and evanescent habits of the popular will. Moreover, the decrees of heaven are never altered. Otherwise they would be often wrong; which is not admissible. People who cannot comprehend what the natural law is, and therefore cannot conform to its requirements, are generally prone to blame the divine order, when they experience the nemesis that invariably follows the breach of the law. It is the business of no one to question the propriety of the divine law, or to affirm that it changes to conform to altered circumstances. This is an aesthetic blunder which we hear repeated every day of our lives; and which originates, as can be easily shown, in the misinterpretation of certain words ordinarily used, when descanting on the subject of the divine ordination.

By national usage, parliamentary statutes are called laws. So are the enactments of the civil and criminal courts, as well also as those of local municipalities. Here-in lies the confusion of imagining the laws of God to be like the usages of men. Every such statute, among the Greeks was named *nomos* (lot), meaning the lot or fortune

dependent on circumstances for the time being. And, this is what a political statute should be named and should signify ; because it is continually undergoing change, by repeal or renewal. At the same time, as the established polytheism assumed caprice to be a characteristic of the gods, the word *nomos* (lot), consistently applied to their actions as much as to those of mankind. Still *nomos*, being a consequence, good or bad, attending single acts or courses of conduct, can not be an efficient cause. It is only a consequence. The difference then is that, on the one hand, law means an efficient cause ; whereas, on the other, *nomos* signifies an effect. *Nomos* is dependent on preceding circumstances ; law, being independent of results, controls them.

But modern aestheticians are not satisfied to keep within the limits of the aesthetic faculty. They are not restrained by the defectiveness of sense from straining to reach at what is beyond the capacity of the faculty, of seeking to ascend from the known to the unknown. It is not enough to perceive the fixity of law from the evidences of exact scientific investigations, in so far as the scientific or geometric faculty, without epistemy, is able to accomplish. Their endeavor is to find the origin of the divine laws ; whether they ever had a beginning or were framed by a personal and supernatural cause. A course so unmythological and consequently unmathematical requires here some exposition, in order to be able to comprehend aright the false position which scientists and their opponents the theurgists both occupy.

It cannot be denied that the popular clamor about evolution and agnosticism grew out of the erroneous theurgic interpretation of nature. For the presupposition of a supernatural man-god could not fail to suggest the conception of a Being above and superior to sense. Had the scientists stopped at this conception, their position would have been unassailable. Their error was in proceeding beyond the limits of science, to prove that the

principle of evolution is the primary cause. An error that arose purely from the aesthetic misuse of the word *episteme*, and consequent misapprehension of the faculty to which the word is applicable. For, by putting *episteme* to stand for (science), as they interpret the word, they mistake the place of the faculty and consequently its function. A glance at the chart of the organization of brain shows that science is in the middle region, whereas epistemy is in the upper region.

What is God, is not an admissible question; because the finit cannot comprehend the infinit. It is sufficient to be conscious from the mythological proofs, that there is a God. The business of god-making by the theurgist and god-finding by the aesthetic scientist is an idle, useless and discreditable employment; which is attributable altogether to the ignorance of mythology and the misapplication of mathematics. When Hiero, king of Syracuse, asked the philosopher Simonides, what God was, the latter desired a day to consider the question. On the day following, he asked two days more. And, whenever he was called on for an answer, he dou ed the time. The king, surprised, demanded the reason for such procrastination. Simonides replied: "Because, the more I consider the question, the more obscure it seems." Also, in Hindoo philosophy, a son asks his father what Brahme is; and he is referred, by his father, to his own farther reflection for an answer. Plato, the interpreter of ancient mythology, says that, by the faculty of epistemy we perceive the truth; by the truth, the beauty of creation; that all created things partake of the good which, everywhere is the product of an unfathomable goodness that exists beyond ourselves and beyond the knowledge of this world. **THE CAUSE OF THAT GOODNESS, he says, IS A GOOD CAUSE—IS GOD.***

The ancient mythologists were evolutionists. But not

* Polity, B. VI., c. xix.

for the purpose of finding out God. And, as to the modern confusion about Gnostics and Agnostics, these names correspond with sophists and philosophers, as used by Socrates. The first, being those who did not know that they did not know; the second, those who knew that they did not know. Any doubt on this head can be quickly set at rest, by comparing the theurgy of the second dispensation inaugurated by the Jews, with the theurgy of the Athenian priests described by Plato.*

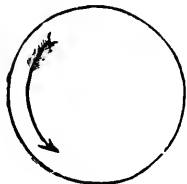
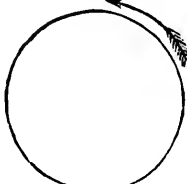
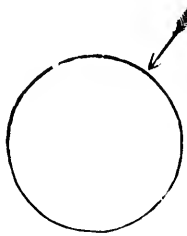
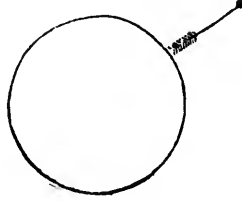
Evolution and agnosticism being thus disposed of proves, in so far, the absurd consequences that spring from the application of aesthetic interpretations to verbs that have suprasensuous significations; and illustrates the cause of the confusion attending a similar practice when interpreting the verbs (*law*) and *nomos* (lot or custom). The object of the queries in relation to the principle of the equilateral triangle, of the right angles, and of the equivalents of the square of the hypotenuse is limited to the durability of the principle, in order to arrive at the conception of the idea of the invariableness and therefor fixity of law. To question the source of the principle itself, would be to transcend the limit of the knowable. But a generalization of the knowable is perfectly legitimate. All, therefor, that is contemplated by the determination of a principle or law, is to distinguish mathematically, what is the rule for guidance from the aesthetic conceptions which when critically examined are not tenable.

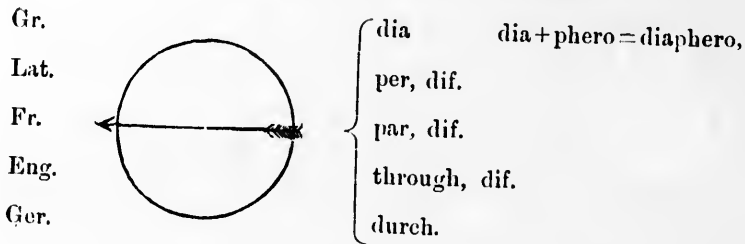
From the unit, and the fixity of the idea of law, as mathematical factors, we now go on to simple and compound words, in order to demonstrate that they also have mathematical values, and to describe the process by which these values are to be ascertained.

The Greek *phero*, from the Sanskrit *bhri*, of which every language has numerous synonymes, signifies pro-

* Polity, B. II., c. vi., vii., viii.

gression, as of the motion of an arrow. In the following examples, the arrow is seen bearing in, out, to, from, through. The rule is as before, namely: Things that are equal to the same thing are equal to one another.

Gr.		{	en	en + phero = enphero.
Lat.			in	in + fero = infero.
Fr.			en	en + fere = enfere.
Eng.			in	in + fer = infer.
Ger.			ein	ein + fähre = einführe.
Gr.		{	ex, ek	ex + phero = exphero.
Lat.			ex.	
Fr.			ex.	
Eng.			ex, out.	
Ger.			aus.	
Gr.		{	ana	ana + phero = anaphero.
Lat.			ad.	
Fr.			ad.	
Eng.			ad, at, to.	
Ger.			an, zu.	
Gr.		{	apo	apo + phero = apophero.
Lat.			ab.	
Fr.			ab.	
Eng.			ab, from.	
Ger.			ab.	



Now in the first diagram, the arrow is in the circle, and is the external pattern of what is signified by *in* of the several languages mentioned. So that the Gr. *en*, Lat. *in*, French *en*, Eng. *in*, and Ger. *ein* are equal to each other in signification, because each is equivalent to the arrow being situated in the circle. The other four diagrams are explicable in the same way.

Again, when equals are added to equals the products are equal. So *enphero* of the above is equal to *infero* = *enfere* = *infer* = *inführe*. And the other compounds in like manner. Again, by the same rule :—

Gr. ana + ballo = anaballo	}	Therefore, anaballo = appello = uppele = appeal = appellire.
Lat. ap + pello = appello		
Fr. ap + pele = appele		
Eng. ap + peal = appeal		
Ger. ap + pellire = appellire		

Again, when equals are taken from equals the remainders are equal, as :—

Gr. anaballo — ana = ballo	}	Therefore, ballo = pello = pele = peal = pellire.
Lat. appello — ap = pello		
Fr. appele — ap = pele		
Eng. appeal — ap = peal		
Ger. appellire — ap = pellire		

Again, when equals are taken from unequals the remainders are unequal, as :—

Eng. {	appello — pello = ap	}	Therefore, ap, ex, im, com, pro, are unequal.
	expello — pello = ex		
	impello — pello = im		
	compello — pello = com		
	propello — pello = pro		

In each of these examples, the verb is required to carry the meaning of the particular thing or action intended; and not ambiguously to express some other thing or action not intended. For this is the prevalent error of our time. Ambiguity is the prevailing error, not less in scientific and ethical subjects than in others less pretentious. Plato has emphasized most forcibly the rule, that the external pattern is the type for the signification. The truth of which cannot be too often repeated.

Now most words are derived from primitive roots of the older languages. In such case, care is required to discern and preserve the significations of these primitive roots not only in simple verbs, but in every simple constituent of the compounds. This is a branch of mathematics that has been neglected ever since usage, in the use of language, superseded the ancient mathematical rule. One example, here, may suffice; as follows:

Sanscrit.....schala.
Hebrewshale.
Greekschole.
Latinschola.
Frenchécole.
Englishschool.
Germanschule.

Having an eastern origin, this verb has the signification of the Hebrew *kl* or *kol*; namely, whole or perfect. Its derivatives abound in all modern languages. A school is, properly, a place for healing or making whole. The Athenian lyceum, academy and porch were schools, wherein the purpose and also the practice was to heal the body and the mind, by first healing the superior intellectual faculty. The Pythagorean society of Crotona too, was such a school. The men who frequented them were scholars, eminent in the higher spheres of thought. Aristotle's method of making whole was purely mathematical. The Sophists, on the contrary, taught by usage, and produced such specimens of their handy work as Alcibiades and Euthyphro. Moderns call their class-rooms schools.

But this is a misnomer. No place can be a school in which the healing faculty of the body and mind is not first made whole ; much less, where psychical mathematics is ignored. Usage was popular in the ancient mythological period of the world, as much as it has been ever since, and as it is now ; but it was branded as sophistical, no mathematician or astronomer of Greece can be named who was not hostile to the authorized practice of teaching by usage. This is one specimen of the unmathematical and, therefor, wrong meaning, and consequently wrong use of a familiar word ; so used wrongly, in our text books, and by the authors of those books as well as by those who teach from them.

Many words are indigenious or not derived from a foreign stock. In which case the necessity is more imperative of being certain that the external pattern is what is signified by the verb. The following is an example of six synonymous verbs, with their external pattern ; which pattern must necessarily be expressed in each.

Sans.
Gr.
Lat.
Fr.
Eng.
Ger.



{ aswa.
hippos.
equus.
cheval.
horse.
pferd.

A few examples of the popular errors of our lexicons and dictionaries may be profitably exhibited, before going on to the graver irregularities of professional scholarship.

Gr.	{ mathetes = a learner	Fr.	{ appelle = I call.
	{ dialogos = conversation.		{ enfant = a child.
	{ episteme = knowledge.		{ cependant = nevertheless.
	{ arete = virtue.		{ davantage = more.
	{ aidos = shame.		{ rien = nothing.
	{ sophrosune = temperance.		{ supplice = { punishment, { torture.
Lat.	{ exercitus = a host	Eng.	{ subdue = vanquish.
	{ impero = I command.		{ ask = a request.
	{ populor = I plunder		{ intellect = understanding
	{ quaero = I ask, seek.		{ knowledge = science.
	{ sequor = I follow.		{ philosophy = love of wisdom.
	{ praeter = except,		{ idea = { what is seen, a { form.

By resolving these compounds into their simple constituents, in conformity with the rule explained on page 14, the erroneousness of the above definitions will at once become apparent.

