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STUDENT

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MASTER AND LECTURER

AT THE UNIVERSITIES OF

HALLE · WITTENBERG · JENA

1727–1747

Translation of his Works

MARTIN LUTHER UNIVERSITY HALLE-WITTENBERG

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The Martin-Luther-University Halle-Wittenberg takes pride in presenting the works of the eminent Ghanaian of the 18th century, Anton Wilhelm Amo. The Department of English of this university has contributed the English version of his works. It is hoped that this translation will prove useful to those students of the literature of the Enlightenment, to whom the Latin text might offer some difficulties.

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MAY GOD TURN THIS TO GOOD

INAUGURAL PHILOSOPHICAL DISSERTATION

ON

THE ΑΠΑΘΕΙΑ OF THE HUMAN MIND

OR

THE ABSENCE OF SENSATION AND THE FACULTY OF SENSE IN THE HUMAN MIND

AND

THEIR PRESENCE IN OUR ORGANIC AND LIVING BODY

WHICH WAS

PRESIDED OVER BY

DOCTOR MARTIN GOTTHELF LOESCHER [1]

PUBLIC PROFESSOR OF MEDICINE AND PHYSIOLOGY
AND ALSO PRIVATE TUTOR TO THE MOST SERENE
DUKE OF SACHSEN-WEIMAR
DEFENDED IN PUBLIC
BY THE AUTHOR

ANTHONY WILLIAM AMO,

A WEST AFRICAN, MASTER OF PHILOSOPHY AND
THE LIBERAL ARTS, AND JURUM UNIVERSALIUM
CULTOR

IN THE GREATER ASSEMBLY HALL
1734 IN THE MONTH OF APRIL
AT WITTENBERG FROM THE OFFICINA SCHLOMACHINA

ON THE ΑΠΑΘΕΙΑ OF THE HUMAN MIND

AN OUTLINE OF THE EXPOSITION OF IDEAS CONCERNING THE SUBJECT AS WELL AS THE PREDICATE OF THE THESIS

THE SUBJECT

I. What is the general nature of spirit? ch. I, div. I, § 1.

II. What is the human mind in particular? ibid. § 3.

THE PREDICATE

I. What is the opposite of the predicate? namely
(a) what is sensation?
(b) what is the faculty of sensing? ch. I, div. II.

II. What is the predicate itself or ἀπάθεια? ibid. div. III.

III. What, finally, is the proposition itself, i.e. the ἀπάθεια of the human mind itself?

With these things explained at the outset, there follows a statement of the question, and the theses.

I. Negative Thesis: The human mind does not sense material objects; necessary proofs supplied.

II. Second Negative Thesis: The faculty of sense does not belong to mind.

III. Third Affirmative Thesis: But rather, it pertains to our organic and living body. Necessary proofs again supplied.

Proof of this Exposition

If spirit should be said to feel, that is, admit passivity in itself, this could only happen either through communication, or through penetration, or finally through contact.

NOTE I. By communication I understand the following: when the parts, properties, and effects of one being through the agency of some act become present in another being which is suitable and comparable.

EXAMPLE: Thus if fire should give its heat to a glowing object, what is this but that we see it to communicate itself?

NOTE II. By penetration, I understand the passage of one being through the parts of another object through the agency of some act.

NOTE III. What contact is, immediate sensation itself reveals to us; but lest we seem to speak words without ideas here, by contact we understand the following: when two surfaces touch each other at some physical or sensible point.

APPLICATIONS

STATEMENT I. All spirit lies wholly outside passivity.

PROOF I. No parts, properties, or effects of a second object can become present in spirit through the agency of any act; otherwise, spirit would contain in its essence and substance something other than it should contain. Likewise, to contain and to be contained are material conceptions, and cannot with truth be predicated of spirit. The spirit therefore does not feel through communication, i.e. in the way in which the parts, properties and effects of an object are material, in the same way they ought to be when present in another object through the agency of some act.

PROOF II. No spirit either by itself or by accident receives material and sensible parts, properties, and effects, for it is opposed in a contrary way to a sensible being and among contrary opposites no communication is possible.

NOTE to this proof: Those things are opposed in a contrary way, which are so related that the absence of one occasions the presence of the second and the presence of the second means the absence of the first, i.e. if something is immaterial, it follows that it cannot be material: for these are contrarily opposed, for the predicate of immateriality excludes the predicate of materiality since the presence of immateriality is the absence of materiality. Likewise where spirituality is present, there materiality is absent, and vice versa.

I have said that spirit does not feel or have passivity through communication.

I say secondly that no spirit feels or becomes passive through the mode of penetration, since penetration is the passage of one object through the parts of another object, but no

by definition purely active, but matter is always passive, and receives unto itself all the action of an agent in itself active.

EXPOSITION IV. Spirit acts with intention from precognition of the object which ought to happen and of the end which it intends to achieve by its operation.

PROOF. For in this consists the nature of activity, that a being operates rationally and from knowledge.

CONSEQUENCE I. Every efficient cause ought to have knowledge of itself, its own acts and of what ought to happen.

CONSEQUENCE II. Every active object in which is present knowlege of itself, of its own acts and of other things, is that object which is spirit.

EXPOSITION V. Spirit is immaterial, i.e. neither in its essence nor in its properties does it include anything material.

PROOF. Of contrary opposites one cannot contain and include the other, since contrary opposites mutually exclude each other in genus, species, and identity of designation.

§ 2.

So far concerning spirit, we have at least settled these topics which serve our purpose. Next in order is:

§ 3.

DESCRIPTION OF THE HUMAN MIND AS REGARDS ITS SPECIES

The human mind is a substance which is purely active and immaterial; by its intercourse with the organic living body in which it exists, it thinks, and acts from intention towards a determined end of which it is conscious to itself.

NOTE I. The association of body and mind consists in the following: (1) that it employs the body in which it inheres as a subject; (2) and also as an instrument of its own acts and as a medium.

NOTE II. Instrument and medium differ in this respect that instrument is actively applied to the goal by a practical exercise, and medium is used for the goal to be achieved as a theoretical conception.

NOTE III. There are two essential parts of a man, mind and body. We have already spoken about mind. As for the body, it is an extremely elegant substance first skilfully fashioned by the Creator from diverse living and animal organs, and thence multiplied by procreation. These are the words of D. Christian Vater in his *Physiology*, section VIII, chapter III about the human body, thesis 1. [5]

with its parts from the subject; negation is partial or secondary when we remove a part at least of the predicate from the subject. In this thesis of ours, we remove the whole bimembered predicate from the whole of the subject; that is to say, we remove both sense and the faculty of sensation. But since we have been talking of something being removed from another thing, it is necessary to explain that which is removed from another as though the subject had no room for it; i.e. what is sensation, what the faculty of sensing?

§ 1.

SENSATION EXPLAINED

Sensation is in general as follows: the result of the sensory organs obstructing the sensible properties of material objects immediately present.

NOTE I. Sensation is considered to be either logical or physical. When logical, all sensation is either mediate or immediate. People call that an idea, and it will be clarified in what follows soon. Meanwhile, when physical, all sensation is either pleasant or unpleasant, and in either case is internal or external. These subjects are treated in my logic disquisitions.

NOTE II. Internal sensation is an affection or feeling of the soul. For this see DESCARTES in his treatise on *The Passions of the Soul* [11].

NOTE III. Sensation, feeling, sensing are for me synonyms.

§ 2.

THE FACULTY OF SENSATION EXPLAINED

With what has been said before in mind, the faculty of sense is easily described, as regards what it really is. It is such a disposition of our organic and living body as by whose mediation all animal being is affected by material and sensible objects which are immediately present.

NOTE. The ancients called this faculty of feeling the sensitive soul. This was different and distinct from the rational soul and the vegetable soul. About the rational soul see SENERTIUS [12] in the *Epitome of Natural Science*, bk. VIII ch. 1. On the vegetable soul see bk. VI ch. 2 and again the *Essay on Nature*, first part, ch. VIII on the sensations, p. 103 [13]. Animals are therefore composed of body and a sensitive soul which is their form, but with men this sensitive soul is subordinated to the immortal soul. And being a substance intermediate between body and this immortal soul, it perfectly unites them, etc.

CHAPTER II

CONTAINS APPLICATIONS OF OUR GENERAL CONCLUSIONS WHICH WE HAVE BROUGHT OUT AT LENGTH IN WHAT HAS GONE BEFORE

The State of the Argument

Man has sensation of material objects not as regards his mind but as regards his organic and living body. These statements are here asserted and are defended against DESCARTES and his expressed opinion in his *Correspondence*, part I, letter XXIX, where the passage reads: "*For since there are two factors in the human soul on which depends the whole cognition which we can have concerning its nature, of which one is the part that thinks and the other that which united to the body moves it and feels with it.*" [14]

To this statement we give the following warning and dissent: that the mind acts with the body with which it is in mutual union, we concede; but that it suffers with the body, we deny.

NOTE. Among living things, to suffer and to feel are synonymous. But among things destitute of life, to feel is to admit in oneself changes coming from elsewhere as far as quantity and quality are concerned. In other words it is for them to be modified and determined from outside.

First Caution. But he openly contradicts himself, loc. cit. part I, Epistola 99, in the preceding programmatic investigation where he lays it down that the nature of the soul consists solely in the faculty of thinking [15]; and yet thinking is an activity of the mind, not a passion.

Against SENERTIUS in his *Natural Science* bk. VIII ch. 1 on the subject of the rational soul [16] where he writes: "*Even if indeed the human soul is strengthened by means of the faculties which we have so far attributed to it regarding the vegetable and the sensitive soul nevertheless the two, etc.*" Again bk. VII ch. 1 p. 562 [17] on the sensitive soul: "*For to feel is the work of the soul.*"

Second Caution. But he stands in contradiction to himself p. 563 [18] with the words: "*To receive sensible forms is the function of an organ. To judge it when received is the function of the soul.*" To receive the sensible forms is to feel; but this is appropriate to organs, and in consequence to body, for organs are appropriate not to mind but to body. Again he himself distinguishes between feeling and judging, attributing the former to organs and the latter to minds.

DIVISION III.

Contains the Description of *ἀπάθεια* or the Predicate of the Thesis

§ 1.

We are considering *ἀπάθεια* (first) in respect of the faculty of sensation and (second) in respect of sensation itself. The former must be treated now, and the latter afterwards, § 3.

NOTE. The predicate of this thesis is twofold since it contains a twofold idea, viz. the faculty of sensation and sensation itself, and their absence from a subject in fact not appropriate.

§ 2.

Ἀπάθεια in terms of the faculty of sensing. *Ἀπάθεια* in terms of the faculty of sensing is the absence of such a disposition in an inappropriate subject as by whose means an animal should be affected by material objects immediately present.

Special exposition. A subject has no capacity or is not apposite if it is an entity which does not admit in itself the parts, properties, and effects of another entity, and cannot partake in them. Such a subject is either spirit or matter. Concerning spirit, it has been said that it is incapable of sensation in part I, ch. 1, together with these appropriate expositions and their applications.

Because of the nature of matter, a distinction ought to be made between the living body and body deprived of life; the former certainly, the latter by no means because of its own disposition, is affected by sensation.

§ 3.

Ἀπάθεια in terms of sensation. The next thing in order is what *ἀπάθεια* is in terms of sensation: the absence of any sensation whatever in an inapposite (non-sentient) subject, for example, spirit, stone, etc.

§ 4.

What is the *ἀπάθεια* of the Human Mind?

With all these explanations, the question at last is what is the thesis itself; namely, what we understand by the *ἀπάθεια* of the human mind. Surely this is the absence of the faculty of sense and of immediate sensation in the human mind.

First Proof of Thesis. Whatever feels, lives; whatever lives, depends on nourishment; whatever lives and depends on nourishment grows; whatever is of this nature is in the end resolved into its basic principles; whatever comes to be resolved into its basic principles is a complex; every complex has its constituent parts; whatever this is true of is a divisible body. If therefore the human mind feels, it follows that it is a divisible body.

Second Proof of Thesis. No spirit has sensation of material objects. Since the human mind is spirit, it has no sensation of material objects.

The major premise has been proved in ch. I div. 1 § 1, under the first exposition with notes and applications supplied. The minor premise is incapable of contradiction.

NOTE I. To live and to have sensation are two inseparable predicates. The proof is in the following inversion: everything which lives necessarily feels; and everything which feels necessarily lives. The result is that the presence of one feature imports of necessity the presence of the other.

NOTE II. To live and to exist are not synonyms. Whatever lives exists, but not everything that exists lives, for both spirit and stones exist, but can hardly be said to live. For spirit exists and operates with knowledge; matter exists and suffers the action of another agent. On the other hand both men and animals exist, act, live and feel.

Third Proof of Thesis. "*Fear not*", our Saviour says, "*those who killing the body yet cannot kill the soul.*" Matthew X 28. From that we gather that whatever is killed or can be killed, necessarily lives. (For to be killed is to be deprived of life by violence from some other quarter.) If therefore the body is slain or can be slain, it follows that it lives; and if it lives, feels; and if it feels, it follows that it enjoys the faculty of sensation. For living and feeling are always and right from the beginning conjoined in the same subject.

NOTE. There is agreement between us and the whole assembly of medical men and others whose opinion is that sensation occurs in fluid of the kind in the nerves, and this nervous fluid was by the ancients called animal spirits. See the illustrious DE BERGER in his *Physiology*, bk. 1, On human nature, ch. XXI on secretion and motion of the nervous fluid, p. 277 [27]. See also the most distinguished Dean, my own Chairman, in his compendious second edition of the *Experimental Physics*. C.V.Q. XXV [28]. *Essays on Nature* part one, ch. VIII, Of Sensations § 5, p. 102 [29]; SENERTIUS in his *Epitome of Natural Science*, bk. XV ch. 2 p. 671 [30].

EXAMPLE. Exceptionally appropriate here is the solemn pronouncement of FREDERICK the WISE, Elector, of the most glorious memory, most beneficent founder of our University which flourishes here, Wittenberg. In his last breath of life he was asked how he felt. He answered that his body was in mortal pain but his mind was at peace: "*who on his death-bed was asked how he felt, and made answer: The spirit is restful, but the body is in gross pain.*" —See BRÜCKNER in "*The Hall of Fame*" on the life of Frederick the Wise, . . . [31]

Also contrary to what Johannes CLERICUS has in the fourth book on the *Physiology of Plants and Animals* ch. X on sensible and mobile animals § 2 [19].

Third Caution. He contradicts himself further § 3 subsequently [20] where he says that three things are to be distinguished: (1) the action of an object on an organ, (2) the passion of the organ, (3) says he: "*When an organ is affected, the mind is upset, and the mind feels the sensation of its body being affected.*" Now if the mind should really have this feeling he should have expressed it in this way: "*and the mind feels its body to be affected, it feels, or rather it understands itself not to have been affected.*" But he confuses the act of understanding with the business of feeling: it is the same as if he should have said: "*and the mind understands its body to have been affected.*"

Likewise, contrary to what George Daniel COSCHWIZ says in his *Organism and Mechanism* S.I.C. VIII, thesis 3. [21] And against several others.

The Aristotelians agree with us. In bk. II of "*de generatione et corruptione*" ch. 9 p. 49 [22]: "*It is the characteristic of matter to suffer and be moved, etc.*" Contrary to John Frederich TEICHMEYER in his "*Elements of Natural and Experimental Philosophy,*" ch. III on the principles of physics p. 18 [23], where he has these words: "*We understand by sensation, etc.*"

Also John Christopher STURM in the "*Hypotheses of Physics,*" bk. 1 or the General Part, section I, chapter II in the 5th Epilogue [24]. Again p. III. 232 and what follows thereafter [25].

SPECIAL PART

1st Negative Thesis

The human mind is not affected by sensible things.

EXPOSITION. The thesis means the same as if you said: The human mind is not affected by sensible things however much they are immediately present to the body in which the mind is. But it has knowledge of the sensations arising in the body and employs them when possessed in its operations. See the *Essay on Physics* chapter VIII, p. 107 [26].

NOTE. When man is considered logically, mind, operation of mind, idea and immediate sensation must not be confused; mind and its operation are immaterial. For as is the nature of a substance so is the nature of the property of the substance, and yet that mind is immaterial, has been shown in what we have already said in ch. I, div. 1, § 1. etc., and therefore its property too is immaterial. Idea is a composite entity; for there is an idea when the mind makes present to itself a sensation pre-existing in the body, and thereby brings the feeling before the mind. For what immediate sensation is, see ch. I, part 2, section 1 together with the footnotes.

THE RECTOR

and

PUBLIC ASSEMBLY OF WITTENBERG UNIVERSITY

to the Kind Reader render Public Greeting

Great once was the dignity of Africa, whether one considers natural talents of mind or the study of letters, or the very institutions for safeguarding religion. For she has given birth to several men of the greatest pre-eminence by whose talents and efforts the whole of human knowledge, no less than divine knowledge, has been built up. No one in former time and no one in our own age has been judged to be either more prudent in civic life or more elegant than TERENCE, the Carthaginian. Moreover, PLATO, in the Socratic disquisitions of APULEIUS the Madaurensian, seemed to come to life again, and with such great applause of former ages, that scholars broke asunder, and the Apuleian School [39] flourished, the school which dared to rival the Ciceronians [40] for first place in eloquence. In Christian teaching too how great are the men who have come out of Africa. Of the more distinguished it is enough to mention TERTULLIAN, CYPRIAN [41], ARNOBIUS [42], OPTATUS MILEVITANUS [43], AUGUSTINE, all of whose sanctity of soul rivals the learning of every race. And finally with what great faith and steadfastness for soundness in sacred matters the African doctors continued their memorials and their deeds, their martyrdom, their councils declare. Those who say that the African Church has always merely been a receiver of instruction, do her immeasurable wrong. While admitting that with the spread of Arab power into Africa, great changes have indeed taken place, nevertheless all the light of their genius and learning has been far from extinguished by Arab absolutism. By an old established custom of this race to whom learning seems to have migrated, liberal science was cultivated, and when the Moors crossed from Africa into Spain their ancient writers brought with them at the same time much help to the cultivation of letters from the darkness which had taken hold of it. Such was the position of learning that it brought pleasure to the Africa of ancient days. But though in our own times indeed that part of the world is reported to be more prolific in other things than in learning, nevertheless that it is by no means exhausted of genius,

ANTHONY WILLIAM AMO

here, that most distinguished Master of Science and the Liberal Arts—would teach by his example. Born in a very distant recess of Africa where it faces the east, he came to Europe as a very little child. He was initiated into sacred rites in the Halls of Julius [44], and so enjoyed the kindness of their most serene Highnesses and Dukes of Brunswick-Wolfenbüttel, of

AUGUST WILHELM [45] and of LUDWIG RUDOLPH [46],

which was so great that in the matter of his education no bounty of paternal love was wanting.

§ 2.

THESIS II. And there is no faculty of sensation in the mind.

PROOF. Anything to which circulation of blood is appropriate is that also to which the principle of life is. Whatever the latter pertains to, to that also does the faculty of sense. Yet circulation of the blood, and the principle of life pertain to the body. See the illustrious DE BERGER ch. 5 to the end of p. 112. In the same book also p. 56 [32]. Let me refer you in addition to my worthy President in the work mentioned, to Christian VATER C.V.Q. XII [33] in *Physiology*, s. IV ch. II, on life and nutrition, thesis 1 towards the end [34]. Likewise the Bible clearly marks the distinction between the soul and the breath, Job XII, v. 10 where the seventy men say: "*If in his hands are the souls of all living things and the breath of all men.*" DR. LUTHER too renders it similarly: "*that in his hand is the soul of all things which have life and the spirit of everything that has flesh.*" The expression ἡ ψυχή indicates the principle of life of animals, Genesis 1 verse 24, also ch. IX verse 4. "*Flesh in the blood, which is the life thereof, shall ye not eat.*" "*Except meat*" etc. "*Eat not of flesh which yet lives in its blood,*" and in the same place DR. LUTHER rendered τὴν ψυχήν as the life of man [35]. Likewise Proverbs 4 [36]. "*Keep thy heart with all diligence, for out of it proceeds life.*" But the heart with its cycle of blood means the body. Further turn to Leviticus ch. XVII [37]: "*For all life is the blood.*" But blood here is traced back to body. Add the *Essays on Nature*, part 1, chapter VIII on sensations pp. 102, 103 [38]. Since these things are so, it follows that the principle of life with the faculty of sense is not appropriate to mind. Rather, they belong to the body.

§ 3.

THESIS III: Hence sensation and the faculty of sense belong to body.

PROOF. Sensation and the faculty of sense belong either to the mind or to the body, not both. That they do not pertain to the mind has been shown by our broad conclusions. Therefore, they belong to the body. I refer you to the proofs of Theses I and II.

FINAL NOTE. To conclude this dissertation: for the refutation of contrary opinions to my position see chapter 2 on the form of the question. In the same way we must not confuse the things which belong to the mind and the body respectively. Whatever consists in the pure operation of the mind belongs to mind alone, and whatever is subject to sensation and the faculty of sensation and involves the concept of matter is entirely to be attributed to body. THAT IS ALL.

excellently proved the felicity and superiority of your mind, the solidity and refinement of your learning and teaching, in countless instances up to now even in this our University with great honour in all good deeds, and also in your present dissertation. Still complete and wholly unchanged I return to you this which you have by your own efforts worked out with refinement of scholarship in order that the power of your intellect may shine forth all the more strongly from now on. It only remains now for me to congratulate you wholeheartedly on this singular example of your more refined learning; and with a more abundant feeling of heart than with words I pray for all good fortune and commend you to the Divine Grace and also to the Highest and Best Prince

LUDWIG RUDOLPH,

for whose greater health and safety I shall never tire of worshipping the Divine Majesty. You too I commend with equal devotion and humility.

I write this at Wittenberg in Saxony.
The month of April, A.D. 1734.

NOTES

The following notes refer to editions which can be presumed to have been at Amo's disposal. They are based on the books available in the libraries at Halle and Wittenberg Universities. In the usual fashion of the times, Amo's references are often defective and quotations are not always given exactly, word for word. Since this is a regular feature, no special mark has been used to denote this. In addition, no reference is made to printing errors in Amo's works.

[1] Martin Gotthelf LÖESCHER (d. 1735), professor of medicine and physics at the University of Wittenberg.

[2] Rene DESCARTES (1596–1650), Epistolae, part 3, Amsterdam 1683, no. 114, p. 420.

[3] Johann Gottfried von BERGER (1659–1736), professor of medicine at the Universities of Leipzig and Wittenberg.
—Physiologia Medica sive de Natura Humana Liber Bipartitus, 2nd edn., pub. Friedrich Christian GREGUT, Frankfurt 1737, I, 1, pp. 1 and 5.

[4] René DESCARTES. op. cit. part 3, no. 115, p. 422ff. Part 1, (Amsterdam 1668), no. 29, p. 59ff. and no. 36, p. 80ff.

[5] Christian VATER (1651–1732), professor of medicine at the University of Wittenberg.
—Physiologia Experimentis et Demonstrationibus, Mechanicis, Chimicis et Anatomicis Illustrata et Confirmata, Wittenberg 1701, VII, 3, p. 446.

[6] Daniel SENNERT (1572–1637), professor of medicine at the University of Wittenberg.
—Epitome Naturalis Scientiae, Amsterdam 1651, VIII, 2, p. 645.

[7] Jean LECLERC (Johannes CLERICUS) (1657–1736), Swiss protestant theologian and philosopher.
—Pneumatologia III, 3, 14, in: Opera Philosophica, vol. 2, Leipzig 1710, p. 104.

[8] Sextus PROPERTIUS,
—Elegiarum libri quattuor, Amsterdam 1702, IV, 7, 1, p. 377.

[9] Antoine MIZAULD (Antonius MIZALDUS) (d. 1578), French doctor, mathematician, astronomer and gardener.
—Centuriae IX Memorabilium, Utilium ac Iucundorum in Aphorismos Arcanorum Omnis Generis Locupletes, Frankfurt 1589.

[10] Samuel Christian TEUBER (1671–1739), protestant theologian, General Superintendent of Halberstadt.
—Moderatum Iudicium de Quaestione Theologica, an Dentur Tres Partes Hominis Essentiales? Magdeburg 1708, passim.

By reason of his proven gentleness of spirit he visited the Saxon town of Halle, and already learned in various doctrines, he came to us, and by continuing the curriculum with diligence, he won the affection of the Order of Scholars to such an extent that by the unanimous vote of the Fathers, he was decorated with the laurels of philosophy. The honour won by desert of his ability, of his outstanding uprightness, industry, erudition, which he has shown by public and private exercise, he increased with praise. By such behaviour, with the best and most learned, he won great influence; among his equals he easily shone out. Therefore trained and stimulated by the study of these, he handed over his knowledge of philosophy to several at home. Having examined the opinions of the ancients as well as those of the moderns, he garnered all that was best, and what he picked out he interpreted with precision and with lucidity. This work has proved that his intellectual ability is as great as his powers of teaching, nor has this ability proved itself unequal to the office of teaching, which by some natural instinct he is at length being drawn to administer in the university. Therefore, since he has completely justified our expectation, there is no reason whatever why we should deny him our public judgement and attestation to which he has a right. Indeed, we hope for all the best things from him and we adjudge him worthy of that Princely favour which he has dutifully respected, and which he publicises in every address. And now for blessing in order that he may be able to enjoy for a long time this good fortune and attain to the most renowned fruition of his hope for the well-being of the good and great Prince,

LUDWIG RUDOLPH,

for the preservation of the whole House of Brunswick-Wolfenbüttel, celebrated for so many great services to all Germany, let us all address God in prayer.

JOHN GODFREY KRAUS [47], DOCTOR,
Rector of the University

THE CHAIRMAN TO THE MOST DISTINGUISHED AUTHOR ETC. OF THIS DISSERTATION RENDERS PUBLIC GREETING

We proclaim Africa and its region of Guinea, planted at a very great distance from us, formerly the Golden Coast, so called by Europeans on account of its abundant and copious yield of gold, but known by us as your fatherland, in which you first saw the light of day, the mother not only of many good things and the treasures of nature but also of the most successful minds; we proclaim her quite deservedly. Among these auspicious minds, your genius particularly stands out, most noble and most distinguished Sir, seeing that you have

MAY GOD TURN THIS TO GOOD

A PHILOSOPHICAL DISPUTATION

CONTAINING

THE DISTINCT IDEA

OF THOSE THINGS WHICH BELONG TO THE MIND AND TO OUR ORGANIC AND LIVING BODY

WHICH

WITH THE CONCURRENCE OF THE MOST DISTINGUISHED DEPARTMENT OF PHILOSOPHY

WAS PRESIDED OVER BY

MASTER ANTHONY WILLIAM AMO

A WEST-AFRICAN

AND

DEFENDED BY

JOHN THEODOSIUS MEINER [1]

OF ROCHLITZ NEAR MEISSEN

STUDENT OF PHILOSOPHY AND LAW

IN THE PHILOSOPHICAL HALL

ON THE 29TH OF MAY, 1734

WITTENBERG, WIDOW KOBERSTEIN'S PRESS

[11] René DESCARTES: Passiones Animae, Amsterdam 1692, passim.
[12] SENNERT, op. cit., VIII, 1, p. 621ff. and VI, 2, p. 445ff.
[13] (Edme DIDIER): Essais de physique prouvés par l'expérience et confirmés par l'Écriture sainte, part 3, Paris 1648 (not available).
[14] DESCARTES, Epistolae, part I, no. 29, p. 59.
[15] ibid. no. 99, p. 319ff.
[16] SENNERT, op. cit. VIII, 1, p. 629.
[17] ibid. VII, 1, p. 540.
[18] ibid. VII, 1, p. 540.
[19] Jean LECLERC: Physicae liber quartus: De Plantis et Animalibus X, 2 in: Opera Philosophica, vol. 4, Leipzig 1710, p. 134.
[20] ibid. X, 3, p. 134.
[21] Georg Daniel COSCHWITZ (d. 1729), professor of medicine at the University of Halle.
—Organismus et Mechanismus in Homine Vivo Obvius et Stabilitus seu Hominis Vivi Consideratio Physiologica, Leipzig 1741, I, 8, 3, p. 196ff.
[22] ARISTOTLE—De Generatione et Corruptione (*Περὶ Γενέσεως καὶ Φθορᾶς*) II, 9; in: Opera Omnia, Graece et Latine, pub. Guillaume DU VAL, vol. 1, Paris 1654, p. 739.
[23] Hermann Friedrich TEICHMEYER (1685–1746), professor of physics and medicine at the University of Jena.
—Elementa Philosophiae Naturalis Experimentalis, Jena 1717, III, p. 8.
[24] Johann Christoff STURM (1635–1703), professor of mathematics and physics at the University of Altdorf.
—Physica Electiva sive Hypothetica, vol. I, Nuremberg 1697, I, 1, 2, epilogue 5, p. 65.
[25] ibid. I, 1, appendix III, p. 231ff.
[26] Essais de physique, loc. cit.
[27] v. BERGER, op. cit. I, 21, p. 277.
[28] Martin Gotthelf LOESCHER: Physica Experimentalis Compendiosa, Wittenberg 1715, III, 5, 20, p. 150. (The second edition of 1717, cited by Amo, is not available.)
[29] Essais de physique, loc. cit.
[30] SENNERT, op. cit., VIII, 2, p. 641ff.
[31] Siegmund von BIRKEN (BETULIUS) 1626–1681), German author: Chur- und fürstlicher sächsischer Helden-Saal, 2nd edn., Nuremberg 1678, p. 532.
[32] v. BERGER, op. cit., I, 5, pp. 112 and 56.
[33] LOESCHER, op. cit., III, 5, 5, p. 140.
[34] VATER, op. cit., IV, 2, p. 303.
[35] Gen. 9, 5.
[36] Prov. 4, 23.
[37] Lev. 17, 11 and 14.
[38] Essais de physique, loc. cit.
[39] Adherents of the mannered style of APULEIUS.
[40] Adherents of the classical style of CICERO.
[41] CYPRIAN (210/15–258), Father of the Church and Bishop of Carthage.
[42] ARNOBIUS (d. 327), Christian writer and rhetorician of Sicca (Numidia).
[43] OPTATUS (2nd half of 4th century), Bishop of Mileve (Numidia).
[44] Juliushall (Bad Harzburg). Authentic evidence however shows that Amo was baptised in Salzdahlum near Wolfenbüttel.
[45] Duke August Wilhelm of Brunswick-Wolfenbüttel (1714–1731).
[46] Duke Ludwig Rudolf of Brunswick-Wolfenbüttel (1731–1735).
[47] Johann Gottfried KRAUS (b. 1680), professor of jurisprudence at the University of Wittenberg.

§ 2.

I. To what Class of Things does the Action of the Mind Belong?

By the action of the mind as to genus, I understand the action of mind, guided by awareness (Bewußt-Werdung) and intention, of thinking through concepts and sensations, and of verifying things thought.

NOTE. For what intention is, see the above-mentioned dissertation on the *ἀπάθεια* of the human mind, ch. I, division I, § 1, note 2.

EXPOSITION I. By verification, I here understand the achievement of some intended end by use of some medium.

EXPOSITION II. Thought is any action of the mind through ideas and sensation.

§ 3.

II. How Many Operations of Mind are there in Genus?

The act of the mind in respect of an object concerning which it is an act, and in respect of the end which the mind intends is threefold. Indeed it takes the form of (1) the act of the mind in understanding or intellection, (2) the act of the mind in wishing and rejecting, (3) the act of the mind in bringing something about or the efficient act. The last is an effect of the first two.

NOTE I. Though the act of the mind has a threefold expression in this way, in number and in nature it is really one. The respective differences arise from the object and the intended end.

PROOF I. Whatever we contemplate is either a sensation or a concrete thing. But both are diverse among themselves; therefore the action of the mind is itself diverse in the two ways, depending for its nature on the way in which either concrete objects or sensations, themselves diverse by nature, are contained in the mind; i.e. as the explanation of the object and of the end of thinking.

NOTE II. The object involved serves either as medium or as instrument, and something else is always intended through it. The end is that in whose attainment and presence, the mind ceasing from its former activity finds rest, and is either a sensation or an idea or a concrete object.

PROOF II. The mind does not turn toward all things in the same say. For the mind turns in one way towards concepts, in a different way towards desirable objects, and yet in another way towards objects of contemplation and indeed towards all those things mentioned in the explanation given of the object and the end.

CHAPTER I

CAUTION ABOUT THE TITLE OF THIS DISPUTATION

By the distinct idea of those things which belong to the mind and our living and organic body, I understand the knowledge of those things which, in human actions, belong, in themselves and always, either to the mind alone, or to our living and organic body alone.

NOTE. Whatever is presupposed in the faculty of thinking as such, belongs to mind; whatever belongs to the faculty of sensing as such, and is immediately in the senses, belongs to body. I refer you to the learned Descartes or Cartesius in his Epistles, part I, Ep. 99, in article 12 of the "*Notes against a Programme*" and in the same reference in his explanation about the first article of the *Programme* [2], where he has the following words: "*The human mind is that by which cogitative actions are performed in the first place by man; and the human mind consists in the faculty of thinking alone and is an internal principle.*" Furthermore for the truth that the faculty of sensing belongs to the body alone, see those conclusions which we have drawn at great length in our inaugural dissertation on the *ἀπάθεια* of the human mind in the whole of chapter II.

DIVISION I

CONTAINING GENERAL POINTS

Caution about the title of this division. By general points, I understand the following: those things which right at the start ought to be explained as method demands so that things which ought to be done in an orderly manner should proceed to the final conclusion in a correct way.

§ 1.

The following questions are the preliminary ones: (1) what is our body? (2) what is the human mind? (3) to what class of things does the action of the mind belong? (4) how many kinds of actions count as actions of the mind, and indeed also (a) what is an intellectual act? (b) what is an act of will? (c) what is the act of bringing things about or the efficient act?

