representative hypothesis is most easily called in to account for ≡tion. The Stoics explained it as a transmission of the per- quality of the object, by means of the sense organ, into the percipient’s mind, the quality transmitted appearing as a disturb­ance-or impression upon the corporeal surface of that “ thinking thing," the soul. Sight is taken as the typical sense. A conical pencil of rays diverges from the pupil of the eye, so that its base covers the object seen. In sensation a presentation is conveyed, by an air-current, from the sense organ, here the eye, to the mind, *i.e*. the soul’s " ruling part ” in the breast; the presentation, besides attesting its own existence, gives further information of its object— visible colour or size, or whatever be the quality in the thing seen. That Zeno and Cleanthes crudely compared this presentation to the impression which a seal bears upon wax, with protuberances and indentations, while Chrysiρρus more prudently determined it vaguely as an occult modification or “ mode ” of mind, is an interest­ing but not intrinsically important detail But the mind is no mere passive recipient of impressions from without, in the view of the Stoics. Their analysis of sensation supposes it to react, by a variation in tension, against the current from the sense-organ; and this is the mind’s assent or dissent, which is inseparable from the sense presentation. The contents of experience are not all alike true or valid: hallucination is possible; here the Stoics join issue with Epicurus. It is necessary, therefore, that assent should not be given indiscriminately; we must determine a criterion of truth, a special formal test whereby reason may recognize the merely plausible and hold fast the true. In an earlier age such an inquiry would have seemed superfluous. To Plato and Aristotle the nature and operation of thought and reason constitute a suffi­cient criterion. Since their day not only had the opposition between sense and reason broken down, but the reasoned scepticism of Pyrrho and Arcesilaus had made the impossibility of attaining truth the primary condition of well-being. Yet the standard which ultimately found acceptance in the Stoic school was not put forward, in that form, by its founder. Zeno, we have reason to believe, adopted the Cynic Logos for his guidance to truth as well as to morality. As a disciple of the Cynics he must have started with a theory of knowledge somewhat like that developed in the third part of Plato’s *Theaetetus* (201 C seq.)—that simple ideas are given by sense, whereas “ opinion,” which is a complex of simple ideas, only becomes knowledge when joined with Logos. We may further suppose that the more obvious of Plato’s objections had led to the correction of “ reason ” into “ right reason.\*’ However that may be, it is certain from Aristotle *(Nic. Eth,* vi. 13,1144b, 17) that virtue was defined as a “ habit ” in accordance with right reason, and from Diog. Laer. vii. 54 that the earlier Stoics made right reason the standard of truth. The law which regulates our action is thus the ultimate criterion of what we know—practical knowledge being understood to be of paramount importance. But this criterion was open to the persistent attacks of Epicureans and Academics, who made clear (1) that reason is dependent upon, if not derived from, sense, and (2) that the utterances of reason lack consistency. Chrysippus, therefore, conceded something to his opponents when he substituted for the Logos the new standards of sensation *(aἴσθησις)* and general conception *(πpoληψις =* anticipation, *i.e.* the generic type formed in the mind unconsciously and spontaneously). At the same time he was more clearly defining and safeguarding his prede­cessors’ position. For reason is consistent in the general conceptions wherein all men agree, because in all alike they are of spontaneous growth. Nor was the term sensation sufficiently definite. The same Chrysippus fixed upon a certain characteristic of true presentations, which he denoted by the much disputed term “ apprehensive ” (*καταληππτικη* *φαντασία).* Provided the sense organ and the mind be healthy, provided an external object be really seen or heard, the presentation, in virtue of its clearness and distinctness, has the power to extort the assent which it always lies in our power to give or to withhold.

Formerly this technical phrase was explained to mean “ the perception which irresistibly compels the subject to assent to it as true.” But this, though apparently supported by Sextus Empiri­cus *(Adv. Math.* vii. 257), is quite erroneous; for the presentation is called *καταληπτόν,* as well as *καταληπτική φαντασία,* so that beyond all doubt it is something which the percipient subject grasps, and not that which grasps or “ lays hold of ” the percipient. Nor, again, is it wholly satisfactory to explain *καταληπτική* as virtually passive, “apprehensible,” like its opposite *Ακατάληπτος;* for we find *Αντιληπτική των υπoκtιμεvωv* used as an alternative phrase (ibid. vii. 248). It would seem that the perception intended to con­stitute the standard of truth is one which, by producing a mental counterpart of a really existent external thing, enables the percipient, in the very act of sense, to “ lay hold of ” or apprehend an object in virtue of the presentation or sense impression of it excited in his own mind. The reality of the external object is a necessary condi­tion, to exclude hallucinations of the senses; the exact correspondence between the external object and the internal percept is also necessary, but naturally hard to secure, for how can we compare the two? The external object is known only in perception. However, the younger Stoics endeavoured to meet the assaults of their persistent critic Cameades by suggesting various modes of testing a single presentation, to see whether it were consistent with others, especially such as occurred in groups, &c. ; indeed, some went so far as to add to the definition “ coming from a real object and exactly correspond­ing with it ” the clause “ provided it encounter no obstacle.”