There being two kinds of thought, two ways of expression, and consequently two languages, namely, the aesthetic and the mathematical, it was unavoidable that there should be two interpretations. One for the public whose occupations and conceptions were exclusively materialistic and sensuous; and another, for the comparatively select few who were capable of looking beyond their immediate surroundings, for the causes of natural and social phenomena. At the same time, it was unavoidable that these two interpretations should represent, apparently, two different mediums for the inculcation of ethics; one social, the other natural; namely, theurgy and religion. Theurgy, the elder medium of the two, was readily available for the civilization of the rude populations of the globe; for, without it, such civilization would have been impracticable. In the order of providence it was a wise and seasonable provision, and falls in with the universal fitness of things. That there should be interpreters of God's will to those who cannot interpret the signs for themselves is universally conceded. And that such has been the case from time immemorial in every savage and every civilized community is undeniable. So far there is no difficulty in dealing with theurgy as a divine appointment. And accordingly the aesthetic interpretation is proper, if limited to theurgic necessities; but not beyond. Religion, being in a higher sphere, interprets itself. It stands in no need of aesthetic mediators. Nevertheless, it has not only no objection to associate with theurgy in the ordinances of public worship, but contends for the union of the two in all national and political institutions. In this, agreement is visible, the harmony of the epistemic or highest faculty of the brain with the aesthetic or lowest faculty, when each keeps within its own sphere, and each

does its own work without encroaching on the work of the other. For it is in this mutual reservation that justice consists. And, where there is justice, harmony is the sure result.

The difficulty is with science. Its geometric faculty being situated between the lowest and highest faculties of the brain, it is therefore the connecting link between the two; and, for this reason, partakes in some measure of the characteristics of each. Its rays of divine light, derived from the study of the natural laws, tend directly to the rejection, first of aesthetics, second of the aesthetic interpretation, and third of theurgy. On the other hand, its generalizations being necessarily imperfect, disqualifies science from perceiving how multiplicity is in unity, and what is the common end of life. What follows is, that men of science, who form a numerous, intelligent and influential part of the population of every country, occupy an isolated position with respect to theurgy on the one hand, and to religion on the other. This should not be. The cause is discernible. And, for this reason, the remedy is not difficult to find. Had the two interpretations been preserved, as they existed among the ancients, there would have been no cause to regret the hostile attitude presented by science to theurgy and religion. And until scientific men shall be educated mathematically as they were educated in ancient times, there can be no hope of a termination to the existing estrangement. Aesthetic interpretation to the exclusion of mathematical interpretation is, demonstrably, what is at fault. This is what has now to be shown. At the same time let it be observed that the exclusively commercial bent given to the progress of science, in modern times, aggravates tenfold the evils occasioned by the aesthetic teaching in the colleges and universities.

Every scientist and artist ought to be a seeker after truth. Not what is aesthetically taught to be truth, but what in reality is the truth. In place of this he has been

taught in the college from which he has graduated that *myth* signifies *falsehood*, and mythology signifies *fabulous doctrines about the heathen gods*. Now, when he comes afterwards to discover that *myth*, being a compound of *meson* and *titheme*, signifies what is *mathematical* and therefore what is true; and that *mythology* signifies *the light or logic of mathematics*, his faith in collegiate teaching is sure to become considerably modified. And a repetition of similar discoveries must soon incline him to distrust his text books, his teacher and all that he had ever learned.

In an allegory, the historical narrative is a romance or may be such. It is the metaphor that bears the truth. And there could be no mistake on this head if the mathematical rule for interpretation, already explained, had been applied. A general remark here may be sufficient, that beyond sensuous objects, carrying sensuous meanings, no popular interpretations are reliable, and scarcely can they be said to be in any measure correct; because the Greek rules for the interpretation of suprasensuous terms were lost, shortly before or at the time of the conquest of Greece by the Romans.

From the writings of the two principal interpreters of Grecian learning, Plato and Aristotle, the following seems to have been the scheme for the interpretation of suprasensuous terms during the age of Homer and Hesiod:—

PHONIC SEMAIC ROOTS.

	<i>Modes of Expression.</i>	<i>Greek.</i>	<i>Other European Languages.</i>	<i>Significations.</i>
Homo-Semaic	Labial	$\beta, \pi, \varphi, \psi,$ $b, p, ph, ps.$	$f, v, w.$	Bearing, becoming, making.
	Lingual	$\delta, \tau, \theta, \zeta,$ $d, t, th, z.$		Fixity.
	Guttural	$\gamma, \kappa, \xi, \chi, \epsilon,$ $g, k, x, ki, h.$	$h, c, q, j.$	Holding.

	Modes of Expression.	Greek.	Other European Languages.	Significations.
Semaic	Palatal	λ, l.		End or aim.
	do	ρ, r.		Taking into (motion).
	Nasal	μ, m.		Mean (middle).
	do	ν, n.		Being.
	Dental	σ, s.		Commutes with the gutturals.

1. The lingual, the palatal *l*, and the two nasals, are the chief factors for the suprasensuous significations. Fixity denotes perpetuity, without change, end or aim, the perfect end which is fixed and unchangeable; the mean, what is not too much nor too little; and being, which has no limit in duration of time to fixity, to the end or aim, or to the mean state. A common characteristic of these is, that each partakes of the autologic properties of the others.

2. The gutturals have a suprasensuous signification, only when fixity, end or aim, the mean and being, are implied; as, in *psuke* (soul), *karis* (grace), *arke* (first or chief), *Hera* (harmoniser).

3. These suprasensuous roots, as may be seen, are factors of the common category.

4. When duplicates of semaic or homo-semaic sounds or letters occur in the same simple word, one is neutral both in sound and signification.

Thus, single semaic sounds function as words. And, as Plato teaches in the *Cratylus*, single words function as whole sentences. For example, *telos* is (the end that is fixed) when read backwards; but, when read forwards, it is (the fixed end). *Meson* (held in the mean); that is,

in the right measure, being neither in excess nor deficiency, but the medium.

The power of single sounds and their commutations may be illustrated on the words which stand for the idea of whole, pure and perfect:—

Ser. Hailis	hl	} The sun ; the whole, pure and perfect object of adoration			
Gr. Helios,	hl				
Lat. Sol,	sl				
Ser. Solnze,	sl				
Goth. Sautil,	sl				
Gr. Hellas,	hl	—The people of the sun ; being whole, pure and perfect.			
Eng. Celts,	cl	do	do	do	
Eng. Gaels,	gl	do	do	do	
Eng. Selaves,	sl	do	do	do	
Gr. Kalos,	kl	—Whatever is whole, pure and perfect.			
Eng. Holy,	hl	do	do	do	
Eng. Health,	hl	—The state of being whole, pure and perfect.			
Lat. Coelum,	cl	} Heaven ; the whole and pure place, for the wholly and purely good.			
Fr. Ciel,	cl				
Gr. Helikon,	hl	—A mountain sacred to Phœbus Apollo, which is the name of the sun.			
Heb. Sheol,	sl	} Hell ; where the imperfect are healed and made whole.			
Eng. Hell,	hl				
Ger. Hölle,	hl				
Ser. Schala,	sl	} School ;	do	do	do
Heb. Shale,	sl				
Gr. Schole,	sl				
Lat. Schola,	sl				
Fr. Ecole,	cl				
Eng. School	sl				
Ger. Schule	sl				
Heb. Kele,	kl	} Prison ;	do	do	do
Eng. Jail,	jl				
Gr. Kolasis,	kl	—Healing, making whole, pure and perfect.			
Gr. Kalis,	kl	—Whole or pure wine, unmixed.			
Gr. Kolos,	kl	do	do	bile	do
Gr. Kulos,	kl	—The lacteal secretion, which contains the whole, perfect and pure nutriment for the whole body.			
Gr. Kalux,	kl	} The capsule in plants, or ovary in animals, which contains the whole formative germ of the plant or animal to be developed therefrom.			
Lat. Cella,	cl				
Lat. Colare,	cl	—And <i>colere</i> . To cultivate, to make whole, pure and perfect.			
Eng. Cull,	cl	—To separate or pick out what is whole.			
Gr. Selas,	sl	—Brightness, shining, splendor, whole and pure.			
Gr. Selene,	sl	—The moon ;	do	do	do

Ger. Hell,	hl—Clear, bright ; that is, whole and pure.
Eng. Soul,	sl)
Ger. Seel,	sl } The whole, pure and perfect guide.
Eng. Solace,	sl—To make whole.
Lat. Cella,	cl)
Eng. Cellar,	cl } Where things are kept whole.
Heb. Kol,	kl—All, whole, entire.

In these examples, read backwards, the end is what is held in view ; for hl signifies the end that is held. Now, when the guttural and lingual are transposed, as lh, and still read backwards, the meaning is, what holds the end in view. In the former case, the end is held in view ; in the latter, the holding in view is what is signified. There is a wide difference between the end held, and holding the end ; or an object seen, and seeing an object. The sun is the giver of light, light is the gift given, to which we hold, because it is a sensuous guide. God is the giver of intellectual light, which those hold, to whom it is given, because it is the only safe moral guide. Hl, of the example above, stands for the sun or giver of light ; lh, in the following illustrations, for the sensuous or intellectual light that is given :—

Ser. Loka,	lk)	} The light of the sun.
Lat. } Lux,	lx	
Lat. } Lucco,	lc	
Scl. Luc,	lc	
Ger. Licht,	lc	
Eng. Light,	lg	
Ser. Lokhan,	lk—To look, to hold to the light.	
Gr. Logos,	lg—The epistemetic light of the soul, in its application to ethics.	
Lat. Lex,	lx—The epistemetic light of the soul, in its application to the natural law.	
Lat. { Lego,	lg	} What communicates light to the soul.
Lat. { Lectio,	lc	
Swed. Lexa,	lx	
Ger. Lesen,	ls	
Fr. Leçon,	lc	
Eng. Lesson,	ls	
Eng. Lecture,	lc	

Although the phonic-semaic roots were intended for the

interpretation of suprasensuous terms, it entered, notwithstanding, largely, into the nomenclature of sensuous things. In which case, without being perceived, much confusion was occasioned in not being able to distinguish the difference of the primary from the secondary meanings; as the following examples, on the verb (common), will show:—

Ser. Sam,	sm—Forewards (holding the mean); backwards (the mean that is held), together.				
Gr.	{ Sum,	sm	dc	do	do
	{ Xum,	xm	do	do	do
	{ Hama,	hm	do	do	do
	{ Homaios,	hm	do	do	do
Lat.	{ Homos,	hm	do	do	do
	{ Com,	cm	do	do	do
	{ Cum,	cm	do	do	do
	{ Sim,	sm	do	do	do
Goth.	{ Sym,	sm	do	do	do
	{ Communis,	cm	do	do	do
	{ Gamana,	gm	do	do	do
Ger.	{ Gemein,	gm	do	do	do
	{ Sammen,	sm	do	do	do
	{ Sam,	sm	do	do	do
Eng.	{ Sim,	sm	do	do	do
	{ Sym,	sm	do	do	do
	{ Com,	cm	do	do	do
	{ Common,	cm	do	do	do

Another example of the same gutturals and nasal, as follows:—

Gr.	{ Gamos,	gm—(Marriage); the middle, between a single and wedded life.
	{ Koma,	km—(Coma); a middle state between wakefulness and sleep.
	{ Sema,	sm—(Sign); the mean symbol, between an external thing or act and the mind which perceives it.
	{ Soma,	sm—(the body); the mean between the soul and the external world.
	{ Skema,	sm—(scheme or plan); which holds between a purpose and its execution.
Lat.	{ Humanus,	hm—(human); the mean, or equality of conditions among mankind.
	{ Homo,	hm—one of the community.

Eng.	{	Homely,	hm—what is not gaudy, but of a common cast, customary.
		Home,	hm—the place of resort, where the members of the family all meet in common.
Lat.		Humidus,	hm—holding a middle state of moisture, between the dry and the wet.
Lat.	{	Humus,	hm—earth in the said middle state.
		Chum,	cm—one whose social tastes and pleasures are enjoyed in common with those of a companion.
		Same,	sm—equality between things.
		Seem,	sm—likeness between things and the previous conception of them.
		Sum,	sm—equality between the whole and the aggregate of its parts.
Eng.	{	Game,	gm—animals between the tame and fierce.
		Chime,	cm—the harmony or mean correspondence of musical sounds.
		Sham,	sm—a deceptive appearance between the true and false, in which the false is made to appear as true.
		Shame,	sm—the feeling of being detected in the perpetration of a sham. A feeling of guilt and fear of detection.

This variableness of the meaning, consequent on the transposition of the same roots, occurs in words wherein the roots carry primary significations; as of the guttural and lingual in the Gr. *agathos* (good), the g. d. of which imply fixity of hold; whereas, if transposed, as d. s. in *deus* (deity), the signification is changed to that of a fixed hold. Mythologically, the relation of *agathos* to *deus* is seemingly that of a universal to a particular. Both words carry good significations, only *deus* has seemingly more of personality. But, from the definition of their elements, it is made manifest that the Northern tribes, without losing the Eastern universal signification of *agathos*, had brought with them also the personal one as (god), and bearing the same import as the *deus* of the Eastern races that settled in Southern Europe. As universal, and therefor on the common category, both *agathos* and *deus* signify good. It is only, when in the dividual category, that they take a contrary signification, in consequence of being then wrongly applied. So the Gr. *dis*, *deus*, *zeus*, *theos*;

Lat. *deus* and Scr. *deus* generally denote an allegorical species of demiourgos or anthropomorphism existing outside of nature, the *deus ex machina*, the maker of the natural laws and controller of all natural operations; a personal despot, ruling by an arbitrary will. This use of the allegory is elsewhere explained, as judiciously applicable to states of society in which the ordinary mind is not capable of appreciating the justice and goodness inseparably associated with the law of necessity.