NOTE. What the mind is, and what our living organic body is, we have already explained in op.cit., the mind being explained in ch. I, section I, § 3, and the body at the same place in note 3. Next in sequence therefore comes:

things which appertain to it; but simply applies ideas to an end of which it is conscious. Such an act besides is either before or after reflection; what sort is before reflection, we have elsewhere shown, as e.g. representation, attention, enumeration or the review of things, etc. An act is truly post-reflection when the mind simply brings into close contact ideas acquired by a judicious reason, on account of a known end of which it is conscious, for example as in the act of defining when the mind puts ideas together judiciously, etc. Again in division, ratiocination, in syllogisms, demonstrations, etc.

§ 4.

The act of the mind in understanding is reflective. In this the mind really, and to the extent it can, with rectitude and adequately, enquires into the origin of that of which it is conscious to itself, its existence, essence, and the properties belonging to it, in order that it might as much as possible gain a perfect understanding of the object just as it is in itself.

§ 5.

This act is furthermore either adequate or less than adequate. It is adequate when the mind understands in a distinct way all things which are known in the object. It is inadequate when not all things are understood or when the understanding is less than distinct. Either is applicable in respect of sensation, the thing to be known, and the intention of the knowing mind.

SECTION II

II. Concerning the Will

CAUTION. The will, to the extent that it is a faculty of the mind for accepting and rejecting, is not to be confused with natural instinct. This will subsequently become plain.

§ 1.

Will is the action of the mind through ideas, on account of an end to be made to ensue and for a reason which is in agreement or in conflict with a concurrent natural instinct, and the action follows a prior decision of the mind.

EXPOSITION I. The natural instinct is that propensity towards the presence and enjoyment of something which is gratifying and good, and towards the absence of that which is unpleasant and bad, or according to Philipp MELANCHTHON, in *De Sensibus Interioribus*. "Q. *What is the appetitive faculty?* [8] *It is the faculty which seeks or avoids objects.*"

NOTE. Naturally we have sensations, the faculty of sensing and natural instinct in common with brutes; concerning natural instinct, see EPICTETUS in *Enchiridion*, ch. 38 [9], where he has the following words: "*That is placed by nature in all kinds of living things, in order that they may turn away and fly for their own sakes from things which seem harmful, and on the other hand admire*

DIVISION II

CONTAINING SPECIAL POINTS CONCERNING EVERY ACT OF THE MIND CONSIDERED FROM THE POINT OF VIEW OF SPECIES

SECTION I

I. On Intellect or the Act of the Mind in Understanding

Caution on the title of this section. We call this act of the mind understanding or intellect interchangeably. But not without ambiguity; for the intellect is either the mind itself or an idea or the action of the mind. (We use the word interchangeably) for the mind when we say: "*The intellect understands, thinks, etc.*" where we should rather speak as follows: "*The mind understands, thinks, etc.*" See the *Philosophiae Aristo-Thomisticae Cursus*, volume V, bk. I [3]; ARISTOTLE's *de Anima*, chapter III [4] where he has: "*The soul is not a moving or a moved body*," and also the learned ST. THOMAS' *Lectures* 6, 7, 8, page 234 note 2 [5], where the following words occur: "*If the intellect should be a magnitude, since it would understand by agreement, etc.*" ibid. n. 4 [6] thus: "*From this the motion of the intellect would be understanding, etc.*" where for the word "intellect" one should rather put down "mind," thus: "*If mind should be a magnitude, etc., the motion of the mind would be understanding, etc.*" for locutions of this kind sound not otherwise than if we should say: "*The action of speaking speaks, or speaking speaks.*" (2) When "intellect" is used for idea, "intellect" and "understanding" become synonyms. In fact, however, any idea whatever is something different. (3) When "intellect" is used for the action of the mind, it becomes that action of the mind by which something is confusedly or distinctly understood (in German, *der Verstand*) and we call this act of the mind in understanding "intellect" in this usage.

§ 1.

The intellect is therefore to us in genus: that act of the mind by which it makes things known to itself.

NOTE. Whatever the mind makes known to itself is either a concrete object or a sensation.

Explanation. There is nothing in the intellect which has not been in the senses previously. Philipp MELANCHTHON's translation of *de Anima* at de Potentia Sentiente, q. 1. "*What is a sentient faculty, etc.?*" [7] reads: "*Nothing is in the act of understanding of the mind, which has not previously been perceived by the senses.*" But nothing is perceived which does not affect the senses, and anything affecting the senses is a sensible thing, indeed a material thing.

§ 2.

This intellective act of the mind is either momentary or reflective.

§ 3.

The intellectual act of the mind is momentary when in that act the human mind does not enquire into the origin of the thing of which it is conscious, its existence, its essence, and those

CHAPTER II

CONTAINING THE APPLICATION OF WHAT HAS BEEN SAID

DIVISION I

THE STATE OF THE ARGUMENT

THESIS. All things which are effects of the exercise of an intention of the human mind are to be so far attributed to the mind as the extent to which they owe their nature to the consciousness (Bewußt-Werdung) and to a prior decree of the mind. But in so far as the effects are those of sensation, the faculty of sense, and natural instinct, considered simply and in themselves, they belong to our living and organic body.

NOTE. These words are spoken and defended against implicit combatants, of whom see the "*de humanae mentis ἀπάθεια*," ch. II, pp. 12, 14; and by name against John CLERICUS in *Pneumatology* S.I.C. III § 2 p. 14, where he writes this: "*There are seven principal faculties of the mind, which are worth the trouble of considering in the manner of images: (1) intellect (2) will (3) the faculty of sensation (4) liberty (5) imagination (6) memory (7) various habits contracted through repeated action.*" [15]

DIVISION II

CONTAINING SPECIAL APPLICATIONS

§ 1.

I. THE INTELLECT. What intellect should be, I have explained in ch. I, division II, section I. It really belongs to the mind, insofar as to it appertain consciousness and the operation of the mind through ideas from a premeditated decision; but to the body, just as ideas, through which the mind operates, are sense-representations, for sensation and the faculty of sense belong to the body, as shown in the dissertation "*de humanae mentis ἀπάθεια*," ch. 2, special section, the first negative thesis in the exposition with notes. Again, whatever bears the name of animal we have in common with the brutes; such a thing does not belong to the mind but to the body. But sensations and the faculty of sense are found with brutes, and under the name of animal, we share them in common with brutes, etc. The minor premise is proved, because of the immense number of animals which though destitute of mind and reason alike yet do not find it impossible to enjoy the faculty of sense. See the dissertation

and pursue for their own sakes useful things, etc." That the faculty of sensing and sensations are common to us and brutes is proved from this consideration that animals, which are not denied life and sensations, are in fact endowed with many things required by their nature as animals. See R. P. AUGUSTINE OF THE VIRGIN MARY in *Aristotelis Reseratus* vol. V, bk. I [10]; ARISTOTLE *de Anima*, page 245, beginning from the words: "*For they seem to have, etc.*" [11].

EXPOSITION II. A mental decision is the operation of the mind by which it establishes something to itself as requiring to be done or avoided on account of an end of which it is conscious to itself.

NOTE. In explanation of this decree of the mind, the mind acts either despotically or politically. These are the words of Philipp MELANCHTHON who thus says in *de Anima* and "*de Sensibus Interioribus*" [12]: "*Thus in man there is a double governing principle. One is despotic, by which the mind and the will compel motion, etc.*" And he goes on after a short digression: "*The second governing principle in man is that which is called the political, since not only are the outer limbs made to agree through motion, but the heart itself agrees with true reason, honest will, and is moved by persuasion, as when Hippolytus, son of Theseus, avoids his stepmother, Phaedra.*" These words are well-considered when the mind acts by commanding; but it often also acts by indulging a natural instinct, and from this arise unjust and evil actions; out of the former arise just and good actions, i.e. when the mind commands the natural instinct, in pursuit of a truth seen beforehand. Concerning that, see Genesis IV [13], "*Let your appetite be under you and you will conquer it.*" Of the indulgence of the natural instinct it says: "*I see better things, and I approve them, but I follow the worse.*" [14]

SECTION III

III. Concerning the Effective Act of the Mind

The effective act of the mind is that by which the mind intends to pursue an end through application of instruments (i.e. limbs) which are joined to the body. It varies (just as does the act of understanding or willing) according to the nature of the object and end.

NOTE. In the act of understanding we understand either substance or property. Substance is either spirit or matter. A property is either spiritual or material. In the act of the mind in willing or rejecting is contained a simple sensation which is pleasant or unpleasant and is directed towards the preservation or destruction of things and the human body, or finally towards the perfection and imperfection of things and man. In the act of bringing something about or the effective act, there is an application of media and instruments. Out of the intellectual act arise intellectual objects; and out of the act of acceptance or rejection come morals; out of the effective act come political objects and artefacts. These are the preliminary points.

on the contrary absent. This does not belong to the mind purely, but insofar as it has a representative function it belongs to it, and insofar as the body controls sensation, the faculty of sense and the natural instinct, it belongs to our living organic body.

§ 6.

VI. MEMORY. Memory is the continued presence of ideas in the ordered content of the brain, arising out of a repeated act of the mind, performed more than once, such ideas being preserved for a future purpose. This, to the extent of the repetitive act of the mind, with consciousness and premeditated decisions, belongs to the mind, since it is indeed a disposition of the brain and an immanence in the body.

EXPOSITION. Immanence is the perduration of one thing in another thing.

§ 7.

VII. HABIT. Habit is a promptitude of action acquired through actions repeated many times. It appertains to mind in respect of consciousness and the pre-determined operation of the mind and appertains to body in respect of the disposition of the subject and the habit of passivity.

COROLLARY

Whatever is immutable in man belongs to mind. Whatever is changeable with time belongs to body.

THAT IS ALL.

at ch. I, division 2, section 2, where I expatiate in the note in the words: "*The faculty of sensing, etc.*".

NOTE. I say that a thing bears the name of animal when man is considered as animal, and only in respect of the living organic body. Accordingly, "*man is a rational animal*" where it is animal as touching the living and organic body, and rational as touching his thinking mind.

§ 2.

II. WILL. Will can be predicated of mind, as touching consciousness and premeditated decrees of the mind, not as touching the natural instinct as such, see chapter I, div. II sect. II, § 1, expos. I. Otherwise will will be present even in brutes since they enjoy natural instinct.

NOTE. The esteemed author in his definition of will says the same thing in the same words. For he defines will in terms of accepting and rejecting. For the command of the will, see the dissertation at § 6 where you have [16]: "*Will is that by which we accept or reject something contemplated by the mind or brought about by the body, if we are thinking of the commands of will.*"

§ 3.

III. THE FACULTY OF SENSING. We wholly deny this of the mind, but attribute it to the body, see the whole of my dissertation "*de humanae mentis ἀπάθεια.*"

§ 4.

IV. LIBERTY. By this we understand either something relating to the mind alone or something relative to the whole man. Liberty as a principle of the mind is that spontaneity or faculty by which the mind decides what is to be done or what avoided, and without constraint from elsewhere. This is never absolutely speaking the case because the mind is not able to operate without the medium of its intercourse with the body. For the way in which it operates through sensation, see DESCARTES or CARTESIUS *Epist.* part II, Epist. V, note 2, where he has the words: "*Why among children, etc.*" [17].

EXPOSITION. An impediment is whatever object makes it impossible by its presence that an intended end should ensue.

§ 5.

V. FANTASY. Fantasy is the momentary act of the understanding mind before it has reflected sufficiently, in which the mind, by the nature of the natural instinct and of the affection which are present, represents to itself something as existing which however is quite

ANTONIUS GVILIELMUS AMO
AN AFRICAN FROM GUINEA
MASTER OF PHILOSOPHY
AND THE LIBERAL ARTS

TREATISE

ON THE

ART

OF

PHILOSOPHISING SOBERLY AND ACCURATELY

COMPOSED IN ACCORDANCE WITH HIS ACADEMIC LECTURES

TOGETHER WITH AN

ESSAY

CONCISE AND EXACT
ON CRITICISM, INTERPRETATION, METHOD,
THE ART OF DISPUTATION
AND OTHER MATTERS
DEALT WITH IN LOGIC

HALLE–MAGDEBURG
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MDCCXXXVIII

TO THE MOST NOBLE JOHANNES THEODOSIUS MEINER, PUBLIC GREETINGS FROM THE CHAIRMAN

Of your continued diligence that tends towards human knowledge which is produced by continuous and untiring application, and which is increased by swift additions of great importance and learning, you have shown proof with great public honour.

Proceed therefore happily as you have done for some time, recommended by honest conduct and prudent living to render asistance to letters so all the best people will love you.

In this way, your father, long worthy of respect by virtue of wide experience, well-merited honours and devotion to his faith, who in your native Meissen is an adornment of the church, will have in you a son not unworthy of so great a parent. Your most noble race, renowned by its ancestry and the splendour of its achievements will see in you its virtues prosper and flower.

I congratulate you, noble Sir, but more for your promise of excellence than for the ambivalence of your words.

NOTES

[1] Johann Theodosius MEINER, of Rochlitz (Saxony), student of philosophy and law at the University of Wittenberg, matriculated on 14th October 1732.
[2] René DESCARTES: Epistolae, part 1, Amsterdam 1668, no. 99, pp. 325ff. and 317.
[3] AUGUSTINUS A VIRGINE MARIA (Guillaume de GOAZMOAL) (17th cent.), French Catholic theologian.
—Philosophiae Aristo-Thomisticae Cursus, vol. 5, Lyons 1664 (not available).
[4] ARISTOTLE: De Anima (*Περὶ Ψυχῆς*) I, 3; in Opera Omnia, Graece et Latine, pub. Guillaume DU VAL, vol. 2, Paris 1654, p. 8ff.
[5] THOMAS AQUINAS (1225/26–1274).
—Commentaria in tres libros Aristotelis de Anima I, 6–8; in: Opera Omnia, pub. Cosmas MORELLES, vol. 3, Antwerp 1612, p. 6bff. (Quotation from p. 9a).
[6] op. cit. I, 8, p. 9a.
[7] Philipp MELANCHTHON (1497–1560).
—Liber de anima, Wittenberg 1562, p. 91a.
[8] op. cit. p. 103a.
[9] EPICTETUS.
—Enchiridion (*Ἐγχειρίδιον*), Graece et Latine, Wolfenbüttel 1692, 38, p. 85ff.
[10] AUGUSTINUS A VIRGINE MARIA, op. cit.
[11] ARISTOTLE, op. cit. II, 2, p. 21.
[12] MELANCHTHON, op. cit. p. 110aff.
[13] Gen. 4, 7.
[14] OVID (Publius OVIDIUS Naso).
—Metamorphoses 7, 20f. in: Opera Omnia, publ. Peter BURMAN, vol. 2, Amsterdam 1727, p. 447; cf. also Romans 7, 15ff.
[15] Jean LECLERC: Pneumatologia I, 3, 2; in Opera Philosophica, vol. 2, Leipzig 1710, p. 14.
[16] LECLERC, op. cit. I, 3, 6, p. 15.
[17] DESCARTES, op. cit., part 2, Amsterdam 1668, no. 5, p. 16. (Quotation is from no. 1).

AND TO THE
MOST ILLUSTRIOUS, WISEST, MOST EXCELLENT AND
DISTINGUISHED
GENTLEMAN

JUSTUS HENNING BOEHMER [3]

ADVOCATE OF HIGHEST RENOWN AND
DIRECTOR OF THE FREDERICK UNIVERSITY,
MEMBER OF THE PRIVY COUNCIL
OF THE MOST MIGHTY KING OF PRUSSIA,
PROFESSOR IN ORDINARY OF LAW,
MY MOST RESPECTED PRECEPTOR AND PATRON,

AND ALSO TO THE
MOST ILLUSTRIOUS, WISEST, MOST EXPERIENCED,
MOST EXCELLENT
AND MOST DISTINGUISHED GENTLEMAN

D. FRIEDRICH HOFFMANN [4]

THE GREAT PHILOSOPHER AND PHYSICIAN,
IMPERIAL COUNT OF THE PALATINATE,
PRIVY COUNCILLOR AND PERSONAL PHYSICIAN
TO THE MOST SERENE AND MIGHTY KING OF PRUSSIA,
BY FAR THE MOST MERITORIOUS SENIOR OF THE WHOLE FREDERICK
UNIVERSITY AND PRIMARY PROFESSOR OF THE MEDICAL FACULTY,
MY MOST HONOURED MAECENAS,

AND TO THE
MEMBERS OF THE ACADEMIC SENATE
AND TO ALL MY OTHER
MOST HONOURED PATRONS AND MOST RESPECTED
BENEFACTORS,
I DONATE, DEVOTE AND DEDICATE
THESE FIRST FRUITS OF MY STUDIES
IN ALL DUE REVERENCE AND DUTY BOUND.

TO THE

PRORECTOR MAGNIFICUS

OF THE
ILLUSTRIOUS FREDERICK UNIVERSITY [1]
AND TO ALL THE OTHER
MOST ILLUSTRIOUS, MOST REVEREND, DISTINGUISHED,
WISEST, MOST EXPERIENCED AND MOST EXCELLENT

PROFESSORS and DOCTORS

OF THE
SCIENCES HUMAN AND DIVINE,
BY FAR THE MOST RENOWNED
AND PRE-EMINENT MINISTERS OF THE MUSES,
THAT HAVE PERFORMED AND ARE STILL PERFORMING
EXCELLENT SERVICE
TO THE CHURCH OF GOD, AND TO THE REPUBLIC
OF BOTH LIFE AND LETTERS,

TO THAT
MOST ILLUSTRIOUS, WISEST, MOST EXCELLENT
AND DISTINGUISHED GENTLEMAN

JOHANN PETER VON LUDEWIG [2]

CHANCELLOR OF THE FREDERICK UNIVERSITY,
MEMBER OF THE PRIVY COUNCIL
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AND OF THE GOVERNMENT AND CONSISTORY OF THE
DUCHY OF MAGDEBURG
DEPUTY PRESIDENT OF THE ORDER OF ADVOCATES,
MOST CELEBRATED PROFESSOR OF LAW AND HISTORY,
GENTLEMAN OF BENDORFF, PREZ, GATTERSTÄDT, ETC.,
MY INCOMPARABLE PRECEPTOR AND PATRON,

THE ART OF PHILOSOPHISING SOBERLY AND ACCURATELY

GENERAL PART

CHAPTER I

ON INTENTION, ITS DIFFERENT ASPECTS AND ITS EFFECTS

DIVISION I

On Intention in General

OBSERVATION. Apart from God, the first cause of all things, every *ens*[1]) is the effect of an intention already carried forward to its end[2]).

DEMONSTRATION I. Every *ens* apart from God exists either of itself or by chance or through something else that is its efficient cause; now (a) nothing apart from God exists of itself; for to exist of itself is the same as being its own efficient cause; but in that case an *ens* would exist before its efficient cause existed, which is absurd; (b) neither by chance; for in that case, where would the constituent parts and properties of such an *ens* come from? Therefore (c) every *ens* apart from God exists through something else that is its efficient cause. But every effect presupposes as a principle some operation; an operation however is the necessary consequence of an intention.

DEMONSTRATION II. Everything knowable is either nothing or an *ens*. By nothing I mean the absence of a thing anywhere, commonly called non-existence. By *ens* I mean whatever is actually present somewhere. Concerning the former, nothing, there can be no dispute, since that which does not exist can have no attributes, and is therefore unknowable, for things are known through their properties or attributes. The latter, *ens*, is either actual or rational. If it is actual, it is either a substance or a property, the substance either spirit or matter, the property either spiritual or material, all of which owe their origin to God. Every rational *ens* recognises as its efficient cause the human mind. Both efficient causes (God and the human mind) are intelligent substances, which act in accordance with order and operate with intention; thus every *ens* is the effect of an intention carried out. If we wish to treat of this, we must first answer the following questions:

1) What is intention in general?
2) How many kinds of intention are there?
3) What is human intention?
4) In how many ways is it realised?

[1]) *ens*, pl. *entia*, has been kept thro ughout the English text and has not been translated.
[2]) *end* here and elsewhere for Lat. *finis*.

PRORECTOR MAGNIFICUS,

AND MY

MOST ILLUSTRIOUS, MOST REVERED, DISTINGUISHED,

WISEST, MOST EXPERIENCED, MOST EXCELLENT

PRECEPTORS AND

MOST EMINENT PATRONS!

THAT which was yours returns to you, gentlemen and luminaries of learning. For whatever increase there is in me of intellect cultivated by dedication to learning, that I owe to your guidance and patronage, before all else. These it has been my constant privilege to enjoy in this illustrious seat of the Muses for seven, eight, and even more years. This is the reason why I dedicate to your most splendid names these first fruits of my studies. And this I do all the more gladly, the more I am indebted to the brilliant gifts of your intellects and minds, knowing as I now do that you are the ministers of all liberal science and the best judges of profound erudition. What proceeds from a grateful heart is wont to be accepted with gratitude, though it be the merest trifle. Therefore it is my fervent request that you will accept with favourable countenance these my endeavours, of whatever sort, to serve the public weal, and that you will show indulgence to any human imperfections therein. Maecenases of the republic of life and letters, who have rendered and continue to render outstanding services to both, may God preserve you all your days and grant you long years of life! May you prosper and show me your favour!

Given at Halle–Magdeburg,
the 6th July, in the Year
1737 of Our Lord.

§ 6.

To this the intention of the damned spirits is directly opposed, i.e. that intellective faculty of theirs by which they decide what is to be done and not to be done for an end which is always contrary to the intention and end of God. This is done

a) by resisting the divine will in so far as this can be done by them,

b) by doing harm to men, especially to good ones, in various ways, examples of which may be found everywhere in Holy Scripture, Job ch. I and II: John ch. VIII, 44: I Peter V, 8: see also Polydor. VERGIL. *Tractatus de primis rerum inventoribus*, bk. I ch. 1. [6]

§ 7.

Leaving aside the intentions of the rest of the spirits, there is on the one hand the divine and on the other the human intention. The former is the wisdom of God, in operating independently with the highest, immutable rectitude: the latter is that intellective and determinative act of the mind by which it decides what is to be done and not to be done for an end of which it is conscious to itself.

NOTE. Intention, will and natural instinct are to be rightly distinguished from one another. Concerning intention, this matter has been dealt with, cf. our dissertation *On the apatheia of the human mind*, ch. I, division I, § 1, note II. The will however is the act of the mind in determining what is to be done and not to be done with regard to an end of which it is conscious to itself, taking into account however agreement or disagreement with the natural instinct which immediately accompanies it. This is the innate and perpetual propensity for the presence of that which is pleasant and good and the absence of that which is unpleasant and bad. Or, as Philipp. MELANCHTHON says, in his book *de Anima*, de sensib. interiorib. Q. What is the appetitive power? [7] It is: the faculty that pursues or avoids objects. We have this sort of propensity or natural instinct in common with brute beasts. EPICTETUS, *Enchiridion*, ch. XXXVIII [8], (says): "*For this is innate in the whole animal kingdom, that it avoids and flees from those things which appear harmful to it, and from their causes, and conversely pursues and keeps its gaze fixed upon useful things and their causes.*" The intention however, considered in itself, belongs solely to the spirits and to the human mind.

NOTE. Thus the will, together with the natural instinct that immediately accompanies it, can only be predicated of man, for all natural instinct is wanting in the spirits considered in themselves, like everything we have in common with brute beasts; see further on this point our disputation *Ideam distinctam eorum quae competunt vel menti vel corpori nostro vivo et organico*, ch. I, sec. II, de voluntate, § 1 ff. See also below, this part, ch. V, on the threefold act of the mind, 1, § 6.

DIVISION II

On the Definition and Nature of Intention

§ 1.

The intention in general is that faculty of the intelligent substance by virtue of which it determines known things as things either to be done or not to be done, for an end of which it is conscious to itself. We consider such an intention in a subjective, objective, or final way.

NOTE. By subjective is meant with reference to the efficient cause, by objective, with reference to the thing considered in itself, and by final, with reference to the end.

§ 2.

The intention, considered subjectively, is a property of the intelligent substance or the intellective faculty. But every intelligent substance is (either God or a created spirit) or the human mind. Thus there is divine intention, the intention of the spirits, and human intention.

§ 3.

The divine intention is: that highest wisdom of God who determines independently what is to be done and not to be done, and directs it towards an end decreed by himself.

§ 4.

As far as the intention of the spirits is concerned, no Christian is ignorant of the fact that there are two kinds of spirits, namely those of the blessed and those of the damned, the former being angels and blessed souls, the latter devils and damned souls.

§ 5.

The intention of the blessed spirits is thus defined: it is their intellective faculty, by means of which they decide what is to be done and not to be done in conformity with God's intention and end and the perfection created in them, for an end which always corresponds with God's end. This is achieved

a) by carrying God's will into practice, or executing it, as for example Tobit ch. V, Acts of the Apostles ch. XXII, 15, Genesis ch. XVI, 7 and ch. XVIII and XIX, Numbers ch. XXII, 23, II Paralipomena ch. XXXII, 21, IV, Kings ch. XIX, 35, etc.

b) by guarding man and defending him from the wiles of evil spirits, Psalms XCI, 11. [5] Matthew IV, 6, Luke IV, 10,

c) by ministering to God and men, for they are ministering spirits.

it is an effect of the human mind. Someone will object: "But God knows the *entia* of human reason." The answer is: God knows the *entia* of human reason as *entia* of the human mind, not of his own: not as in himself but in something else. Therefore in the divine intellect are rational *entia*, not as *entia* of divine but of human reason.

§ 2.

With respect to human intention an *ens* is either rational or actual. The former belongs to the human intention, the latter to both the human and divine intentions. The *ens* of divine intention is either a substance or a property. A substance is either spirit or matter—i.e. a body: a property is either spiritual or material. The effects of human intention are moral, political or technical.[1])

§ 3.

But the rational *ens* is anything having its existence, origin and essence solely in the human intellect, but none outside it; the idea of a thing that exists nowhere in reality, such as the idea of a golden mountain, of Pegasus, of a Centaur, etc., is a fictive one. It is therefore an *ens*, i.e. something, in that it has its existence in the human intellect, but it is merely possible and rational in the sense that it is nowhere encountered in actuality outside the intellect.

NOTE. The *ens* in an abstract sense was called by the Scholastics an entity, the essence and definition of a thing a quiddity, see R.P.D. PETR. A SANCTO JOSEPH FULIENSI, in *Idea Philos. universal. seu Metaphysic.* bk. II, ch. I, art. I, Q. I, [9] where he distinguishes the formal conception of an *ens* from the objective. The formal conception of an *ens* is: the idea or cognition of a thing considered in itself; but by the objective concept of a thing they understand: the archetype of the idea, i.e. the thing itself which is known.

§ 4.

A rational *ens* is either intentional in itself, or hypothetical. The former is that which is thought out for its own sake, without any application to and use for something else, such as Pegasus, Parnassus, etc. The latter is that which is thought out for the sake of something else, such as all hypotheses, signs, words, etc.

§ 5.

We now come to the actual *ens*, which is: whatever is actually encountered somewhere as the effect either of the divine or human intention, outside the human intellect and excluding all fiction.

[1]) *technical* throughout for Lat. *artificialis*.

§ 8.

Thus we have stated what the intention is in general, how many kinds of intention there are, (and) what the human intention is; the only remaining question is, in how many ways is the intention realised? To this the answer is (1) that God's intention is realised either immediately or mediately. "Immediately" means "without natural media," like the creation of this universe out of negative nothingness; but "mediately" means "by the employment of natural media," such as the conservation of worldly things, propagation, generation, etc. But man's intention is always mediate. So much for intentions considered subjectively.

§ 9.

Now let the objective and final consideration of intentions follow.

§ 10.

One object of God's intention is intrinsic and essential, the other extrinsic and extra-essential.[1]) The former is that eternal truth that is co-essential with itself and independently active with the highest rectitude. The latter is the universe created by him. The end however is always the highest perfection and the most righteous truth.

§ 11.

The objects of the intention of the human mind are (a) things perceptible to sense, (b) intelligible things, and (c) actions. One end is natural, the other moral. The former is either a pleasant sensation or conservation; the latter is habitual perfection with respect to the intellect, the will and the actions.

DIVISION III

On the *Ens* as the Effect of Intention

§ 1.

The effect of the cognitive intention is a rational *ens*, that of the effective intention a real *ens*. With respect to the divine intention, there are no rational *entia* merely as such.

DEMONSTRATION. Whatever is in God is always the most certain truth. Now no *ens* that is merely rational is the most certain truth; therefore, etc.

Every *ens* that is merely rational is an effect of the human mind. Now there is no effect of the human mind in God; therefore no *ens* that is merely rational is in God, in so far as

[1]) *extra-essential* here and elsewhere for Lat. *extra-essentialis*, i. e., "not included in the essence of some thing," see N.E.D. s. extra — 1.

DIVISION V

On Learning in General

§ 1.

In undertaking any operation at all, account must be taken of (1) the intention of the agent, (2) the object, (3) the end, and (4) the modus operandi.

§ 2.

The intention of the educated person is: to understand intelligible things in themselves. Objects are things of divine and human intention, see especially the philosopher CICERO, *De Officiis*, bk. II, ch. II [10]. The end of all learning is conservation and perfection, or, to summarise many aspects in a few words, the perfection of natural existence and moral essence.

§ 3.

In particular, the end of learning is three-fold: (1) a pleasant sensation, as in every natural action, (2) perfection of the existence and essence of mankind, as in moral and universal philosophy respectively, and (3) obedience, as in normal[1]) actions.

The basis of the division is: every human action is either natural, rational or normal; natural, when in the indulgence of a natural instinct or for the necessary conservation of our bodies we are concerned with things which must be learned and done: rational, when we apply known truth: and normal, when we operate in accordance with a norm.

DIVISION VI

On

I. The Branches of Learning with Respect to the Intention

OBSERVATION. Everything knowable is either a thing itself, or a sensation, or an operation of the mind.

DEMONSTRATION I. That which in us understands and takes cognisance, is the mind; that which it uses as an instrument of understanding, is its intellective faculty: that by means of which understanding is generated, is sensation: that for the sake of which cognition occurs, is the thing itself, which is either of divine or human intention and operation. The thing, the operation of the mind and the sensation can only be inferred from these. This by way of induction.

[1]) *normal* for Lat. *normalis:* "according to the norm".

§ 6.

To this actual *ens* is opposed the *ens* possible and impossible.

§ 7.

The possible is: whatever actually attains origin, existence and essence through an operation and by the application of means. The opposite of this, the impossible, is: whatever attains no origin, existence or essence whatsoever, through an operation and the application of means. So much for the possible and the impossible in a positive sense. The negatively[1]) possible is: whatever is actually changed through an operation and becomes absent; the negatively impossible is: whatever becomes in no way absent through any operation. In both cases the possible and the impossible are so, either in themselves and simply, or in some particular respect.

NOTE. Anyone who affirms or denies that something is possible, has the onus of explaining (1) the thing which he says is possible or impossible, (2) for whom it is possible or impossible, and (3) the real mode in which it actually achieves origin, existence and essence, or, negatively, absence. If he cannot demonstrate these things, we cannot support his contention.

DIVISION IV

On the Application and Use of the Points Discussed Above in Learning and its Branches

§ 1.

The intention of our mind is either cognitive or effective. The former is the principle of learning, the latter of actions and *habitus*[2]). The objects of our learning belong either to the divine or to the human intention: see foregoing div. III, § 2. The end is the conservation and perfection of mankind, or, in a word, the perfection of existence and essence.

§ 2.

The genus of definitions for the theoretical sciences is (the province of) the *habitus* of the intellective intention, for the practical sciences, however, that of the effective intention; the objects and ends constitute the specific difference.

NOTE. *Habitus* is assured promptitude acquired by oft-repeated exercise.

[1]) *negatively* for Lat. *remotive*.

[2]) *habitus* has been kept throughout the English text and has not been translated.

§ 7.

Relevant here is false cognition, which is perceiving a thing otherwise than it is in itself. Thus possible, probable, fictive and false forms of cognition are mere *entia* of the reason.

NOTE. False cognition and imperfect cognition are not the same. Imperfect cognition, though true, is yet not adequate with respect to all parts and properties, joint and several, whereas false cognition corresponds in no respect whatsoever with the thing to be known.

§ 8.

We have spoken of real learning; now comes intellectual or speculative learning. This is the cognition of a thing from contemplation and through causes necessary with reference to origin, existence and essence.

§ 9.

Now follows learning or moral cognition in respect of the will, which is an intellective *habitus*, concerned with rectitude in choosing the good and useful and in rejecting the bad and useless.

§ 10.

Pragmatic or experimental learning comes last: this is cognition acquired by much experience and long practice.

NOTE. This learning has a twin–sensory or historical learning, which is cognition of things perceived by the senses.

DIVISION VII

On

II. Learning with Respect to the Object, Briefly

§ 1.

An *ens* is either actual or rational. The actual *ens* is either of divine or human intention and operation. The former is either spirit or matter. Therefore with regard to things which are the effects of the divine intention and operation, there is on the one hand cognition of the spirits, and on the other of bodies which are to be known; hence pneumatology and natural philosophy. Therefore apart from human things everything knowable is a matter either for pneumatology or for physics.

§ 2.

The actual *ens* of human intention is either moral, political or technical. Therefore, objectively, cognition of human things is either moral, political or technical.

DEMONSTRATION II. There is nothing in the intellect that has not already been in the senses. Now there is nothing in the senses, i.e. in the sensory organs, that has not already been in sensible things from which are distinguished things not perceptible to the senses. Nothing can be inferred therefrom except the operation of the mind, sensation and the thing itself.

§ 1.