The same criterion was available for knowledge derived more directly from the intellect. Like all materialists, the Stoics can only distinguish the sensible from the intelligible as thinking when the external object is present *(alσθάvεσθαι)* and thinking when it is absent *(ἐvvoειv)* The product of the latter kind includes memory (though this is, upon a strict analysis, something intermediate), and conceptions or general notions, under which were confusedly classed the products of the imaginative faculty. The work of the mind is seen first in “ assent ”; if to a true presentation the result is “ simple apprehen­sion ” *(κατάληψη\*.* this stands in\* close relation to the *καταληπτική φαντασία,* of which it is the necessary complement) ; if to a false or unapprehensive presentation, the result is “ opinion ” (*δόξα*), always deprecated as akin to error and ignorance, unworthy of a wise man. These processes are conceivable only as “ modes ” of mind, changes in the soul’s substance, and the same is true of the higher conceptions, the products of generalization. But the Stoics were not slow to exalt the part of reason, which seizes upon the generic qualities, the essential nature of things. Where sense and reason conflict, it is the latter that must decide. One isolated “ apprehension,” however firm its grasp, does not constitute knowledge or science *(ἐπιστήμη)* ; it. must be of the firmest, such as reason cannot shake, and, further, it must be worked into a system of such apprehensions which can only be by the mind’s exercising the “ habit ” (*ἕξις*) of attaining truth by continuous tension. Here the work of reason is assimilated to the force which binds together the parts of an inorganic body and resists their separation. There is nothing more in the order of the universe than extended mobile bodies and forces in tension in these bodies. So, too, in the order of knowledge there is nothing but sense and the force of reason maintaining its tension and connecting sensations and ideas in their proper sequence. Zeno compared sensation to the outstretched hand, flat and open ; bending the fingers was assent; the clenched fist was “ simple apprehension,” the mental grasp of an object; knowledge was the clenched fist tightly held in the other hand. The illustration is valuable for the light it throws on the essential unity of diverse intellectual operations as well as for enforcing once more the Stoic doctrine that different grades of knowledge are different grades of tension. Good and evil, virtues and vices, remarks Plutarch, are all capable of being “ perceived sense, this common basis of all mental activity, is a sort of touch by. which the ethereal Pneuma which is the soul’s substance] recognizes and measures tension.

With this exposition we have already invaded the province of logic. To this the Stoics assigned a miscellany of studies—rhetoric, dialectic, including grammar, in addition to formal logic—to all of. which their industry made contributions.

Some of their innovations in grammatical terminology have lasted until now: we still speak of oblique cases, genitive, dative, accusa­tive, of verbs active *(opθά),* passive *(ύπτια),* neuter *(oυδετερa),* by the names they gave. Their corrections and fancied improvements of the Aristotelian logic are mostly useless and pedantic. Judgment *(Αξίωμα)* they defined as a complete idea capable of expression in language *(λεκτov αυτoτελές),* and to distinguish it from other enunciations, as a wish or a command, they added “ which is either true or false.” From simple judgments they proceeded to compound judgments, and declared the hypothetical syllogism to be the normal type of reason, of which the categorical syllogism is an abbreviation. Perhaps it is worth while to quote their treatment of the categories. Aristotle made ten, all co-ordinate, to serve as " heads of predica­tion ” under which to collect distinct scraps of information respecting a subject, probably a man. For this the Stoics substituted four *summa genera,* all subordinate, so that each in turn is more precisely determined by the next. They are Something, or Being, determined as (1) substance or subject matter, (2) essential quality, *i.e.* substance qualified, (3) mode or chance attribute, *i.e.* qualified substance in a certain condition (*πως* *ἕχov),* and, lastly, (4) relation or relative mode (in full *υπoκειμεvov ποιόν πρός τί πως ἕχov).* The zeal with which the school prosecuted logical inquiries had one practical result—they could use to perfection the unrivalled weapon of an­alysis. Its chief employment was to lay things bare and sever them from their surroundings, in order that they might be contemplated in their simplicity, with rigid exactness, as objects of thought, apart from the illusion and exaggeration that attends them when presented to sense and imagination. The very perfection and precision of this method constantly tempted the later Stoics to abuse it for the systematic depreciation of the. objects analysed.

The ethical theory of the Stoics stands in the closest connexion with their physics, psychology and cosmology. A critical account of it will be found in the article Ethics. It may be briefly summarized here. Socrates had rightly said that Virtue is Knowledge, but he had not definitely shown in what this knowledge consists, nor had his immediate successors, the Cynics, made any serious attempt to solve the difficulty. The Stoics not only drew up an elaborate scheme of duties, but also crystallized their theory in a general law, namely that true goodness