The Gr. *Tuke* (what has a fixed hold) means what happens by necessity; and therefore, it imports necessity. Gr. *Dike* (justice), is doing properly what accords with the universal law of necessity, in the correspondence of conditions and consequents. It is the truly fixed hold. When an animal eats food which is calculated to reproduce the parts of its body that, by exertion, have been wasted, the correspondence between the aptitude of the food and the purpose it serves is the justice of the correspondence. On the other hand, if unsuitable food is eaten and produces internal disorder, and the effect is painful and injurious, the correspondence between the cause and effect is still perfectly just. So that justice is the correspondence which happens by the fixed law of necessity. Pain is considered an evil by those who are not able to interpret its purpose. But once it is perceived to be a monitor, it then becomes a blessing. All other supposed evils are of the same nature. The object of education is to make their usefulness manifest. A burnt child dreads fire. When, in a state, a citizen, reared by rote, is allowed to grow up without a psychical conception of the inexorable nature of the divine law, and he becomes a burglar and withal a murderer, his criminal acts are, in reality, beneficent monitors. But the state cannot or will not so regard them. It is unable to perceive that every irregularity, however small or whatever the magnitude, is an infallible indicator of the true remedy for its removal.

The Gr. *deiko* or *tasso* (I hold fixedly) is a form that has many representatives, bearing secondary significations; such as in Lat. *doceo*, *dico*, *duco*, *taxo*, *taceo*; and in Eng. token, teach, tax, tuck, tack, touch, take, tug, tight, tie, thick, touch, with equivalents in most other languages. Many Sanscrit words have come down to us through the Latin or Slavonic; in which case, they are to be accepted as equivalents of Greek synonyms somewhat differently constructed; such as the Lat. *sedeo*, Goth. *sitan*, Eng. *sit*, from Ser. *sad*; the Greek of which is *istemi* or *stao*.

A lingual with the nasal, as *dm*, *lm*, or *zm*, implies fixed measure, as in Gr. *damao*, Lat. *domo*, Ger. *zahme*, Eng. I tame, which denote the bringing of an animal, a man or a tribe, formerly fierce and ungovernable, into subjection to authority. Of a family, Lat. *dominus* is the male tamer; *domina* is the female tamer; and *domus* is the tamery. Of a nation, Lat. *dominator*, *dominatrix*, *dominium*. Deem and doom imply the one, a fixed measure of thought, the other a fixed measure of judgment. Demon, the genius of Socrates, is a spirit intermediate between man and God. He is the Hermes of mythology. Incarnated, he becomes a Christ, as in the Gautama of the Buddhists and the Jesus of Judaism. When the order of these roots is transposed, the primary signification becomes changed. It is no longer a measure that is fixed; or measurer that is a fixer, as in tamer or demon. But it is a fixity in measure; as a myth, the true part of an allegory, of which the other part unfixed by measure may be false. Gr. *mathetes* is one whose fixity of belief is in measure; and, therefore, not capable of change. Gr. *manthano* (I fix in the mean) is, by the translators, interpreted (I understand). In combining the nasal *n*, care has to be taken in distinguishing the *n* of the Gr. *on* (being), from the *n* of the Gr. *ion* (not being). For *on* signifies incessant and invariable being; whereas *ion* is variable and therefore signifies properly (bearing). The *n* of *on*,

combined with *m*, signifies the measure of invariable being, as in *nemesis* (the measure of invariable being between conditions and their consequents). A man's lot in life which corresponds with his antecedents of character and conduct, is a *nemesis*. If the antecedents have been good, the *nemesis* will be good; but, if the antecedents have been bad, the *nemesis* will be bad. The Gr. *onoma* (a name) is a compound of *on* (being) and *homos* (same), signifying the same measure of being in the representative word as in the object for which the word stands. A name, then, unless it represents the perfectly pure being is not the real name. A vocal or grammatical sign may be a word and, as such, may stand for any phenomenon. But nothing can be a name which is not mathematically so. For, as a compound of *on* (the being of *einai*) and *m* (measure), a name must represent the reality, essence or notion that never changes. In social intercourse, words are called names from the habit of thinking, acting and speaking in relation to sensuous objects. But in dialectic, habit in such relation is absolutely excluded; for truth, which is the foundation of pure ethics, demands mathematical exactness. A name of a suprasensuous object is not the expression of a number of vocal sounds, nor yet of a number of letters, unaccompanied by the signification which the original inventor of the name intended it should convey. The sounds and letters are the sensuous parts. The psychological notion is the myth. This myth is found by the dialectical process of derivation from the thing intended, in the original language or, at least, from the oldest language to which it can be traced. The errors occasioned by the non-observance of this rule are incalculable. Of which we have examples in such names as *muthos*, *daimon*, *episteme* and *philosophia*; in the interpretation of which, lexicographers make them to signify the very opposite of their true significations.

As *n* of *ienai* (to bear) has a different and secondary signification from *n* of *einai* (to be), its combination with

m is to be distinguished as different altogether from that of the preceding examples. Accordingly, n of *ienai* with m, as in *nomos*, signifies properly the measure of what is transpiring. *Nomos*, the variable decree of society, is opposed to *logos*, the fixed law of nature. The difference is expressed in the permanency or variableness of the vocal roots. The decrees of society, being necessarily individual, are accordingly at variance with what is right; and, on this account, are unjust. So *nemesis* is the consequent or lot of the measure that is transpiring or has transpired. It is the issue of the individual category. And, wherever employed by Homer, Hesiod, Aeschylus and other Greek dialecticians, it carries a individual meaning.

In transposing n of *ienai* with m, as in *maino* and *mnao*, the meaning is, being in measure transitively. *Mneme* or *mnesis* (memory) is, being in the middle between the inception and extinction of a mental eidea for the time being; that is between knowledge and forgetfulness. *Maino*, on the other hand, being in the middle between the individual and common categories; as *Eros*, on the dialectical line of *Hermes*. *Mania* from *maino*, is the frenzy or madness of the philosophical nature, in its struggle to free itself from the fetters of individualism.* Whoever is in this state is sure to be regarded, by the populace, as a person of unsound mind, eccentric and to some extent a madman. Socrates was so regarded by the Athenians. Even now, men of erudition do not scruple to ridicule Plato, as a romancer and fool; and his system, as eutopian. Homer and Hesiod have escaped; the one for having been caricatured a heroic poet, and the other a fabulist. Two characters not supposed to have been tainted with transcendental hallucinations. When, however, it is understood that the philosophical *mania* is a withdrawal from the conventionalities of a vicious

The Phaedrus of Plato.

state of society, in order to be able to conform to the requirements of the divine laws ; and thereby to promote the universal adoption of humanising agencies ; such mistaken imputations cease to be regarded otherwise than as derogatory and unbecoming. The *mania* so minutely described in the Phaedrus and other Dialogues is shown to be a process of regeneration, from ignorance to wisdom ; a middle and transitionary state, from vice to virtue. Thus memory and *mania* are two middle states. One, between the inception and extinction of ideas. The other, the transition state between the dividual and common categories.

From the incessant continuity of *on* (being), its function is that of an equation ; and, consequently, through all its modes, the principal of the theme is implied in the principal of the predication. It makes no difference whether we say $1+1=2$; or $1+1$ are 2. Nor that the Gr. *eimi*=Lat. *sum* ; or *eimi* is *sum*. The sign of the equation is the same either as =, or as (are) or (is). The sign = is a conjunction, and so is (are) or (is). Therefore, when the principal of the theme is joined to the principal of the predication by the sign = or by a word of being, the same thing is signified. The mathematical import of the word of being is, thus, determined. So that (the man is dead) signifies (the man is a dead man) ; (the man being dead) signifies (the man being a dead man). (Being) requires, thus, the principal of the predication to be the same as the principal of the theme, as much as (is) or (are). Where there is a difference it is not in the signification, but in the distinction of a phrase from a sentence. A sentence having a personal conjunction ; whereas the phrase has an explicative of which the principal is in the theme. Xenophon says : " Clearchus, taking the gold, created an army. Here, " Clearchus collected an army " is a sentence ; and " Clearchus taking the gold " is a phrase. He says again : " The soldiers, being in great hopes, held well * *." Here again,

(soldiers) is the theme for the sentence and also for the inclosed phrase, while the equation (being) requires the repetition of the same theme; as, the soldiers being soldiers in great hopes.

It may not be out of place to notice a most absurd practice which has crept into the English literature, in the use of the conjunction and explicative to express a passive action. "It is being prepared," "it is being issued," "the house is being built," are now general forms of expression. Their falacy is made evident by noting the difference of time of the conjunction and of the explicative. "Prepared," "issued," and "built," are passive explicatives. They denote actions perfected. Therefor, "is prepared," "is issued," and "is built," denote perfected actions with reference to the present time. "Being prepared," "being issued," and "being built," also perfected actions with reference to the present time. The combination "is being" does not alter the time of the explicative; for "is built" and "being built" indicate equally not only the past time but the completion of the act. This anomaly arises from the absence of a passive form for the conjugations. A similar anomaly exists in the French. It would be much more rational to correct the error by adopting the Greek, Latin or German model, than to aggravate the error by a different conventional practice that is equally untenable.

What is intended to be said, is that it becomes prepared or comes to be prepared; it becomes issued or comes to be issued; the house becomes built or comes to be built. "Becomes" is equivalent to "comes to be." This is the signification in the original Greek, Latin and German. Why not the same in the derived English. Let it be observed, at the same time, in order to bar the device of irrational criticism, that "comes" of the compound "becomes" is from Gothic and Teutonic words synonymous with the Lat. *commeo* (I bear together) and Gr. *suniami* (I bear together). So that "it comes to be prepared,"

“it comes to be issued,” “the house comes to be built,” is the ultimate resolution of each expression ; in which, the present time of speaking, the present and future progress of the act, and the ultimate future end of the act are specified seriatim in the most explicit manner.

Such errors, notwithstanding that they are numerous and flagrant, from having become habitual, escape criticism. A few only of the secondary significations has been noticed. The number, however, of wrong derivations is legion. They abound in every language. A fact that exhibits the folly of giving so many arbitrary meanings to the same word, in place of holding fast to the primary significations. Herein is a forcible example of the wisdom of the ancient method, when contrasted with the bewildering modern practice of assuming so many contradictory significations, when no differences exist.

A scientist or artist, as has been said, when he becomes aware, to some extent, of the erroneousness of the European nomenclatures, more particularly of verbs intended to represent scientific and artistic ideas, will certainly distrust what he had been taught to respect as rules for his guidance afterwards. But what will be the result, when describing the suprasensuous conception of *Zeus*, he encounters that of a Dantian monster, reeking with fire and brimstone ; and ruling by a despotic and arbitrary will. Such a theurgic conception produces scepticism ; against which there is no longer any safeguard, and the suprasensuous interpretation is ignored. Xenophanes of Elea referring to the aesthetic conceptions of the Supreme Being, says : “Men fashion their gods after their own likeness.” In confirmation of this, he said : “The Ethiopians represent their gods with flat noses and of a black hue ; while the Thracians, on the contrary, give theirs blue eyes and a ruddy complexion : and generally every people make their gods to resemble themselves.” Which gave occasion to Voltaire to remark that : “If a (man) god did not exist, it would be necessary to invent one.”

Now science and art protest alike against such a conception. However proper and necessary aesthetic interpretation and theurgy may be in their proper spheres, it is too much to expect any intelligent man to be satisfied to see religion saddled and degraded, by having to carry theurgy on its back. The present isolation of scientists from religion, however unfortunate, cannot be avoided except by the adoption of the two interpretations. There can not be two rational opinions on this head. In the meantime, the primary signification of almost every word of the ancient wisdom is travestied. In place of being scholars, we are *litterateurs*. We nurse a false and vicious conventionalism in the universities, in the church and in the national reputation.