Now that a basis of enquiry has been thus established, learning is objectively either real, sensory, i.e. historical and experimental, or intentional: it thus concerns, respectively, (1) the intellect, (2) the will, (3) *habitus* and actions, i.e. it is either logical, or moral or pragmatic.[1])

§ 2.

Real learning is cognition of things in themselves. It thus has the basis of its certainty in the known thing. This is established in two ways: by demonstration in the case of contemplative things, and by induction in the case of things perceptible to the senses.

§ 3.

In contrast with real learning there is possible, probable and fictive learning.

§ 4.

Possible learning is: cognition which is disputable on both sides, because of the equipollence of reasons for affirming and for denying the same thesis.

§ 5.

But probable learning is: the cognition of possibles, demonstrable hypothetically by induction. Here we argue from similar things to similar.

§ 6.

Fictive learning is: cognition of purely rational *entia*.

NOTE. Cognition of a thing which cannot be otherwise is a science, i.e. a *habitus* by means of which we give our assent to a conclusion demonstrated as arising from certain and evident premisses: see D. Petr. a Sancto Joseph Fuliensi, *Idea philosoph. rational.* praelud. art. I. premonit. V. [11] But cognition of a thing which can be otherwise, is assumption. Hence in science there is certainty, in conjecture uncertainty: for science is possible of an unchangeable thing, conjecture of a thing changeable into something else.

[1]) *pragmatic* throughout for Lat. *pragmaticus*; see N.E.D. s. *pragmatic* A 5. The term must not be related to philosophical pragmatism.

§ 2.

I. On Theology

The theology of the Christians is: the *habitus* of the intellective and effective intention whereby we concern ourselves with the true and well-founded cognition of the truth, revealed to us by God himself, that we may be saved by actions conforming with the divine intention and by true faith in Christ.

NOTE I. I say expressly: the theology of the Christians. For there are other theologies—that of the heathens, that of the Turks and others according to the variety of peoples.

NOTE II. The positive theologies provide us everywhere with definitions by theologians.

§ 3.

Theology is either instrumental or principal.

§ 4.

The departments of instrumental theology are: (1) exegetical, with which is contrasted das Postilliren[1]), (2) patristic theology, (3) hermeneutics, (4) textual criticism.

§ 5.

Principal theology is either dogmatic or practical.

§ 6.

The parts of dogmatic theology are, (1) thetical, otherwise known as positive, theology, (2) polemical theology, (3) moral theology, of which the parts are (a) the ethics of the Christian virtues, and (b) Christian prudence.

§ 7.

The parts of practical theology are: (1) homiletics, (2) pastoral prudence, (3) casuistics, (4) catechetics, (5) ascetics.

NOTE. The individual parts are to be thoroughly discussed.

[1]) *das Postilliren* is to be found in Amo's text. The expression was commonly used by Pietists in Halle, meaning "interpretion of the Holy Bible by preaching."

§ 3.

The rational *ens* is either intentional or hypothetical. Cognition of the former is fictive, of the latter hypothetical, which means that by presupposing the one it is possible to argue towards the other.

NOTE. Every hypothesis is either merely possible or real. The former comes about from mere fictive ideas, the latter is an argumentation that proceeds from an actual effect towards the actuality of the cause, or from the actuality of the cause to the actuality of the effect.

DIVISION VIII

On

III. The End of Learning

§ 1.

The end of the existence of natural man is threefold—self-preservation, perfection and eternal blessedness of the soul. Preservation is subordinated to moral perfection, the latter to the soul's eternal beatitude. The purpose of learning is the same. Thus the cognition of the things of divine intention and operation is the perfection of (1) the intellect, (2) the will; the former is primary, the latter secondary. The end of the cognition of the things of human intention and operation is on the one hand self-preservation, on the other perfection. All political and technical things tend to the former, all moral things to the latter. The end of the cognition of the truth revealed by God is the soul's eternal blessedness.

§ 2.

But where the end of cognition is the enjoyment of a pleasant sensation, the actions involved are purely natural ones and the cognition merely curious[1]), i.e. curious forms of cognition.

DIVISION IX

On the Higher Orders of the Learned, Called the Four Faculties

§ 1.

The principal orders of the learned are theology, jurisprudence, medicine and philosophy, to which is to be added mathematics.

[1]) *curious* here and elsewhere for Lat. *curiosa*. In connection with *cognitio*, *curiosa* may have the meaning of *exploratory* and/or *inquisitive* and/or *queer*.

§ 6.

Again common jurisprudence is either theoretical or practical.

§ 7.

Theoretical jurisprudence is either divine or human. In the former the law is either mediate, i.e. natural and international law, or immediate, i.e. Mosaic law, which is ceremonial, moral, forensic. Human jurisprudence is that in which the law is common or mixed. Common law[1]) is either private or public. Again private law is either Roman, which is either civil or criminal; or Germanic, which is either Alemannic or Saxon or common civil. Mixed law is either feudal or canon. Feudal law again is either Langobardic or Germanic. Germanic again is either Alemannic or Saxon. Canon law is either that of the Papists, or that of the Protestants, i.e. parochial law. These are the parts of common theoretical jurisprudence.

§ 8.

Next in order comes the other general part of common law, practical law, or, simply, practice. This is either theoretical, or practice as actually practised. So much for common jurisprudence.

§ 9.

Particular jurisprudence is either provincial, or relates to the (individual) jurisconsult. This is (1) concerned with the judiciary, (2) preventive, (3) consultative, (4) defensive. All these will be dealt with in greater detail in the discussion.

DIVISION XI

On Medicine

§ 1.

Medicine is: the *habitus* of the cognitive and effective intention, whereby we concern ourselves with the cognisance of natural things and with the mechanism of the human body, so that by the application of medical care the health of a person, when lost, may be restored, or when present, may be preserved, for the sake of the natural preservation of the human body.

§ 2.

The whole of medicine is either theoretical or practical.

[1]) *Common Law* for Lat. *jurisprudentia communis* must not be confounded with English Common Law.

DIVISION X

On

II. Jurisprudence

§ 1.

There are two definitions of jurisprudence, that of the ancient and that of the modern jurisconsults.

§ 2.

The definition of the ancients is: knowledge of divine and human things, the science of right and wrong. § 1 *Inst.* de I. et I [12]. From this it is clear that jurisprudence corresponded with philosophy in general, but that in particular the one was entirely different from the other. Now they differed in object. The object of jurisprudence is the science of right and wrong; the object of philosophy is the science of things according to their causes. For philosophy, or wisdom, is according to the definition of the ancient philosophers the science of divine and human things and of the causes in which these things are contained—CICERO, *De Officiis*, bk. II, ch. II [13].

NOTE. Under the designation of "divine things" the ancient jurisconsults did not understand the divine things of the divine law of the Romans as sacred, religious, or holy. On the contrary, natural things came into the category of divine things. For divine things, properly so-called, and also the administration of them were entrusted to the priests. See bk. I, § 1, h.t. π I.I. Reward, bk. V, varior. ch. XII [14], A. GELLIUS in *N.A.* bk. XI, ch. XVIII [15].

§ 3.

The following definition by modern jurisconsults is well enough known: jurisprudence is the *habitus* of interpreting laws and applying them to human affairs.

§ 4.

From this we infer that jurisprudence is the *habitus* of the cognitive and effective intention to understand and interpret laws and rights and apply them to the affairs and deeds of men so that the preservation and perfection of the state may always flourish through the administration of justice.

NOTE. The end of jurisprudence is on the one hand an internal, on the other an external one. The former is justice, the latter the preservation and well-being of the state.

§ 5.

But the jurisprudence that prevails in Germany is divided into common and particular.

§ 2.

I. The parts or types of curious learning are: (1) the polyhistory of the learned, i.e. wide reading. This comprises things that are (a) of no moment (b) alien to the purpose (c) impossible (d) impious (e) uncertain.

§ 3.

II. The types of speculative learning are (1) the pedantry or the braggadocio of learned men (2) the charlatanry of learned men (3) learned imposture.

§ 4.

III. The species of demonstrative learning is twofold, certain and uncertain, of things which are certain or merely possible. There are also other types of learning,—sectarian, eclectic, hypothetical. Each of these will be dealt with individually below.

DIVISION XIV

On the Species of Learning which Have Been Spoken of Above, Individually

§ 1.

I. On Curious Learning

I. The polyhistory of the learned is: the *habitus* of the cognitive intention, whereby we deal with the cognition of very many things without any determinate end.

NOTE. The grammarians were once called polyhistorians, who were content with the cognition of philological, mythological and historical things. In our times, however, polyhistory requires adequate experience (1) in all the so-called "literae humaniores," (2) in the foremost sciences of the higher faculties, adequate at least, it is said, for comfortable and apt discourse. In this field of study Hugo GROTIUS, Hermann CONRING [16], Claudius SALMASIUS [17], Julius CAESAR [18], Daniel MORHOF [19], LEIBNIZ, etc. contend for supremacy. There is hardly a man who can do justice to this sort of learning: according to the words of SENECA, "*There is no man whatever who is everywhere.*" [20] Nevertheless those things must be diligently learned which serve the purpose and make it more easily attainable, though they may count as parts of a different brand of learning.

§ 2.

There is a polyhistory of (1) useless things; it is of no importance whatsoever and has no other end but the delectation of the mind (2) things alien to the purpose as is mostly the

§ 3.

The theoretical parts are (1) physiology, which is (a) general, (b) special, i.e. anatomy, (2) doctrinal pathology, (3) semiotics[1]).

§ 4.

The practical parts are (1) with respect to a healthy person, preservative or dietetics (2): with respect to a sick person (a) botany, (b) materia medica, (c) clinical practice, (d) surgery, (e) also that juridical part, forensic medicine. These will be dealt with more fully in the discussion.

DIVISION XII

On Mathesis or Mathematics

NOTE. Philosophy will be treated as a special subject in the appropriate place.

§ 1.

Mathematics is: the *habitus* of the cognitive and effective intention whereby we deal with the determinations and proportions of things that are determinable in themselves and in point of measurement. Its end is too wide to allow of determination.

§ 2.

It is divided into pure and mixed.

§ 3.

Pure mathematics is subdivided into higher and lower. The former is called algebra; the latter consists of arithmetic and geometry.

§ 4.

Mixed mathematics has the following parts: (1) astronomy (2) gnomonics (3) mechanics (4) geography (5) chronology (6) hydrometry (7) aerometry (8) architecture, which in its turn is civil, military or naval.

DIVISION XIII

On the Other Types of Learning in General

§ 1.

We have said that knowables include the thing in itself, the operation of the mind, and sensation, see the same part and chapter, division VI. Hence learning is either real and demonstrative, or critical or speculative, or historical or curious.

[1]) *semiotics* is used here with reference to the medical and not to the philosophical discipline of *semiotics*.

of which we assent to a conclusion drawn from indisputable and evident premisses. See D. Petr. a Sancto Joseph Fuliensi, *Idea Philosophia Rationalis*, Praeludium, article I, praem. V. [24]. The opposite of this is probable, possible and fictive cognition, see div. VI, §§ 3, 4, 5, 6.

§ 7.

There is on the one hand sectarian, on the other eclectic learning. The former is that by which we superstitiously follow and defend the tenets of others. The latter is that by which, when indisputable principles are duly put forward in accordance with the rules of accurate philosophising, we contemplate matters without embracing the tenets of others, unless they have been adequately demonstrated and proved.

§ 8.

Finally comes hypothetical learning, which is conjecture derived as a possibility from mere hypotheses, by using which as premisses we try to demonstrate truth and falsity.

NOTE. The number and nature of types and divisions of ideas are the same as the number and nature of the types and divisions of cognition and learning with reference to the object.

case with those who neglect the work prescribed by their studies and who do everything in a perfunctory manner and meddle in things that don't concern them: this is commonly called polypragmosyne[1]) (3) things impossible in theory and practice, which is more a kind of arrogance than of learning (4) impious things like black cabals, magic arts, etc., digging up treasures by means of the magic arts, etc. (5) uncertain things, in which conjecture takes the place of science: this happens when we deal with purely probable or possible things.

§ 3.

II. On Critical[2]) *Learning*

II. Pedantry or the thrasonical behaviour of learned men is (1) the presumption and arrogance that arise from some sort of knowledge of things, i.e. of things that are useless, insignificant and non-contributory to the preservation and perfection of mankind, (2) some knowledge of useful things, but accompanied by an intolerable pride and contempt for others; on this subject, see Christian THOMASIUS, *Vom Paedantismo* [21].

§ 4.

III. The charlatanry of learned men offers itself for contemplation: it is that self-importance by which a man imagines his learning to be immeasurably superior to that of all others. In fact, so far from being superior to the rest, he is rather much inferior to them. That in no way prevents him from crying his own wares to the despite of all others on any and every occasion, for the sake of some small material gain and cheap glory.

NOTE. Charlatanry owes the origin of its name to the French and Italians, for whom the word "charlatan" means pedlar, mountebank, vagabond, cf. CICERO, Pro *Cluentio*, ch. 26 [22]. In Greek these vagabonds were called "periodeutae" (quack-doctors) and "agyrtae" (tramps). On this pseudo-learning see MENCKEN, *Tractatus de Charlataneria Eruditorum* [23].

§ 5.

IV. No more laudable is learned imposture. This is the effect of the cognitive and effective intention whereby we alter in various ways the correct writings of others and advertise and sell them as our own to unsuspecting people, for the sake of cheap glory.

§ 6.

III. On Demonstrative Learning

Demonstrative learning is: the cognition of a thing demonstrated from principles and causes which are indisputable. This sort of cognition is known as science, i.e. the *habitus* by virtue

[1]) *polypragmosyne:* i.e. "they are busybodies."

[2]) *critical* here and elsewhere for Lat. *judiciosa*.

§ 2.

I. The Genus of the Definition

The genus of the definition of philosophy is: the *habitus* of the intellect and the will. For philosophy does not concern itself with the intellect alone, but also with the will and its actions. Hence those who today define philosophy exclusively with reference to the action of the intellect and ignore its pragmatic parts, can easily err. Since however philosophy is nothing other than wisdom, and wisdom is virtue; and virtue is the perpetual exercise of known truth: so the definition of the ancients as to what philosophy is, ran: the science of things divine and human. CICERO, *De Officiis*, bk. I, ch. 43 [25]. This is quite right as far as theory is concerned, but not at all in respect of practice, since the pragmatic parts are not included in it. Now, wisdom and virtue are synonyms, and the whole merit of virtue consists in action, as is testified by CICERO himself, op. cit., bk. I, ch. 6 [26]. Therefore philosophy is wisdom, wisdom virtue, and those who strive after it are called philosophers: CICERO, op. cit. bk. II, ch. II [27]. Now that part of philosophy which is concerned with justice and goodness in actions belongs to the will, and to the effects of the will, not to the intellect.

§ 3.

In being in genus a *habitus* of the intellect and the will, philosophy coincides with all the other branches of learning and especially with theology, in so far as it is concerned with moral things, i.e. the knowledge and the exercise of virtue.

§ 4.

I. General Proposition

I. The philosopher must continuously concern himself with the things themselves that are to be known

REASONING. Since truth is the congruence of cognition with the thing known, therefore all cognition which has no basis in the thing known, is a nullity and a mere *ens* of reason. For the principles of cognition are the things themselves. Hence in possible and probable things there is no real truth, nor can they be tested either in reality or by the senses, in so far as they are mere *entia* of reason, but can nowhere actually be encountered and are consequently nothing. For whatever exists nowhere outside the intellect is actually nothing, see above ch. I, div. III, § 3.

II. In the absence of the things themselves all cognition is only probable or possible conjecture. This is the cognition of those things (1) that exist nowhere in actuality (2) that are

CHAPTER II

ON
PHILOSOPHY

DIVISION I

On the Definition of Philosophy in General

§ 1.

The definition of philosophy demands some general preliminary observation.

§ 2.

In each definition there occur (1) the denomination, or name of the thing to be defined (2) the definition itself, including genus and specific difference.

OBSERVATION. A definition is a proposition with a two-fold predicate, the one general, the other particular, which applies everywhere, always and immutably to the subject. The former is the genus, the latter the specific difference. This can be demonstrated from the nature and structure of a definition.

§ 3.

Now a definition is the determinate and adequate explanation of a thing, in distinct and precise words.

§ 4.

NOTE. Distinct words are those which delimit a thing from other things of the same name, genus and species. Precise words are those which do not have any ambiguous or equivocal significance, like metaphors and other figurative expressions.

DIVISION II

On the Definition of Philosophy

§ 1.

Thus philosophy is: the *habitus* of the intellect and the will whereby we continuously deal with things themselves which have to be known in their certainty determinately and adequately as far as may be possible: in order that by the application of this kind of cognition the perfection of man might take on all possible increase.

§ 6.

On the End of Philosophy

The end of philosophy is moral perfection with regard both to the soul and to the body. For there is perfection of natural existence on the one hand and that of moral essence on the other. The former is self-preservation by acts of justice and prudence, the latter is wisdom. Preservation is for the sake of natural existence, existence for the sake of cognition and exercise of the truth, both for the sake of moral perfection, i.e. wisdom, which is for the sake of man's moral conformity with the divine essence and as far as is possible, this for the sake of the eternal blessedness of the human soul. Such are the various ends of philosophy, of which the ultimate one is moral perfection, towards which all the ends converge, in such a way that preservation is subordinated to the cognition and application of the truth, and of these the former to moral perfection and the latter to moral conformity with the divine essence in respect of moral perfection. For the perfection of any thing whatsoever is in conformity with whatever in the same genus is the most perfect of all; now God is the most perfect of all spirits, etc. Hence is is clear that man's perfection is in moral conformity of the mind with God's essence. "*Be ye therefore perfect, even as your Father which is in heaven is perfect.*" Matth. ch. V, v. 48. Likewise, "*Sanctify yourselves therefore, and be ye holy: for I am the Lord Your God.*" Levit. ch. XX, v. 7. Also ibid. v. 26, "*And ye shall be holy unto me, for I the Lord am holy.*" This moral conformity however is subordinated to the eternal blessedness of the soul.

DIVISION III

On the Parts of Philosophy

§ 1.

The basis of division is the *ens*. This, as we have already said, is either of the divine or the human intention and operation. The *entia* that are the effects of the divine intention are either properties or substances. There are properties which are common to spirits and bodies: these universal and common properties are subjects of ontology; further, there are properties appertaining only to spirits, which are subjects of pneumatology; while those appertaining only to bodies are subjects of physics. Pneumatology is concerned with spiritual substances, physics with corporeal substances. These are the parts of theoretical philosophy which in general is the *habitus* of the intellect alone, of understanding that which is understandable, in itself. In this we deal with the pure cognition and contemplation of things.

changeable. For the terms of cognition a quo and ad quem, and the very principle, is the thing itself.

III. There is no cognition of and no certain truth about changeable things, since it can always happen that the opposite occurs.

§ 5.

II. Special Propositions

I. All philosophical cognition should as far as possible be certain, demonstrative, real.

NOTE. Immutable things admit of certain knowledge, mutable things of conjecture. For certainty is the immutability, uncertainty is the mutability of a thing. Thus in certain cognition, attention is always to be paid to what is always, everywhere and immutably immanent in a thing, and to what is not always, everywhere and immutably immanent; from the former results certain knowledge, from the latter conjecture. Now, with respect to mutability, every *ens* falls into one of three categories:—(1) *entia* consisting of mere mutables in themselves, such as physical things, (2) all moral, political and technical *entia* of the human intention, since man is immutable as to his soul, but mutable as to his body, (3) *entia* consisting of pure unmutable substance, like God and all spirits; from which are distinguished sublunary things, mutable with regard to their formal principle. Thus uncertainty is the mutability of the thing known and to be known, but certainty is immutability.

II. All philosophical cognition must be determinate with respect to the thing known, distinct with respect to ideas.

EXPLANATION. Determinate cognition is cognition of a thing with reference to its three termini a quo, instans and ad quem, and with reference to the number of all its parts and properties, joint and several, to be known from some design or in themselves. An idea of this kind is in respect of others known as distinct. Thus cognition is indeterminate when it is not possible to answer the questions: how far? how long? how many parts? how many properties?

III. All philosophical cognition must be adequate, i.e. perfect, so that we cognize with regard to terms and number, all parts and properties, joint and several, of the thing known, and that in intention or in reality. Thus imperfect cognition is that which does not proceed with regard to terms and number of all properties and parts, joint and several.

IV. All cognition without application to an end is useless, if not in itself, then by accident and intentionally. For the usefulness of any thing whatsoever is judged by its end, and the end of philosophy is the preservation and perfection of mankind.

§ 8.

III. Related to this is natural theology, which is: the *habitus* of the contemplative intellect and of the will, whereby the mind, left to itself alone, by arguing from the existence, origin and essence of the world to the existence and essence of God, and the dependence of man on Him, infers the duties which are naturally owed to Him by us, and performs them out of lovingkindness, to the greater glory of the Creator.

NOTE. Thus the performance of duties to God, or piety, arises from a natural cognition of Him and the greatest lovingkindness towards Him.

§ 9.

IV. Now follows the natural law and international law, which is the *habitus* of the contemplative (intellect) and the will, whereby we deal with the cognition and performance of common duties for the sake of the mutual preservation of all men, collectively and singly.

NOTE. Natural law differs from international law. The former has as its object the duties common to all men collectively and singly for the end of the equal and mutual preservation of men, collectively and singly. The latter has as its object the duties common to parties to an agreement, for the end not of the preservation of them collectively and singly, but of those interested in it by agreement, and its force consists solely in the agreement of peoples, such as the laws of war, of consular representation, of alliances and treaties, etc., see CICERO, *De Officiis*, bk. I ch. XI [28]. "*And in the state the laws of war are to be upheld most.*"

§ 10.

V. POLITICS is generally held to be two-fold: general and special. The former deals with the foundation and preservation of the state by the application of the rules of practical wisdom:[1]) the latter is concerned only with some one state. A. RECHENBERG, *Lin. philos. civil.* pt. II, ch. 1, on the nature of politics [29]. I should prefer to divide politics into universal, general, special and very special.

§ 11.

Universal politics is: the *habitus* of the speculative intellect and the will of circumspectly preserving oneself and one's status, in any state and any circumstances whatsoever, by means of actions of justice, practical wisdom and virtue.

§ 12.

General politics is: the *habitus* of the contemplative and effective intellect in founding and preserving the state.

[1]) *practical wisdom* for Lat. *prudentia*.

§ 2.

The *entia* of the human intention recognise as their end either preservation or moral perfection. The former is natural or civil, hence natural and international law, and the science of civil law. The latter concerns itself with the intellect and morals, hence logic and ethics. Pneumatology is concerned with God, ethics with man. This is the basis of division. Now follow the parts.

NOTE. Practical philosophy is: the exercise and application of truth known beforehand for the sake of the preservation and the potential and moral perfection of mankind.

§ 3.

The Speculative Parts

I. ONTOLOGY is: the *habitus* of the speculative intellect whereby we deal with the universal and common properties of things which have to be known, so that we know those things in general for the perfection of the intellect with regard to the *habitus*, and the increase of cognition.

§ 4.

II. PHYSICS is: the *habitus* of the speculative intellect, whereby we deal with natural things which have to be known, for the sake of perfection and increase of cognition.

§ 5.

III. PNEUMATOLOGY is: the *habitus* of the speculative intellect in cognizing God and other spirits, known to us by their properties, by means of the critical reason, for the higher perfection of our intellect.

§ 6.

The Practical Parts

I. LOGIC is: the *habitus* of the contemplative intellect whereby we deal with the mode of cognizing the *entia* in themselves, with regard to their existence, origin and essense; in order (1) to understand intelligible *entia* determinately and adequately and (2) to acquire a habitual perfection of the intellect in the cognition of things to be known in themselves.

§ 7.

II. ETHICS is: the *habitus* of the contemplative intellect and of the will whereby, given a knowledge of ourselves beforehand, we deal with the true virtues that are to be cognized and with the exercise of truth, so that by actual improvement of our behaviour we may increase our perfection and the moral excellence that arises from it.

CHAPTER III

ON

THINGS CONSIDERED LOGICALLY

DIVISION I

On the *Ens* and its Principle

§ 1.

We consider a principle (1) by its name (2) in itself. A principle, as the name implies, is that which first of all is immanent in a thing: but in itself it is that from which the *ens* has actually its existence, origin and essence.

NOTE. The origin is the principle of existence. The existence is the actual presence somewhere of the *ens* itself. The essence is the presence of all properties and parts joint and several constituting the thing.

§ 2.

Every principle is two-fold, real or actual, and formal.

NOTE. That which is immanent first and immutably in all things joint and several, both spirits and bodies, is the universal principle; that which is immanent in spirits alone joint and several, or in bodies, is the general principle; that which is immanent either in some spirits or bodies alone, is the special principle; that which is everywhere and immutably immanent in some single *ens*, is the very special and individual principle.

§ 3.

The real principle is that, from which materially an *ens*, actually and firstly, receives its origin, existence and essence.

NOTE. The real principle constitutes the substance, the substance constitutes the principle of the properties: the determinations and modifications of the latter constitute the formal principle. Determination is the disposition of terms and is concerned with quantity; modification is the operation whereby the *ens* receives its form and specific difference, and is concerned with quality.

§ 4.

Again the real principle is two-fold: (1) that from which the spiritual substance and (2) that from which the material substance materially receives its origin, existence and essence. In the cognition of both we are like blind men.

§ 13.

Special politics is: the *habitus* of the contemplative intellect and the will, whereby we deal with knowing and ruling any particular state, as for example, that of the Holy Roman Empire of the German Nation.

§ 14.

Very special politics is: practical wisdom in the performance of duties which each one owes to himself, for self-preservation and the perfecting of himself and of his status in particular.

NOTE. Between substance and attribute there is a third something, which is known as a supposite. Now the supposite is: matter determined and modified in various ways by man or by some other intelligent substance. And it is, as to its real principle, of divine substance, but, as to the accidental form of the intention, of created substance, e.g. spectres that in various ways appear in visible shape, bodies in various techniques constructed by men, like statues, buildings, ships, etc. Likewise moral *entia*, of which something is predicated, like virtues, actions, etc.

§ 2.

We consider properties however either in general or in particular.

§ 3.

A property in general and a predicate, as the logicians say, are synonyms, for it is all that which can be predicated of something else.

NOTE. Whatever is predicated of something else, is either a part, or an effect, or a property.

§ 4.

A property in particular is: whatever is actually immanent in a thing either in itself or from somewhere else or by accident.

NOTE. The parts and properties are in the substance, and there are none outside it: but the effect is outside the substance to which it belongs. Reason: the parts without their whole, and the properties without the subject to which they belong, are non-existent. The effect with regard to its cause lies either in the potentiality or in the instantaneous act. However, a true effect only then exists when it exists in actuality outside its cause.

§ 5.

Every property is either essential or accidental or intentional.

§ 6.

I. An essential property is that which has its origin, existence and duration simultaneously with the substance to which it belongs, e.g. the mind's faculty of thinking and understanding.

§ 7.

It is either necessary or consecutive.

§ 8.

A necessary property is that without which an *ens* receives no origin, existence and duration whatever.

NOTE. In demonstrating this principle, we answer the questions (1) what is a thing materially? (2) where does the thing come from, i.e. what actually is it?

§ 5.

The formal principle is: that mode of acting whereby the *ens* receives its distinguishing determination and modification, or its specific difference. For the real principle constitutes the genus, the formal however the specific difference.

NOTE. In explaining this formal principle we answer the questions (1) what kind? (2) how? (c) how far or how long? (d) how manifold? (e) what is the *ens* formally? (f) what is its genus? what is its species? what is it individually?

NOTE. In the case of the real principle we consider (1) first principles, (2) that, from which these have their origin, existence and essence. In the case of the formal principle we refer to principiates.

DIVISION II

On the Division of Things

§ 1.

We consider all things either in themselves or with regard to their intention. A thing in itself and absolutely as such is either a substance or a property, or it is a spirit, a body, an operation of the mind, a sensation, so that every *ens* in itself may be traced back to one of these. Intentional *entia* are either coordinated with or subordinated to an end. This latter is either theoretical or practical: in either case, it is universal, or special or singular or very special.

§ 2.

From the point of view of intention we next consider things with reference to the intellect, the will, the action. Hence there are intellectual, moral and pragmatic *entia*.

DIVISION III

On the Properties or Attributes

§ 1.

Every *ens* considered absolutely is either a substance or a property. The former is either spirit or matter, the latter is, with regard to matter, either spiritual or material, for the number and types of properties are equal to the number and types of substances.

DIVISION IV

On the Modes in which that which is Predicated of the Subject is Affirmed or Denied.

§ 1.

Something is predicated of another thing (1) in reality, i.e. in itself, (2) intentionally, with regard to the end, (3) hypothetically, i.e. by supposing something for something else, and that in general.

§ 2.

In particular however the modes of affirming and denying something about something else are (1) conformity, (2) connexion, (3) dependence, (4) containment or inexistence[1]), (5) similitude, (6) universality, particularity, singularity, together with their opposites; the principle of all of which is presence or absence, existence or non-existence.

§ 3.

I. Conformity is: the presence of the same properties and parts in things of the same denomination, genus and species.

NOTE. ITEM. Conformity is the identity of things of the same denomination, genus and species.

§ 4.

II. The opposite of conformity is discrepancy, which is: the absence from objects of the same properties and parts, irrespective of the diversity or identity of the denomination.

NOTE. Each of these is either in itself or in some particular respect only.

§ 5.

III. Connexion is present when one of the things compared is contained within another in respect of one of its parts.

NOTE. It is predicated properly of bodies, improperly of incorporeal beings. The opposite to this is separation, when things exist apart from each other.

§ 6.

IV. Dependence must be considered in a two-fold way, with respect to simultaneous existence, and to causality. The former is that by which things co-exist in such a way that the presence of the one brings about the presence of the other and the absence of the one the absence of the other, like all that is co-ordinated and sub-ordinated. The latter, the dependence of causality, or causal dependence is the effect whereby an *ens* is the efficient cause of a second *ens*, either simply and in itself, or in some particular respect only.

[1]) i.e. *inherence.*

§ 9.

A consecutive property is the effect arising immediately from the disposition, coordination and subordination of the parts and properties. The necessary property is in the real principle, the consecutive in the formal.

§ 10.

II. An accidental property is whatever is not in itself and originally inherent in the thing to which it is said to belong, but from somewhere else and unintentionally. As a consequence it has no simultaneous origin, existence or duration with the substance or *ens* to which it is said to belong.

§ 11.

We divide it into contingent and habitual.

§ 12.

Contingent is: what is sometimes encountered in some individuals of the same genus, species and denomination: but not in each and every one of them, nor always nor everywhere nor immutably. Thus Ecclesiasticus, ch. XVIII [30]: *The number of the days of men, when they live long, is a hundred years.* Psalms [31]: *The days of our years in themselves are seventy years, etc.*, where a life of a hundred, seventy or eighty years must be predicated of some men, i.e. contingently, but not of all men joint and several always, everywhere and immutably. For all that is contingent, is an exception to the rule.

§ 13.

A habitual property is: a promptitude acquired by exercise frequently repeated, and it is properly called a *habitus*.

§ 14.

III. There follows the intentional or extra-essential property, which is not actually immanent in the subject of which it is predicated, nor can it in any way exist in it. It is either comparative or contradictory.

§ 15.

Comparative is: the property of a different *ens*, intentionally predicated of another *ens* by comparison.

§ 16.

Contradictory is: that which cannot in any way exist in the subject of which it is predicated, e.g. thinking matter, dying spirit, etc. For it is in no way possible for matter to think or for spirit to die, etc.

CHAPTER IV

ON

SENSATION CONSIDERED LOGICALLY

§ 1.

Sensation is: the sensible quality present in the sensory organs. This is considered in a three-fold way, physically, morally, logically.

§ 2.

I. Physically every sensation is either pleasant or unpleasant; the former is called pleasure, the latter pain, or it is a mixture of both. Sweetness, bitterness, tickle.

NOTE. We are not able to define an immediate sensation itself, i.e. the sensible quality itself that is present in the sensory organs.

§ 3.

II. To be considered morally is every habitual sensation, which is called a custom, and is either good or bad. The former is a virtue, the latter kakoethes.[1])

§ 4.

III. Logically every sensation is either present in the sensory organs and the memory or absent from them.

§ 5.

When present, it is either immediate or remanent, the former when the archetype is present, the latter when it is absent.

§ 6.

When present it is either pleasant or unpleasant or mixed. When remanent it is either represented or representable; the former is an idea, the latter a sensation that can be recalled to mind, hence reminiscence and recollection.

§ 7.

A sensation that is absent from the sensory organs and the memory, is either absent from the beginning or subsequently; in the former case, this is sensory ignorance, in the latter, forgetfulness.

[1]) *kakoethes:* a bad habit.

§ 7.

V. Independence is therefore present with respect to co-existence, when the presence of one *ens* does not necessarily bring about the presence of a second *ens*, or the absence of the one the absence of the other. Causal independence is when one *ens* is not the efficient cause of another simply, nor in some particular respect only.

NOTE. Dependence is cause and foundation, but independence consists in the non-existence of a bond.

§ 8.

VI. Containment is the presence of one thing in the other.

§ 9.

VII. Similitude is: the presence of the same accidental properties and parts in the things compared. The absence of them is called dissimilitude.

§ 10.

VIII. The universal is: whatever is met with in individuals jointly and severally of the same denomination; the particular is in some individuals; the singular or individual, in one alone.

NOTE. The universal is: that which is perpetually immanent in all substances, spiritual as well as corporeal, jointly and severally. The general is what is only in all spirits, jointly and severally, or only in all bodies, jointly and severally; the particular, either only in some spirits, or only in some bodies; the individual, only in one single spirit, or body.

§ 5.