This brings us to the all important subject of Scriptural interpretation, which has agitated the European mind during the period of eighteen centuries, with no satisfactory result. The only test yet applied being the opinion of the majority. Even in the recent revision of the New Testament, this was the rule applied; the same that was applied by the great council at Constantinople, in the year 325 of our era. Now the view among the ancient mathematicians was, that majorities are never right; and, if stated candidly, no modern of much experience can say otherwise than that by the testimony of our own times majorities are always wrong. Hippomachus, an ancient musician of Athens, severely rebuked one of his pupils, because he was praised by the multitude, observing that it was the greatest proof of his musical incapacity and ignorance. And Phocion, making a remark, in one of his addresses, that was received with applause, turned to his friend and said: "Have I inadvertently let some bad thing slip from me?" But Pericles, who relied on majorities for the success of his political schemes, when he had occasion to speak in public, always addressed a prayer to the popular gods, that not a word might fall from him disagreeable to the people. Now concerning the Revised

Edition, it has the misfortune of having been sanctioned, as agreed on, by at least a two-thirds majority, which circumstance, of itself, is sufficient to incur the disapprobation of every scholar; more particularly if the majority of the revisers trusted to the existing Greek versions, in consequence of their inability to read either of the three oldest manuscripts in the old and difficult verbal characters in which these manuscripts are written.

Of the two interpretations, the aesthetic and mathematical, one is for the use of the aesthetic faculty; the other, for the epistemic. Let this distinction be clearly understood. The missionaries who operate in Africa, make use properly, of the first; but among educated Hindoos, the latter only would be available. In civilized communities the same arrangement should be observed; for there is no satisfactory reason why the two classes of faculties should not be distinguished at home as well as that they should be distinguished abroad. Every scholarly Orientalist, be he Chinese, Japanese, Persian or Hindoo, holds on by the two interpretations. A fact which our missionaries do not seem to know, and, by their experience, seem not to be capable of being taught. This explains the reason why educated Hindoos while they ridicule our shortcomings in this respect, now threaten to send missionaries to Europe to instruct us on the propriety and necessity of adopting the two interpretations.

It is not admissible to say that the two interpretations could not exist along side of each other, distinct and without confusion. For while the epistemic interpretation continued to be beyond the scope of the aesthetist, he would be inclined to regard the suprasensuous as a transcendental and unmeaning folly. And such being the case, as it certainly would be, nothing could induce him to renounce the historical narrative of the allegory, which costs no trouble to comprehend, for the metaphor which must remain beyond his capacity, until by education and study he can be made to perceive it. Objection might as well

be made against the teaching of astronomy which is intellectual, on the ground that it would undermine the faith of the uneducated in the popular belief of the Mosaic account of the creation. But it cannot be said that intellectual astronomy has affected the popular belief in any country or in any large city. The most conclusive evidence, however, against the possibility of such a result is the fact, that in the Eastern countries the two interpretations have been perpetuated, from time immemorial, along side of each other with the best results.

The tendency of the cultivation of the higher faculty is to elevate the intellectual status of the people and consequently the national reputation. Its object being to overcome the animalism of our nature, it ought to be regarded as a jewel of great price, instead of being frowned upon as it is liable to be, by those who ought to be disinterested enough to welcome its influence, as a moral and religious agency of marvelous power. It has besides, another advantage equally desirable, namely, the elevation of the educational capacity of the clergy. This is a most important consideration. It is a well ascertained fact that the mental status of the clergy stands in a corresponding relation to the mental status of the people among whom they minister and conduct the public worship. The mythologists stigmatized the conduct of the Athenian priests, on this ground. And we read, that at the time of the Protestant revolution, few of the clergy were able to read the Scriptures. The reason of which, no doubt, was that learning was not in requisition; and there existed no stimulus to move the contented ignorance and apathy that characterized the great body of the clergy at that time. Agreeing with Talnage, that pulpit sensationalism is better than pulpit stupidity; still, there is no necessity for either. Learning commands respect, from the untutored as well as from the educated. But, above all, the clergy ought to be sufficiently educated to interpret the words of the sacred text, which it is their

office to expound. And this is the potent reason why they should be masters of the two interpretations. However necessary and proper it is to hold on to the use of the historical narrative in the ministrations of the church, there are many intelligent communicants, who cannot suffer to hear the doctrine of hell and eternal punishment emphasised beyond what is required for its theurgic purpose; for they are conscious within themselves that goodness cannot be the cause of evil. To the words of the text they have no objection. But to the interpretation placed on those words, from the pulpit, they judge what the conception of it is in the mind of the officiating clergyman, by the nature and manner of his exposition of the doctrine. If the allegorical requisites are retained and exhibited, and both the historical and metaphorical aspects are presented, as required by the rule in such case provided, the impression is satisfactory. But how can such a treatment of the subject be possible, if both interpretations are not admissible, and form no part of the theological discipline in the college or university course.

Aristotle who, though not a mythologist, is a master of the definition of verbs, agrees with the mythologists on the primary signification of *kolasis*. A word which the Sophists applied to mean the vengeance of the gods,* and a meaning which it still continues to carry. When Aristotle says: "*Kolaseis* (healings) are generated through the action of pleasures and pains, which are certain remedies," it is evident that he signifies the pleasures and pains to be the remedies which produce the healings. As explained on another page, the Semaic roots of *kolasis*, derived from the Eastern languages, are k and l, which signify whole. Both with Aristotle and Plato, it is invariably used with this meaning; though in satyrising the Sophists, as in the case of Protagoras, Plato represents that prince of aesthetists to mean by it the vengeance of

* Nicomachean Ethics, B. II. c iii. 4.

the gods. But this is done for the express purpose of bringing the discriminating faculties of the Sophists into disrepute. A collateral error occurs with respect to the English verb punish, which comes from the Sanscrit and signifies pure, and is allied to the Greek *pur*, which means fire, the pure element and purifier of all else. Nevertheless, when used allegorically in Scriptural interpretation, punishment should be preserved in its popular and aesthetic sense, while healing should be its epistemetic signification. The two interpretations should be thus retained, because there are two classes of persons and two grades of faculties to be operated on and influenced.

Timoria (esteem or honor), another verb erroneously used, has also two interpretations which, for the same reason, ought to be preserved. Many such Scriptural terms occur, wherein the true purport is lost, unless so treated. Otherwise, no reliance can be placed on the preservation of the text from the most damaging criticism. From all which considerations, it is obvious, that Scriptural exegesis, the status of the church, national morality and, above all, the truths of religion are made to suffer, because mythology is held to be fabulous; and because, like the Sophists of old, we cannot perceive that there are at least two kinds of faculties and, consequently, two kinds of thoughts which require two kinds of interpretations.

Supplementary to their alphabet, the mythologists had two categories; one of the good, the other of the evil. If doubt should exist at any time on the alphabetical interpretation of a suprasensuous verb, resort to the categories, as a final criterion of appeal, settled the point questioned without reservation. The knowledge of the categories seems to have been lost about the same time that the alphabet suffered the same calamity; as no author since has made the slightest reference to such having ever existed. Had it been known, such earnest thinkers as Descartes, Kant and Hegel would, no doubt,

have been able to direct their scholarly attainments to more profitable results. For a right understanding of the categories, the following explanation will instruct the popular mind as well as the more advanced how they are to be used.

On the mythological chart are seen two large circles. In the centre of one is the verb *agathos* (good). In the centre of the other is the verb *kakos* (evil). These two circles are distinguished by Plato as, *auton* (same), and *heteron* (other); because in the one the attributes are always the same and never vary; whereas, in the other, not two things are alike, while the fluctuations of the changes are perpetual, producing eternal strife. Again the attributes of the good have a mutual participation with each other and with the good; thereby showing that communism is its essential principle. And, for this reason, the category of same is named the common category. As an example, the attribute *dikaioσune* (justice), which means and is limited to the doing by each faculty of its own work, is simultaneously beautiful, right, true, fitting, safe, fixed, graceful, imperishable and so on. And, in the same way that justice partakes of the attributes of every other factor, every other factor partakes of justice. It is thus that the community is established of all the factors or attributes in this circle; which has therefor been called common. Turning now to the other circle, what is most striking is the individualism of each of its members. First we find Mohamedanism, Judaism and Buddhism irreconcilably opposed to each other. Next in these comparatively minor circles, others still smaller are seen, whose mutual hostility to each other is deeply seated. These last contain smaller circles still, which are divided and subdivided, until a limit is reached, beyond which individualism, except that of the person, can go no farther. Now what in the first place is to be here observed is, that each of these circles, from the largest to the smallest, is actuated by what the French call an *esprit du corps*;

which signifies an adherence by the members of a circle to a bond of allegiance, to promote the interests of the particular circle to which they belong in antagonism to all other existing circles. It is based on the feudal principle and inherits all the objectionable features of feudalism. In the second place, what is still as remarkable is, that the persons who organize and preserve the autonomy of each circle are its office holders and office seekers; while the rank and file do the hauling of the wood, the drawing of the water and the paying of the required tribute. And, in the third place, what is equally remarkable is the tendency of each member of each such circle to sacrifice his circle to his *amour propre* or self love, when opportunities offer of doing so, with what he considers immediate personal benefit to himself.* Solon, who was no admirer of aesthetics, says: "Men keep their agreements when it is an advantage not to break them." And Momus, the god of mimicry, found fault with Hephaestus because, in the human form which he had made of clay, he had not placed a window in his breast, by which whatever was done or thought there might be seen, and might be easily brought to light.

This *esprit du corps*, which is the principle of every social organization, is the essence of selfishness. It is the veritable diabolus of mankind; seeing that the autonomy of its circle is not subordinated to the autology of the race. The difference of the common from the dividual category may readily be seen in what every mythologist

* A remarkable circumstance in this period of English history relates to the repeated and sudden changes with respect to religion, in accordance with the views of the sovereign and the court. Many who had been Protestants under Edward, became persecuting Romanists under Mary; and under Elizabeth, they were again transformed into zealous promoters of the reformation. Religion, it would seem, hung so loose upon a great part, that they were equally ready to conform to Popery or Protestantism, as might best suit their temporal interests. Of 9,000 beneficed clergymen, the number of those who preferred, on the accession of Elizabeth, to quit their preferments rather than popery was less than 200." Elements of History, Ancient and Modern, by J. E. Worcester, A.A.S., S.H.S.

has designated *ouranos* (heaven) and *hades* (hell). They could not have intended that heaven could be other than the haven of happiness, after which every weary soul aspires; or that hell should be other than an abode of strife. And so they expressed the distinction beautifully and instructively in these two categories which they named the categories of mythology.

As has been shown, the purpose of the Semaic alphabet is to fix the primary significations, by giving the roots of the Semaic sounds or letters which have specific values. Now the use of the categories is supplementary to the alphabet. When, by custom, the sensuous or suprasensuous import of a word is not determinate, it can be easily ascertained by referring the word to its appropriate category. *Lex* (the law of nature, or the divine law), as, by its Semaic roots, it means what holds the end or divine purpose, which is invariable, cannot be made to signify the ever varying enactments of parliaments and civil and criminal courts. It, therefor, takes its place on the common category, which is invariable. *Agathos* (good), which implies justice, grace, beauty and every other divine attribute, is not applicable to what an aesthete may think is good for himself. *Dikaiosune* (justice), for a similar reason, cannot be applied to a man; because, before he can be said to be just, he must possess all the other attributes of the category in which justice is comprehended. On the other hand, *edone* (pleasure) cannot be used for *karis* (pleasure), because the former implies lust, whereas the latter is a divine attribute. They, consequently, belong to different categories. The Philibus of Plato is an instructive satire on the abuse of these two words, wherein the one is mistaken for the other. Again, a parallel case is witnessed daily, in the abuse of the word charity, when the giving of alms is what is intended. In all such cases, ambiguities are at once detected, and in such a way as to leave no scruple.

After the creation of mankind, as the mythologists narrate, the families lived at first apart; which it was necessary they should do, for the purpose of pasturing; for that was the earliest employment then available. But, owing to their isolation from each other, they and their flocks became a prey to the wild animals. And for this cause, and for mutual protection, they betook themselves to live in villages and towns. It so happened, however, in the course of time, that their dividual propensities led to their cheating, robbing, and destroying each other. They could not agree to live at peace. So, to prevent the prospective and utter extermination of the race, Zeus sent Hermes to them with the gift of science and justice; which were to be the future guides for their good government. Now science which is in the province of the intermediate or geometric region of the brain, as shown on the chart, is conversant about the rays of light which, when generalised, lead directly to the energising of the higher faculty of intellect; and so it was intended by Zeus it should have been understood and practised. With the additional gift of justice, nothing else was required to overcome and remove the dividualism which was the inciting cause of the discord then existing. But unfortunately, like ourselves, they did not know what science and justice signified. They applied science, as we do, to mechanical purposes; and justice, like ourselves, to the detection of frauds in commerce, and the punishment of criminals. The consequence is that here we are now in the same plight that the primitive race was in. Hades, as foul as at first, and heaven still unperceived. This beautiful myth, one of the best of the mythological age, and as truthful as it is beautiful, has been ever since regarded by the Sophists, ancient and modern, as a fable. Protagoras stumbled the moment he touched the subject. What better are we? Our commentators do the same.