The object of the intellect is two-fold, the idea and the proposition, both being forms of cognition, the former partial, the latter composite. The former exists in the concrete, the latter in the abstract; for every idea is a complex of propositions, because it must be explained by means of propositions. The end is cognition, either certain or probable.

NOTE II. The word "intellect" suffers from ambiguity. It is employed (1) for the mind itself, (2) for the idea, or (3) for the operation of the mind. For the mind itself it is used in these forms of speech: *the intellect understands, the intellect ratiocinates, etc.* For *the mind understands, the mind ratiocinates* and such ambiguous expressions, see *Cursus Philosophiae Aristo-Thomistic.* vol. V, bk. 1. [32] ARISTOTLE *de Anima*, ch. III [33] where we read: "*The soul is not a moving or moved body, etc.*" THOMAS *Lect.* 6, 7, 8, p. 234, note 2, [34] with the words: "*If the intellect be a magnitude, in what way will it understand, etc.*" Also ibid. [35]. From the fact that the movement of the intellect is understanding, etc., where instead of *intellect* it would be more correct to say *mind*, e.g. *If the mind be a magnitude, in what way will it understand, etc.* Otherwise expressions of this kind would be like saying. *The action acts, the expression expresses, etc.* It is used (2) for intellection or cognition, (3) for the faculty of the mind whereby it understands the understandable, in which sense it is also employed here.

§ 6.

II. The will is: the act of the mind, whereby it determines what has been thought as something to be done or not to be done for an end of which it is conscious.

§ 7.

The physical adjuncts of the will are (a) the sensitive appetite, and (b) the natural instinct, which behave as moving causes.

§ 8.

The natural appetite is: that sensuous quality which makes itself noticed in the desire for palatable things for the preservation and delectation of the body, such as hunger and thirst. It primarily follows the disposition of the stomach.

§ 9.

But the natural instinct is the innate and sensuous propensity of the heart whereby we are drawn to that which is pleasant, naturally avoiding that which appears to be unpleasant. Philipp MELANCHTHON, *Tractatus de anima*; [36] EPICTETUS, *Enchiridion*, ch. XXXVIII [37]. Both these features are common to us and brute beasts. CICERO, *De Officiis* bk. I, ch. IV [38].

CHAPTER V

ON
THE THREE-FOLD FACULTY OF THE MIND, THE INTELLECTIVE ACT, THE WILL, THE EFFECTIVE ACT

DIVISION I

General Remarks

§ 1.

The faculty of the mind in general is: the act of thinking and understanding, of determining the purpose of what is thought and understood for an end, and of effecting or not effecting what has been determined.

NOTE. Thus the faculty of the mind reveals itself (1) in understanding, (2) in determining and selecting the object and the end, (3) in acting and not acting. Thus by the intellect, by the will, by action.

§ 2.

From this we infer that the act of the mind is three-fold, i.e. the intellect, the will and the effective act. The effect of the intellect is cognition, that of the will deliberation and selection, that of the effective act, action or omission.

OBSERVATION. As the intellect is subordinated to the will, so the will to action and omission. As cognition is subordinated to action and omission, so action to effect. The consecutive of the intellect is cognition, that of the will action and omission, that of the action the effect.

§ 3.

I. The intellect is: the faculty of the mind for thinking and gaining cognition of the *entia* in themselves, and intentionally. Its physical adjunct is the remanent represented and representable sensation.

§ 4.

Whatever is in the intellect, behaves either as object or as end. The former occurs when a thing is considered in itself and with intention, the latter when a thing is considered with intention.

NOTE I. Everything that is subordinated to the attainment of an end, is intentional.

DIVISION II

On the Intellect in Particular

§ 1.

The intellective act of the mind is either momentary or reflective.

§ 2.

It is momentary when the mind applies ideas and propositions simply, either in reality or in intention, without considering the existence, origin and nature of the thing, and that which pertains to it. This act may take place before, during or after reflection.

§ 3.

I. With respect to ideas and indeed when the archetype is present, this is known as attention, but when the archetype is absent it is called representation. II. With respect to the propositions of ideas, it is separation and momentary composition. In either case it occurs before, during or after reflection.

§ 4.

II. The same situation exists in the case of the will in which the mind's act is either momentary or deliberative. The former occurs either by indulging or governing the natural instinct, in either case before, during or after reflection.

NOTE. Sudden motions of the mind are momentary acts of the will without sufficient deliberation.

§ 5.

No less is deliberation itself either momentary or absolute.

NOTE. Deliberation is a kind of reflection; this will therefore be dealt with when the nature of reflection is explained.

§ 6.

III. Action is either momentary, continued or perfect.

DIVISION III

On Reflection

§ 1.

Reflection exists when the mind enquires into the existence, origin and nature of a thing, in order to know it in itself and intentionally. It is two-fold—momentary and perfect.

§ 10.

We consider the will in a two-fold manner, in the concrete and in the abstract. The former goes together with the natural instinct and the sensitive appetite, the latter without either. In the former sense we speak of the will only in respect of man, but in the latter usage we speak of the intention, instead of the will, only in respect of spirits and the human mind considered separately. We have dealt at length with the intention in what has gone before, having commenced this work at that point where we made some remarks on the will. See in this part ch. I, division II, passim.

§ 11.

The human mind operates either by restraining or indulging both the natural instinct and the sensitive appetite; from the former come morally good actions, from the latter morally bad. From indulgence comes the saying, "I see the better and approve it, but I follow the worse," [39] i.e. by indulging the natural instinct. From restraint, however, we get the same result as from all virtues. Ingenious arts and things that appeal to us with a pleasant sensation arise in most cases from the indulgence of the natural instinct. But matters of judgment, memory and hard work are achieved by mastering it.

§ 12.

The mind first of all makes a decision by deliberating on what is to be done and what is not to be done according to the end. It directs the result of its deliberations to the end to be achieved. Thus the object of the will is good, or bad. (2) This is the pragmatic proposition, commonly called the purpose of the mind.

§ 13.

The outstanding difference between the will and the intellect consists in this, that in respect of the intellect the mind is satisfied only in the cognition of a thing, but in respect of the will with the actual effects of an action, or in omission.

§ 14.

III. The effective act of the mind is: that faculty of the mind, through which that which has been thought actually attains origin, existence and essence.

NOTE. In this case, means, instruments and the modus operandi occur as adjuncts.

§ 15.

The principle of intellectual *entia* is the intellect; of moral *entia*, the will; of political and technical *entia*, the effective act of the mind.

§ 8.

It is adequate with respect to the intention, when we take cognisance of the parts and properties, joint and several, of the thing to be known in a determinate and adequate manner with reference to the intention and end, in the full absence of doubt.

§ 9.

Thus it is inadequate with respect to the intention, when we do not consider in a determinate and adequate manner the parts and properties, joint and several, for the sake of an end to be obtained, in the incomplete absence of doubt. It is the same with deliberation.

NOTE. The criterion of perfect cognition is acquiescence or the full absence of doubt; the criterion of imperfect cognition is doubt.

OBSERVATION. In reflection, attention must be paid to the sufficiency or insufficiency (1) of the sensations, i.e. to experience, (2) of the causes, (3) of the reasons, (4) of reflection itself, (5) to acquiescence.

NOTE. Cause and reason are not synonyms. For the cause is the mode whereby the *ens* actually receives its origin, existence and nature. But reason is any mode of conveying belief to another person. Belief is assenting to a proposition; or, human belief is the *habitus* whereby we give our assent to some proposition on the authority of the man who states it. These are the words of PETR. A ST. JOSEPH FULIENSI in *Idea Philosophiae Rationalis*, Praeludium, Art. I, Prem. V. [40] Persuasion and opinion arise from reasons, but demonstration and knowledge from causes.

§ 10.

These remarks in general are sufficient on the three-fold act of the mind. To it must be referred whatever belongs to the human intention, just as intellectual things owe their origin to the intellect, moral things to the will, and actions to the effective act.

§ 2.

It is momentary when with respect to the intention and to the circumstances of things we enquire swiftly, as it were in passing, into the existence, origin and nature of a thing and into that which pertains to it. This is done either with respect to the thing in itself, or with respect to the intention and end.

§ 3.

It is the same with the momentary deliberation whereby the mind enquires into the nature of a thing to be done or not to be done, the mode of doing or leaving alone, the means and instruments, and that swiftly and as it were in passing, according to the necessity imposed by circumstances and the end to be attained. Momentary deliberation of this kind is called by the French "présence d'esprit."

NOTE. Both reflection and momentary deliberation with respect to the intention are sometimes determinate and adequate, sometimes indeterminate and inadequate; but with respect to the thing in itself they are always indeterminate and inadequate. For here acquiescence, or the complete absence of doubt, is lacking.

§ 4.

Absolute reflection is the contemplative and cognitive act of the mind whereby we enquire into the existence, origin and nature or essence of an *ens* up to the point where doubt is completely absent; and this either with respect to the intention or to the thing in itself, in both cases either in itself and simply or in some particular respect only.

§ 5.

Hence reflection is either adequate or inadequate, and that either with respect to the intention or to the thing to be considered in itself.

§ 6.

It is adequate in reference to the thing, when we take cognisance in a perfect and determinate manner of all the parts and properties, joint and several, of the thing to be known, in the full absence of doubt.

§ 7.

Therefore it is inadequate when we do not take cognisance in a determinate and adequate manner of the parts and properties, joint and several, of the thing in itself, but are left with a residue of doubt.

to a proposition is the conformity of the enunciation with what is enunciated. So much with regard to the intellect.

§ 6.

With regard to the will, ethical truth is that in which there is justice and virtue. In the former, the norm is regarded, in the latter, conformity; and so moral truth is either normal[1]), or belonging to perfection.

§ 7.

Normal is the conformity of that which is normalised with the norm just as mathematical truth is the conformity of that which is measured with the measure.

§ 8.

The truth of perfection is either absolute or intentional.

§ 9.

Absolute truth is the presence of all the parts and properties, joint and several, that constitute a thing.

§ 10.

Intentional truth is when an *ens* possesses all the parts and properties, joint and several, which it must possess according to the intention of the efficient cause.

§ 11.

Pragmatic truth is the reality or actuality of the mode, by the application or employment of which the effect occurs as a necessary consequence.

NOTE. The negations and contraries of these species of truth are falsities.

DIVISION II

On Falsity

§ 1.

Falsity is, in general, taking cognisance of something else, and otherwise than the thing in itself is, just as truth is taking cognisance of a thing in itself.

§ 2.

Falsity with respect to the intellect occurs in two ways (a) by compounding actual separates, (b) by separating composites, which is known as contradiction.

[1]) cf. note on p. 101.

CHAPTER VI

ON
TRUTH AND FALSITY IN RESPECT OF THE THING

DIVISION I

On Truth in General

§ 1.

The internal nature of truth is (1) presence or existence, (2) absence or non-existence, either in general or with respect to the subject in particular. For (1) the presence of the predicate in the subject makes an affirmative proposition true; (2) the absence of the predicate from the subject makes a negative proposition true; (3) the absence of the affirmed predicate from the subject makes an affirmative proposition false; (4) the presence of a negated predicate in the subject makes a negative proposition false; where there is any uncertainty about the presence or absence of the predicate in the subject, the proposition is doubtful.

§ 2.

Truth is either objective or intentional. In the former the thing is considered in itself, without any application of it to something else. In the latter, we consider a thing as applicable to something else.

§ 3.

In the case of objective truth the mind is concerned either with things in themselves or with sensations. Thus objective truth is either real or sensory. The former is either the actual presence of a thing, i.e. existence, or its absence, i.e. non-existence, the latter is the actual presence of the sensible quality in the sense-organs, or its absence from them.

§ 4.

Truth, with regard to the intention, is threefold: logical, moral, pragmatic.

§ 5.

Logical truth is the correspondence of cognition with the thing known.

NOTE. This is so with regard either to an idea or to a proposition. Logical truth with regard to an idea is the correspondence of the idea with its archetype. Logical truth with regard

THE ART OF PHILOSOPHISING SOBERLY AND ACCURATELY

SPECIAL PART

SECTION I

ON THE MOMENTARY INTELLECTIVE ACT OF THE MIND BEFORE REFLECTION

CHAPTER I

ON REPRESENTATION AND IDEAS

DIVISION I

General Remarks

§ 1.

The special part of the art of philosophising soberly and accurately is divided into four sections. Of these, the first deals with the momentary intellective act of the mind before reflection, with representation and attention; the second with reflection, contemplation and deliberation; the third with the momentary effects and operations of the mind after reflection, etc.; and the fourth and final part with the art of disputation.

§ 2.

The basis of the division. Logic has for its object the intellect which is either momentary or reflective. It may be momentary before, during or after reflection. Before reflection, it is called attention when the archetype is present, and representation when it is absent. The reflective intellect may be either such in general, or contemplation or deliberation; now such as is the object according to its various aspects, so also is the treatment of the object. On the intellect see the general part ch. V, div. II and III. The effect of contemplation is cognition which either ends in an idea or in a proposition. The former is dealt with in this section, the latter in its place.

DIVISION III

On Truth and Falsity in Respect of Our Mode of Cognition

§ 1.

We take cognition of *entia* either in themselves or by comparing them with something else. Thus the mode of contemplating them is either absolute or relative. In the former case we regard the thing in itself, in the latter, correspondence and conformity with something else.

§ 2.

With regard to the intellect and correspondence, logical truth appears, which is the correspondence of cognition with the *ens* known. With respect to the will, there is moral truth, which may either be considered in general or in particular. The former is the correspondence of cognition, intention and actions with the end; in the particular case, however, it is correspondence with that which is most perfect and best. With regard to the effective act of the mind, it is the certainty of the mode by which the end is attained.

Opposed to this truth is falsity, which is (1) with regard to the intellect, a divergence of cognition from the thing known, (2) with regard to the end, i.e. in a moral sense, it is the divergence of the intention and actions from the end to be obtained, (3) with regard to the effective act of the mind, it is when effect is not obtained in that manner which is prescribed as true.

NOTE. All our cognition and truth itself is either real or intentional or sensory. The first is concerned with existence and non-existence; the second with logical and moral cognition; the third with physical and historical cognition.

That is all. End of the general part.

one way in taking cognisance, in another in exercising the will, in yet another in the action itself, etc. This division is not exhaustive. This is the reason why we have said that the act of the mind is threefold, intellect, will, and effective act. We consider the first in logic, the second in morals, the third in pragmatic actions and things. Again, we said that the intellect was either momentary or reflective, so that any operation of the mind considered logically must be attributed to one of these two.

OBSERVATION. The act of the mind in itself is indivisible (1) in the way that the mind itself is indivisible: for as the substance, so the property of the substance; (2) because in it there is no variety of parts and properties: therefore also not in its action in itself. For there is no heterogeneity in the mind and in the other spirits, but an immutable uniformity, for this latter is the nature of the simplest substance and therefore is of the simplest property. Thus it is one and the same act of the mind when we understand by thinking and when we by making a choice wish, do not wish, act and leave alone; and it achieves diversity not through itself but through the object and end of its operation. In the intellective act there is another object and another end, yet another object and another end in the will, and the action itself is directed towards an object and end, just like every act of the mind.

§ 3.

The momentary act of the mind before reflection is representation and attention, the former when the archetype is absent, the latter when it is present; and without one or the other of these two acts of the mind there is no cognition, for they are the terminus and principium a quo of all operations of the mind.

NOTE. Representation, memory, reminiscence are synonyms, unless one would prefer to use the expression "representation" for something representable with ease, and memory or reminiscence for something representable with difficulty.

§ 4.

Attention always comes before reflection and during reflection, but never after it, whereas representation occurs before, during and after reflection.

§ 5.

Attention will be dealt with in its proper place. Representation must be considered positively and negatively.[1]) In a positive sense, representation is an intellective act of the mind, whereby it places a thing perceived with the senses (a remanent sensation) as present before itself for an end of which it is conscious to itself. Privatively[2]) however, representation is

[1]) See note 1 on p. 100.

[2]) *privatively* for Lat. *privative* = *negatively*.

DIVISION II

On Representation

§ 1.

The scholastics, above all the Thomists, unanimously lay down three operations of the mind: 1) the simple apprehension of terms and the copula; 2) discourse,[1]) whereby we, of course, by way of ratiocination, affirm and deny; 3) the syllogistic art, or argumentation. On this see the *Philosoph. Aristo-Thomisticae Cursus*, vol. I, disp. IX, single question on the second operation of the mind, p. 214 [41]; ibidem the excellent Fathers Franciscus Bonae Spei, Tract. VII, Disp. IV [42], Irenaeus ch. IV, section I, § 3 [43], Blasius *Metaph.* Disp. XXIII, question 2, also loc. cit. on the third operation of the mind Disp. IX, p. 220 ff. [44] In addition, D. Petr. a Sancto Joseph Fuliensi, in *Idea philosoph. rational.* prelude, art. IX, obs. 3 [45]. The latter says, in so many words: It is to be observed that three acts or grades of our cognition are commonly laid down. Of these the first is called simple apprehension, the second judgment, the third discourse. The first is when the intellect simply conceives something, like a man or a stone, without affirming or denying anything about it; the second, when the intellect judges determinately about a known thing, either by affirming, e.g. a man is an animal, or denying, e.g. a man is not a stone. Hence it is called composition and division, since by affirmation it compounds the one with the other, or by negation it separates them; the third, when the intellect, from one known thing, deduces another, e.g., Peter is an animal, and hence judges that every man is an animal and that Peter is a man.

§ 2.

From this it is evident that the logic of the scholastics teaches only the momentary act of the mind, to the complete neglect of the contemplative and deliberative. For simple apprehension is the identical twin of our representation, because it is concerned with the idea of the subject, predicate and copula, which are known as the terms, see V. P. Joan. Gabriel Boyvin in *Philosophia Scoti comp. logic.* question 1 [46]. For a term is that out of which a proposition is made, and into which the proposition resolves itself. That is subject, predicate, copula, the expression, "is not." Judgment, in so far as it consists of simple affirmation and negation, is the momentary act of the mind, just as argumentation is the momentary act of deducing one thing from another, by arguing from genus to genus, species, individual. In addition there are more operations of the mind, like ingeniousness, memory, fiction, reviewing or enumeration, fantasy, imagination, etc. These cannot be attributed to simple apprehension, nor to judgment nor to argumentation. Further, the mind operates in

[1]) *Discourse* for Lat. *discursus*. Cf. Dr. Johnson's definition: "The act of the understanding, by which it passes from premises to consequences . . ." (quoted from the Shorter O.E.D.)

in actual fact and in themselves, for the smaller cannot contain the greater; thus it does not represent to itself things in themselves, but the sensible qualities of things, in so far as they are sensible. Far from being able to have ideas of incorporeal things corresponding with the archetype, we rather make judgments and draw conclusions by arguing from the one to the other. For an idea is a sensation intentionally represented, and no spirit in itself is perceptible to the sense, etc. This opinion is excellently demonstrated by the words of PETRUS A ST. JOSEPH FULIENSI: "*Just as corporeal vision is an act derived from visual power, whereby a thing is perceived as having colour and is therefore so represented to the beholder; so intellective cognition is an act called forth by the intellect whereby the object is so represented that the intellect in itself expresses the actual similitude of the thing known.*" See *Idea philosoph. rational.* praelud. art IX, obs. I. So much for the consideration of ideas with regard to the thing itself.

§ 3.

II. WITH REGARD TO SENSATION. In the idea as such there is no other sensation than that which is remanent and really represented. For proximate and immediate sensation occurs in attention, but not at all in representation because representation has no place in the presence of the archetype.

§ 4.

III. WITH REGARD TO THE ACT OF THE MIND. The act of the mind is nothing other than representative, and it is sometimes called memory or reminiscence. Nor does attention have any place in ideas simply as such. For idea and representation are of a thing which is absent, but sensation and attention of a thing which is present.

§ 5.

II. INTENTIONALLY

I. The efficient cause of ideas is the mind. The mediate, objective, indispensable cause, is the representable or remanent sensation. This is the nearest object of ideas.

§ 6.

II. With regard to the end. The end which the mind aims at in representation is two-fold: consciousness, commonly called understanding, and application. The former exists either in itself and simply, or in some particular respect only, the latter is either momentary, or has reference to reflection, i.e. it is either contemplation or deliberation.

an intellective act of the mind, whereby it feigns a thing, which is present to it and existent, as absent and non-existent, and a thing which is absent and non-existent, as present and existent. From the former arises an affirmative idea, from the latter a negative one: from the former a true idea, from the latter a fictitious one, etc.

NOTE. That in us which can represent something to itself, is called the mind; that, whereby it represents something to itself by means of instruments, is its representative act; that, which it represents to itself as an object, is sensation which remains in the sensory organs and the memory. For nothing is in the intellect which was not previously in the senses. Such a sensation represented to the mind is called an idea. The representative act of the mind is of course a function of the mind, but represented and representable sensation is a function of the body: the former in the sense that the intellect is a faculty of the mind, the latter in the sense that the faculty of sensing is a faculty only of the body; see our dissertation *de Idea distincta eorum quae competunt vel menti vel corpori nostro vivo et organico*, ch. II, div. II § 1 and § 3.

§ 6.

We shall however consider ideas (1) objectively, (2) with regard to the intention: the former with respect to the thing, the sensation, the mind's operation, the latter with respect to the efficient cause, the object, the final cause or end.

DIVISION III

On Ideas in General

§ 1.

In ideas occur:

I. OBJECTIVELY. (1) Thing, (2) sensation, (3) act of the mind.

II. INTENTIONALLY. (1) Efficient cause, (2) object, (3) end.

I. OBJECTIVELY

§ 2.

I. WITH RESPECT TO THE THING. The mind cannot represent to itself a thing in itself, but only the properties and qualities of the thing that are perceptible to the senses and so perceived. For if the former were true, it would follow that the mind could represent to itself the spirit in itself, which is impossible. For there is nothing in the intellect, and consequently nothing in the representative intellect, which has not previously been in the senses. Now there can be no spirit in itself in the senses, therefore etc. Further: the mind cannot represent to itself a distance of, for instance, ten or more miles, let alone the whole globe, the world, etc.

spirit or matter, our mind can only represent to itself such properties and parts of them as are sensible. It cannot represent to itself spirit, since there is nothing in the intellect which has not already been in the senses, and nothing in the senses except a merely sensible quality, and no sensible quality except in a sensible substance in itself; now no spirit is in itself sensible; therefore there can be no true representation of a spiritual substance, in the sense that an idea is always a sensation represented to the mind. Nor can the mind represent to itself a material substance in itself because an idea takes up no space. It has no actual magnitude, otherwise the lesser would contain the greater. Thus when the mind forms its concepts like sun, moon, world, city, etc. it would, in fact, within its own intellect, contain the sun, moon, world, city, etc. in themselves, which is impossible. Thus by representation, the mind only understands the images and species of things, cf. the present chapter, div. III § 2. However, for methodological reasons, we deal with real ideas, because things in themselves are the first bases and principles of all forms of cognition.

III. The end of all ideas, joint and several, is (1) intellection or logical consciousness, (2) application; this is either momentary or subordinate to reflection, which is either contemplation or deliberation. Moreover, the end of an idea is either another idea, co-ordinate or subordinate, or a proposition. So much for intention.

§ 3.

OBSERVATION I. There is nothing in the intellect which has not already been in the senses, i.e. the sense-organs and the memory. Now there is no sensible quality, or sensation, in the sense-organs and the memory, which has not arisen from sensible, i.e. corporeal things. Therefore there is no intellection or idea without an archetype perceptible to the senses. Thus in taking cognisance of spirits and incorporeal things, we must beware of confusing the idea with what is ideated, i.e. the archetype, for an idea of this kind is corporeal, whereas that which is ideated is incorporeal.

NOTE. Synonyms for ideas are: notion, concept, cognition, logical consciousness, intellection.

OBSERVATION II. Logical consciousness is remanent sensation itself, i.e. that which is left in the sense-organs and the memory.

PROOF. Ignorance of both kinds, whether before or after, is sensation absent from the sense-organs and the memory. Now ignorance is diametrically opposed to consciousness. Therefore consciousness is sensation present in the sense-organs and the memory.

§ 4.

Let the classification itself of real ideas follow. The basis of the classification is: just as there is multiplicity and variety in things themselves, so also in the ideas of them.

§ 7.

All the other species of the momentary act before reflection are (1) comparison (2) repetition or memory (3) enumeration or reviewing (4) division (5) opposition (6) composition (7) separation.

NOTE. Here it is to be noted that the momentary operation before reflection in accordance with the intention and with regard to the object and end may also occur after reflection. But here we retain the order with regard to ensuing reflection and to the subordination of ideas to the end.

§ 8.

We close with the general division of ideas of which this is the basis: as many as are the genera of knowable things, so many are the genera of ideas; now, knowable things are things in themselves, sensation, operation of the mind, cf. general part, ch. I, div. VI.: therefore there are different kinds of ideas—real, sensory or historical, and intentional.

DIVISION IV

I. On Real Ideas

I. OBJECTIVELY. Thing, sensation, operation of the mind.

II. INTENTIONALLY. Efficient cause, object, end.

§ 1.

I. OBJECTIVELY

I. With regard to the thing. The mind cannot represent to itself the thing itself, i.e. the substance itself, matter and spirit in themselves: see foregoing division § 2. Therefore real ideas are known as such, not in reality but in intention.

II. With regard to sensation. In the immaterial the mind represents to itself the sensation instead of the thing itself; see this division, § 2, note.

III. With regard to the operation of the mind. The act of the mind is nothing other than representation in all ideas, joint and several; therefore also in real ideas.

§ 2.

II. INTENTIONALLY

I. The efficient cause of real ideas is the mind.

II. The object of real ideas is the substances themselves.

NOTE. The real idea in itself is the representation of the thing looked at in itself. An idea of this kind is impossible. So far from being able to represent to itself either substance, whether

always and everywhere. The act of the mind is the representation of necessary and consecutive properties.

II. INTENTIONALLY. The cause of real ideas is the mind. The objective and indispensable cause is the sensation that is left in the sense-organs and the memory. The nearest object is the above-mentioned remanent sensation: whereas the remote object is the substance itself in itself. The end is as in every representation (1) momentary application, (2) ensuing reflection.

§ 3[1]).

Having laid this down, now to the matter in hand. The idea of a corporeal, i.e. composite, substance is the representation of a material substance possessing a variety and multiplicity of parts and properties.

§ 4.

The idea of an incorporeal, i.e. simple, substance is the representation of a substance in which there is no actual presence and enumeration of parts and various properties.

NOTE. Thus whatever is in an incorporeal substance is the substance itself, just as whatever is in God is God himself: therefore whatever is in a spirit is the spirit itself, etc., and in consequence there is no heterogeneity in spirits.

§ 5.

The composite idea, which is always corporeal, is either universal, particular or individual.

§ 6.

The universal idea is the representation of all parts and properties taken collectively and distributively.

NOTE. We need this idea in the systematic and orderly treatment of whole branches and departments of learning, and also in the historical and accurate description of things.

§ 7.

This universal idea before contemplation is only considered concretely, namely with reference to all parts in general and collectively, but not in particular and distributively; but during contemplation itself, sometimes concretely, sometimes abstractly, depending on the aim in view. Concretely means without determination of the single parts in themselves; abstractly means by considering the single parts and properties in a determinate way, separately. The case is the same after contemplation, with this distinction, that it is obscure and indeterminate before contemplation, whereas after it is clear and determinate.

[1]) There is no § 2 in the original.

PROOF. We do not feel sensible phenomena in one and the same way, a fact to which experience itself lends its support: for we feel heat in one way, cold in another, etc. This sort of variety and multiplicity of sensible phenomena brings about specific difference.

NOTE. Variety is the effect of multiplicity, identity of union and unity.

§ 5.

Having laid this down as a basis, we argue by subsumption in the following manner: we consider the thing in general and objectively (1) as a substance, (2) as a property or mode: therefore real ideas are either substantial or modal.

§ 6.

Next, one substance is corporeal, the other incorporeal; therefore the substantial idea is either of a sensible and corporeal substance, or of a composite or incorporeal one.

NOTE. No idea of a simple substance is simple. For every idea must be stated by means of the partial notions of which it is made up; therefore it is composed of declarative propositions.

§ 7.

In ideas of substances the mind represents to itself the substance itself intentionally rather than in itself, but in modal ideas, the property or mode.

§ 8.

The idea with regard to the thing is either objective or intentional; the former is the idea of the thing in itself, the latter with reference to the intention. The objective idea is either substantial or modal. On the other hand the intentional idea is either co-ordinate, or subordinate, or hypothetical. The classification of modal ideas will be dealt with in its place.

DIVISION V

On

I. Substantial Ideas

§ 1.

OBJECTIVELY. Thing, sensation, operation of the mind.

INTENTIONALLY. Efficient cause, object, end.

I. OBJECTIVELY. The mind represents to itself things, i.e. substances themselves, if not in themselves, nevertheless with regard to the intention. The sensation that is representable in these ideas is nothing else but that of a quality immutably existing in the object alone,

§ 3.

For the basis of the classification with reference to the thing, see the general part, ch. III, on things logically, etc.; on this basis the modal idea is either essential or accidental or intentional.

§ 4.

I. The essential modal idea is the representation of properties and parts which have a simultaneous origin, existence and duration with the substance in which they exist.

NOTE. Thus the representation of an effect is not an idea of this kind, because the effect lies outside the substance which is the efficient cause.

§ 5.

It is either necessary or consecutive. The former is the representation of that without which a thing receives no origin and existence at all; the latter is the representation of an effect arising from the co-ordination and subordination of the parts and properties of an *ens*.

§ 6.

II. The accidental idea presents itself next in order for our contemplation. It is the representation of that which is from elsewhere and unintentionally in the thing to which it is said to belong.

§ 7.

III. The intentional idea is the representation of that which cannot either in itself or by accident be in the subject, of which it is stated as a predicate, e.g. matter thinks, spirit is cold, etc., for the faculty of thinking cannot either in itself or by accident be in matter as if that were its own substance, nor can cold be in spirit, etc.

§ 8.

It is either relative or contradictory. The former is the representation of that which is stated of the subject by way of comparison; the latter is the representation of non-compoundable composites and of non-separable separates. So much on real ideas.

§ 8.

The particular idea is the representation of certain parts and properties alone considered separately, of an *ens* composite in itself.

NOTE. Abstraction is the consideration of a thing, done separately. It is either particular, or singular, i.e. individual: in the former we consider certain parts and properties, in the latter individual ones.

§ 9.

The individual idea, which is also called a partial notion, is the representation of one part or property considered separately in itself.

NOTE. Every idea before contemplation, but equally during contemplation itself, is obscure, indeterminate, inadequate; after contemplation it follows the nature of the contemplation, for an adequate idea comes from adequate contemplation, inadequate from inadequate.

DIVISION VI

On

II. Modal Ideas

§ 1.

I. OBJECTIVELY. Thing, sensation, operation of the mind.

II. INTENTIONALLY. Efficient cause, object, end propter quem.

§ 2.

I. OBJECTIVELY. The things occuring in these ideas are effects, properties and parts considered separately. The occurring sensation takes place sometimes in the presence, sometimes in the absence of the archetype. The act of the mind is the representation of properties, parts and effects considered abstractly.

II. INTENTIONALLY. The efficient cause is the mind which considers effects, properties, and parts in particular by abstracting them from the substance itself. The object is the property, part, effect. The aim is (1) momentary application, (2) ensuing reflection, which is contemplation or deliberation.

OBSERVATION. As are the properties, parts and effects of a substance, so are the ideas of objective consideration. For as the principles are, so are the principiates; things and the properties, parts and effects of things are principles, the ideas based upon them are principiates.

§ 3.

The basis of sensory ideas is: a represented sensation is of exactly the same nature as the sensation remanent in the sense-organs and the memory. A sensation surviving in the sense-organs and the memory when the archetype is absent, is of exactly the same nature as attention when the archetype is present.

§ 4.

On the basis for the classification of these sensory ideas, see general part, ch. IV, On Sensation Considered Logically. The logical and physical consideration of sensation is relevant here, moral consideration belongs to the doctrine of intentional ideas.

§ 5.

I. Physically every sensation is pleasant, or unpleasant, or mixed, e.g. sweetness, bitterness, tickle. Therefore an idea of this kind is of a pleasant or unpleasant or mixed sensation.

§ 6.

A pleasant idea is the representation of a thing in the presence and use of which we are affected with a pleasant sensation.

§ 7.

An unpleasant idea is the representation of that in the presence of which we are affected with an unpleasant sensation.

§ 8.

A physically mixed idea is the representation of something inducing pleasure and pain simultaneously.

§ 9.

II. Logically every sensation is either present in the sense-organs and the memory or absent from them. The former is either proximate or remanent, the latter either a parte ante or a parte post. Hence one idea is immediate, another possible, a third impossible.

§ 10.

The immediate idea must be considered with reference to representation and with reference to attention. In the former case it is the representation of a thing existing in an immediate and sensible way; in the latter, it is the consciousness of a thing that is present, by way of attention.

CHAPTER II

ON SENSORY IDEAS

DIVISION I

On Sensory Ideas in General

§ 1.

I. OBJECTIVELY. Thing, sensation, operation of the mind.
II. INTENTIONALLY. Efficient cause, object, aim or end.

§ 2.

I. OBJECTIVELY. Neither substance considered in itself is relevant to the consideration of these ideas. Relevant here are both kinds of sensation, immediate and remanent. The operation of the mind which is revelant here is the representation of a quality which is sensible and perceived with the senses.