The Christian idea, which is represented by the common category, is the communism of all the factors. The

distinguishing attribute of each is fixed; but, at the same time, each factor participates in the distinguishing attribute of every other. Being fixed, each attribute is therefore epistemised and beyond the influence of aesthesis. Communism, in this sense, is the communism of intellect, into which competition cannot enter, because the aesthetic and geometric faculties, being here superseded, in the natural and educational order of progression the intellect alone exercises complete control. Hence the factors are equally conditioned. No one factor is greater or less than another. In the dividual category, such is not the case. Some have got all the learning, some all the offices, some all the land, some all the power, some all the pleasure and some all the toil.

Still, while surveying the slowness of the work of civilization or rather of moral progress and the obtuseness of the mental faculties, the fitness of the means employed is strikingly exemplified in the oscillations of the political pendulum. By the divine law, it is wisely provided that power should be exercised by the strongest. And, by the same law, that intellectual energy should supersede and control muscular strength, otherwise there could have been no advance from the sensuous state, through the scientific, towards the higher regenerating culture, which is the prospective destiny of the human family. The appropriation of all the land by a few, at first, and the banding together of that few for the perpetuation of their self-assumed rights, produced the autonomy of nations, and prevented minor distracting feuds which would have engendered many and incalculable consequences destructive of the order required in the formulating of national institutions. The inception of manufactures and commerce fraternised separate and distant peoples, who could not otherwise, in the then state of society, have been made to tolerate each other. Out of this international correspondence and the consequent advance of the manufacturing and commercial influence, issued parliamentary government

and civil rights. The internal conflicts between the governors and the governed followed, as a consequence of the increase of population. And, as this increase progresses, so must progress the aggravation of those conflicts. This is destiny. It is what history records. The growth of civilization is systematic. Every stage has its well defined limits. They do not vary. In the occurrence of a revolutionary crisis, when the survival is of the strongest, what follows is but a revival of one of the preceding stages, which repeat themselves successively and continuously without amelioration. Emigration schemes, poor laws, benefit societies, the so-called charitable associations, denominational institutions, brotherhoods, etc., etc., are all make shifts that do not alter, in the smallest, the actual current of the prevailing disorder, for it has been shown, in national statistics that, as these agencies increase, the moral condition of society becomes worse.

Muscular power is better administered by one than by many; mental power, by few than by all; but intellectual power, as Zeus commanded Hermes, must be distributed to all alike and equally. By this mythological revelation, intelligence is the curative power. But it is the intelligence of the mass. Every pure soul is susceptible of its influence, and equally fitted to receive it, when properly conditioned. The equalizing of the conditions is however, the necessary prelude to moral regeneration. This is the fiat from heaven.

But it is idle to condescend on the conditions, before that the means are admitted by which these conditions are to be produced. The communism of the land, republican institutions and government, and all such socialistic speculations are vain dreams, which never can be realized while cupidity instilled and fostered by authority, is the governing power of each and every member of the body politic. The communism of the good can begin only after the cupidity of the millionaire shall cease to operate in the dividual category. Distribution cannot exist along

side of accumulation. This is a truth which the most benevolent citizens on no occasion, seem to have perceived. The cart is uniformly put before the horse; and the most apparently laudable bequests have thereby been diverted into local channels more for the benefit of the managing officials and outsiders, than of the unfortunate poor for whose benefit the bequests may have been originally intended. There is the Scriptural truth, which the Sophist is prepared to dispute, that "it is easier for a camel to go through the eye of a needle than for a rich man to enter the kingdom of heaven." But the appropriation of conscience money, derived from the crooked arts of finance and commerce, to ostentatious bequests, will not compensate for the tears of the widow and the orphan and the broken-hearted parent. We have to look at society as it is; not as aesthetic moralists represent it. And in doing so, cannot help seeing that the conflict in Hades, occasioned by the ignorance and stupidity of the leaders of the blind, continues to be protracted through no other cause than intellectual incapacity, produced altogether and exclusively by the aesthetic conventional practice in the use of verbal symbols.

A man who borrows his interpretation from another, cannot say whether it is right or wrong. He is at the mercy of that other. And that other either through ignorance or, for the purpose of dividual ends, may deceive him. The contingencies on which error is dependent are many; which it is the duty of the prudent man to provide against. The more so since the popular belief is, that man is born depraved. For, if men are born depraved, what man can trust another? Or, are those who have been corrupted by their aesthetic training, and have not been healed, to be trusted? Certainly not. In either case distrust is required, which places the aesthetist between the horns of a dilemma, from which he may try in vain to extricate himself. The conclusion is, that whether a man is born depraved, or born pure and afterwards de-

proved, he is not to be trusted, unless it can be shown that he has been ultimately cured of his depravity. Now the curative process is that which enables the soul, through the energy of the epistemetic faculty, to direct and control the mental and bodily functions. But this curative process is not practised. How then can a man be cured, and how can he be trusted, whatever may be his position in life? This is one of the issues attending the comparison of mathematical education with the aesthetic practice.

If one has learned to interpret for himself and is his own interpreter, he is safe, in as far as he is beyond the risk of being deceived by another. And this is the natural and legitimate position which every person should occupy. Without a right conception of the natural conditions of phenomena, either mental or material, there can be no guide for moral conduct. The dictum of authority or the formulated canon of a self-constituted conclave of officials is of no value unless based on the mythological ultimatum; which consists in the subordination of mind to intellect. There can be no hesitation in saying that the opinion, when promulgated, of any man or body of men, not intellectually educated, is little better than sounding brass. It is safe to affirm that, unless the controlling moral faculty is energized and developed, neither history nor biography can be anything else than vague and distorted narrations of facts. So little value is therefore to be placed on extemporized aesthetic moralists, who have little learning of the right sort and often less judgment, that their text books which have no credential beyond the cheap merit of being sanctioned by self-constituted authority should be scrupulously discarded.

Buddhism has its aesthetic formularies, which we know. Its epistemetic conceptions European literati, at Calcutta, have been laboring for many years to be able to interpret. Hitherto they have failed. Why? Because they had been taught that mythology, the religion of the Hindoos,

is fabulous. And it is safe to predict that so long as this erroneous belief is continued, so long will all our endeavors to read the beautiful allegories of the Vedas be a failure. The right way to the Hindoo mythology is through the Grecian. The latter being the legitimate descendant and progeny of the former. Mythology is one without reference to country or climate. Europeans all came, originally, from the Sanscrit land, and brought with them the language and the religion of that Eastern clime. Hindoo scholars know this, and have signified the same for our information. The difficulty is, in the one interpretation, with us; in the two interpretations with them. They distinguish wisely between theurgy and religion. We do not. When this difficulty, on our part, shall have been surmounted, it will then be seen that a Semaic alphabet, three faculties and two categories are common in all the Eastern cults.

The dividualism of aesthetics is visible in every feature of national life. The care of the soul belongs to the church; that of the body to the doctor. It is not admitted that people ought to know how to take care of their own souls and bodies. Otherwise, why not make these branches of education. The religious exercises and hygiene, in which youth is drilled, are formularies of book rote, which have no practical significance or value, because they are never applied to the conduct of life. In geography a youth is taught to know from a sectional map and by rote, every place within the precincts of his own nation; and to believe that his own country is the most beautiful, the most free and the most productive in the world. In history, that its people have been the bravest in war, and the most enlightened; having the most perfect educational system and the best schools of any other country in the world. Such inculcation of dividualism dwarfs the mind and engenders national animosities, whose fruits are not only the wars but also the uncharitable and enduring deportment, open and latent, of the inhabitants

of different nationalities towards each other. How then is it possible that humanity can come out of such conditions? Where then is the Christianity?

Religion (*re-logos*) is the reflected light of the common on the dividual category. This is the purpose of the two categories; that one should reflect its light on the other. The dialectical Hermes, the messenger of Zeus, is the intermediiator between God and man, in bringing down grace (*charis*, christ) from heaven, to be the destroyer of dividualism, and the bond of love and unanimity, throughout the world. The Hindoos, Japanese, and Chinese have their Hermes. Judaism has its Hermes, so have the fire worshippers of Persia. Mythology can interpret that Hermes. But the theurgy of the Persians, of the Hindoos, of the Japanese, of the Chinese or of Judaism, never can; is utterly unfit to comprehend the sacred purpose of this divine interpreter of the will of God.

Turning now to the aesthetic conception of the depravity of the infant at birth, let us examine the deductions from such an assumed postulate. There is first, the reflection on the divine goodness; which reflection evidently emanates from the absence of a classification of the faculties of the brain; and, consequently, in a belief that the soul of a human being is a distinct entity, and not a part of the universal soul. As a part of the universal soul, such an assumption would not be admissible. But, as something partaking of animal life and in a certain measure sensuous, there might not appear to be any reasonable objection unless, as in the lower animals degeneracy of the parents is assumed to be the cause of abnormal features in the offspring. But even here, as such degeneracy is not applicable to a whole species, it cannot be assumed as applicable to the human family. There is therefor no escape from the impeachment of the giver of all good, as the cause of this assumed depravity. But the responsibility of the parents and of society cannot be so conveniently set aside. Once admit the doctrine of original depravity,

and all the consequences emanating from it and entailed on society, will have to be born by the author of that degeneracy. This is an alarming deduction. Notwithstanding, it is strictly logical. All educational obligations vanish before it; for it exonerates both parents and the state from any accountability for the existing immoralities and crimes with which society abounds.

Having thus committed one mistake, what followed could not fail to partake of a similar misfortune. Coercion, as a means for overcoming or rather rooting out this depravity, is indefensible; because it is contrary to the principle of ethics, and contradicted by the experience of the world, that the human faculties can be improved by the application of brute force. True, the criminal statistics of every country divulge that no reliance is placed on any other means; and the educational records of all states correspondingly show that coercion is regarded as the indispensable appliance for the training of the youthful mind. But such a conclusion could only have originated from the necessity of finding a way out of the consequences entailed by the preceding error; for habits formed by the training of only the cerebellum and medulla oblongata, which are amenable only to sensuous pleasures and pains, can be effective only during the pending operation of those pleasures and pains. Such is the case among the lower animals, which have only sensuous faculties. They are restrained chiefly by fear. A domesticated animal is made tractable by kindness; but fear is the primary and ultimate controlling influence. So with a child, trained under a coercive regimen; rebellion follows whenever an opportunity offers of being relieved from such restraint. Opportunities do occur, and youths who have been reared under the coercive system, if they retain their docile habits afterwards, do so only in appearance, for obvious reasons. But the concealed immorality among those so reared, is the best testimony of how small is the value of the domestic coercive regimen, after the first

restraints of boyhood, they are relieved from the sensation of fear, and dash out in search of pleasure. All which is a fitting result to the education of the cerebellum. Young people so trained may be taught easily to appear circumspect; and, actuated by sinister motives, may seem to be models of uprightness in their outside demeanor; still, it is all appearance. It has no bottom. It is the prevailing sham of this commercial age. It is the photographic likeness; the outside semblance; what is seen by the bodily eye.

“ 'Tis education forms the common mind,
 Just as the twig is bent, the tree's inclined.
 Boastful and rough, your first son is a squire;
 The next a tradesman, meek, and much a liar;
 Tom struts a soldier, open, bold and brave;
 Will sneaks a scriv'ner, an exceeding knave.
 Is he a Churchman? then he's fond of power;
 A Quaker? sly; a Presbyterian? sour:
 A smart Free-thinker? all things in an hour.”

The time absorbed in pleasures, such as boating, cricketing, gymnastics, billiards, cards, excursions, balls, attendance at the club, and similar attractions, leaves no room for intellectual study, even if such had been on the programme of the collegiate course. Book rote then necessarily takes the place which should be allotted to mental and intellectual culture; and the pupil thereby becomes a smart, showy, and facile associate; in place of being a solid and critical thinker, as well as an active member of society. A good memory, in such case, may secure a gold medal. But the cramming required in order to pass the professional examination, like a stomach overloaded with indigestible food, is sure to paralyse both mind and body afterwards, and, in addition, during life. By virtue of his medal, a graduate may get promotion in the ranks of his profession; but rarely does he ever reach mediocrity as a scholar. It is proverbial, that the spoiled boys in a class are generally those who have retentive memories; because they do the largest amount of book rote. A boy

who has not a retentive memory cannot be spoiled. He cannot get a gold medal; but his faculties, being thus preserved, become developed more profitably afterwards, when he leisurely digests each branch of study by the strength of his inborn genius.

The higher education of women is the latest novelty. It is not sufficient that they should be educated to be good wives and mothers and conjugal companions; nor that they should taste the intellectual food of the tree of the knowledge of good and evil. Oh, no, that is not what the official educators mean. The women are to be literalized. That is, they are to learn how to put letters and words and sentences together, so as to become authoresses, magazine writers, and what in common parlance have hitherto passed for blue-stockings. Or they are to be prepared, aesthetically, as the men are, to enter the professions, and to compete with the sterner sex for the bread and butter of life; and, as may be, for a share of the spoils of office.

The mythologists held that women should be as well educated as men. But each according to their purpose. Men, for the sterner political work. Women, for the duties becoming their sex; whether as helpers in the business of their husbands, medical practitioners, or educators of the young; for all which branches they are admirably adapted. There is a special rule applicable to this case that, when applied, leaves no scope for ambiguity, as to the position which women should fill. It is expressed thus: Justice is the doing by each of the work which each is best fitted to do; doing the said work as it should be done; and not undertaking to do that for which one is not fitted. Hesiod is precise in his injunctions on fitness, and its corresponding duties. To Plato, however, we are chiefly indebted for an exhaustive treatment of the subject in its various practical applications. From which law and its exposition by such authorities we are justified in summarising that women's duties are such as those here stated.

Napoleon at St. Helena being asked what would be good for France, replied: "Educate the women." By this he could not have intended that they should be forewarded in the aesthetic routine, or that this routine should be more generally diffused. He was too far sighted, for so narrow a view of a great social problem. Moreover, he made no secret of how much he detested the literary butterflies of the Parisian salons, whom he regarded as on a par with the literary savans who write from egotism or for profit to gratify the ravenous palets of a sensational populace. Napoleon knew that women, in France, are the tendrils of the priestly power; a power that he dreaded, but dared not to confront. What he signified by education, was emancipation. He must be blind who cannot perceive the incidents still growing out of the struggle between the spiritual and temporal powers in Europe; and this most formidable impediment to the unity and independence of the national will. Aesthetic teaching makes dupes of the people to the officials. Inteligence creates independence. But, as has been shown, in the preceding remarks, there can be no inteligence where the intelectual faculty is not cultivated. Napoleon knew this. He could perceive the maukish sentimentality that pervades the popular mind, in its higher as well as in its lower stratum. He was not born under the prestige required to make a good sovereign ruler. He lacked birth, ancestry and official alliances. A creature of fortune, thrown into the midst of a European conflict, wherein every nation and every soldier acted the part of a cut-throat, for its or his own dividual promotion, what other part in the revolutionary drama could he have played, than that he did play, of a great warrior, a wise nomothetes and enthusiastic patron of learning. With prestige, it may be conjectured what he might have accomplished in the way of educating the women of France. He has said enough, however, to let France know that her women

must first be emancipated before that the nation can be a unit at home and in its foreign relations.

Higher education means to learn how to be able to think aright. Outside deportment is not to be despised. But the reality is more valuable, at all times, than its semblance. To speak and write English and French fluently and in accordance with the best usage in England and France, is no test that a woman knows more than is necessary for the purpose of social intercourse. She may be able to discourse on the comparative merits of the most popular writers of the two countries; yet all that can be evoked are the mere echoes of a narrow circle of fashionable frivolities. And should Latin and Greek be added, it is not for the purpose of diving into the profounder depths of past ages; but, as is customary, for the sake of the meretricious *éclat* of having it said that the display of what is called higher education is classical. Metternich says, in his reminiscences, that during his life he met with no more than about twelve men, who knew how to converse. This is a sad commentary on the leading European characters who figured in the eventful period referred to. Men generally occupy themselves, in conversation, about what concern themselves and their belongings; *their* country and *its* greatness; the grandeur of *its* statesmen, of *its* historians, of *its* poets and *its* novelists. Lady aestheticians cannot be accused of troubling themselves much about the babies. But what are the themes and what the compass of their magazine contributions? Are they not evanescent tributes to the popular gods. Yet these lady contributors are innocent; nor are the masculine figureheads of European society, who do not know how to converse, to be blamed for their incapacity. It is the aesthetic routine of teaching that narrows the field of observation and confines the view within the small circle of national prejudices.

Higher education means something more than spelling and pronouncing according to national usage. It means

a thorough understanding of the two interpretations ; and of their separate purpose ; and how used originally, among nations as dissimilar in habits as in political and sacerdotal institutions. It rests upon a religious basis, which it is necessary to comprehend. Without religion, there can be no higher education. It is the higher faculty that requires to be brought into play, in order to determine the divine purpose. The divine purpose is mathematical. Therefore, the light of mathematics or mythology is the higher education. Neither Latin nor Greek can aid the student unless used mathematically. So that the latest novelty, of promoting the higher education of women by resort to the classics, in the way they are learned, by book rote, is a folly that requires no extraordinary gift of penetration to perceive.

The usual practice of spelling, in English, has been exhibited most conspicuously at the late gatherings called spelling bees. The word preconceive, for example, was spelled thus ; p,r,e pre + e,o,n con + e,i,v,e ceive = preconceive. And numerous teachers and men of reputed learning met, in crowds, to compete publicly, in this fashion. The worst that can be said concerning these exhibitions is that they were one of the results of an aesthetic craze ; for no writer, at the time, ventured to go counter to the popular sentiment. It was an apt parallel to what many readers may recollect to have witnessed at the country fairs, where Toby, the learned pig, was exhibited at the low price of one penny. Now the performance of Toby illustrates pretty correctly the practice followed in the public institutions for the teaching of the English language. On a low inclined plane were placed in large letters TOBY. The learned pig was then brought forward, and directing his snout to T, gave a grunt ; then to O, followed by another grunt ; and similarly to B and Y. At this part of the performance Toby received a cake, as a mark of approval. Next the letters of the whole alphabet were ranged on the same inclined plane, commencing at A and ending at

Z. Being brought forward again, the learned pig scented out first T, accompanying the act with a grunt as before, next O, then B, and finally Y. And the whole performance was concluded by Toby receiving two cakes, this time, as extra marks of his general proficiency in the art of spelling. The parallel here given is set forth thus plainly for the purpose of bringing home to the teacher, and also to the learner, how stupid it is to be satisfied with naming the letters, and in a similar way the syllables and words. It is difficult often to appeal to the judgment, when usage defiantly bars the ingress of light; and analogical examples, however unwelcome, in a certain sense, have a force which no prepossessed opinions can withstand.

Equally imbecile is the present-rage for propriety in the pronunciation of English. As with French, there is no rule for either the pronunciation or signification of the words of the vernacular language. Nor can there be in any language that, in both respects, depends on current usage. There is no rule for English pronunciation. The best public speakers have peculiar modes of expression, different from each other; in which they differ as widely as they do in their general opinions. What a good speaker aims at, is not euphony, which never carries conviction; but the manner by which a rational argument can be made to produce the desired impression on an audience, and how an audience can be held spell-bound to the facts and details presented by the speaker. Over-anxiety about the sound, while indifferent about the signification, is a bad omen. Rounded periods, accompanied with effeminate delivery, is no match for the native and manly utterance of a soul absorbed with the truth and grandeur of its conceptions. Hitherto, in the French and English universities, the Latin was corrupted by being made to conform to the pronunciation of the modern vernaculars. It is only within the last few years that the absurdity attending this practice has been publicly noticed, and

that its abandonment has been decided on. But such aesthetic divergencies are by no means creditable.

An example has been given, in a previous page, of the method for digesting compound words. The rule for spelling *via voce* may be here stated. For example, of the same word preconceive; thus: (preconceive) is a compound of three simple words; namely, of (pre) from the Latin *pre* which signifies (before); of (con), from the Latin *con* which signifies (together); and of (ceive) from the Latin *capio* which signifies (I take). By this, the meaning of the compound is (I take together before), when read backwards, as all compounds have to be in spelling. There is no other method for spelling compounds. The word spell, which is itself a compound of the Lat. *ec* and *pello* signifying (I put out), implies the putting out of the significations. The error of the aesthetic practice is, in supposing that the letters and syllables are what require to be put out. But as words and even letters, as we have shown are the Semaic representatives of things and actions, it is consequently what is signified that is to be put out. The mathematical method of spelling is to give the primary significations. The practice of aesthetics is to name the letters and syllables. The contrast is instructive.

Notwithstanding what has been said herein, against the objectionable practice of learning Latin and Greek aesthetically; that is by book rote, it is apparent that no English or French student can understand his own language without a critical knowledge of Latin and Greek. And this fact cannot be too firmly impressed on the minds of those women who desire to reach the higher education, in its reality. By this it is not intended to exact from learners that they should be able to read and translate such aesthetic authors as Cicero and Xenophon; but rather that they should be able to digest and analyze an author's words, so as to reach at the sentiments which the words convey. What an author means to say is one thing; what he says is quite another. Authors are to be

read critically. The object of the higher education is to be able to apply this criticism.

It is too much the custom to be satisfied with the appearance of learning. And in an age when every thing is judged of by appearance; and literary men and women, in reality and as a general rule, are little better than shams; not much is to be gained in a pecuniary way by seeking for truth, and much less by expressing it. Social position is even lowered by refusing to worship at the shrine of the popular idols. In eating of the forbidden fruit, there are certain risks to be encountered, and a choice has to be made between a state of perpetual slavery to the combined interests of the teaching faculty, copyright holders, booksellers, and the various interests bound up with these; or liberty of action to demand proofs and insist on the right to investigate, and to hold fast by the ascertained evidences of what is consciously believed to be in accordance with the divine purpose. By submitting to the established drill, a woman becomes a literary non-entity, being swallowed up in the cauldron of routine. On the other hand, by choosing a lot, sanctioned by her sense of religious duty, she may stand comparitively alone, but on a pedestal far above the imbecile herd which bows the knee to the fashion and frivolity of the passing hour.

“Truths would you teach, or save a sinking land?
All fear, none aid you, and few understand.
Painful preëminence! yourself to view
Beyond life's weakness, and its comforts too.”

Literature is, without doubt, one of the great impediments with which society, at the present day, has to contend. It is a weed prolific, that fructifies and overtops every medicinal herb less pretentious. By consulting an Egyptian myth of great antiquity, we learn that when Theuth, the discoverer of letters, made known his discovery to King Thamus, saying that it would aid the memory and be of great use to the people of Egypt; the reply of the

latter was, that letters would give to those who might use them the appearance of knowledge, but not the reality. A truth which, at this great distance of time, we fail to perceive. Plutarch no less signifies his contempt for arbitrary verbal signs when he says, "I did not so much gain the knowledge of things by the words, as words by the knowledge I had of things." In Greece, the Iliad was recited on the public stage. We are not to suppose, by this, that the Athenians who assembled to witness the recitals were all capable of understanding the merits of the drama or its mythical purport. The two interpretations must, no doubt, have been brought into play; the theurgic for the *polloi*, and the religious for the *charientes*. We, on the contrary, and with our literary characteristics, amuse ourselves trying to discover when Homer lived and where he was born; oblivious to the probability that there never was such a personage; and stone-blind to the mythical fact that the Iliad, and the Trojan War, and all the incidents connected with it are parts of a comprehensive representation of how much human destiny, in its fluctuations, is dependent on the fixity of law, and the invariable correspondence of conditions and consequents. Alexander Von Humboldt took comfort in the reflection that the world is governed by law; not, as the aestheticians suppose, by caprice. All which considerations tend to show that the higher education, to be efficacious, must be mathematical.

The extraordinary importance attached to the outside machinery of teaching, over and above the utility or value of the branches of instruction, affords another contrast of the difference between the mathematical method and the aesthetic practice. The Prussian Government set a good example when it organised its system of public instruction; for it aimed at results as much as it did at the efficiency of the executive machinery. And, excepting that it lacks the mythological idea, the German system is

in other respects unexceptionable; which is proved, amply, by the official returns; and more so is the historical, geographical and scientific attainments of the German people. But how has this example been followed in other countries? In making a comparison, allowance has to be made for the efficiency attending the administrative department of an absolute government over that of a government controlled by the popular will. In Germany, the outside display has been of less concern than the inside efficiency. In this respect it is particularly distinguished. Where else, it may be asked, has this been the case? The Irish system has been successful, in so far as it has been controlled by the government; inasmuch as less money has been squandered, in comparison to the results, than would have been had the system been controlled by irresponsible chief superintendants and boards of school trustees. Much cannot be said for the experiment in England, because of exceptional circumstances, for which the government is scarcely responsible. On this side of the Atlantic, where majorities rule, we reasonably expect to find corresponding consequences. And so it has uniformly happened that education signifies the erection and number of showy and expensive buildings, the amount of public money expended, the organization of boards of school trustees, the training of swarms of youthful teachers, the appointment of inspectors, the awarding of contracts and supplies, and every other conceivable device wherein money is the chief ingredient and the handling of that money the chief employment. On the other hand, the results are the best recorded in the publicly expressed opinions of the teachers themselves and of the parents of the children; namely, that there are too many unnecessary and unsuitable branches required to be taught; that the health of the children is undermined by the amount of book-rote; that the hours of confinement in densely packed class-rooms are excessive; and that for these and

similar reasons the results are, of course, not what they should be. Accusations of jobbery, political influence and sectional purposes are inseparable in a country where the scramble for office and its emoluments is a necessary concomitant of the majority form of government, when the psychological element of education is ignored.