NOTE. Here two points are to be noted with respect to that which is perceived with the senses. (I) We have half-ideas of sensible things. For things are perceived by us with the senses, either only a parte ante or a parte post, but never both at the same time, a fact which experience itself teaches us. Thus, e.g. we see half a globe, i.e. one hemisphere, the other being turned away from our sight, etc. (II) The mind after all can only represent to itself that which, when actually perceived with the senses, is left in the sense-organs and the memory. For there is nothing in the intellect, which has not, etc. Here we must beware (1) of confusing a particular sensation with the whole of the thing in itself to be perceived with the senses, (2) of quarrelling obstinately with our neighbour, about one and the same thing which we have perceived with the senses; for it can happen that you have seen the same thing a parte ante, whereas he has seen it a parte post, and by realising this you will avoid an altercation. And the same perception of a thing, but under different circumstances, a parte ante and a parte post, can equally well occur.

II. INTENTIONALLY. Every idea pertains to the mind, as regards representation, to the body, as regards sensation. See our dissertation *de humanae menits apatheia*, ch. II, single division, p. 15. So much for the efficient cause. The object of these ideas is every sensation in itself. The aim, as always, is momentary application and ensuing reflection.

indeed an impediment to vision, but it does not alter the nature of vision nor the thing visible in itself. Thus sense, intercepting medium and the thing visible in itself must be distinguished from one another.

§ 2.

I. A sensation is either distinct or confused. Therefore the sensory idea is either distinct or confused. Distinct and determinate ideas are synonyms, as are indeterminate and confused ideas.

§ 3.

II. An idea is either primitive[1]) or adventitious: the former is the representation of a thing as one that is already known and applied, the latter of a thing as one that is still to be known and applied.

§ 4.

III. An idea is either certain or uncertain. The former is the representation of that which is always and everywhere immutable, the latter of that which is subject to mutation.

NOTE. An uncertain idea is commonly called vague. But there is in fact no such thing as a vague idea in itself: this sort of vague idea is rather a word or appellation of uncertain or vague significance, e.g. orb, rose, crab, lion, virgin, etc., in which the appellation includes an idea applicable only to one single object in itself, always, everywhere and immutably, an idea however which is intentionally applicable to several objects. Appellations of this kind for the most part denote an uncertain genus or species or individual as "vague", not by nature, but intentionally.

§ 5.

IV. An idea is either principal or accessory. The former is known as the idea of the subject itself, in itself, the latter as the representation of unintentional things.

NOTE. An example is the ten predicaments or categories of the scholastics. In it the predicament of the substance gives the thing itself, the remaining nine give the accessory ideas, in accordance with the key couplet:

Arbor, sex, fratres, ardore, refrigerat, ustos;
Cras, ruri, stabo, nec tunicatus ero.

(A tree cools six brothers parched by heat; tomorrow I shall stand in the country, and shall not be clothed).

Here "arbor" (tree) denotes the substance, the remaining words, however, the accessory properties, quantity, relation, quality, action, passiveness, time, place, *habitus*.

[1]) *primitive* for Lat. *primitivus*, meaning "original, primary", see N.E.D. s. primitive a. I 3.

§ 11.

A possible idea of this kind is either so in itself or actual. The former is a sensation, representable though not actually represented: hence memory and reminiscence. The latter is a sensation actually represented. Any of these ideas is adequate or inadequate, determinate or indeterminate.

§ 12.

Adequate is the representation of all partial sensations, joint and several, taken collectively and distributively. Therefore inadequate is the representation that does not put forward all partial sensations, joint and several, contained in the sensible thing.

§ 13.

A determinate idea is the representation of a thing as to all its parts and properties, joint and several, that are to be known, taking into account the termini a quo, instans, and ad quem, as well as the accurate enumeration of parts and properties, so that it can always be distinguished in every way from other things. In other words, a determinate idea is the cognition or representation of a thing as to the number of its parts and properties and their terms. Therefore an indeterminate idea is the representation of a thing, always in ignorance of some term or other and of the number of its parts and properties considered distributively and collectively.

NOTE. The difference between an adequate and a determinate idea is that the former is the possible enumeration of all the parts and properties, joint and several, a perfect enumeration but in the concrete. The latter adds the cognition and representation of single parts and properties, as to their terms and number, in the abstract. But there is this much difference between inadequate and indeterminate ideas: the former lacks enumeration of all parts and properties, joint and several, concretely; the latter lacks cognition of the individual parts and properties as to their terms. But if an idea is both indeterminate and inadequate at the same time, it is obscure and confused.

DIVISION II

On the Remaining Species of Sensory Ideas

§ 1.

OBSERVATION. A medium between sense and object does indeed impede the sense, but it does not alter the nature of the sensible thing nor of the faculty of sensing; e.g. night is

§ 4.

The basis of classifying ideas with respect to clarity and obscurity. (I) The degree of clarity and subtlety by which vision surpasses hearing is the same as that by which hearing surpasses smell, smell taste, and taste touch. (II) The degree of obscurity and density by which touch surpasses taste, is the same as that by which taste surpasses smell, smell hearing, and hearing vision. The proof will be seen by induction.

§ 5.

Having laid this down by way of a basis, we place visible things in the highest degree of clarity, and things perceptible to the hearing in the second; the rest are more obscure. In the highest degree of obscurity are things perceptible to the touch, in a lesser degree things which are perceived by taste, in the least, things which are perceived by smell.

§ 6.

PROPOSITION I. In the highest degree of clarity are those things which are perceived by vision.

PROOF I. This thesis is proved by the multiplicity of visible objects. For in these things we are able accurately to determine and enumerate (1) substance, (2) all properties and parts, joint and several, (3) definite designation, i.e. genus, species, individual as distinct from others, (4) colour, (5) configuration, (6) quantity, (7) action, (8) passion, (9) relation, (10) quality, (11) time, (12) place, (13) situation, (14) habitus, (15) criteria, (16) movement and rest, (17) form, (18) distance, (19) essentials and extra-essentials, (20) terms, (21) number, (22) what is mutable and immutable, (23) mobile and immobile, (24) conformity and divergence, in a word, all sensible phenomena fit for deeper investigation.

PROOF II. Many things that are to be perceived by the other senses are referred to the sense of vision so that they may become clearer to the intellect. So, for example, with the aid of clocks time is referred to the sense of vision; so also the qualities of the elements which are to be perceived by touch, with the aid of barometers and thermometers; also audible things, as we see in the case of musicians' notations, which represent musical notes, and similar instances.

§ 7.

PROPOSITION II. In the second degree of clarity are those things to be perceived by learning.

PROOF. We are less able to determine and enumerate audible things than those perceptible by vision. For we determine and enumerate very few features: (1) the beginning and

§ 6.

V. One idea is clear, the other obscure, because one sensation is clear, the other obscure.

§ 7.

An obscure idea is the representation of a thing in which the determination and enumeration of parts and properties is impossible.

§ 8.

A clear idea is one by which we may distinguish the thing from another of the same genus and species.

DIVISION III

On
The Degrees of Clarity and Obscurity of
Sensory Ideas

§ 1.

I. OBJECTIVELY. Thing, sensation, operation of the mind.

II. INTENTIONALLY. Efficient cause, object, end or aim.

§ 2.

I. OBJECTIVELY. Things relevant here are: every composite *ens*, but by no means any simple substance, because there is no variety in simplicity; but every gradation presupposes variety, etc. Sensation has itself as proximate object. The pertinent action of the mind is known, etc.

II. The efficient cause of the obscurity and clarity of these ideas is not the mind but (1) the intercepting medium, (2) the nature and disposition of the sense-organs. The proximate object is the sensitive faculty, the remote every composite *ens*.

§ 3.

OBSERVATION. The substance is either a spirit or a body. In the latter is clarity and obscurity; both of these are absent from the former.

DEMONSTRATION. The nearer the parts and their union are to the senses, the greater the clarity: the more remote they are, the greater the obscurity both in respect of the thing and in respect of the sensitive faculty. Therefore clarity lies in nearness, obscurity in the distance of the sensible parts in themselves; however where there are sensible parts seen in themselves, there is a body.

CHAPTER III

ON
INTENTIONAL IDEAS

DIVISION I

On Intellectual Ideas

§ 1.

OBJECTIVELY. Thing, sensation, operation of the mind.
INTENTIONALLY. Efficent cause, object, end or aim.

§ 2.

Objectively these ideas contain everything which has already been dealt with. Intentionally we consider the correspondence and conformity of the idea with the archetype, of cognition with the thing known.

§ 3.

I. With respect to the intellect an idea is either true or false. The former is the correspondence of cognition with the thing known, of the idea with the archetype. A false idea is the divergence of cognition from the thing known, or of the idea from that which is ideated, i.e. the archetype.

OBSERVATION. As the whole of the idea corresponds with the archetype, so all notions and propositions, joint and several, must correspond with it. Otherwise the idea is true in some particular respect only.

§ 4.

II. An idea may be certain, probable or possible.

§ 5.

An idea which is certain is the representation of that which is in the known thing always, everywhere and immutably: equally an idea which is uncertain is the representation of that which is mutable.

§ 6.

A probable idea is knowledge that consists in argumentation from similar to similar, always with an element of doubt.

end of a sound, (2) its movement and rest, (3) its quantity, (4) its quality, (5) its place, and a very few similar features. Hence the famous proverb: *One eyewitness is better than ten hearers*: PLAUTUS [47].

NOTE. The senses used in teaching are vision and hearing, the media are writing and speech. The rest of the senses contribute little to teaching, but are rather for simple experience.

§ 8.

In things perceptible to vision and hearing we discern a thing by its own qualities and parts; in the case of all the other senses we simply explain one thing in terms of another, as we explain like by like, one analogy by something equally analogous. Things that are perceptible to smell can be discerned by means of tastable things, things to be perceived by touch cannot be discerned either in themselves nor by means of anything else.

§ 9.

Thus representations of things perceived by vision and hearing produce clear ideas.

NOTE. For an adequate sensation, and hence for a complete idea, are requisite (1) the actual presence of a thing, and that the proximate, (2) that it be placed at a due distance, (3) that it should not be too subtle, (4) that it should be a sensible body, (5) the due disposition of the senses, (6) that the object be placed in the open, (7) that it be immobile and immutable, (8) that all the senses be applied, (9) that judgements and thoughts be separated from the sensation itself, (10) that there be due attention.

DIVISION II

On Moral Ideas

§ 1.

Basis and principle here are the same as for intellectual ideas, i.e. correspondence and conformity with the archetype.

§ 2.

I. There is the idea of the good and that of the bad. The good is of three kinds—metaphysical, physical and moral.

§ 3.

The metaphysical good is the perfection of existence and essence in itself. Therefore the metaphysical bad is the imperfection of existence and essence in itself.

§ 4.

The natural good may be either sensory or true.

§ 5.

The sensory physical good is any pleasant sensation either of the body or the mind. Thus the physical bad in this category is any unpleasant sensation, i.e. pain, either of the body or of the mind. Ideas in this category are of the same nature.

§ 6.

The true physical good is whatever actually conduces towards perfection of natural existence and essence. The representation of this is the idea of the true physical good. Therefore the true physical bad is whatever actually and by its own nature is the cause of the destruction of natural existence and essence, and that in itself or with regard to something. As both of these are, so are the ideas of them.

§ 7.

The moral good is whatever corresponds and conforms with what is best and most perfect in itself. The representation of this is the idea of the moral good. Thus whatever in itself and by its nature is a cause of imperfection, is the moral bad. The representation of it is an idea of the same denomination and nature.

§ 8.

II. With respect to the effective act of the mind, the idea is either possible or impossible.

§ 7.

A possible idea is cognition disputable on both sides owing to the equipollence of mutually contradictory reasons.

NOTE. Probable and possible ideas of this kind have their place rather in pragmatic matters: but in demonstrational matters the idea must be certain, adequate, determinate and universal so that it can serve as a basis.

§ 8.

Twin to the possible idea is the fictive, which is the representation of a thing otherwise than it is in itself.

NOTE. Fiction itself arises in two primary ways, by compounding and separating mentally, by affirming and denying with regard to the enunciation.

§ 9.

III. There are intentional ideas and unintentional. The former are applied principally in thinking from the intention to the end; the latter arise from a source other than the intention. They have the same nature as have the principal and accessory ideas. On these see this part, ch. II, div. II, § 5.

NOTE I. Accessory, or unintentional, ideas and sensations arise from three sources—the intellect, the will, and accident. With reference to the intellect they arise either from representation or from reflection, which is contemplation or deliberation. With reference to the will they arise either from a ruling passion or from an affect aroused at the time of reflection. An idea arises by accident from the unexpected presence or absence of a thing.

NOTE II. When attention and reflection are applied, accessory and unintentional ideas easily become secondary propositions. These either retreat from the aim or correspond with it: in the former case the ideas may be either useful or useless; in the latter, they are always useful so long as they are applied in due order, for while they have nothing to do with the aim, they are none the less useful and must be earmarked for future use in their own place while under contemplation, though great care must be taken to ensure that they do not deflect one from the aim: this will be achieved by constant comparison of all ideas, joint and several, with the object under contemplation.

CHAPTER IV

ON
THE REMAINING MOMENTARY MODES OF THE INTELLECT BEFORE REFLECTION AND ON ATTENTION, FANTASY, IMAGINATION

DIVISION I

On Attention

§ 1.

OBJECTIVELY. Thing, sensation, operation of the mind.
INTENTIONALLY. Efficient cause, object, end.

§ 2.

I. OBJECTIVELY. A thing that occurs in attention is always perceptible to the senses and also proximately present. Sensation is nothing other than immediate, i.e. in the presence of the archetype. For the operation of the mind, i.e. attention, see below § 3.

II. INTENTIONALLY. The mind is the efficient cause of attention. The proximate object is the proximate sensation in the object proximately sensible. The end is momentary application or reflection. In attention the object is present, in representation it is absent.

§ 3.

I. But attention is defined as the momentary intellective act of the mind before reflection, whereby the mind directs its whole faculty of understanding and all its senses exclusively towards the object proximately present, either for momentary application or ensuing reflection.

DIVISION II

On Fantasy and Imagination

§ 1.

OBJECTIVELY. Thing, sensation, act of the mind.
INTENTIONALLY. Efficient cause, object, end.

§ 9.

The possible idea is the cognition and representation of a thing with reference to (1) that modus operandi whereby it actually attains its origin, existence and essence, or (2) whereby it actually becomes absent. Therefore the impossible is the representation of a thing which either (1) in no way attains origin, existence and essence, or (2) in no way becomes absent.

NOTE. With respect to the intellect, we contemplate the true and the false in themselves; with respect to the will, the good and the bad, the perfect and the imperfect; with regard to the effective act of the mind, the possible and the impossible.

DIVISION III

On Ideas According to the Modes whereby the Predicate of the Subject is Affirmed or Denied

§ 1.

I. CORRESPONDENCE. The representation of parts and properties actually present in the archetype, is a true idea. The representation of those parts and properties which are not actually encountered in the archetype, is a false idea.

§ 2.

II. CONNECTION. Some ideas are connected, others are separate. The former are either co-ordinate or subordinate. Co-ordinate ideas are representations of things so compared that the presence of the one establishes the presence of the other, the absence of the one the absence of the other. Subordinate ideas are representations of things, of which the one appears as effect, the other as cause, and that either simply or with regard to something.

Separate ideas are representations of things existing separately.

§ 3.

III. DEPENDENCE. What has already been said about co-ordinate and subordinate ideas, is applicable here.

§ 4.

IV. CONTAINMENT.[1]) One idea contains, another is contained. The former behaves as the whole, the latter as the part.

§ 5.

V. An idea is universal or particular or individual. On this see ch. I, div. V, §§ 6, 7, 8, and 9.

NOTE. The representation of a thing before reflection is a merely sensory and historical idea whereas after reflection it has been acquired by critical reasoning.

[1]) *convenientia* in the Latin text must be a misprint for *continentia* = *containment*, since it has already appeared under I.

CHAPTER V

ON
THE MOMENTARY INTELLECTIVE ACT OF THE MIND, BEFORE AND AFTER, BUT ALSO DURING REFLECTION, ON REPRESENTATION, COMPARISON, REPETITION OR MEMORY, ENUMERATION OR REVIEWING, DIVISION, OPPOSITION

I. OBJECTIVELY. Things occurring here (under this heading) are sometimes immediately sensible, sometimes sensations in themselves and sometimes ideas.

II. INTENTIONALLY. The object: see what we have said previously. The end: momentary application or ensuing reflection.

DIVISION I

On Representation, Comparison, Repetition

§ 1.

I. I have dealt in sufficient detail with representation already. It occurs before and after, but also during reflection. Before reflection it consists of merely sensory and historical ideas, after reflection in ideas acquired by critical reasoning when these ideas behave like effects of contemplation and demonstration. But during reflection itself, it plays the part of attention.

§ 2.

II. Comparison is the representation of several things as dissimilar and similar. Before reflection it is concerned with purely sensory ideas and sensations; during reflection with correlates, co-ordinate with and subordinate to the end, after reflection, with ideas acquired by critical reasoning. For some ideas are merely sensory and historical, whereas others are acquired by critical reasoning; the former can be stated in terms of merely sensory propositions, the latter however in terms of demonstrative propositions supported by their reasons.

§ 3.

III. Memory is of two kinds, either of the mind, or of our living and organic body. The former is mental, the latter corporeal. Mental memory is that momentary act of the mind by the frequent intentional repetition of which the mind succeeds in fixing the oft-repeated

§ 2.

I. OBJECTIVELY. Things occurring in the fantasy and in the imagination are perceptible to the senses. The sensations are sometimes immediate, sometimes representable. The act of the mind will be dealt with in what follows.

II. INTENTIONALLY. The efficient cause is the mind. The object is everything that is possible. The end of fantasy is the avoidance of the bad, and of imagination a pleasant sensation. Both fantasy and imagination are representations of a thing other than it is in itself. But they differ in that fantasy occurs when the intellect is not functioning correctly, but imagination, when it is. Adjuncts of fantasy are diseases of the mind, and distortion and ataxia (disorder) of the affections. But the ideas of the imagination are arbitrary and accessory to the natural instinct and the will. In fantasy there is fear and sadness, in imagination, hope and joy, but as often as not they are treated as synonyms.

§ 3.

II. Fantasy is the momentary and incorrectly functioning intellective act of the mind before reflection, whereby the mind acting in accordance with the nature of the affections, out of fear or sadness, represents to itself a thing otherwise than it is in itself.

§ 4.

III. Imagination is the momentary and correctly functioning intellective act of the mind before reflection, in representing to itself and imagining possible things, in accordance with its arbitrament, intentionally and hypothetically. This act of the mind is commonly called ingenuity.

§ 3.

The division of the denomination or name is different from that of the thing. The division of a name is into its significates, just as the division of a symbol is into its referends[1]). But the division of a thing is that (1) of a whole into its parts (2) of a genus into its species, (3) of a species into its subspecies.

§ 4.

Rules

I. Things to be divided must be of the same designation, genus and species.

II. The idea is to be divided into its constituent notions and propositions; in order that this may be done more fittingly, it is necessary to have a definition of the idea to be divided.

III. The effect of division is distinction: therefore the principle and basis of distinction is division. The above is true, because all distinction is a determination of genus, species, individual, as opposed to some other genus, species, individual; this can take place with the aid of division alone; therefore the following is also true.

IV. The parts to be divided must be opposed to one another, i.e. sufficiently distinguished from one another, generally, specially, individually.

V. Dichotomy is best achieved in the case of diametrical opposites.

VI. Division differs from subdivision; the former is of genus into species, of the universal into genera and species, while the latter is of the species into its individuals and subspecies.

VII. Division by mere individual cases is invalid, unless it is preceded by the division of the universal into genera, of the genus into species, of the species into its subspecies: for a unity cannot divide, it can only enumerate.

§ 5.

II. Opposition is the representation of contraries: it is either relative, or contrary, or privative, or contradictory. Relative opposites are those which agree in some third respect. Contrary opposites are those in which the presence of the one constitutes the absence of the other, the absence of the one the presence of the other. Privative opposites are considered (to be so) with regard to the capacity of the receiving subject, with reference to its aptitude for having and receiving. Contradictory opposition is the mutual exclusion of the terms that we have laid down, e.g. man—not-man.

§ 6.

III. Composition of ideas is affirmation, but separation is negation. Where however we separate what is compoundable or compound what is separable, there is a contradiction.

[1]) *Referend* and *symbol*, thougt modern philological terms (cf. their use by Simeon Potter in "Language in the Modern World," Penguin edition, 1961) seem to be very apt here for Amo's *signatum* and *signum*.

ideas in the disposition of the brain for future use. This act of the mind is called memorizing. During reflection itself its place is taken by representation, before reflection it deals with merely sensory ideas, but after reflection with ideas acquired by critical reasoning.

§ 4.

Corporeal memory is the immanence or duration of oft-repeated ideas in the disposition of the brain. It behaves passively, just as mental memory behaves actively.

NOTE. Oft-repeated representation is called the repetition of ideas. But the memory itself, by the agency of which a representative act results, pertains to the mind, though it pertains to the body with regard to the immanence of ideas in the disposition of the brain: see our disputation, *de idea distincta eorum, qua vel menti competunt, vel corpori nostro vivo et organico*, ch. II, div. II, § 6.

DIVISION II

On Reviewing, Division, Opposition

§ 1.

IV. Reviewing is the momentary act of the mind whereby the individual mind enumerates in order what has previously been represented to it or is immediately sensible and where necessary enunciates it in the process of enumeration.

NOTE. Before reflection it is concerned with merely sensory ideas; after reflection with critical ideas; during reflection, with ideas co-ordinate with and subordinate to the end.

§ 2.

Division is the representative act of the mind whereby the totality, considered as to its parts, is subordinated to the end.

NOTE. Thus, for instance, a term is divided by the scholastics into mental, vocal, written. A mental term is that into which a proposition, conceived by the mind, is resolved, as it were, into subject and predicate. A vocal term is that into which a proposition, produced by the voice, is resolved. A written term is that into which a proposition committed to writing is resolved. The term to be divided in itself, however, is the designation of the subject or predicate. See D. Petr. a St. Joseph Fuliensi, *Idea philos. rational.* bk. I, ch. I, art. II, obs. I [48].

single individual in itself, while the comparison of three individuals produces confusion. Equally, the act of the mind, when functioning correctly, proceeds in strict succession within a plurality of individuals, and every succession excludes an intermedium. Then after comparison comes affirmation or negation, and that which is affirmed or negated is present in one of the things compared, and absent from the other, or it is present or absent in both. This is known as the "tertium comparationis" which is nothing but a part or property of either one of the things compared. Nor does doubt constitute a third between affirmation and negation really, but only intentionally, since affirmation, negation and doubt are not things themselves, but operations of the mind.

§ 3.

In this momentary contemplation occur:

I. OBJECTIVELY: Thing, sensation, operation of the mind.

II. INTENTIONALLY: Efficient cause, nearest object, end.

§ 4.

I. Objectively

Things occurring objectively are either things present or absent. A sensation, as in any act of the mind, is either instantaneous or remanent, i.e. left behind. The act of the mind in this momentary contemplation is (1) the actual comparison of things to be compared, (2) reasoning, (3) affirmation, negation. (1) Comparison is the consideration of two objects as co-ordinate or subordinate to affirmation or negation. (2) Reasoning or ratiocination is an act of the mind whereby we enquire into the absence or presence of a part or property in one or both of the things compared. (3) Affirmation is an act of the mind whereby we establish what is in one or both of the things compared; negation, what is absent from one or both.

§ 5.

II. Intentionally

The end or aim of this momentary contemplation is either momentary application or ensuing perfect reflection. Momentary application is affirmation or negation. Perfect reflection is either contemplation itself or deliberation.

§ 6.

In this momentary contemplation we are dealing with, ideas or complete propositions occur. The ratiocination whereby the mind deals with the latter, we call reasoning in itself: therefore, that whereby it deals with the former, we call a differential judgment. For things which differ objectively, differ actually.

SPECIAL PART

SECTION II

ON THE REFLECTIVE ACT OF THE MIND, ITS MODES AND NATURE

CHAPTER I

ON REFLECTION

DIVISION I

General Remarks

§ 1.

On reflection itself, see general part, ch. V, div. III.

§ 2.

Reflection is either contemplation or deliberation and both of these are either momentary or perfect. Contemplation may occur either in the presence or the absence of the archetype, deliberation either in the presence or the absence of the media.

DIVISION II

On Momentary Contemplation

§ 1.

Momentary contemplation is one thing when the archetype is present; another when it is absent.

§ 2.

Momentary contemplation in the presence of the archetype is the intellective act of the mind, whereby, after first using attention, by a process of ratiocination we compare two things and infer a third from them. But when the archetype is absent, the mental act is the same, but this time we first use a representation, then compare two ideas or propositions with one another and by a process of ratiocination infer a third from them. In this case we have ideas or propositions.

NOTE. Ideas when compared are either similar or dissimilar; from the former comes affirmation, from the latter negation.

OBSERVATION. The number of things to be compared in one and the same momentary act of the mind must not be more nor less than two. For there can be no comparison of a

NOTE. The mind thinks either by ideas alone or by words, i.e. the appellations of things: hence some propositions are mental, others enunciative. A word is a sign whose significance is thing, sensation, operation of the mind.

§ 13.

The copula "is", when expressed, renders an affirmative proposition explicit; "is not," when expressly used, renders a negative proposition explicitly so. An affirmation or negation which is latent in the predicate, makes a proposition of this character implicitly affirmative or negative. Every man is mortal. No man is a stone. Every man is subject to death, no mortality befalls a tree, burning fire, cold water, etc.

§ 14.

In reasoning subject and predicate behave like ideas subordinate to an end, so that the predicate is either essential or extra-essential. In the former case, it is an inseparable part or property of the subject. In the latter case, everything is separable from the subject, such as effect, place, etc.

§ 15.

We compare the predicate and subject of a thesis under the following aspects: (1) mutual subjects or predicates, (2) the subject of the former with the predicate of the other, (3) the subject of the other with the predicate of the former, and that universally, particularly, individually, by the use of the particles "every," "any," etc., "a certain man," "a certain woman," "someone."

NOTE. We compare two propositions (1) as to their subjects, (2) as to their predicates, (3) the subject of the first with the predicate of the second, (4) the subject of the second with the predicate of the first, (5) by inverting both propositions.

§ 7.

In the judgment or ideal ratiocination, we consider ideas or things themselves, (1) as existing separately and apart, (2) as co-ordinate with or subordinate to an end. Hence the consideration of a thing as of a part, property, effect, subject, predicate. In ratiocination, we consider whole propositions according to their parts and relationships, with reference to the subject and to the predicate. In judgment we concern ourselves with ideas as separately laid down, in reasoning, however, as composite and connected.

NOTE. The mode of judgment is of two kinds: (1) by means of definitions of definitions; the end is a store of ideas and definitions having their basis in the thing; (2) by means of causes of causes; the end is a plentiful store of reasons. Reasoning is completed by inversion, and we shall discuss and give examples of both these things. The objects of reasoning are subject, predicate, copula, and the negative locution "is not."

§ .8

Judgment is the momentarily reflective act of the mind whereby we infer a third idea from two which have been compared.

NOTE. In this judgment, propositions occur not for their own sake, but as declarative of ideas contained in one or another of them.

§ 9.

Reasoning is the momentarily reflective act of the mind whereby we infer a third proposition from two which have been compared.

NOTE. Propositions occuring here are either primary or secondary. The former are compared with one another, the latter arise by inference from comparison and ratiocination.

§ 10.

The parts of a proposition are, as we noted in § 7, note: subject, predicate, copula "is," its negative form "is not."

§ 11.

The subject is all that concerning which something else is said, whether true or false. The predicate is what is said about something else.

§ 12.

The copula, or word "is," is the sign whose significance is the ratiocinative act of the mind whereby it establishes the actual presence or existence somewhere of a thing. Opposed to this is the locution "is not" whose significance is the ratiocinative act of the mind whereby it establishes the actual absence of a thing anywhere.

former is done by answering the question "whence?", the latter by answering the question "how?" until the first principle, i.e. the thing itself, has been reached.

§ 5.

II. Rules with Respect to Existence

I. The cognition of a thing which has actually ceased to exist, is nothing else than the idea: thus it is an *ens* ideally, but actually it is nothing.

II. Everything that lies in the future is nothing in itself and actually, since it is everywhere absent, and possesses the certitude of its existence and of existing only in its efficient cause.

III. With respect to their co-existence, things may be considered in three ways, (1) as existing separately, (2) as co-ordinate with, (3) as subordinate to the end. In the first case there is no true argumentation from one to another, in the two other cases it is permissable to argue by the mode of causality and dependence.

IV. Where there is an inseparable property of an *ens*, there is the *ens* to which the property belongs, for without it the *ens* has no existence, and where there is no existence, there is no being-there.

V. A distinction must be made (1) between existence, prior, present and posterior, (2) the act of the efficient cause, (3) the effect. We argue from the effect to the existence of the efficient cause considered a parte ante, but in no way with regard to the present and a parte post. But from the effective act, still continuing, of the efficient cause, we immediately argue to its existence in the present.

VI. In every (act of) contemplation a clear distinction must always be drawn between actual, sensory and intentional *entia*; which in their turn may be intellectual or moral or actions in themselves. For a thing is neither a sensation nor an operation of the mind, but either spirit or matter, or a property, part or effect of these. Neither the sensation nor the operation of the mind is the thing itself, nor is one's own sensation someone else's, in respect of the same thing perceptible to the senses. No less does the operation of the mind differ from things themselves and sensations. The effect of the sentient faculty is sensation; of the act of the mind, thought, intellection, will, action. In thoughts things, which can be determined by the intellect, arise through idea and proposition; in intellection there is sensation, idea, proposition; in the will, things to be done and not to be done, in action, possible and impossible things.

§ 6.

III. With Respect to Essence

I. Account must be taken of what is always, everywhere and immutably in things, and of what is subject to change. The former produces knowledge, the latter conjecture.

CHAPTER II

ON THE CONTEMPLATIVE ACT OF THE MIND IN PARTICULAR

§ 1.

The things that come into contemplation are (1) God and the things of divine intention and operation, (2) man and the things of human intention and operation. The things of divine intention and operation are spirit, matter, and their properties, parts and effects; those of human intention and operation are all rational, moral, political and technical *entia*.

§ 2.

In the presence of the archetype, having first used attention, we contemplate (1) the origin of the object, (2) the object itself as to its parts, properties and effects. In the absence of the archetype, having first representation or an idea, we contemplate (1) the existence of the object, (2) its origin, (3) its parts, properties and effects. The end is cognition, i.e. a determinate and adequate idea.

§ 3.

I. Rules with Respect to Origin

I. The presence of the terminus a quo is the presence or existence of the first principle.

II. That, whose terminus a quo is the first of all, is the principle of all things, both actually and intentionally.

III. We may not argue from ignorance of both termini a quo and ad quem to the infinitude of the thing, for the presence of these termini is actual, just as their absence is, but all ignorance is purely intentional just as every rational *ens* is.

IV. Everything possessing a terminus a quo presupposes something prior to itself, namely the cause of its terminus a quo.

V. Everything existing in the present has something prior and something posterior to it; otherwise it would be its own terminus a quo and ad quem.

NOTE. God alone can be considered neither a parte ante nor a parte post but only as existing.

§ 4.

In the contemplation of origin, judgment is necessary by means of the causes of causes, right back to the ultimate cause and the first cause of all; this is done by enquiring (1) right back to the ultimate and first efficient cause, (2) into the modal cause, as far as is possible. The

possessing intelligence. Independent action is either immediate or mediate production; the opposite of this is, by the same reason, reduction. On the other hand dependent action is determinative or modificatory.

I. On Independent Action

This independent action is either productive or reductive, its effect being (1) production and reduction, (2) existence. Production is either immediate or mediate. Production is the effect of the independently effective act of God, whereby an *ens*, absent everywhere, materially and formally, actually attains origin, existence and essence. The effect of this (act) is every substance in itself, spirit and body. A mediate productive action is the evolution of principiates from their first principles, as for example, in generation. For the same reason reduction is either immediate or mediate. Reduction in general is the act of an intelligent substance whereby the *ens* becomes that which it was materially and formally, before attaining origin, existence and essence. Immediate reduction is an act of this kind, whereby an *ens* becomes absent, i.e. non-existent, anywhere, materially and formally. But mediate reduction is also an act, one however, whereby an *ens* is only reduced to its first principles. So much for independent action.

II. On Dependent Action

This action is concerned with corporeal substances only, and these to be determined and modified intentionally and formally. Corporeal substances of this kind variously modified and determined are called supposita, e.g. spectres, buildings, statues, etc. Determination is the act of an intelligent substance, whereby the quantity of an *ens* is intentionally circumscribed. Modification is the act of an intelligent substance whereby an *ens* attains its formal essence.

NOTE. Determination is either a parte ante or a parte post. The former is that by which principiates are determined with regard to their first principles. The latter is that by which this is done intentionally. Both determination and modification are either in themselves, i.e. universal, or in some respect only, i.e. particular or individual.

NOTE. This question must be answered objectively, to the effect that every *ens* is either a substance, which is spirit or body, or a property either spiritual or material, or it is either an operation of the mind or a sensation.

V. WHAT SORT OF A THING IS AN *ENS*?

With this question we take account of (1) correspondence with things of the same genus, species, and designation, (2) the determination and modification of parts, (3) properties, essential and accidental.

II. Enquiry must be made into both principles, real and formal: the former determines the genus, the latter the specific difference.

III. Enquiry must be made into the way in which an *ens* attains its origin, existence and essence.

IV. There is no demonstrative proposition and no true cognition, except such as arise from a determinate and adequate idea.

V. In order that an idea may be determinate, account must be taken (1) of the universal, particular, individual, (2) of the universal, particular, singular, subordinate, ultimate end. But every particular and individual end is inferred from the effect, just as the universal end is inferred from the universality of the effect.

VI. Corporeal things are known through ideas, incorporeal things, such as spirits, by ratiocination, by arguing from effect to cause. For the idea is the representation of a thing as it has been perceived by the senses; now spirits and incorporeal things, in themselves, are not in any way perceived by the senses: therefore they cannot in themselves be represented to the mind.