A collateral incident of aesthetic teaching is, that no youth is permitted to interpret for himself. The authorised text books are the interpreters. The teacher's duty is to enforce conformity in this particular. However erroneous the definition in the lexicon and dictionary may be, its correction would be an insufferable offence. The teacher, if in any measure an educated person, cannot but feel the indignity of being thus degraded to fill the office of a mechanical puppet. But for him there is no redress, any more than for the pupil who becomes a literary parrot. Routine attendance at a professional college, and closed door examinations, written not oral, conclude the aesthetic curriculum in which the fees seem to constitute the chief concern.

By reference to the chart of the organization of the brain, it will be seen that, under aesthetic training, what goes by the name of education is properly the education of the cerebellum. The aesthetic region, as marked on the chart, is the lowest of the three regions, and it is named aesthetic (unfixed), because its sensuous faculty does not measure. The motives and actions of this faculty are concerned exclusively about the bread and butter side of life, and indulgence in such exercises as foster the largest amount of sensuous gratification. Music, by ear, is of this nature. So is music, by the book, when its metrical principles are not comprehended. For transition to the geometric region is dependent on the capacity to measure; and, as measure signifies to hold to the mean; a musician is required to know the principles of the science before he can be presumed to be an adept

in the art. A nice ear for music, however refined by practice is, therefor not scientific. Many branches of learning are in the same predicament. Arithmetic, by book-rote; the English and any foreign or classical language, by book-rote; civil engineering, by book-rote; medicine, by book-rote; law, by book-rote; hygiene, by book-rote, all are restricted to the education of the cerebellum. Science begins with the elements or principles of the natural law, applied to a particular kind or department of phenomena. So that no branch of learning is metrologic or scientific which begins and ends in book-rote, and which is not exercised on the elements or principles of the natural law. This is born out by the remark of Aristotle, already referred to, when he says that the carpenter studies geometry in its application to his work; but a geometrician to find the truth.

The material conditions required to produce a properly constituted state of society are not embraced in the subject of this treatise. They can be easily deduced from their psychical conditions. Their nature and their outlines are stated of a perfect and imperfect city, contained in the Polity of Plato. Our comparison, on the contrary, is that of two antagonistic systems of education, emanating from two antagonistic doctrines concerning the condition of the soul at birth, which doctrines, in their turn, are engendered by two antagonistic theories respecting the organic structure and functions of the brain. While the material conditions are dependent on the psychical, the divergence of the doctrines of purity or depravity of the soul at the birth of the body, which occasions the educational antagonism, originates thus in the structure and functions of the material organization. It will thus be seen that, in the treatment of the subject, the structure of the brain comes first; on this structure the functions are dependent. Next is the question of purity or depravity of the soul. And finally, the educational systems

based thereon. As to the material consequences, the postulates of the mythologist are, that a consequence of the violation of the natural law produced by ignorance of the law, is the state of society exhibited in the individual category; that death before old age is abnormal; that sickness and disease are abnormal; and so are all the social inconveniences arising from wrong opinions, vicious habits and dishonest and criminal acts of whatever nature. People who are dirty and filthy about their persons, wonder why lice and bugs were created. Slovenly housekeepers who have no economy and who scatter crumbs of food and garbage round the house, express surprise that mice and rats and cockroaches should be sent to annoy them. Mothers and nurses who supply the infants with abundance of purgative, foul air and innutritious food regard the fearful mortality therefrom as a matter of course and irremediable. The fashionable damsel, who figures in corsets and fancy slippers, is amazed why she should so often take colds, and be troubled with flatulence and dyspepsia. The glutton and voluptuary imagine that there is a mistake in the plan of creation. The temperance man who drinks water and strong tea, and yet is nervous and debilitated, expresses consternation. The dunce blames the teacher; the teacher, the system; the theurgist, god; the religious man, himself. This earth, the intended and destined paradise, why is it inhabited, if not altogether, chiefly at least, by thieves, burglars, assassins, cheats, forgers, simulators, tyrants, hypocrites, millionaires and paupers, the sick, lame, blind, diseased, stupid, imbecile? Why is it that we still continue to misuse science and justice, the gift of Zeus, and are still unable to interpret their signification and purpose? To all such questions there is but one answer.

The mathematical and aesthetic systems have been contrasted; their operations have been explained; and the result, as shown is, that as a condition of epistemy is

the mathematical development of the geometric faculty ;
and a condition of the mathematical development of the
geometric faculty, is the mathematical use of its verbal
factors ; therefor, the mathematical use of its verbal fact-
ors is the only true method of interpretation, and the
only safe and perfect guide to moral conduct.

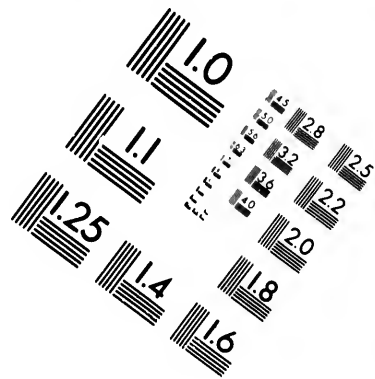
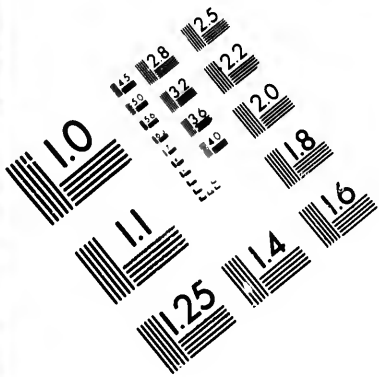
APPENDIX.

For the proper understanding of certain words, having suprasensuous significations, which appear in this treatise, the following interpretations are to be consulted.

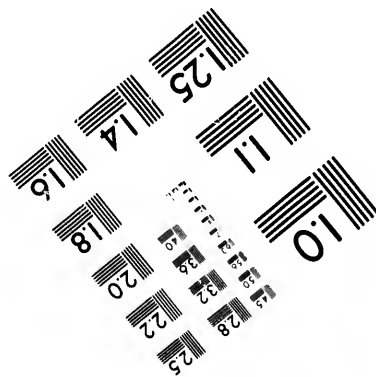
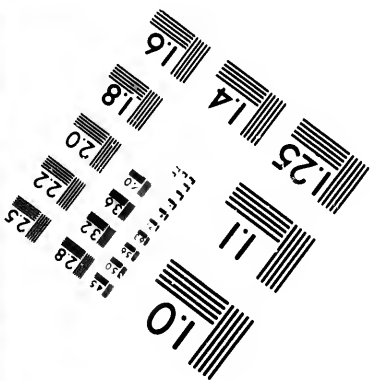
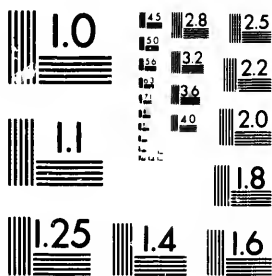
Agathos, g th, in the common category signifies divine goodness, because it has fixity; and being common partakes of all the attributes of the good. It therefor implies justice, fitness, right, beauty, immortality, unsensuousness, harmony and every other attribute of the common category. It could not be applied to a man, because no man possesses all these attributes. In the dividual category its application is associated with selfish motives. A man is said to be good who, directly or indirectly, has favored his friends or has upheld the exclusive interests of the section or social ring of which he is a conspicuous member. The following classification will exhibit the propriety of the two interpretations:—

	COMMON.		DIVIDUAL.
Ser.	Khoda,	K d	khoda.
Pers.	Choda,	C d	choda.
Goth.	Goda,	G d	goda.
Ger.	Gott,	G t	gott.
Eng.	God,	G d	god.
Gr.	Agathos,	g th	agathos.
Ger.	gut,	g t	gut.
Eng.	good,	g d	good.
"	guide,	g d	guide.
Gr.	hodos,	h d (a way)	hodos (a way).

Now God as here shown in the common category, is the God of the universe, the God of all mankind. The good, too, is universal. On the other hand, in the dividual category, god is a sectarian or national god only; and



**IMAGE EVALUATION
TEST TARGET (MT-3)**



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oi

good is limited to what each person or each sect imagines is good for him or itself.

Αἰδώς, d with a privative, denotes unfixity. As *ido* or *ideo* is the absolute fixity of the common category and of the epistemetic faculty; with the privative a, it becomes fixity in the dividual category or in the geometric faculty; and then has the primary signification of *εἶδος*, namely, the result produced in the mind by a geometric computation of sensuous objects. The difference being in their secondary significations; *εἶδος* denoting a single eidea; and *αἰδώς* the geometric process of the eideal region, which process is science, from the Lat. *scientia*. *Αἰδώς*, therefor, signifies properly (science). In the gift of Zeus to mankind, *αἰδώς* and *δικαιοσύνη* are coupled together. Hesiod says that, in the degradation of the iron race, justice and science (*αἰδώς*) with nemesis, after having clothed themselves in fair skins, departed to Olympus, to the immortals. And Homer says: "Science (*αἰδώς*) is not good for a needy man;" because a needy man needs immediate relief; whereas science is a tedious process; requiring time, opportunity and patient study. All the lexicons and translators make *αἰδώς* to signify (shame, bashfulness, modesty). An error which, no doubt, has originated in the ignorance of the chart of the organization of the brain, which shows that *εἶδω* and the Latin *scio*, are synonymous in expressing the function of the geometric or middle region of the brain.

A-esthesis, a s th, (instability). Applied to the lowest faculty of the brain, which is incapable of measuring; and therefor its functions are always instable. All teaching by rote, being limited in its operation to this faculty, is a teaching of the cerebellum.

Andreia, aner (a man) from Scr. *nara*. *Andreia* has the signification of Lat. *virtus* and *firmus*; from which *vir* (man). It has the widest application, either to sensuous or suprasensuous objects, as in Lat. *virgin*, *virago*, virility.

Arete, ἄρετη, (fitness). This is an important mythological word, because it specifies the condition on which alone any work can be rightly accomplished. What qualifies the general of an army is not *andria* (strength), nor *tharas* (courage), nor *ploutos* (wealth), nor *elaphria* (agility), nor *sophrosune* (sagacity), nor *oikonomia* (economy), nor *phulake* (watchfulness); but that quality which comprehends all these, namely (fitness). In every work, from that of the shoemaker to that of the chief ruler of a state, what is required for doing the work as it should be done, is fitness. This fitness comprehends all the qualities required. Aristotle says that man's chief good is what fits the soul or its highest cerebral faculty to direct the subordinate faculties of the mind, so as to control the man's motives and actions. The *Meno* of Plato is a dialogue limited to the definition of *arete* (fitness). The satire on this word is, as in many others, reserved for the Protagoras, on which the Sophists are most derisively treated. The lexicons and translators most erroneously interpret *arete* by (*virtus*), a word of quite a different signification. See *andria*.

Charis, χάρις, denotes taking in to hold, with a beneficent intention which is divine and of the common category. It belongs to a class of Greek words which has secondary significations, such as *Christos* (Christ), *Chrusos* (gold), *charme* (charm), *krino* (I sift), *kratos* (strength), *kuros* (power), *kurios* (one having power), *heros* (a hero), *Hermes*, *Hera*. There are numerous Greek words having those roots; as, *keir* (the hand), *keros* (wax), *ker* (fate), *kear* (the heart), *kairia* (a bandage), *kairos* (the warp), *hritza* (a root). Besides those in Latin and German and the derived languages, we have in English, grasp, grip, gripe, grab, grief, grope, group, carp, crop, creep, scrape, &c., &c.; all which come from the Sanscrit *kara*, which has the primary signification of the roots k r.

Dia-logos, δίαλογος, (what holds the light through from one

to another). In a dialogue there is a mutual transmission of light, on the subject treated.

Dia-noia, d n, (noting being, through, from not being). It is the process of the metrologic faculty which, in its comparison of sensuous phenomena and their conditions, discriminates what has being or permanency from what is variable. Being, when thus discriminated, becomes an ideal type, which is afterwards perceived in the notion without the process.

Dikaiosune or *dike*, d k, Justice (what holds fixed). It is the execution of the purpose of a faculty in accordance with its natural design; and therefor its place is in the common category.

Dogma, d g, (what holds fixed), also *dora*, *doceo*, *deiknumi*, *didasko*; Lat. *dico*, *doeo*, *disco*, Eng. teach, all come from the Scr. *dic.*, which signifies teach, say, show. Categorically, a doctrine whether common or dividual has a firm hold and shows its influence over conduct in a variety of ways. As a notion it shows, says and teaches; and, as an opinion, it does the same. The fixed hold is all that is implied in the homosemaic roots. Its intellectual or sensuous import is determined by its categorical application; and may be either common or dividual.

Eidesis, d, (eidealising; or science from the Lat. *scientia*). It is the process of geometrising or measuring sensuous phenomena.

Eidos, d, (an eidea), is an eidea in the mind; distinguished from an absolute idea, the external type, which is noted by the intellect. See *αιδωσ*. *Eidos* is related to *idea*, as *ouk on* to *on*; that is the imperfect to the perfect.

Eido, d, (I eidealise, or I fix in mind the form or result of a geometric process. It is a secondary or dividual meaning, from *ido* (I fix absolutely). Eidealising or scientising among sensuous phenomena is therefor not intellectual. The process of measuring is attended with errors; and though directed to fixing, its problems cannot

be said to be fixed before that they are amenable to the highest generalization. See *αἰδώς*.

Eikasia, κ, (holding). The passion produced on the sensorium by a shadow or a semblance of a real object. The passion is held, but not fixedly. In *pistis* (faith), on the contrary, the impression, for the time, has a fixed and firm hold.

En-tel-ekia, n tl κ, (what holds the end fixedly in) the thought. It is equivalent to the Lat. *intellectus*. It does not appear to have been used by the Greeks, who employed *nous* and *episteme* to express the intellectual faculty. The example of Cicero and the other Roman sophists, who put in an additional l, is not deserving of notice, for their practice of interpretation, like their morality, was exclusively aesthetic and limited to the criterion of the dividual category. *Τελος* has but one λ; and *εχω* has none; so that, in Latin, *intellectus* is the correct structure of the word.

Ep-isteme, p st, (the fixity of the hold over), what stands over, the substance, the highest faculty, what stands having a fixed hold. Meaning what does not change. In comparison, the geometric faculty is mutable; so is the aesthetic. But the highest, that is the epistemic faculty, never changes, but stands over; that is, it has a fixity of hold. The Romans who were not mythologists and none of whom had mythological conceptions, made the Gr. *episteme* equivalent to the Lat. *scientia*. The Germans make it synonymous with *kenntniss* (knowledge). And the French and English, adopting the German interpretation, make it equal to knowledge. Now, between *episteme*, *scientia* and *kenntniss* there is no relationship; for *episteme* implies what is related to the highest faculty; *scientia*, what is related to the geometric or middle faculty; and *kenntniss* whatever is related to the aesthetic or lowest faculty. See *episteme*, *eidesis* and *gnosis*. This is an instructive specimen of the literary rocks and quicksands which baffle the aesthetic navigator,

and reduce the unmathematical translator to be a veritable blind leader of the blind.

Eris, r, (takes in to) the strife of the dividual. Whence the Lat. *ira* (anger); and Gr. *iris* (the | rainbow, which is a sign of strife in the atmosphere).

Eros, r, (takes in to) love of the universal. Is an attribute of the common category. Partaking of *charis* (grace), it is active in the incarnated *Hermes*. Is a lover of beauty and the attendant of *Aphrodite* (which Aphrodite signifies without mind, unsensuousness, that is suprasensuously beautiful).

Geo-metria, g m t, (fixing the mean in generated) things. Measuring natural objects scientifically.

Gnosis, g n, (what is generated). Is the impression produced on the sensorium by an external object. A knowledge is, in the sensuous faculty, what an eidea is, in the geometric, or a notion, in the epistemetic. The corresponding words in Latin, French, English and German are derived as follows :

<i>Scr.</i> Jan.	<i>Greek.</i> geno, gignosco. gignomai. gnosis.	<i>Latin.</i> gero. nascor. cognitio.
<i>French.</i> (en)gendre. nais. connaissance.	<i>English.</i> I generate. I become generated. knowledge.	<i>German.</i> Ich kenne. Ich werde gekannt. kenntni-s.

Thus derived, it is seen that *gnosis*, *cognitio*, *connaissance*, knowledge and *Kenntniß* signify properly (generation).

Hera, h r, (the harmoniser) of all things. An attribute of the common category.

Hermes, h r; the spiritual dialectician which harmonises the dividual with the common. His place is on the line between the two categories. He is the messenger of the good from heaven to earth; the incarnator of divine grace (*charis*).

Idea, d, (what is fixed) absolutely. The external fixed

type, which is perceived, as the *nous* (notion), in the epistemetic faculty.

Man-thano, m n th, (I fix in the mean). Popularly I apprehend your exact meaning.

Me-th-odos, m th d, (a fixity that is fixed in the mean). A right way.

Mnesis, m n s, (holding being in the mean). A middle state between the inception and extinction of the thoughts or mental conceptions.—*Anamnesis*, (holding the thought as a mean to the external pattern).—*Hypomnesis*, (holding the thought as a mean over, above or beyond the pattern).—See The Phaedrus of Plato, p. 275, *Stollbaum's text*.

Noesis, n s, (holding being). Notioning or noting the external types or ideas, by the epistemetic faculty.

Nous, n s, (holding being). The copy, in the intellect, of the external pattern or type which is absolutely fixed being, or is absolutely held.

On, n, (being), continuous, without beginning, end or intermission. *Out on* (not being), is intermittent and variable being; such as pertains to the dividual category. The English, French and German representatives of *on* should also be continuous and invariable; but such is not the case. They cannot be said to express an equation. See remarks, on a preceding page.

Philia, ph l, (the end that becomes). The will. Love of the dividual, in the dividual category. The direction of the will dividentally; friendship, distinguished from *eros* (love of the divinely beautiful).

Philo-sophia, ph l, | s ph, (wisdom of the will). See *philia* and *sophia*.

Phren, ph r, (Taking in to bearing). The mind = the two faculties, aesthetic and geometric.

Sophia, s ph, (bearing hold); what bears safe; wisdom.

So-phrosune, s ph r, (what takes in bearingly to hold). The mind that is safe; sagacity; mental wisdom; acting wisely by instinct. It is intermittent; and is sagacity

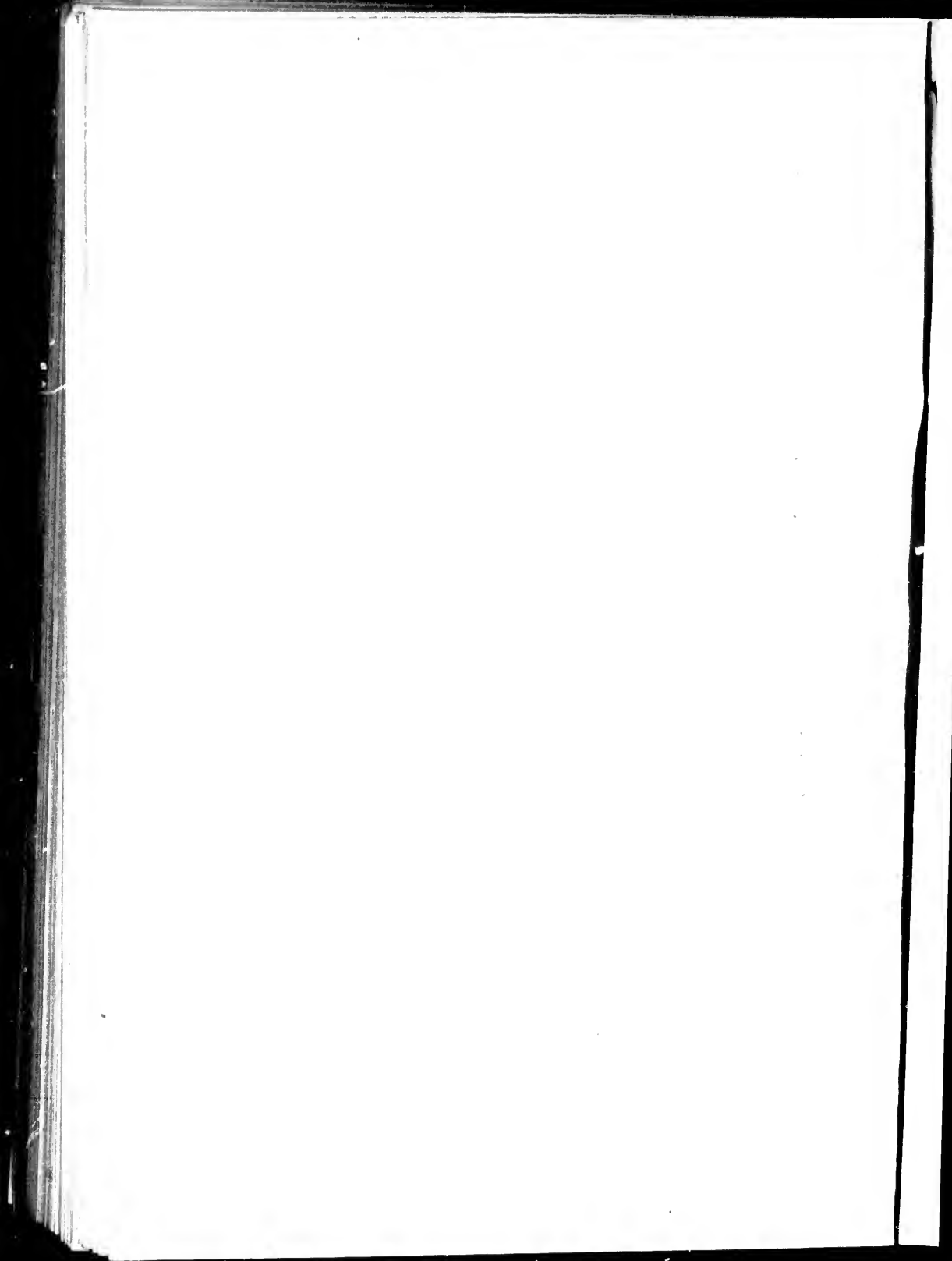
only when at times it is equal to sophia. See *sos* and *phren*.

Sun-eidesis, sn d, (idealising together). The sum of ones ideal thoughts or conceptions; conscience; the scientific monitor.

Telos, t l, (the end that is fixed, or the fixed end). The only end conceivable by man is his own destiny. The end of the world or of the universe is what never can be conjectured. Man's end, that for which he strives, and to the attainment of which he directs all his bodily and mental energies, is happiness. Not happiness for a short time, nor for the half of life; but for the whole period of his existence on earth. So far there is no difference of opinion. But there is a difference of the dividual from the common happiness, which, without the categories, cannot be perceived. This is the critical point on which Aristotle differs from Plato. Aristotle, as has been remarked was not a mythologist. Consequently he could not believe in a common good, a common happiness, or a common category. He taught that some men can be happy, while many others may be miserable. A doctrine that has fitted so completely with the aesthetic and sophistical teachings of modern times, as to have gained for it the mistaken merit of being more practical than that of Plato. How one man can be happy, in view of the misery of his neighbor, Aristotle has not undertaken to explain. It might be, by the usual practice of seeming not to perceive that misery. With Plato, on the contrary, the office of Hermes is not dividual. The sacrifice of Jesus was not for the Jewish race, nor for his native country, nor for his own immediate kindred. The crucial type would have been worthless, had it been so. If dividualism is more practical, why retain even the profession of Christianity, seeing that Christianity is not dividual? Sensuous pleasure is more practical than intellectual, and probably that is the reason why it is most practiced, and most patronized; but is no justification for its being made morally

preferable, as is here assumed. If the merit of an ethical doctrine is to be measured by its facility of adaptation over its intrinsic value, as a divine ordination, it follows, that the second dispensation was a gigantic mistake.— Without perceiving the consequence of his teaching, Aristotle fabricated what has turned out to be a formidable theurgic weapon to be used for the frustration of practical Christianity; for, if not the formulator of the Protagorian conscience that man is the measure of all things, he gave it a scholastic sanction that has been followed by disastrous results. Aristotle agrees with the mythologists, as to the purity of the soul at the birth of the infant. Wherein he differs is, in making the child responsible for the formation of its habits. Thus, relieving the parents, the state and society from accountability. Now, as seen on the chart of the organization of the brain, the moral faculty is the last of the three faculties which becomes energized. So that it can exercise no control whatever on the formation of the habits. On the contrary, it is long after the habits have been completely formed that its functions begin to operate. This battle of conscience has yet to be fought out on apparently new ground.

Happiness, to be perfect, must be guaranteed against the cupidity and violence of neighbors; which is impossible, except on the provision that such neighbors are not reared as they are now. Otherwise no man can be said to be happy while surrounded by the contingencies of being defrauded, burglarised or murdered. The supposition of a perfect happiness, as Aristotle assumes, apart from the common happiness, is untenable, and may be accounted for by the unmythological bent of Aristotle's mind, and consequent neglect of the two categories, to which he seems to have been a stranger, as he no where makes reference to them.



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