§ 7.

Questions to which Contemplation must be Directed

I. WHETHER?

By this question we enquire into the actual existence of a thing with respect to which the *ens* is either real or rational.

II. WHENCE?

By this question we consider (1) the origin or principle of existing and being, (2) the efficient cause, (3) the way in which the *ens* actually attains its origin, existence and essence.

III. WHAT IS THE REAL PRINCIPLE?

By this question we enquire into that from which the *ens*, with regard to its matter, has actually and first attained its origin, existence and essence. Thus, for example, co-ordinate and subordinate ideas are the real principle of a proposition, but sensation left behind in the sense-organs and in the memory is the real principle of ideas. Human cognition fails to take cognisance of the real principle of spiritual and material substance, but the real principle of cognition itself is the intellective act of the mind together with sensation.

IV. WHAT IS THE FORMAL PRINCIPLE?

The first cause of both principles, real and formal, is action. This is either independent or dependent. The former belongs to the creator alone, the latter to the created substance

III. With Respect to Essence

I. Account must be taken of both principles, essential and formal; the former constitutes the genus of the definition, the latter the specific difference.

II. To be considered in corporeal things are (1) first principles materially and formally, (2) principiates in the same way, (3) the adjuncts of principles and principiates.

III. In contemplating spirits, account must be taken of those things which are always, everywhere and immutably encountered in them, i.e. of the inseparable and necessary properties, for accidental ones are not found in spirits.

VIII. HOW?

Enquiry must be made into the modus operandi (1) whereby an *ens* actually attains its origin, existence and essence, (2) whereby an *ens* actually becomes absent either simply or in some particular respect. In this a clear distinction must be made between God's modus operandi and ours. For God operates (1) in moral matters from the smallest to the greatest, from what is unpleasant to us to the most pleasant, (2) in physical matters from principles to principiates; from interiors to exteriors; from the centre to the periphery, (3) in metaphysical matters, directly. In our modus operandi we proceed in moral matters in inverse order, in technical matters in the same way, from principiates to principles, from the periphery to the centre, etc.

IX. ON ACCOUNT OF WHAT?

An end may be (1) intentional, or (2) consecutive, which is judged by the effect and is always particular, for every end is either universal or particular or individual, either determinate or indeterminate.

§ 8.

With Respect to Ideas and to the Contemplative Act of the Mind

In this (act of) contemplation occur (1) adjuncts, (2) rules.

I. ADJUNCTS

Intentional adjuncts must be considered with regard to (1) the intellect, (2) the will, (3) action. Adjuncts of the intellect are ideas; of the will, the natural instinct and the sensitive appetite; of action, media and instruments.

II. RULES

Certain rules must be observed before and after contemplation, others during it.

VI. WHERE?

I. Whatever is actually in a substance is either separable or inseparable. The former is an accident, the latter an essential property or part.

II. Whatever is encountered in matter, whether as a part of matter or a property of it, is matter. For to be of the essence of a thing is to have the same nature as the thing.

III. Whatever is encountered in spirit as belonging to it, is spiritual and has an active nature.

IV. With regard to their whereabouts things exist as separate or as co-ordinate with or subordinate to an end.

V. As the substance, so is its property. Therefore whatever is encountered in spirit, is spiritual; whatever in matter, is material and perceptible to the senses.

NOTE I. Spirit is either in another spirit, or in matter, or in negative nothingness. This is impossible, since to be contained and to contain is a predicate of matter: see our dissertation, *de human. ment. apatheia*, ch. I, § 1, p. 5[1]). Spirit is in matter not as of the essence of matter but so that the body in which it is may be co-ordinated with, and subordinated to it: an example is the mind in our living and organic body. In negative nothingness are all things which are not encountered either in spirit or in matter. This negative nothingness is properly that which is called a vacuum, i.e. the absence of anything anywhere.

II. It is impossible for matter to be encountered in spirit since spirit, in itself the simplest thing, excludes everything alien to it; now matter is something alien to spiritual essence, therefore, etc. Matter exists in matter (1) locally, or (2) essentially, i.e. as a part or sensible property. All matter not existing in some other matter is in negative nothingness.

III. Can there be negative nothingness, i.e. a so-called vacuum in itself, in spirit? The answer is negative. For whatever is in God, is God himself: now it is permissable to argue from God to the rest of the spirits, not in particular but in general: therefore whatever is in spirit, is spirit itself; but there is no vacuum in spirit, etc. In matter there are two kinds of vacuum, relative and absolute; physics deals with this.

VII. THE ADJUNCTS OF THE *ENS*

Adjuncts are inseparable or separable. The former are essential, the latter extra-essential. The spirits in themselves must be considered to be without essential adjuncts. For whatever is in spirit, is spirit itself: and whatever is outside spirit, is either another spirit or a body or negative nothingness. Adjuncts of the body are its parts and properties, either essential or extra-essential. Adjuncts of the operation of the mind are intellectual, moral, physical or technical.

[1]) pp. 66–7 in this edition.

NOTE. An abundance of media, instruments, etc., books, random speculations, observations are not in principle relevant here.

(c) Intentionally

In addition (1) cognition, (2) the will, (3) the faculty, (4) the mode of acting occur.

1) With Respect to Cognition

1) In the case of pure unknowns contemplation makes no progress since there is no scientific argumentation from unknowns to equally unknowns. Nor is there any point in contemplating things which are as clear as daylight to everyone. But contemplation is best used in proceeding from things better known to unknowns. In order not to touch a thing with unwashed hands, we need experience to serve as a basis.

2) With Regard to the Will

2) An idea or proposition, on whose account contemplation is undertaken, (1) should have a basis in the thing as its principle, (2) should be useful.

3) It is not advisable to want to examine impossibles; impossible is what cannot be determined by the intellect either a parte ante or a parte post.

4) A thesis or idea which has been thought out for contemplation, must be maintained without substituting another, until it is known in a determinate and adequate fashion as to its subject and predicate, and the modes whereby the predicate is said to be in the subject, or absent from it.

NOTE. With regard to sensation, experience supports the contention that, before truth is discovered, the mind of the person contemplating suffers some pain, but some pleasure, once it is discovered. The former (= pain) comes from the unrest, the latter (= pleasure) from the tranquillity of the mind. The mind, considered in itself, so far from acquiescing in the false, only does so in the truth: for the mind finds no tranquillity in contradiction.

3) With Regard to the Faculty of Acting

Whatever can be put together into a definition or proposition is an object for a contemplator.

4) With Regard to the Mode of Acting

The mode of contemplating is continuous ratiocination by means of uninterruptedly connected ideas and propositions, subordinated to the principal idea or proposition. For

I. BEFORE CONTEMPLATION

I. Let the first rule be the famous saying by Cicero, *De Officiis*, bk. I, ch. XX at the end [49]. In all matters, before you take any step, careful preparation must be made. However in the course of this preparation certain things occur objectively and intentionally.

(a) Objectively

Thing, Sensation, Operation of the Mind

I. Thing. The *entia*, with which contemplation is concerned, must be (1) actually existent, (2) determinable as to all terms, at any rate as far as possible, (3) they must have properties in themselves immutable, since there can be knowledge of immutables, but only conjecture about mutables.

II. Sensation. There must be present a sufficiency of sensations, and reflection, i.e. contemplation complete in all respects, for from these comes a sufficiency of reasons and facility and promptitude in demonstrating. But if one lacks sensations of one's own, other people should be consulted.

III. The operation of the mind is contemplation which consists of acts of ratiocination uninterruptedly connected until an adequate and determinate idea is reached, without any shadow of doubt.

NOTE. The same procedure is to be applied with probables.

(b) Intentionally

Efficient Cause, Object, End

I. The mind should be left to itself until it takes cognisance of the true with acquiescence, without confusing the objects. For in contemplation we consider a thing in itself without taking any account of the goodness or perversity of actions. But we consider things morally by deliberating about them as good or bad; and pragmatically, as possible or impossible.

II. The proximate object of contemplation is of two kinds (1) idea, (2) demonstrative proposition. Ideas are either secondary or primary. The former are co-ordinated with, and subordinated to the end during contemplation. The latter are those on whose account the contemplation is undertaken. Secondary ideas should be so compared, co-ordinated and subordinated that they work together towards the end, i.e. towards the adequate and determinate idea. The procedure with secondary propositions is the same. They should be co-ordinated with and subordinated to the principal proposition and so compared that they conduce towards connection or demonstration.

III. The end of perfect contemplation is (1) the determinate and perfect idea, (2) the proposition demonstrable by its own reasons.

III. One must equally beware of precipitancy, which may be avoided by accurately committing one's thoughts to paper, and then by renewed study, examining the matter afresh, in order and according to the aim in view.

IV. One must also beware of diffidence, by applying the highest degree of actual contemplation possible.

III. With Regard to the Enunciative Act of the Mind

I. Both word and idea are symbols. The referend[1]) of a word is an idea, but of an idea sensation, and sensation is the consecutive of a sensible thing. So we think of ideas by means of words, of propositions by means of the separations and combinations of ideas—thus does the enunciative act of the mind behave. In the intellective and ratiocinative act of the mind in itself, ideas and propositions occur which are purely mental; in the enunciative act, they are verbal. This must be done in such a way that the word should have the highest possible degree of correspondence with its idea, the expression with its mental proposition. This is achieved by thinking out in Latin what is to be expressed in Latin, and by thinking out idiomatically in the vernacular what is to be enunciated in it. For words are to be determined in reference to things, not vice versa. This will guarantee that no word and no proposition will be robbed of its concept. So much for contemplation.

[1]) *Referend* and *symbol*: See footnote on p. 161.

ratiocination, see this part, ch. I, div. II, §§ 7, 8, 9. Ideas are put together into propositions, propositions into systems of ideas and propositions, co-ordinated with one another and subordinated to the principle idea or proposition. We shall give examples when we discuss this.

II. DURING CONTEMPLATION ITSELF

In contemplation, intellect, will and enunciation occur.

I. With Regard to the Intellect

1) Ideas and propositions are adjuncts of the intellect. Ideas are either principal or accessory; some propositions are principal, others accessory. In both cases "principal" means those which have a basis either in the subject or in the predicate, while "accessory" means those that flow from some other source in contemplation. As far as principal ideas are concerned, the greatest care must be taken to see that they are causally so co-ordinated and subordinated as to work together towards the end, which is either a determinate and adequate idea, or a theorematic or problematic proposition. Accessory ideas either correspond with the aim or conflict with it. In the former case, they should be subordinated, as connections, to the primaries, or as demonstratives they should play the part of reasons or be added as illustrations. In the latter case they are useful or useless; the former should be earmarked for future use and should serve as footnotes; all others must be rejected: this is what must be understood about both accessory, ideas and propositions.

NOTE. Some propositions are affirmative, others negative, a third kind doubtful. The two former are to be so disposed, co-ordinated and subordinated, that they serve the aim. The doubtful ones, however, are irrelevant, except as possible objects of further contemplation.

2) We must take care that the mind, in following accessory ideas and propositions, does not stray from the aim: this can be avoided by painstaking comparison of all ideas and propositions, joint and several, with the subject and predicate of the thesis, by making use of convergent ones and noting the divergent separately.

II. With Regard to the Will

Adjuncts of the will are (1) the sensitive appetite, (2) the natural instinct.

I. Sobriety and temperance are necessary, and also patience, so that the mind only acquiesces in an idea or proposition that is determinate and adequate, and so true beyond any shadow of doubt.

II. Nor should affections arising from any other source than the intention lead the mind astray; this can be avoided by considering the object with unwavering accuracy until doubt disappears, for all doubtful cognition is more conjecture than knowledge.

§ 5.

In deliberation occur (1) contemplation of a thing as to be done or not to be done, (2) the decision of the mind to do or not to do, (3) the object which is either medium or instrument, (4) the end, (5) the mode of acting. In contemplation, however, (1) we do not consider things as things which are to be done or not to be done, but as things to be cognised simply (2) we do not turn our eyes to the decision of the mind, but to the idea and the proposition, which at the same time constitute the proximate object, so that materially one and the same thing is object as well as end of contemplation, either an idea or a proposition, and the word cognition is common to both. The mode of acting in contemplation is purely theoretical, namely ratiocination through ideas and propositions which are perpetually connected and subordinated to it as well as to the end; in deliberation, however, that mode of acting is objectively pragmatic, for it deals with the application of the media and instruments so that the effect emerges from the real action as its proximate principle. Contemplation and deliberation in general correspond in so far as both are a consideration of the thing either in itself or intentionally, but they differ from one another objectively and with regard to the end.

§ 6.

Now deliberation is the consideration of a thing as to be done or not to be done for an end which is known and is to be attained.

§ 7.

It is undertaken with regard to media that are either absent or actually present. In the former case it is an intentionally intellective act of the mind, by which the mind is concerned with discovering, cognising and using media according to the end to be pursued; the latter is also an intentionally intellective act of the mind, by which the mind is concerned with the cognition and actual application of the media and the mode of acting by which the end is attained.

DIVISION II

On the Deliberative Act of the Mind in Particular

§ 1.

I. Rules concerning the Thing to be Cognised

1. The first deliberation is to be undertaken about the selection and attainment of the end and of the thing to be done. In most cases the end is a matter of our arbitrament, but the thing to be done is not. Most often we are drawn towards the latter whether we will or not.

CHAPTER IV[1])

ON THE DELIBERATIVE ACT OF THE MIND AND ITS EFFECT, DELIBERATION

DIVISION I

On the Deliberative Act of the Mind in General

§ 1.

Just as the intellect is subordinated to the will, the will to the action, the action to the effect, so contemplation is subordinated to deliberation, deliberation to action, action to the effect. Thus the end of contemplation is cognition of the thing in itself which is either an idea or a proposition; the action of deliberation however is the effect of an actual action.

§ 2.

A perfect reflection in general is a contemplative and intellective act of the mind, by which we enquire, until doubt is completely absent, into the existence, origin and nature of a thing and into its adjuncts, and that either objectively or intentionally, i.e. either in itself or with regard to an intention; see the general part, chapter V, division III.

§ 3.

Such a reflection is either adequate or not adequate, and that either in itself or intentionally; it is called contemplation with respect to the intellect and cognition, deliberation with respect to the will and action. The former has been dealt with in the foregoing, the latter will be dealt with in what folows.

§ 4.

The effect of contemplation and deliberation, which is also their end, must be considered in two ways, logically and in itself. The end of contemplation logically is the idea and the proposition, but in itself it is the cognition of the thing, looked at in itself.

The end of deliberation in a logical sense is the decision of the mind, which is also called election and pragmatic proposition.

[1]) There is no chapter III in the original.

CHAPTER V

ON THE SECONDARY MODES OF PERFECT REFLECTION

DIVISION I

On the Secondary Modes of Contemplation, Probability, Possibility, Observation, Doubt

§ 1.

I. On Probability

In the case of the possible and the probable all contemplation takes place (1) in the absence of the archetype, (2) by means of merely possible ideas which are in no way actually based on things, for argumentation is from similar examples to similar ones. In observation every idea is actually based on a sensible thing; in doubt just as in possibility and probability every idea is lacking in real foundation.

§ 2.

Probability is a merely possible and always dubious proposition flowing from argumentation from similar examples.

II. On Possibility

That which does not involve contradiction is called possible. But the argument might be advanced that the most certain truth itself does not involve contradiction, and that, therefore, a true thing which is actual and most certain and that which is only possibly true are synonyms; which is far removed from the truth.

§ 3.

I. The occasion of this error is that opinion whereby people state that there is a contradiction in the things themselves; but there is no contradiction in the things themselves. For in itself a thing cannot be called simultaneously the same and not the same, at the same time and in the same respect. Thus, composites in their nature cannot not be composites and actual separates cannot not be separates. Frequently, however, the mind by means of its intellective faculty intellectually compounds things which are actually separate and are to be separated by their own very nature; and the mind separates things which

2. Concerning the end to be pursued or attained we must consider whether it is (a) possible and (b) how it is to be attained.

§ 2.

II. Concerning the Decision of the Mind

NOTE. The decision of the mind is that act of the mind by which the mind decides what to do and not to do in order to attain some end.

1. In uncertain things the will is uncertain, and in order that the will be certain, a certain thing is to be put as the end, at least as far as possible.

2. Yet one has to avoid the other extreme, i.e. letting the mind vacillate in the case of a certain thing which can easily be obtained; this is called diffidence.

§ 3.

III. Concerning the Media

1. The media must be available, otherwise one desires impossible things.

2. They must be appropriate to the end and application, so that the end may be attained all the more certainly.

IV. Concerning the Mode

Attention has to be paid to the certainty of the effective mode, as to whether in its application the effect actually attains origin, existence and essence or not.

V. Concerning Action

Action is the real application of media and instruments, by which the end is actually attained. The effect is the proximate principle and is immediately sensible.

VI. Concerning the End

1. The end is either universal or particular or individual. The individual end is subordinated to the particular, the particular to the universal, but the most necessary and proximate is the individual.

2. One may not hope for more than can be obtained by the application of the media and instruments, otherwise one wants impossible things to happen.

3. Deliberation of possible, probable and impossible things does not offer enough credibility.

VII. Concerning Circumstances

The conformity of things with the end or their divergence from it is called circumstance. Those which serve the end which is to be attained are to be sought after with every effort, those, however, which impede it, are to be removed. So much on the two kinds of reflection, contemplation and deliberation.

§ 10.

IV. The possible in an intellectual sense is positive either in general or in particular. The former is everything thinkable and conceivable. In this sense even contradictory things and all rational *entia* are possible. The latter is whatever can be determined by the intellect either simply or in some particular respect. The opposites of these are impossible things: (1) whatever can neither be conceived nor thought, (2) whatever cannot be determined by the intellect, e.g. the concept of infinity, etc.

§ 11.

V. Possible with regard to the will is whatever complies with what we want or do not want; impossible, however, is whatever is always immutable, whether we want it or not.

§ 12.

III. On Observation

Observation is a conclusion from sensory premisses.

§ 13.

IV. On Doubt

Doubt is the equipollence of reasons for affirming or denying one and the same proposition.

DIVISION II

On the Secondary Modes of Deliberation

§ 1.

Under this heading are to be considered (1) constancy of the mind with regard to purpose or intent, (2) vacillation of the mind, (3) presence of mind, which the French call "présence d'esprit."

§ 2.

I. Properly speaking, constancy of the mind with regard to its purpose cannot be related to contemplation nor to deliberation; for it is perseverance in the decision of the mind after both and is thus rather an effect of reflection.

are actually composite and are to be compounded by their own very nature; a proposition arising from such an act of the mind is called a contradiction, e.g. humid fire, the fire is cold, not-burning fire, etc. So much for contradiction with regard to the intellect.

§ 4.

II. With respect to the will it is a contradiction when we want what we cannot want and ought not to want; all disobedience belongs here.

§ 5.

III. With respect to action it is a contradiction when we do what we ought not to do and fail to do what we ought to do, i.e. disobedience.

§ 6.

Thus "possible" means for us something which is to be contemplated with regard to existence and nonexistence, in both cases either actually or with regard to the senses or intellectually.

§ 7.

I. Actually possible in a positive sense is whatever through the application of media and some operation actually attains origin, existence and essence.

NOTE. In connection with this the following have to be considered: (1) what, (2) for whom such an object is possible, (3) the effective mode, through the application of which the effect actually results; e.g. the formation of a square is possible. Thus one asks: (1) What is a square? (2) For whom is its formation possible? for the same things are not possible to all joint and several, (3) What is the efficient mode and what is it like? etc. Otherwise the formation of the square so far from being possible is quite impossible until the contrary can be proved. Contrary to this is the impossible; viz. all that does not attain any existence whatsoever through the application of any operation, either simply or some particular respect.

§ 8.

II. Possible in a privative (negative) sense is whatever through the application of some operation or media is mutable either simply or in some particular respect. Contrary to this is the impossible, namely whatever is in no way mutable.

§ 9.

III. Possible in respect of the senses is whatever is actually perceptible to the senses; its contrary is the impossible in respect of the senses; that is, in no way perceptible to the senses.

CHAPTER VI

A SUCCINCT REPETITION OF WHAT HAS BEEN SAID ABOUT REFLECTION

§ 1.

We have said in the foregoing what reflection is. All reflection is either contemplation or deliberation.

§ 2.

Contemplation is either momentary or perfect.

§ 3.

I. Momentary contemplation is a promptly executed ratiocinative act of the mind by which we infer some third thing either negatively or affirmatively, by comparing ideas, things and propositions with each other, using attention when the archetype is present and using representation when it is absent.

NOTE. In this as in every operation of the mind (1) the first place is held by attention when the archetype is present, by representation when it is absent; (2) it is succeeded by a comparison of similar or dissimilar things; (3) from the former follows affirmation, from the latter negation. So the end of momentary contemplation is simply either negation or affirmation, the end of perfect contemplation, however, either the idea or the proposition or adequate and determinate cognition in itself or intentionally.

§ 4.

II. Perfect contemplation is an intellective act of the mind and a ratiocinative act carried on until doubt is completely absent, the end of which is adequate and determinate cognition either really or intentionally.

§ 5.

It is undertaken either when the object is present or when it is absent. In the former case attention comes first, in the latter representation. Attention is followed by contemplation (a) of the origin (b) of the object with reference to its parts and properties and the adjuncts it possesses. (c) The end, however, is adequate and determinate cognition of the thing either really or intentionally. Following representation comes contemplation (1) of the

§ 3.

II. Vacillation of the mind is the same in deliberation as doubt is in contemplation. It is, however, the mode of imperfect deliberation; whereby we are uncertain and hesitate in choosing because of the equipollence of reasons for doing and not doing.

§ 4.

III. Presence of mind is promptitude in thinking correctly and applying the thoughts in a correct manner.

SPECIAL PART

SECTION III

CONTAINING THE DOCTRINES OF (I) THE EFFECTS OF REFLECTION, (II) THE MOMENTARY MODES OF THE ACT OF THE MIND AFTER REFLECTION AND OTHER THINGS WHICH ARE DEALT WITH IN LOGIC

CHAPTER I

ON THE EFFECTS OF REFLECTION

DIVISION I

On the Effects of Reflection in General

§ 1.

We have two modes of reflection, contemplation and deliberation, both either perfect and determinate or imperfect and undeterminate and that either really or intentionally. From this result various effects. The effect of contemplation in general is cognition, that of deliberation is action.

NOTE: Add in a moral sense a third effect, emotion, for all emotions logically and morally owe their origin to reflection, physically, however, to the phenomenon present.

§ 2.

The effect of the contemplative act of the mind is either the idea or the proposition, i.e. cognition. If the act is perfect, it is the principle (1) of the adequate and determinate idea, (2) of the demonstrative proposition with a sufficiency of reasons. If the act is imperfect, however, it is the principle (1) of an inadequate and undeterminate idea or cognition, (2) of a merely dubious, possible, probable, uncertain proposition, i.e. a conjecture.

§ 3.

The effect of a perfect deliberative act of the mind is (1) the certain and fixed design of the mind for doing or not doing, (2) actuality in doing or not doing. The effect of an imperfect act is vacillation of the mind, from which follows a wavering design for doing or not doing.

NOTE. The inseparable adjunct of cognition or of the perfect and determinate idea is acquiescence, that of the imperfect and undeterminate idea is doubt. The inseparable adjunct of perfect deliberation is the certain design of the mind to do or not to do, that of imperfect

existence and (2) of the object itself with reference to its parts, properties and adjuncts. The end is the same as in the former case, i.e. the sort of cognition we have already mentioned.

NOTE. All cognition can be divided objectively into either ideas or propositions.

§ 6.

One of the primary modes of reflection is deliberation, which in general is the consideration of the thing with regard to action and application to a conscious end.

§ 7.

It is either momentary or perfect: both are undertaken either when the media are present or when they are absent.

§ 8.

Momentary deliberation when the media are present is a ratiocinative act of the mind through which we, using attention, compare the media present with the object and end, because of the affirmative or negative design of the mind. Momentary deliberation when the media are absent is the same act of the mind as the one mentioned above, only representation is used instead of attention.

§ 9.

Perfect deliberation is undertaken either in the presence or in the absence of media. The former is a ratiocinative act of the mind undertaken until doubt is completely absent, through which by first using attention we inquire into (1) the nature of the thing to be done or not to be done, (2) the design of the mind, (3) the mode of acting and applying, (4) the end. But when the media are absent it is an act by which we (as before) inquire into (1) the nature of the thing to be done or not to be done, (2) the design of the mind, (3) the origin of the media and instruments, (4) the way of acting and applying the media, (5) the end, and that by first using representation.

END OF THE SPECIAL PART, SECTION II

§ 8.

There are as many kinds of ignorance as there are kinds of ideas and cognitions. Thus e.g. an idea is either universal or particular or individual, therefore ignorance is either universal or particular or individual, etc.

§ 9.

With respect to existence and essence there is (1) ignorance of the terminus a quo, the terminus instans and the terminus ad quem, (2) ignorance of the mode of existing and being. With respect to the threefold act of the mind there is ignorance of the mode of understanding, of deciding what to do and not to do, and of operating. Due reflection accompanied by attention and representation cures any kind of ignorance. The principle of error, however, is ignorance, that of ignorance, negligence; ignorance has been dealt with, error has still to be dealt with.

DIVISION VI

On Error and its Causes

§ 1.

I. With respect to the intellect error means to understand and cognise a thing otherwise than as it is seen in itself.

II. With respect to the will error means to want and not to want something otherwise than as we can and must.

III. With regard to action error means to do and not to do otherwise than as we can and must.

§ 2.

Causes of errors are (1) with respect to the momentary act of the mind: negligence, ignorance and forgetfulness, (2) with respect to the reflective act: negligence, indeterminate and inadequate reflection, (3) with respect to the will and action: precipitance and impatience, (4) deficiency of sensations.

§ 3.

The errors of the intellect and will are called prejudices, which are now to be dealt with.

DIVISION V

On the Opposites of Attention, Representation and Reflection, i.e. on Negligence, Forgetfulness, Ignorance and Error

§ 1.

Observation: The absence of attention, representation and reflection is negligence, forgetfulness and ignorance.

§ 2.

Negligence is: when the mind does not use its faculty of understanding things and using things understood.

§ 3.

Forgetfulness is: the absence of sensation either pre-existing in the memory and the sense-organs or occurring a parte post.

§ 4.

Ignorance is: the absence of sensation and cognition, and that either a parte ante or a parte post. The former is simply called ignorance, the latter forgetfulness.

§ 5.

It is either real or intentional, the former with regard to the thing, the latter with regard to intention.

§ 6.

Real ignorance, i.e. in itself and with regard to the thing itself, is either sensory or logical. The former is the absence of sensation from the memory and the sense-organs, the latter is absence of cognition.

§ 7.

Intentional ignorance is either excusable or inexcusable. The former refers to things which it is impossible, useless, unnecessary and uncertain to know; the latter to possible, useful, necessary and certain things. Both cognition and ignorance exist simply or in some particular respect only. All ignorance in some particular respect only is cognition, cognition in soma particular respect only is inadequate ignorance; ignorance in itself is ignorance with regard to all parts of the thing, joint and several, ignorance in some particular respect only is ignorance with regard to some parts of the thing only.

NOTE. Lawyers recognise that there are two kinds of ignorance, vincible and invincible; the former can be overcome by gaining experience, the latter cannot be overcome.

Catholic church for many centuries and it has even been proclaimed in the Council of Trent, Session VII, canon 1 [51], viz.: *If somebody should say that there are more or less than seven sacraments of the New Testament, let him be anathema.* Here you have an example of the prejudices of antiquity, tradition and authority.

NOTE II. A prejudice so far from being provable by demonstration is rather solely dependent upon the citing of examples and quoting of witnesses and testimonies. But you have to pay attention in the case of every prejudice (1) to contrary judgments, especially to the better ones and to their refutations by adversaries, (2) to the author of the opinion or dogma and his aim, (3) whether he was unable to be deceived or to deceive, (4) whether he did not want to do so, (5) whether he could not do so, (6) whether he, being deceived himself, has ever deceived, (7) to the questions whether? whence? how far? how? and why it is of that kind?

§ 7.

II. With respect to the will there are the prejudices of (1) precipitance, superficiality, subtlety, founding a school (sect).

§ 8.

1. The prejudice of precipitance is a false and erroneous proposition, a carelessness by the contemplator, arising from impatience.

NOTE. Younger and sanguine people are inclined to this. You can avoid it (1) by stating nothing unless it has been cognised up to the point of acquiescence; (2) by bearing in mind that an error, once committed, is very hard to correct, unless it is revoked at once; (3) by bearing in mind that there is no certain, perfect and determinate cognition of a thing if doubt is not completely absent; (4) that few but perfectly cognised things are better than many imperfectly and confusedly cognised, (5) by using cautious circumspection. For: *When you do something which you intended to do, do not refuse to be watched while doing it,* even *if it should happen that the uninitiated judge adversely. For if you do it wrongly, you should put the thing aside. If you to it correctly, why fear those who reprehend you wrongly?* These are the words of EPICTETUS, *Enchiridion*, chapter 57 [52]; (6) with reference to the natural instinct we must see to it that (a) we do not think things alien to the aim and follow accessory ideas too much, (b) that the force of the emotions does not sweep us away with it.

§ 9.

2. The prejudice of superficiality is: Nothing new is to be looked for nor to be adopted, but it is safest to follow the ancients.

DIVISION VII

On Prejudices

§ 1.

Errors and prejudices arise in one and the same way, i.e. from the intellect and from the will.

§ 2.

But prejudice in general is a false and erroneous proposition which has its origin in negligence and ignorance.

§ 3.

I. With respect to the intellect there is a prejudice of antiquity, one of tradition and one of authority.

§ 4.

1. The prejudice of antiquity is this purely historical proposition: Whatever has been handed down from the ancients to us is either absolutely true and the best or at least more true and better.

§ 5.

2. The prejudice of the older tradition is: Whatever has been handed down from our ancestors to us through unbroken observance is true, the best and has to be maintained immutably.

NOTE. The prejudice opposed to these two is that of novelty. Namely: whatever is stated by contemporaries is true and the best and better than the obsolete views of the ancients.

§ 6.

3. The prejudice of authority is: Whatever has been stated by the most brilliant and therefore most celebrated men is true and the best, if not simply, then in some particular respect, i.e. it is more true and better.

NOTE I. Here is an example of such prejudices: In opposition to Sempronius, an adherent of the religion of the papists, Titius constantly denies that the septenary of the sacraments has its basis in the Holy Bible. Sempronius answers him thus: Whatever has come down to us unchanged (1) from the old Catholic church on the one hand, (2) through unbroken tradition on the other, (3) through long and very old custom and observance, that is true and has to be maintained; and so a comparable case is the septenary of the sacraments, therefore, etc. Moreover, he says, this septenary of the sacraments has been observed in the

CHAPTER II

ON THE REMAINING MODES OF THE MOMENTARY ACT OF THE MIND AFTER REFLECTION

DIVISION I

General Remarks

§ 1.

The mind is concerned with the cognition which is either to be acquired or to be declared. In both cases this is done either with regard to the intellect or to the will or to action.

§ 2.

The consecutive of contemplation is the idea and the proposition, that of deliberation is the design of the mind to do and not to do.

§ 3.

What we feel in our hearts, we explain to others either with words or with deeds. If we do it with words, the words comprise ideas and propositions which are combinations and separations of ideas. Therefore, after contemplation, we have to consider the ideas and propositions in themselves; with regard to deliberation carried out to its end we have to consider what has to be done or not to be done, not morally, but logically.

NOTE. Before contemplation the ideas are merely sensory and historical, after contemplation they are certain and critical.

DIVISION II

On the Remaining Modes of the Momentary Act of the Mind after Contemplation

§ 1.

I. Here are relevant (1) the ideas resulting from the critical reason (2) demonstrative and critical propositions (3) definition (4) description (5) limitation (6) proof (7) demonstration. So much for contemplation. The momentary act of the mind after deliberation becomes evident (1) in directing what has been deliberated towards action and omission, (2) in action and omission.

NOTE. You will overcome this prejudice (1) by comparing old things with newer ones, (2) by inquiring into everything until doubt is absent, (3) by not despairing of your own powers, but by doing as much as you can.

§ 10.

3. The prejudice of subtlety is an intellective act of the mind, by which we bring ourselves to examine things of almost no moment or usefulness more subtly than is appropriate.

NOTE. That is the principle of pedantry. You will overcome it (1) by always contemplating things of some moment and usefulness, (2) such as contribute to the perfection of mankind.

§ 11.

4. Finally also the prejudice of founding a school (sect) is relevant here, but so far from being called a prejudice, it is rather the opposite of a prejudice, namely the zeal and the well-premeditated design of propagating one's doctrines. Who after all is able to enumerate all prejudices? There are as many causes of prejudices as there are errors and causes of errors.

DIVISION IV

On Definitions and Descriptions in Particular

§ 1.

For "definition" see the general part, chapter II, division I, § 3, where we said that a definition is the determinate and adequate declaration of a known thing in distinct and clear words. That is of course the definition considered objectively. Intentionally, however, a definition is a representative act of the mind, whereby it represents to itself all the sensations and ideas joint and several of the thing denominated and enunciates them intentionally.

§ 2.

The opinion of the Aristotelians and scholastics is that there is a definition of the name on the one hand and one of the thing on the other. We have a definition of the name when the signification of the name or the denomination is declared, e.g. a leader is one who leads an army. A definition of the thing, however, is what declares the nature of the thing. See D. Petr. a Sancto Joseph Fuliensi. *Idea. philos. rational.* libr. I. c. IX. De definitione art. II. Quotuplex etc. [53].

§ 3.

In a real definition genus and specific difference occur. That is the reason of the classification, whereby it is said that in a definition are considered onomatology and pragmatology.

§ 4.

Now onomatology is the declaration of the denomination. It is either real or intentional, the former for the nature of the thing, e.g. philosophy is the study and the love of wisdom. The latter (intentional onomatology) exists either in itself or hypothetically. The former is that which conforms to the end, embracing what has to be said methodically, the latter, however, is that which conforms to the hypothesis.

NOTE. In every definition three things occur: the name, the genus, the specific difference. Every name comprises either the genus or the species or the individual, for it denotes the thing either universally or particularly or individually. The genus comprises the common predicate, the specific difference comprises the special and very special predicate. See the general part, chapter II, division I, § 2, observation.

§ 5.

The parts of onomatology are called etymology, homonymy, synonymy and paronymy.

§ 2.

Ideas and critical propositions are the effects of contemplation. The idea acquired by the critical reason is always demonstrable from the nature of the thing; the proposition which is critical in that way is always a conclusion, the premisses of which and the reasons involved in whose proof are contained in the thing cognised. But purely historical or sensory ideas and propositions have to be proved by sensations, i.e. by experience, witnesses and testimonies.

DIVISION III

On Definitions and Descriptions

§ 1.

I. OBJECTIVELY: Thing, sensation, act of the mind.

II. INTENTIONALLY: Efficient cause, proximate object, aim.

§ 2.

I. OBJECTIVELY: Every definition is either real or sensory or moral or technical.

II. INTENTIONALLY: The efficient cause of the definition is the mind, the proximate object is the idea or the proposition, the end or the aim is the perfect and determinate declaration of the thing and idea.

NOTE. But not every declaration of ideas by words is a definition or description, for there is a third thing, speech, whereby we declare our will, e.g. you must not lie, etc., for we declare the cognition, the mode of the thing, the action, the will and the sensation. In declaring our will we define or describe nothing but our will.

§ 3.

The declaration of the thing with regard to genus and specific difference is called definition, with regard to genus alone or species alone it is called description.

§ 4.

With things which are perceptible to the senses we always use descriptions, i.e. historical or sensory propositions. These descriptions are either causal or descriptions of partial sensations.

§ 5.

With respect to the intellect every definition is theoretical, with respect to the will it is called moral, with respect to action it is called genetic. So much for definitions and descriptions in general.

NOTE II. From this we infer that real definition in particular is a determinate and adequate declaration in words of a thing itself which is sufficiently contemplated and cognised as far as this is possible. It is not always possible to add in this definition the end of the thing defined, for we only cognise the end of all things of divine intention and operation in a particular sense, arguing from some better known effect of such an *ens*. In the things of our intention, however, the end is always twofold: perfection of natural existence and of moral essence.

§ 3.

I. Rules with Respect to Genus

I. Every real definition must be a combination of the genus and the specific difference.

REASONING. For we contemplate a thing (1) with reference to its common attributes, (2) with reference to its very special attributes. As the mode of cognising, so is the declaration of the thing cognised. For to cognise things in one way and to declare things so cognised in another way is a contradiction and obscurity.

II. The genus must comprise the adequate and determinate idea of the real principle; the specific difference must comprise that of the formal principle.

II. Rules with Respect to the Specific Difference

I. The specific difference must contain what is inherent in the thing to be defined, in it alone, always, everywhere and immutably.

II. The specific difference must contain the very special accidentals.

III. Common Rules

I. The definition must be clearer than its definitum.

Explanation. Definitum is the name of the thing which is to be defined or has been defined. Thus the rule implies that the idea expressed in the definition must declare the thing more truly more determinately and more adequately than the concept of denomination does; or: the definitive idea must show the thing defined more clearly than the idea of denomination does.

II. The definition must be interchangeable with its definitum.

Explanation. The denomination and the definitive idea must be so alike that they can be equally interchanged without detriment to the nature of the thing defined, i.e. they should be synonyms.

III. In the definition nothing must be superfluous, and nothing necessary must be missing. The reason for the former is that either something essential is expressed by this superfluous

§ 6.

I. Etymology is: the consideration of a name with regard to the author and to the general, special and very special meaning.

§ 7.

II. Homonymy is: one and the same denomination, but for different things; e.g. gallus for a man coming from Gallia and for a cock. Things denominated in this way are called equivocal.

§ 8.

III. We understand by synonymy different denominations which denote one and the same thing, e.g. cognition, concept, notion, idea.

§ 9.

IV. Paronymy is: a denomination which is taken from an *ens* meaning something quite different, e.g. relative and contradictory properties.

§ 10.

In pragmatology we consider the genus of the definition and the difference; the former comprises sometimes the indeterminate special, i.e. a subaltern genus, sometimes the general in itself; the latter comprises either the special or the individual. A more special and more determinate definition is what puts the special for the genus and the very special or individual for the specific difference.

DIVISION V

On Real Definition

§ 1.

Real definition is the declaration of a thing looked at in itself. It is of two kinds: essential and extra-essential. The former has to do with essential properties and parts, the latter with extra-essential ones.

§ 2.

The essential definition in its turn is called either physical or metaphysical. The former is composed of physical properties and parts, the latter of metaphysical ones, e.g. a human being is a substance consisting of a mind and a living and organic body. The mind is a substance that understands, etc.

NOTE I. In this real definition real *entia* occur, but never intentional ones.

4. The definition significes neither the false nor the true. This statement is false, for we define either real *entia* or merely rational *entia*. In the former case the definitions denote a true thing, in the latter fictive, i.e. false things. Further, in every definition there are either affirmative or negative propositions; now every proposition, affirmative or negative, is either true or false, therefore a definition consisting of such propositions is either true or false.

DIVISION VI

On Sensory and Intentional Definitions

§ 1.

We have said that a definition in general is either real or intentional. The real definition in general has been dealt with.

§ 2.

In particular, however, every real definition is either metaphysical or physical. The former is the declaration of a thing not perceptible by the senses, the latter the declaration of a thing perceptible in itself.

NOTE. Every declaration of a thing deals with the (1) common and (2) its own individual attributes. Every declaration either by common attributes alone or by individual attributes alone is a description; a declaration by both sorts of attributes is a definition.

§ 3.

The physical definition is either sensory or causal.

§ 4.

The Sensory or Historical Definition

This definition is the declaration of a thing perceived by the senses through characteristic features, and through its partial and sensible parts and properties.

NOTE I. Such characteristic features, parts and properties are either universal or particular or individual; the particular and singular ones determine a thing more clearly.

NOTE II. In the case of sensible things one has to use (1) all senses (2) attention and (3) contemplation.

§ 5.

The sensory causal definition is the declaration of the mode, by which the physical effect actually attains origin, existence and essence.

term, or something extra-essential. If the former is the case, that which has already been declared is declared once more by the same expression, giving the impression that one and the same attribute is in fact two different attributes. If the latter is the case, occasion is given for the assumption that what is extra-essential in itself belongs to the nature and essence of the thing defined. If, however, something necessary should be missing, the definition is inadequate and obscure.

IV. The definition must be short and comprise everything in a few words.

V. The definition should be distinct and adequate, for such must be the idea of the thing to be defined.

VI. The definitum must not be included in the definition, i.e. the denomination must be banned from the genus and the specific difference of the definition itself.

VII. In matters of human intention the specific difference is in the object and in the end.

VIII. The definition may contain other definitions. Therefore: The description may contain other descriptions. The definitions contained in a definition are nothing else but declarations of partial ideas.

§ 4.

Features of the definition:

(1) The definition cannot be proved.

NOTE. This rule or feature is not consistent, for the definition consists either of purely historical propositions or of critical ones. If the former is the case, each of the propositions can be proved by induction, if the latter is the case, by demonstration; if it consists of propositions of both kinds, it can be established in both ways, e.g. man is a rational animal. The genus, viz. "Man is an animal," can be proved (1) by induction (2) by demonstration. An animal is every living and organic body with the faculty of locomotion. Now Titius Gaius, in a word, all men joint and several are with regard to their bodies of this kind. Therefore: every man is an animal. Further, everything which is born, lives, is fed and finally dies, is an animal; now every man is born, lives, is fed and finally dies; therefore: every human being is an animal. Further, whatever understands itself and other things outside itself, possesses reason or intellect; now every human being considered in himself understands himself and other things outside himself; therefore every human being possesses reason or intellect, i.e. is rational. Thus man is a rational animal.

2. The definition is the best medium of demonstration. This feature implies that the definition must be demonstrated in the same way, in which it is a medium of demonstration, for a demonstration does not proceed by false and uncertain propositions.

3. The definition explains the nature of the thing and that either in itself or intentionally.

§ 2.

I. Distinction

Distinction is a momentary act of the mind after contemplation, by which the mind considers the insufficiently determinate predicate with regard to the essentials and extra-essentials of the subject so that it may become more apparent whether and how far the predicate is contained in the subject.

Rules

I. As a proposition exists as true only under certain circumstances and conditions and under a certain aspect, distinction is necessary.

II. When the predicate actually is inherent in the subject, but not with regard to the essentials and extra-essentials at the same time, distinction is necessary.

NOTE I. Thus in every distinction under certain conditions we partly deny the same predicate of the same subject and partly affirm it, in both cases from the determination of the subject and of the predicate, e.g.: every human being is mortal. I reply making a distinction and affirming with regard to the body, but denying with regard to the mind. Pertaining to this are the modes of locution in themselves, by accident, or from somewhere else, for the sake of itself, for the sake of something else, with respect to itself, in some particular respect, really or intentionally, actually or apparently, how far, etc.

NOTE II. Every distinction has two kinds of conditional proposition, an affirmative one and a negative one.

§ 3.

II. Limitation

Limitation is a momentary act of the mind after contemplation by which we concede that the predicate is inherent in the subject, but not with regard to all parts joint and several either in the predicate or subject.

NOTE. In distinction the predicate alone is inherent in the subject, not in itself, but under certain conditions. In limitation, however, the predicate is actually inherent in the subject, but not with regard to all parts of the subject or predicate. Example: No physician should be ignorant of the other sciences. The answer to this must be: (1) by limiting the predicate: some sciences are necessary and proper to the physician, others are not necessary and quite alien to the aim of the physician; (2) by limiting the subject: the physician as such and as surpassing all others in learning. In the former sense it is sufficient for the physician to concern himself with the sciences necessary and proper to the physician; in the latter sense, however, he must also concern himself with the remaining sciences, etc. This can also be enunciated by making a distinction.

NOTE. In this definition we consider matter, form, situation, motion, motive cause, cause of rest, what is mutable in the subject and what is immutable.

§ 6.

Now follows the intentional definition, which is intellectual, moral and genetic.

§ 7.

An intentional definition in general is the declaration of an effect, the efficient cause of which is the mind.

§ 8.

An intellectual definition is the declaration of an idea corresponding with the archetype.

NOTE. In this definition the definitive idea must be expressed in relation to the archetype, but not the aim.

§ 9.

A moral definition is the declaration of the object and the end.

NOTE. The intellectual definition has as its genus the intellect and its effect, in a word, the intention; as its specific difference it has the idea and the theoretical proposition, as its end the perfection of the intellect. The moral definition has as its genus the intention, as its specific difference what is to be done or not to be done, as its end moral perfection. The genetic definition declares the mode by which the thing actually attains origin, existence and essence.

§ 10.

A genetic definition is the declaration of the mode of acting, by which the effect in a technical way actually attains origin, existence and essence.

DIVISION VII

On the Remaining Modes of the Momentary Act of the Mind after Reflection, i.e. on Distinction, Limitation, Proof and Demonstration

§ 1.

The things occurring in this momentary act are sensations, ideas and propositions. In proof ideas and sensory propositions occur; in the remaining modes occur ideas and propositions which have their origin in the critical reason.

§ 9.

Observations

1. Before demonstration diligent contemplation has to be used, because we need in demonstration itself critical and certain ideas and propositions.

2. Those causes have to be demonstrated without which the thing to be demonstrated attains no origin, existence and essence at all.

3. Demonstration has to be undertaken until doubt is completely absent.

§ 10.

Demonstration has two parts: understanding and knowledge. The former is the certain, determinate and adequate cognition of principles, the latter the deduction of principiates from their principles. In demonstration understanding is the cognition of the most certain propositions and ideas, knowledge the deduction of truths from these principles.

NOTE. Intelligence is acquired by asking: whence? and what? the former through the causes of causes, the latter through definitions of definitions, until one arrives at indubitable principles, i.e. the things themselves. Knowledge comes from the *habitus* of demonstrating the effect from its causes.

§ 11.

On the Differences and Modes of Demonstrations

I. There are as many kinds of demonstrations, as there are kinds of ideas, for every demonstration is done by propositions, every proposition is a combination of ideas, but as the parts are, so is the whole composed of them.

II. The number and types of demonstrations correspond with the number and types of proposition, for just as the parts are, so are the wholes composed of them.

§ 12.

Primary Divisions of Demonstrations

I. Demonstrations are either direct or indirect. The former is a priori, the latter a posteriori; demonstration a priori is from cause to effect, demonstration a posteriori from effect to cause.

NOTE. In things of the divine intention and operation our mode of cognising proceeds from effect to cause, from principiates to principles, from the periphery to the centre, from the exterior to the interior. In things of the human intention and operation, however, in which the definition of the thing and the mode of its realisation are synonymous, demonstra-

§ 4.

III. Proof

The things occurring in proof are sensations and reasons.

NOTE. Reason and cause differ from one another. Reason is the mode of creating belief; cause, however, is whatever actually contributes to the origin, existence and essence of the thing. We use reasons in proof, causes in demonstration.

§ 5.

Hence proof is either merely sensory or rational.

§ 6.

Sensory proof is the establishment of the proposition by what is actually perceived by the senses. Rational proof, however, is the establishment of a proposition by reasons.

NOTE I. For sensory proof witnesses, testimonies, examples and experience are required. A witness is someone who has perceived the thing in itself by his senses. A testimony is the statement of such a witness. An example is a similar thing. Experience is the immediate perception of a thing.

NOTE II. In the case of a witness the following are required: (1) a correctly functioning intellect (2) cognition (3) will (4) the faculty of testifying in a frank manner.

NOTE III. In court proof is used instead of demonstration, because there we deal with human affairs and matters of fact, i.e. perceptible by the senses.

§ 7.

IV. Demonstration

I. OBJECTIVELY: Things of contemplative consideration enter into demonstration, purely represented sensations, i.e. ideas and propositions. The act of the mind occurring here is momentarily ratiocinative after contemplation.

II. INTENTIONALLY: The efficient cause of demonstration is the mind itself. The proximate object is the idea sprung from the critical reason and the demonstrative proposition, i.e. the one by which the demonstrable proposition is demonstrated. For a proposition is either demonstrable or to be demonstrated, or demonstrative or indemonstrable. When discussing them we shall go into greater detail. The aim of demonstration is the establishment of a given proposition.

§ 8.

From this we infer that demonstration is a momentary ratiocinative act of the mind after sufficient contemplation, by which, after the causal nexus has been shown, the thesis is established by ratiocination, according as the end varies.

CHAPTER III

ON THE ENUNCIATIVE INTELLECTIVE ACT OF THE MIND AFTER REFLECTION

DIVISION I

On Propositions

§ 1.

The enunciative act of the mind is that faculty of the mind by which thoughts are declared in words. Words are also called terms in logic. On this, see this part, chapter VI, on terms.

NOTE. Terms are otherwise quite properly defined as those things into which a proposition can be resolved, i.e. the predicate, the subject, the copula, the expression[1]) "*is not.*"

§ 2.

Words or vocables, however, denote either separate and separately considered ideas or ideas co-ordinate with and subordinate to one another. The former denote either a substance or a property, a whole or a part, cause or effect, subject or predicate, or a thing, or an operation of the mind, or a sensation. The latter denote propositions which in a grammatical sense are called sentences.[1])

§ 3.

The effect of contemplation is either an idea or a proposition; ideas have been dealt with, now propositions will be dealt with.

OBSERVATION: Our mode of thinking is of two kinds, (1) by ideas that are single and posited separately, (2) by ideas co-ordinate with and subordinate to one another and the end. The former mode is more proper to brute beasts, the latter to man only. Thus whatever we think is either an idea in itself or a proposition; in the latter is the greatest power and faculty of thinking, because a mental proposition is a ratiocinative act of the mind, whereby it thinks variously about various things by affirming and denying.

§ 4.

Now we consider propositions (1) in general and in themselves, (2) with respect to the syllogistic art, which will be followed by a short essay (a) on the art of criticism, (b) on hermeneutics and (c) on method.

[1]) Amo uses *phrasis* variously to mean *expression, sentence, locution, phrase.*

tion proceeds a priori. Here are relevant the synthetic and analytic methods. The former proceeds from cause to effect, from principles to principiates, the latter in reverse order; the former is called *διότι* (therefore), the latter *ὅτι* (because).

§ 13.

II. Demonstration is either ratiocinative or causal. The former proceeds by ratiocination through reasons, the latter through causes necessarily connected.

§ 14.

III. Demonstration is either real or hypothetical. Real demonstration is that in which the things themselves occur as principles, hypothetical demonstration is that in which hypothetical principles occur as a possibility.

§ 15.

VI. Demonstration is either real or topical. Real demonstration has been dealt with. Topical demonstration proceeds from commonplaces. EPICTETUS gives in his *Enchiridion*, chapter LXXVI [54] an example of a topical demonstration of the Stoics where three commonplaces occur. The first contains theoretical and pragmatic propositions, the second commonplace contains demonstrati on softhese propositions, clearly from the point of view of the useful, useless, pleasant, unpleasant, honourable, dishonourable, true and false; further, according to the precepts of justice: to live honestly, hurt nobody, give everyone his due; further, according to the virtues: temperance, fortitude and constancy. The third commonplace contains (1) the demonstrations of the demonstrations preceding in the second commonplace, (2) distinctions, (3) the questions: Whence demonstrations of this kind come and what they are? What is their consequence? What is the contention? What is true? What is false? Why is the third commonplace necessary for the sake of the second? i.e., why are demonstrations of demonstrations necessary and where do they come from? Why is the second commonplace necessary for the sake of the first? i.e., why is demonstration of the thesis required? Most necessary of all, however, they say, is the first commonplace, i.e. the first proposition itself. An example of this will be given in the course of the discussion.

DIVISION III

On Sensory Propositions

§ 1.

A sensory proposition is an enunciation by which a sensible thing is declared. It is either possible or actual; the former belongs to a thing which actually has never been perceived by the senses, though it can be perceived in itself; the latter, however, belongs to a thing which has actually been perceived by the senses; in both cases either in themselves or in some particular respect.

§ 2.

It is either universal, particular or individual. The first is demonstrative, because it can be proved by induction from all examples joint and several. The second, however, i.e. the particular proposition, is true in some particular respect only, for (a) it is not inherent in all individuals joint and several of the same genus, (b) nor has it always a contrary. The third is certain only in its own archetype.

NOTE. All propositions relevant here come from that which happens most often, like adages, presumptions of fact, etc., for they are particular propositions.

DIVISION IV

On Moral Propositions

§ 1.

With regard to the act of the mind a proposition is either theoretical, or moral in itself, or pragmatic.

§ 2.

A theoretical proposition is the enunciation of the thing as cognised. A moral proposition is an enunciation which comprises the ideas of habitual perfection or imperfection. A pragmatic proposition is a proposition containing ideas of the thing either to be done or not to be done and the modes of acting either in themselves or with reference to a norm.

§ 5.

The kinds of ideas correspond with the kinds of things, the kinds of propositions correspond with the kinds of ideas. Now the principles of the ideas are the thing, the sensation, the operation of the mind; therefore propositions are either real or sensory or moral.

§ 6.

Propositions are commonly considered with reference to the questions: which? of what sort? of what scope? With respect to the question: which? a proposition is either composite or simple. With regard to the question what sort? it is either affirmative or negative. To the question: of what scope? the answer is that the proposition is either universal or particular or individual.

NOTE. You could say not inappositely that a proposition can be considered with regard to quantity and quality. Now quality is either affirmative or negative or dubious, therefore this sort of proposition too is dubious in the case of a mutable property, affirmative or negative in the case of a fixed and immutable property. Quantity is either continuous or discrete, there is no third possibility; therefore the proposition is either simple or composite. In the composite the parts are considered either universally or particularly or individually; therefore this sort of composite proposition is either universal or particular or individual, and that is so with regard either to one or to both extremes of the proposition.

DIVISION II

On Real Propositions

§ 1.

I. With Respect to Substance

We have said in the general part, chapter III, "On things considered logically" that every thing is either a substance or a property. Substance, however, is either spirit or matter. Therefore every proposition with regard to substance is either simple or composite. We call the former (the simple one) that which has neither in the subject, nor in the predicate, nor in both, any multiplicity and variety of parts and properties; we call the latter (the composite one) that in which these things are present.

§ 2.

II. With Regard to Properties

With respect to properties a proposition in general is either essential or accidental, and each has its own species.

Topica, Chapter I [57], and PETR. A S. JOSEPH FULIENSI, *Idea philosophiae rationalis*, book III, chapter VI, de syllogismo demonstrativo, art. I, praemonitum II [58]. On these see below.

§ 5.

Fundamental Rules

I. The subject of both premisses must be of the same essence (kind).

EXPOSITION. This means, they must have the same essential, necessary and inseparable properties, so that both subjects have the same genus and belong to the same species.

Example

Every lion is an animal.

Now, a certain lion is a sign of the zodiac.

Therefore, a certain sign of the zodiac is an animal!

In this argumentation the subjects of the two premisses do not in the least belong to the same genus and the same species, for the same essentials and inseparable attributes are lacking. The animal "lion" is not the same as the sign of the zodiac "lion".

NOTE. Therefore, both subjects of the premisses must have the same definition with regard to essentials.

§ 6.

II. With regard to the middle term the subject of both premisses must have the same definition and common properties.

Every *man* is mortal.

Now, Titius is a *man*.

Therefore, Titius is mortal.

III. With regard to the idea. To that, to which the definitive notion belongs, the nature of the definitum, the definition and the denomination also belong.

IV. With regard to connexion and causality. The subject and the predicate must have the necessary bond, and the third idea must be connected either with the subject or with the predicate of the major.

DIVISION II

On Regular Syllogisms – Simple

NOTE. In a simple proposition there is only one subject and one predicate, though either or both may sometimes be compound. It is also called categorical. About this see PETRUS A S. JOSEPH FULIENSI, op. cit., book II, chapter II, Art. II [59], as follows: Enunciations are usually divided into simple and compound ones; simple or categorical are those in which

CHAPTER IV

ON SYLLOGISMS

DIVISION I

On Syllogisms in General

§ 1.

Two preliminary questions arise: (1) What is argumentation in general? (2) What is a syllogism in particular? Argumentation is an inference from premisses. A syllogism is the inference of a third proposition from two premisses, stated explicitly; ARISTOTLE, book I of *Aualytica priora*, chapter I [55] and PETR. A S. JOSEPH FULIENSI, *Idea philosophiae rationalis*, book III, chapter I, Art. III [56].

NOTE: This subject-matter about syllogisms is to be referred to the momentary enunciative act of the mind after contemplation.

§ 2.

A syllogism may be considered either materially or formally.

§ 3.

The subject-matter of syllogisms is either proximate or remote. The proximate subject-matter is the propositions, the remote subject-matter is the terms. Of these, two are extremes, one is intermediate. One of the extreme propositions is called a "major," the other one a "minor." Both are connected with the intermediate proposition, the former in the major, the latter in the minor. The intermediate proposition is, however, that which (1) is connected with either premiss, (2) which, though incorporated in the premisses, is lacking in the conclusion, (3) is compared to the subject and the predicate of the major, (4) is the subject of the major and the predicate of the minor in the first figure, (5) the predicate of both premisses in the second figure, (6) the subject of both premisses in the third figure, (7) the predicate of the major and the subject of the minor in the fourth figure.

§ 4.

Formally a syllogism is either regular or irregular. The former is either simple or compound, the latter has either more or fewer than three propositions. The former is called perfect, the latter imperfect.

NOTE. According to the doctrine of Aristotle and his disciples there are various syllogisms, demonstrative, dialectical, pseudographic and finally sophistic. ARISTOTLE, Book I of the

§ 5.

The Third Figure

Let the subject of the major become the subject of the minor. Let the new predicate of the minor become the subject of the conclusion, the predicate of the major the predicate of the conclusion.

NOTE. In this figure the middle term is the subject of both premisses.

Example

Every *scholar is* mortal.
Now, a certain *scholar* is a prince.
Therefore, a certain prince is mortal.

§ 6.

The Galenical Figure

In this figure the predicate of the major, which is the subject of the minor, takes on a new predicate, which, having become the subject of the conclusion, takes the subject of the major as its predicate.

NOTE. In this figure the middle term is either the predicate of the major or the subject of the minor.

Example

BA–Every man is an *animal.*
LA–Now, every *animal* is a sentient living being.
NI. Therefore, a certain sentient living being is a man.

§ 7.

OBSERVATION. If the *entia* were multiplied unnecessarily, dispositions of propositions would result which would obviously imitate the figures of the syllogisms. For:

I. Let the predicate of the major take the place of the subject of the minor. Let the predicate of the minor become the predicate of the conclusion, the subject of the major its subject.

Example

BAR–Every man is *mortal.*
BA–Now, every *mortal* being is a sentient living being.
RA. Therefore, every man is a sentient living being.

NOTE. The middle term is the predicate of the major and the subject of the minor.

one thing is predicated of one thing, where that one thing may be either simple, as in "The horse is an animal," or compound, either on the part of the predicate, as in the proposition "The horse is a neighing animal", or on the part of the subject, as in "A good man must be esteemed," or on the part of both, as in "A just man is worthy of love."

§ 1.

Thus syllogisms are simple or regular, if they consist of categorical propositions only.

§ 2.

The figure emerges from the disposition of the propositions and the co-ordination with the middle term; some speak of three, some of four figures.

§ 3.

The First Figure

In the first figure the subject of the minor takes on the subject of the major as its predicate.

The subject of the minor becomes the subject of the conclusion and assumes the predicate of the major as its predicate.

NOTE. In this figure the middle term is the subject of the major and the predicate of the minor. So (1) the subject of the minor is used as a subject twice, namely in the minor and in the conclusion, (2) the subject of the major is used as a predicate once, namely in the minor, (3) the predicate of the major is used as a predicate twice, namely in the major itself and in the conclusion.

Example

DA–Every *man* consists of body and soul.
RI–Now, Titius is a *man*.
I. Therefore, Titius consists of body and soul.

§ 4.

The Second Figure

In this figure the predicate of the major becomes the predicate of the minor, the subject of the major becomes the predicate of the conclusion, the subject of the minor becomes its subject.

Example

CA–Every man is *mortal*.
ME–Now, no stone is *mortal*.
STRES. Therefore, no stone is a man.

NOTE. In this figure the middle term is the predicate of both premisses.

DIVISION III

On the Modes of Syllogisms

§ 1.

A syllogistic figure is the disposition of the terms with regard to the middle term; a mode, however, is the consideration of the propositions with regard to quantity. Thus the universal affirmative proposition is marked with the letter A, the universal negative proposition with E, the affirmative particular and individual proposition with the letter I, and the negative particular and individual proposition with O, according to the well-known verse:

A says 'yes' and E says 'no', yet both are general;
I says 'yes' and O says 'no', yet both are particular.

See *Cursus philosoph. Aristo-Thomistic.*, vol. IV, on priora Analyticorum, book I, chapter II p. 113 [60].

§ 2.

The modes of the first figure (are): Barbara, Celarent, Darii, Ferio; those of the second: Cesare, Camestres, Festino, Baroco; those of the third: Darapti, Felapton, Disamis, Datisi, Bocardo, Ferison; those of the fourth: Cadere, Fegano, Balano, Fedilo, Digami. These modes are (1) similar, though belonging to different figures, (2) similar or dissimilar in the same figure. See Table A.

NOTE. From this table it is easily seen that the number of modes can be reduced. For either 'Celarent' or 'Cesare' may be used in the first or the second figure without altering this figure, by omitting the other mode, 'Darii' and 'Datisi' in the first and the third figure by omitting the other mode. 'Ferio' may be used in all figures by omitting the similar modes 'Festino', 'Ferison', 'Setilo'; either 'Camestres' or 'Cadere' in the second and the fourth figure by omitting the other one; 'Darapti' in the third and the fourth figure by omitting 'Balani'; or the latter by omitting 'Darapti'; 'Felapton' by omitting 'Fegano' or the latter by omitting 'Felapton'; 'Disamis' by omitting 'Digami' or the latter by omitting the other one; 'Barbara' only in the first figure, 'Baroco' and 'Bocardo' only in the second figure: this would result in ten instead of nineteen modes.

§ 3.

General Rules

I. By making the correct inference only a true conclusion can follow from a true antecedent. From a false antecedent sometimes a true conclusion follows, sometimes a false one, but in both cases by accident.

II. Let the predicate of the major become the predicate of the minor. Let the subject of the major become the subject of the conclusion, the subject of the minor its predicate.

Example

DA–Every animal *lives*.

RA–Now, every dog *lives*.

PTI. Therefore, a certain animal is a dog.

NOTE. The middle term is the predicate of both premisses.

III. Given the subject of the minor, let the predicate of the minor be the subject of the major, let the predicate of the major be the subject of the conclusion, the subject of the minor its predicate.

Example

CE–No *man* is a stone.

SA–Now, every substance consisting of body and soul is a *man*.

RE. Therefore, no stone is a substance consisting of body and soul.

NOTE. The middle term is the subject of the major and the predicate of the minor.

Finally

IV. Let the subject of the major take the place of the subject of the minor. Let the major be given its new predicate. Let the predicate of the major become the subject of the conclusion, the predicate of the minor its predicate.

Example

DA–Every *man* is mortal.

RA–Now, every *man* consists of body and soul.

PTI. Therefore, a certain mortal being consists of body and soul.

NOTE. The middle term is the subject of both premisses.

Let the modes of the first figure be: Barbara, Darii, Camestres; those of the second figure: Darapti, Celantes, Barbara; those of the third figure: Celarent, Datisi; those of the fourth figure: Balani, Darii, Barbara'.

§ 6.

IV. The terms must not be altered, but must be repeated without any alteration in the same way as they have been put forward.

NOTE. This rule holds good mainly with disputations, so that the truth of the argument raised is established. See R. P. Henr. MARCELL. part II, *Regina scientarium*, title III, distinction VI [61].

V. With regard to the terms the same meaning has always to be observed, and they must not sometimes be taken materially and at other times formally.

§ 7.

VI. The middle in one of the premisses must either be taken distributively or generally.

§ 8.

VII. The extreme which has not been distributed in the premiss, must not be distributed in the conclusion, e.g.: Every *horse* is a *sentient being*; every horse is a *living being*; therefore, every *living being* is *sentient.*

§ 9.

VIII. Whenever one of the premisses is negative, the conclusion must be negative. Whenever it is particular, the conclusion must be particular; for the conclusion follows the weaker part of the antecedent.

§ 10.

IX. From mere singular and particular premisses nothing follows.

§ 11.

X. From mere negative premisses nothing follows; for by constantly removing and denying you say nothing.

§ 12.

OBSERVATION. We argue in a two different ways: (I) from genus to genus, from species to species, which is regular. Irregular is (II) from genus to species or individual, from species to individual. But the argumentation does not proceed (1) from species to genus, (2) from one individual either to another individual or to the species or the genus. The subject of the minor is either the genus or the species or the individual with regard to the subject or predicate of the major. No premiss has an individual predicate; therefore, the middle term is either the genus or the species, never, however, an individual predicate; hence it follows that the predicate of the conclusion applies to several things, either in the genus or in the species.

TABLE A

of the similar and dissimilar modes either of the same or of different figures. See special part, sect. III, chapter IV on syllogisms, division III on the modes of syllogisms § 2, p. 158.[1])

Figure I	*Figure II*	*Figure III*	*Figure IV*
Celarent	Cesare		
Darii		Datisi	
Ferio	Festino	Ferison	Sedilo
	Camestres		Cadere
		Darapti	Balani
		Felapton	Fegano
		Disamis	Digami
	Baroco		
	Bocardo		
Barbara			

TABLE II

of useless modes

Figure I	*Figure II*	*Figure III*	*Figure IV*
IIA.	EEA.	OAO.	EAE.
OIA.	OIE.	IAA.	EEA.
OEI.	IOE.	AIA.	OAE.
IOE.	EOI.	OAE.	AOE.
	OOA.	EA.	EOA.
	AOA.	AEO.	IAA.
		IIA.	OIA.
		OOA.	OEI.

§ 4.

II. From contingent principles a contingent conclusion follows, e.g. Titius is disputing; therefore, he is speaking.

§ 5.

III. A syllogism must only consist of three terms, which may either be stated explicitly or be represented by equivalents.

[1]) p. 213 of this edition.

DIVISION IV

On Regular Syllogisms – Compound

§ 1.

As a simple syllogism consists of simple propositions, a compound syllogism consists of compound propositions. A compound proposition is one which (1) has more than one predicate, (2) is composed of several propositions. A proposition is compound either with regard to the subject or with regard to the predicate or with regard to both.

§ 2.

Such a compound proposition is multiple: conditional or hypothetical, causal, rational, copulative, disjunctive. A conditional proposition betrays itself by the particle 'if', e.g. if the sun is shining, it is day; a causal proposition by the particle 'because', e.g. because the sun is shining, it is day. At the head of a rational or illative proposition is the particle 'therefore': the sun is shining, therefore, it is day. The distinctive mark of the copulative proposition is the particle 'and', e.g. a man consists of a soul and of a living and organic body, and a horse of a living body and a consciousness rational to a corresponding degree. A disjunctive proposition is recognisable by the particle 'either . . . or', e.g. Peter is either just or unjust.

§ 3.

On the Hypothetical Syllogism

The hypothetical syllogism is either conditional or copulative or disjunctive.

§ 4.

On the Conditional Syllogism

This conditional syllogism is constructed on two different patterns: (1) the antecedent is laid down, the consequent is to be laid down; (2) the antecedent is denied, the consequent is to be denied. Both can be done in four ways: (1) so that both are affirmative, (2) so that both are negative, (3) so that the antecedent is affirmative, the consequent negative, (4) so that the antecedent is negative, the consequent affirmative.

I.

If *matter* exists, body exists.
Now, *matter* exists.
Therefore, body exists.

§ 13.

XI. Terms and premisses must denote essentials, never, however, accidentals. From what is accidental and contingent there follows no knowledge, but mere conjecture.

§ 14.

XII. The middle term must be taken universally once, not twice particularly. See Johannes CLERICUS in his *Logic*, part IV, chapter II, § 2ff [62].

§ 15.

Special Rules.

I. According to ARISTOTLE, *Priora Analytica*, chapter I, [63], the principle of syllogisms is of two kinds; on the one hand, a statement is made about everything, on the other hand, about nothing, which amounts to saying that it is inherent either in all things joint and several or in some things or in one alone of the same denomination, and that it is absent from all things joint and several or from some things or from one alone.

§ 16.

I. First Figure

I. The basis of the mode 'Barbara' is that the statement is made about everything, that of the mode 'Celarent' that the statement is made about nothing. All the following modes are based on the same principle.

II. The major must be universal, the minor affirmative.

II. Second Figure

One of the premisses must be negative and, consequently, the conclusion must also be negative.

III. Third Figure

The minor must be affirmative, the conclusion particular.

IV. Fourth Figure

When the major is affirmative, the minor must always be universal; (2) when the minor is affirmative, the conclusion must be particular; (3) when the modes are negative, the major must be universal.

NOTE. In all modes except 'Bocardo', 'Disamis', 'Digami' the major is universal.

Secondly, by denying the consequent after the antecedent has been denied, as in:

If he is a *scholar*, he is erudite.

Now, he is not a *scholar*.

Therefore, he is not erudite.

NOTE. There must be a necessary connexion between the predicate and the subject of the antecedent.

§ 5.

So much about the regular conditional syllogism; it is irregularly composed of the antecedent and the consequent. This is exemplified by CICERO, *de Officiis*, book III, chapter VI [64]:

"*Thus one thing must be resolved by all that the advantage of the individual and of the community be the same. . . .*" and after a fewwords he continues: "*. . . if that is so, we are all held together by one and the same law of nature. And if that is so, we are certainly forbidden by the law of nature to harm our neighbour.*"

Yet true is the first

And true therefore is also the last.

§ 6.

On the Hypothecial, Copulative and Disjunctive Syllogism.

Such a copulative syllogism is never affirmative, see PETR. A S. JOSEPH FULIENSI, *Id. phil. rat.*, book III, ch. V, art. 4 [65], and is virtually an enthymeme.

Titius is rich and a scholar.

Therefore, he is a scholar, or therefore, he is rich.

A negative syllogism of this type has only one figure, so that the statement of the one cancels the other.

You cannot sit and run at the same time.

Now, you are sitting. Therefore, you are not running, etc.

In this kind of argumentation all the parts joint and several must be adequately reviewed.

You cannot sit, stand, walk and run at the same time, etc.

For it does not automatically follow that because you are not sitting you are running; you could be standing or walking, etc. The argument proceeds in two ways. Firstly, from positing one part to cancelling the other as in the example mentioned above; secondly from cancelling one part to positing the other, e.g.

You are either just or unjust.

Now, you are not just. Therefore, you are unjust.

NOTE. In that case all the parts must be diametrically opposed to one another.

II.

If *matter* does not exist, body does not exist.
Now, *matter* does not exist.
Therefore, body does not exist.

III.

If he is a *man*, he is not a stone.
Now, he is a *man*.
Therefore, he is not a stone.

IV.

If he *cannot hear*, he is deaf.
Now, he *cannot hear*.
Therefore, he is deaf.

From these examples it is evident that such a positive argumentation with regard to the antecedent takes place in the first figure. It is different with the other mode of argumentation, which takes place in the second figure.

I.

If he is a scholar, he is *erudite*.
Now, he is not *erudite*.
Therefore, he is not a scholar.

II.

If he is not a scholar, he is not *erudite*.
Now, he is *erudite*.
Therefore, he is a scholar.

III.

If he is not a scholar, he is *unlearned*.
But he is not *unlearned*.
Therefore, he is a scholar.

There are two contrary principles from which nothing can be inferred. Firstly, by laying down the antecedent after the consequent has been laid down, as in:

If he is a scholar, he is *erudite*.
Now, he is *erudite*.
Therefore, he is a scholar.

§ 6.

V. Sorites

The sorites is a kind of argumentation in which many propositions are accumulated by means of the device that the attribute of the antecedent is the subject of the consequent, until the last predicate is enunciated about the subject of the first proposition. Sufficiently illuminating examples will be given in the discussion of this.

§ 7.

VI. Prosyllogism

Let a simple syllogism be formed in the first figure, let a new premiss be formed from its conclusion and from that a second conclusion, e.g.

Every *man* is a rational animal.
Now, Peter is a *man*.
Therefore, Peter is a rational animal.
Now, every rational animal thinks.
Therefore, Peter thinks.

§ 8.

Crocodilitis

Crocodilitis is not argumentation proper, but a kind of captious question in which the questioner has two contrary propositions in mind which according to the answer made, may be proved with fictitions reasons; if somebody says 'yes', by 'no'; if he says 'no', by 'yes'; in both cases by bringing forward reasons invented in advance.

Example

Mental Propositions

I. I am not your friend.

II. I am not your enemy.

Question

Do you think that I am your friend? If the question is answered in the affirmative, the other one will ask immediately: Why are you convinced of it? For if I were your friend, I would have done you good turns long ago and, besides, I would not have asked you. If the question is answered in the negative, it is easy for the other to say: How could you prove that? For if I were your enemy, I would not have asked you beforehand, but would have done you harm without saying anything; so you can see that I am not your enemy. In accordance with whichever of the mental propositions can be first put to the man to be questioned, the question must be enunciated either affirmatively or negatively.

DIVISION V

On Irregular Syllogisms

§ 1.

Irregular syllogisms are called Induction, Example, Enthymeme, Dilemma, Sorites, Prosyllogism; Crocodilitis also belongs here.

§ 2.

I. Induction

Induction is the inference of a universal or particular proposition from the aggregation of similar examples.

Example

The Assyrian monarchy, Carthage, Sidon, Sodom, Gomorrha, the monarchies of the Greeks, the empire of the Orient, the city of the Sybarites, Athens, etc. perished through luxury. Therefore, states perish through luxury, at least most of them, if not all.

It is otherwise known as proof by means of exception or by examples. After reviewing the parts which can be reviewed, it degenerates into a demonstrative argument. It operates very well and has a great conclusiveness and persuasive force in things which are perceived with the senses.

§ 3.

II. Example

An example is when a particular or individual conclusion is drawn from one single or a few particular phenomena, e.g. Christ pardoned Peter, the thief, Magdalene, who all showed penitence. Therefore, he will pardon me, if I show penitence.

§ 4.

III. Enthymeme

This is an argument which makes an inference from one single premiss:

Every man is rational.

Therefore, every man thinks.

§ 5.

IV. Dilemma

The dilemma is a ratiocination composed of two contrary predicates, and if one of them is affirmed, the opponent must negate the other one; if one of them is negated, the opponent must concede the other. About this mode of argumentation see Joh. CLERICUS, *Logic*, part IV, ch. VII [66]. It is of two kinds, theoretical and practical; we shall give examples when we discuss this difference. It presupposes an open contradiction.

CHAPTER V

ON FALLACIES OR SOPHISMS

DIVISION I

General Remarks

§ 1.

I. The things occurring in fallacies are words and propositions.

II. With regard to the intellect there is error and ignorance.

III. With regard to the will the design is to deceive one's partner for the sake of showing off and self-interest by captious argumentation. Such fallacies occur sometimes before, sometimes after reflexion; in the former case without intention, in the latter case with premeditated intention.

§ 2.

Thus, a sophism or fallacy is a captious argument for the sake of showing off and self-interest.

§ 3.

It is perpetrated either with regard to form or with regard to matter or with regard to both.

§ 4.

A fallacy with regard to matter is perpetrated either in the words, i.e. the diction, or in the things themselves; the former is dictional, the latter is non-dictional.

§ 5.

Dictional fallacies are those of 1) equivocation, 2) amphibology, 3) composition, 4) division, 5) of accent, 6) of the figure of diction. Non-dictional fallacies are those of (1) accident, (2) the dictum secundum quid simpliciter, (3) the ignoratio elenchi, (4) the consequent, (5) the petitio principii, (6) non causae ut causae, (7) several questions as a single one.

DIVISION VI

On the Remaining Syllogisms Briefly

§ 1.

As has already been mentioned in this chapter, division I, § 4 note, a syllogism is according to Aristotle either demonstrative or dialectical or pseudographic or, finally, sophistic.

§ 2.

The Demonstrative Syllogism

A demonstrative syllogism is one whose premisses are necessary since they contain necessary and inseparable parts and properties.

§ 3.

The Dialectical or Topical Syllogism

A dialectical syllogism is one which lays down probable premisses and draws only a probable conclusion from them.

§ 4.

The Pseudographic Syllogism

A pseudographic syllogism is one whose propositions seem necessary, though they are not so; it is the contrary of the demonstrative syllogism.

§ 5.

The Sophistic Syllogism

A sophistic syllogism is one whose propositions seem probable, but are not so; it is the contrary of the topical syllogism. For more on this, whoever likes should refer to PETR. A SANCTO JOSEPH FULIENSI, op. cit. book III, ch. V. art. VI, premonit. II and ibid. ch. VIII [67].

NOTE. At one time 'sophist' and 'sophism' were honourable words, see Daniel Friedr. JAHN, *Notitia vocum olim honestarum, nunc inhonestarum*, num. XII, Voce Sophista, p. 53 [68]. Later on however those persons were called sophists who delivered speeches for the sake of showing off and profit, see Cicero, book IV of *Academica*, question ch. 23 [69]. *Who is a sophist? Those persons are called sophists who philosophise for the sake of showing off and profit.* The sophists were said to be the founders of a school. On the sophists see Seneca, *Epist.* CXI [70].

DIVISION III

On Fallacies in Things, i.e. Non-dictional Fallacies

§ 1.

I. The fallacy of accident is a confusion of the accident with the *ens* in itself i.e., of the *ens* in some connection with the *ens* in itself, etc., e.g.: What does not allow of sin is to be desired. Sleep does not allow of sin. Therefore, it is to be desired. In the major 'sin' is taken in itself and simply, in the minor, however, by accident.

§ 2.

II. The fallacy of the dictum secundum quid et simpliciter is a conclusion from the dictum secundum quid to the dictum simpliciter, e.g. Every man is mortal. Now, every man consists of body and soul. Therefore, every man is mortal both with regard to body and with regard to soul; but mortality, i.e. decay, only affects the body.

§ 3.

III. The foregoing may be contrasted with the fallacy of the conclusion from the dictum simpliciter to the dictum secundum quid, e.g.: Every man has intellect. Now, every man consists of body and soul. Therefore, every man has intellect both with regard to body and with regard to soul.

§ 4.

IV. The fallacy of the ingoratio elenchi. The elenchi is the vital point of the controversy. Thus, a syllogism which infers the contrary from what has already been accepted, contains, it is said, the fallacy of the ignoratio elenchi.

§ 5.

V. The fallacy of the consequent is one in which the conclusion is made from the opposite of the antecedent to the opposite of the consequent, e.g.: If it is a stone, it is a body. Therefore, if it is not a stone, it is not a body.

§ 6.

VI. The fallacy of the petitio principii is one in which the same thing is proved by the same thing, where either lacks proof. e.g.: Sponges live because they have life, and because they have life they live.

NOTE. What is called a petitio principii proof and argumentation is thus a closed circle of definitions and descriptions where what is to be explained is explained by something that likewise is still to be explained.

DIVISION II

On Dictional Fallacies

§ 1.

I. A fallacy of equivocation is a conclusion from one equivoque to another, e.g.: Every dog is an animal. Now, a certain star is the Dog. Therefore, a certain star is an animal. This is also called 'homonymy'.

§ 2.

II. We speak of amphibology, when one term with a double significance is taken with one significance in the major and with another significance in the minor, e.g.: All that is Plato's is owned by Plato. This is Plato's philosophy. Therefore, this philosophy is owned by Plato. In this captious argument "what is Plato's" is taken for "what is owned by Plato" in the major and the cause is taken for the effect in the minor.

§ 3.

III. A fallacy of composition is one in which something that is only true in an isolated sense is taken to be true in a composite sense, i.e. in which what is isolated in the premisses is compounded in the conclusion, e.g.: This goat is yours. Now, this goat is a mother. Therefore, this goat is your mother.

§ 4.

IV. Vice versa, we speak of a fallacy of division, when something that is only true in a composite sense is taken to be true in an isolated sense, i.e. when a conclusion is made from composites to isolates, e.g.: This shepherd was a citizen. Therefore, this shepherd was.

§ 5.

V. A fallacy of accent is due to a difference in pronunciation, e.g.: Those who hunt hares (lépores) need dogs. Orators and poets hunt after bon mots (lepóres). Therefore, they need dogs.

§ 6.

VI. A fallacy of the figure of diction is a sophism arising from a similarity of different words. It occurs either grammatically or logically, the former on account of the similarity of the words, the latter on account of that of the predicates. What you bought yesterday, you have eaten. Now, yesterday you bought some raw meat. Therefore, you have eaten raw meat.

CHAPTER VI

ON TERMS

DIVISION I

General Remarks

§ 1.

Caution and Connexion. Every connexion must be considered with regard to the antecedents and to the consequents. With regard to the antecedents we have dealt with the referends[1]) in themselves, namely with the act of the mind and its modes; now we deal with the symbols, i.e. the terms, by which things known and thought are expressed. With regard to what is to follow, however, since we have made up our mind to deal with verbal matters at once, a logical exposition of the words or terms themselves is necessary.

§ 2.

In the terms occur the symbol and the referend. The referend is either the thing, or the sensation or the operation of the mind. On the symbol see below.

§ 3.

A symbol is that by which something else is signified intentionally.

DIVISION II

On the Classification of Terms

§ 1.

I. A term is either meaningless or significative; the former is one which does not denote anything, either really or intentionally. On the other hand, a significative term is either single or composite, the former denoting a single thing or idea, the latter a composite one, the former is called non-complex, the latter complex.

§ 2.

II. Materially a term is considered either significatively or linguistically. Thus, for instance, the word 'immateriality' is a non-complex term with regard to the thing signified

[1]) For *referend* and *symbol* cf. footnote on p. 161.

§ 7.

VII. The fallacy non causae ut causae is a conclusion made from an antecedent cause which is not a true cause.

NOTE. It may also happen that a true cause is not recognised as true, but is taken as false.

§ 8.

VIII. The fallacy of several questions as a single one is twofold: (a) when a single answer is requested for a multiple question, as in "Are a man and a horse rational animals?", (b) when several questions are implied in a single one, e.g. "Is man good?", where by the word 'man' all men are embraced. If the answer is in the affirmative, at once it is said: then highwaymen, thieves and murderers, etc. are also good. If the answer is in the negative, then: the righteous, the saints, the pious, etc. are not good.

NOTE. This fallacy is employed in the Socratic method of disputing, those mentioned before, however, in the Aristotelian method. Every fallacy is, however, avoided (1) by adhering to the vital point of the controversy, (2) by acting in such a way that the opponent has to explain what he has in his mind, (3) by distinguishing.

refers actually and in its own nature, the latter is that to which it refers only intentionally. The tertium comparationis is that which refers to both, to the one in itself, to the other with regard to intention. The denominant is the absolute comparate, the denominative the intentional correlate, the denominate the tertium comparationis itself, e.g.: 'God's paternal love.' Father in itself is the denominant as it is the absolute subject, of which the proper predicate is 'paternal love;' 'God', however, is the denominative or the subject, of which the comparative third is mentioned intentionally. Love, however, which is predicated of both as the joint predicate, is the tertium comparationis. Therefore, it is nothing but the relative term.

§ 10.

X. A term is either homonymous or synonymous. The former is one denomination for different things, the latter a variant denomination for one and the same thing.

§ 11.

XI. A term is either absolute or respective. The former states the idea of a thing in itself the latter a relative one.

§ 12.

XII. Finally, a term is either clear or obscure. The former comprises a clear idea, the latter an obscure one.

NOTE. The kinds and classifications of ideas correspond in number and quality with the kinds and classifications of terms. For as is the classification of the referends, so is the classification of the symbols denoting them.

and ideally, because there is no diversity, multiplicity, and enumeration with immateriality. So much on the significative aspect. Linguistically, however, immateriality is a complex term, for it consists of 'in' and 'materiality'.

§ 3.

III. With regard to its range a term is either universal or particular or individual.

§ 4.

IV. With regard to the thing signified and signifying a term is either common or technical.

§ 5.

V. With regard to its use in propositions a term is either categorematic or syncategorematic, signifying or co-signifying. The former is the subject or the predicate of the thesis in itself, the latter the determination and modification of the predicate or the subject.

§ 6.

VI. With regard to common use a term is either univocal or equivocal. The former is applied in the same signification to several things taken distributively and collectively, and always refers to its referend only, solely, and immutably. An equivocal term, on the other hand, is the same denomination for different things.

§ 7.

VII. With regard to the intrinsic nature of the referend a term is either positive or privative. The former denotes the existence and essence of the thing in itself, the latter its absence, and that either actual or intentional and hypothetical.

§ 8.

VIII. With regard to the composition of the referend a term is either concrete or abstract. When concrete, we consider the thing collectively, when abstract, distributively.

§ 9.

IX. Relevant also here is the paronymous term, where (1) the denominant, (2) the denominative, (3) the denominate must be considered. It is also a term which comprises the idea of a comparative property. Here two comparates are encountered, the one being the proper, the other the intentional. The former is that to which the tertium comparationis

Cautions

I. Allowance must be made for the intention and the end of the questioner.

II. Answer every question only after duly premeditated foregoing contemplation, so that you do not give an answer alien to the purpose.

III. Beware of the fallacy of several questions as a single one.

IV. It is the questioner's duty to urge the respondent so hard as to get him entangled in contradiction, while it is the respondent's concern to be silent, when cornered. For more on this subject see Hier. GUNDLING, *Logic*, book III and VIII, on dialogue, § VI [71].

CHAPTER VII

ON SPEECH OR LANGUAGE

§ 1.

Propositions and sentences are made up of terms, while speech or discourse is made up of propositions and sentences.

NOTE. The mind of a writer and of a speaker is revealed determinately by a proposition, less determinately by a term laid down separately. For a term in itself contains universal, general, common, and the like ideas, which lack any determinate sense, unless they are transformed into propositions. For a proposition comprises proximate and intentionally determinate ideas.

§ 2.

But speech is the statement of one's thoughts and will by using words in such a way that they are distinctly and perfectly understood by others.

§ 3.

Cautions

I. As ideas should correspond to known things as their archetypes, so terms should correspond to the ideas to be expressed.

II. Because the end is that our neighbour should understand the thoughts of our mind distinctly and perfectly, words must be used that denote our thoughts and our will determinately and perfectly.

III. In explaining substances the inseparable accidentals must be included.

IV. Truth must be established and explained in the way in which it is found.

§ 4.

On Dialogue

A dialogue is speech in which the speakers make their thoughts clear by asking one another questions.

NOTE. Every question embraces either the ignorance or the doubt or the mental reservation of the questioner.

§ 5.

II. The Literary Work

Enquiry must be made into the conformity of the literary work and its contents with its title and preface, for the author's purpose is contained in them, (2) with the author's situation and condition, (3) with the fundamental thesis, (4) into the theses incidental, affirmative, negative, ambiguous and their conformity (a) with one another, (b) with the fundamental proposition and the purpose, with the antecedents and the consequents, namely the how? and the why? (5) into the words, phrases, quotations etc., i.e. in what sense they are taken both by the author quoted and by the author quoting, (6) into the parts of the theme and its divisions and their connexion, (7) into the method of writing and the style.

§ 6.

III. Apart from the Author and the Literary Work

Apart from the author and the literary work occur (1) falsifiers who corrupt the literary work either through carelessness or by design, such as learned impostors, (2) copyists of books commonly known as 'amanuenses', who like falsifiers debase the literary work.

§ 7.

IV. The Interpreter

The interpreter must know the writer's idiom well, aim at truth without partiality and enquire into the true and false reading.

DIVISION II

On the Recognition of a False Reading

§ 1.

An argumentation in a sense which is not the author's is called a false reading.

Rules

I. Everything that does not correspond to the author's purpose and aim is alien to it.

II. The thoughtless repetition of one and the same way of speaking indicates an error and not the sense of the author.

III. Everything that is alien with regard to the antecedents and the consequents does not arise from the author's aim.

CHAPTER VIII

ON CRITICISM, HERMENEUTICS, METHOD

DIVISION I

On Criticism Briefly

§ 1.

Criticism is the *habitus* of the contemplative intellect, whereby we try to recognise with probability the genuine quality of a literary work by using appropriate aids and rules. In so doing, certain general and particular points must be considered.

§ 2.

General Remarks

First comes what we have said about terms in the chapter above. (2) (Next comes) consideration of the critic in general and in particular. In general, every critic must be a polyhistor and must know many languages. In a more special sense he must be versed in those things that are the special objects for critical contemplation. (3) Furthermore, he must be an expert in literature, in the sciences relevant for the purpose, in the principal branches of learning and in universal philosophy. So much in general.

§ 3.

Particular Remarks

Subjects for special consideration are (1) the author, (2) the literary work, (3) the interpreter.

§ 4.

I. The Author

In connection with the author we consider (1) the intellect, (2) the design, i.e. will, the ability to write, (3) the method, (4) experience, (5) purpose, and these essentially. Extra-essentially we consider the religion or divine worship to which he is devoted, his school, his political position and the office he performs, the doctrines favoured by him, veracity and his zeal for it, the stimulating cause for his writing, the fate of both author and literary work.

II. By Belief

As regards belief, allowance must be made for (1) trustworthy witnesses, (2) testimonies, (3) experience, (4) statements or silence of contemporary writers on the same subject, everything with respect to the termini a quo, instans, and ad quem. For you can only believe a man who passes something that happened before his time on to posterity, if trustworthy witnesses testify to it, and when he reports an event of his time, if contemporaries corroborate it. The concurrence or dissent of subsequent witnesses also plays an important part here.

§ 3.

IV. An author and his literary work are tacitly denied by availing ourselves of what has been said in the negative, (2) by the silence of contemporaries and successors. And a testimony is trustworthy only if it coincides with the author's judgment with regard to the termini a quo, instans, and ad quem. Besides (3) the name on the title-page of the literary work does not suffice, if more conclusive evidence suggests something else.

§ 4.

V. The style follows native practice and the spirit of the language and the time. Otherwise the verdict on it is negative.

§ 5.

VI. Therefore, obsolete and too modern words and also expressions older than the author, especially the latter, forfeit belief.

§ 6.

VII. A literary work which contains something that the author (a) did not know, (b) did not want to know, (c) could not know, (d) ought not to have known, forfeits belief.

DIVISION IV

On Logical Interpretation

§ 1.

The art of interpretation or hermeneutics is the *habitus* of the contemplative intellect of probing into the sense of a somewhat special text by using logical rules and suitable means.

NOTE. Hermeneutics differs from criticism as the species does from the genus and the part does from the whole.

§ 2.

In every interpretation there occur the author, the literary work, and the interpreter.

IV. It is the interpreter task (1) to exercise due attention and (2) contemplation, (3) so that he has the argument of the theme clearly before his eyes.

V. A form of handwriting and lay-out which is alien to the author as well as uncharacteristic do not come from the author.

VI. Everything that is not in accordance with the author's purpose, school, religion, age, stimulating cause, office, consideration of advantage, and experience may be looked upon as alien.

NOTE. A painter is recognised by his painting, a writer by his writing.

§ 2.

On the Recognition of a True Reading

In a true reading we argue toward the genuine and true sense of the author. In this (1) we avail ourselves of what has been said in the affirmative before. (3) All the rules of contemplation must be applied.

DIVISION III

On the Negative and Affirmative Cognition of the Author.

§ 1.

To know who is the author of some literary work is affirmative cognition, to know who is not the author is negative cognition.

§ 2.

I. Negative Cognition

Rules

I. The author can be recognised (1) by reasoning in general, (2) by belief.

I. By Reasoning

II. In reasoning we make use of the rules we have laid down on the two kinds of reading. Besides, it is important to know that the author's name is either given or not. And then, where the principles, doctrines and the author's way of writing are the same, there is the author, and vice versa.

III. When we compare the autograph, if possible, with the apograph and consult those who have written on this subject, namely contemporary commentators, there will be no doubt that there is evidence for affirmation, negation or doubt in abundance.

universal or special or individual. With regard to object and aim propositions are either in conformity with or contrary to the object and aim, either abundant or deficient, and these are respectively defined in this way either universally or particularly or individually. So much primarily. Secondarily the intermediate propositions are to be considered; they are either reasons for proving and demonstrating or for illustrating or for connecting or they prove nothing, illustrate nothing, and connect nothing.

§ 5.

Rules with Regard to Cognition, Opinions, and Hypotheses Held by us on Spirits and Sensible Things

NOTE. With regard to both substances, i.e. spirit and matter, we deal with them in judgments, opinions, and hypotheses by arguing from effect to cause. Therefore:

RULE I. What is stated on spirits and corporeal substance is fiction and opinion, unless it can be proved by experience. In doing so, we argue from effect to cause. Cause is not sensible, effect is perceptible with the senses. Therefore, effect is to be proved by experience, and hypotheses founded on it may be deemed trustworthy.

RULE II. What is perceived with the senses must be proved, not by demonstrations, but by experience. Thus a writer must not be trusted blindly, if he tries to demonstrate things perceptible to the senses with reasons, seeking to prove by examples what can only be demonstrated. For what is perceived with the senses must be established by examples, what is grasped with the intellect, by proofs. For intelligible things and things perceptible with the senses are materially contrary opposites. Now, contrary opposites cannot be established by equally contrary opposites.

RULE III. Witnesses, testimonies, and criteria are necessary with things perceived by the senses according to their nature.

NOTE. Traces and sensible signs of the thing mentioned by the author are criteria and denote either the existence or pre-existence of the thing.

RULE IV. The author's design is that the thing be understood according to its own nature. Therefore, everything that is redundant or deficient lies outside the writer's intention and leads to obscurity. So, redundancy may be cut short by contemplating and deficiency remedied by having recourse to works written on the same theme by other writers.

§ 6.

2) With Regard to the Mental Act

RULE V. The nature of what is intelligible is inferred from definitions, the certainty from demonstrations. What is moral must be examined according to object and end, what owes its origin to art must be judged from experience.

§ 3.

1. With Regard to the Author

I. With regard to the author we contemplate intellect, will, stimulating cause, object, means, purpose, freedom and faculty of writing.

II. Of all these points collectively and distributively this is true: the predicates are constituted as they are permitted to be by the subject, and the subjects are constituted as they can be according to the genuine nature and determination of the predicate. For no one, as a rule, acts or suffers against his own personal interest and condition, unless forced or persuaded.

III. All things are determined either in themselves or according to intention and end. There is no faculty of determining beyond the intrinsic nature of the thing.

IV. Thus, cognition beyond the limits or boundaries of the thing in itself and of the intention and purpose is not within the author's power. For no one in his right mind wants what is impossible and alien to the purpose.

V. Every obscurity develops outside the author's intention, design and end.

VI. The author's universal, special and singular end must be taken into account, and, resulting from it, the author's universal, special and singular obligations. Universal and general are those which are shared by the author with all writers on the same theme, special are those which especially take the aim into consideration, singular are those which belong to the author alone. You obtain the universal and general obligations by defining the thing or theme with regard to the general object and end, the special ones by doing this with regard to the special object and end, the singular ones by doing this with regard to the individual object and end. The individual end is subordinate to the special, the special to the general, the general to the universal. Once these things have been determined, the rules of interpretation can easily be deduced.

§ 4.

With Regard to the Literary Work

The literary work contains either judgments, opinions and hypotheses about spirits or the experience of sensible things or (2) varied experience, or (3) intellectual, moral and technical things of human intention and operation. So much with regard to the theme. With regard to the contemplative mode the general, special and singular purpose of the author must be taken into account, and with regard to it the propositions met with in the theme are to be considered either in themselves or according to the author's object and purpose. In themselves, propositions are either affirmative or negative or doubtful, and each of them is either

DIVISION V

On Legal Interpretation

§ 1.

There are various arts of interpretation: religious, with which theologians deal, logical, with which we have dealt above, and legal, with which we shall deal now.

NOTE. Physicians also have their own art of interpretation, which is known as semiotics, which is the doctrine of recognising and judging maladies correctly from symptoms.

§ 2.

Legal hermeneutics is the *habitus* of interpreting doubtful and obscure laws in the sense of the legislator from probable principles.

NOTE. Thus, the object of this interpretation is law in general, doubtful and obscure law, however, in particular. For a clear and certain law does not need any interpretation, and there is a place for the maxim: The law is severe, to be sure, but it is written down. L. XII ff. *Qui et quib. man.* [72]. It, however, presupposes an obscurity that can be remedied.

§ 3.

It is of two kinds, authentic and doctrinal.

§ 4.

I. Authentic is the explication made by the author of the law itself according to the principle: everyone is the best interpreter of his own words. It is relevant (1) when a law is obscure and doubtful, (2) when a case is doubtful, (3) where a law is clear, to be sure, but severe. In the two former cases the exact words and explication of the legislator are required, in the latter case correction.

NOTE: It is improperly called authentic interpretation when so far from being so, it is in fact an explanation made by the legislator himself. For an interpretation is only relevant where the law is obscure and doubtful; no law, however, is obscure or doubtful for its author.

§ 5.

A species of authentic interpretation is usual interpretation, which is also known as observance, and which has come into use with the sovereign's knowledge and toleration.

NOTE. To demonstrate this, there is required (1) the tacit agreement of the sovereign, (2) that it be constant and permanent, (3) that it be upheld in a competent court of justice; see GRIEBNER, *dissert. de observantia* [73], where authentic interpretation is dealt with in great detail.

§ 7.

3) Logical Consideration of the Literary Work

RULE VI. All theses joint and several must be examined (1) in themselves, (2) as coordinate with, (3) subordinate to one another and to their end or aim. Coordinate theses express the nature of the thing by definitions and descriptions; in the case of subordinate theses one is a proof or illustration of, or a connecting link with, the other.

RULE VII. Contradictory theses—the singular ones as opposed to the particular and the universal ones, the particular ones as opposed to the universal and the singular ones, the universal ones as opposed to the particular and the individual ones—betray an author who is not consistent with himself. In that case all theses joint and several must be examined with reference to their universal, particular and very special end. A universal end is one (1) to which all singular and particular ends are subordinate, (2) to which all propositions must refer by their very nature and necessarily, even if this end is not expressed. A particular end is subordinate to a universal end, a singular end, however, to a particular end. A singular end is subordinate both to the universal and to the particular end.

RULE VIII. We must consider, whether the reasons for affirmation, negation, and doubt are true or sufficient or not. Other writers on the same theme will supply what does not seem to be sufficient. What is doubtful must be interpreted in the light of what is certain, what is obscure in the light of what is obvious, by bearing in mind the end and the connection of the matters involved.

§ 8.

4) With Regard to the Interpreter

RULE IX. The interpreter takes essentials and extra-essentials into account. Essentials are the writer's object and end, (2) the affirmative, negative, doubtful, universal, particular, individual propositions and their proofs. Extra-essentials are the author's style, idiom, condition, religion, school, doctrines, etc.

RULE X. The author must use words and phrases according to common usage, not as he likes, and appropriate to his aim and object.

NOTE. What we have said briefly about the critical and hermeneutic art belongs to contemplation, when the archetype is absent; the end of this art is probable cognition.

V. In a doubtful case considerations of humanity have priority over strict law.

VI. Justice is not secured by thinking, but on the basis of the laws.

VII. Beware of sophistry in interpretation.

VIII. Do not always appeal to the law; *Non annium*, etc. L 20 and 21. π de LL [81].

IX. The law is not applicable, when the adequate sense as a whole cannot be applied.

X. Do not only keep to the words as such, but also to their power and force. L. 17. π de LL. [82].

XI. Subsequent general laws do not always supersede what was previously provided by special laws, but create exceptions; L. 26 and 28 ibid. [83].

XII. He who keeps to the letter of the law but distorts its meaning and purpose, is guilty of fraud against it; L. 29 ibid. [84].

XIII. A special law must not be stretched to extremes; L. 14 π ibid. [85].

DIVISION VI

On Method

§ 1.

There is a difference between order and method. The former is the arbitrary and intentional disposition of things. It is of two kinds: either coordination or subordination. With coordination the mutual dependency is equal, with subordination it is unequal. Method, on the other hand, is the deduction of the theme from principles laid down in advance.

§ 2.

There are two kinds of method: a) from principles to principiates, from the centre to the periphery, from principles to conclusions, from cause to effect; this is known as the synthetic method; b) from principiates to principles, from the periphery to the centre, from conclusions to principles, from effect to cause; this is known as the analytic method.

NOTE. God employs the synthetic method through nature and in nature, while man employs the analytic method in artefacts.

§ 3.

Method is either Aristotelian or Socratic, the former consisting of arguments, the latter of questions. Every method, however, either consists of invention, which is contemplation and deliberation, or of discourse, which is the orators' affair, or of disputation, on which see below, special part, sect. IV.

§ 6.

II. Now follows doctrinal interpretation, which is the interpretation of jurisconsults according to the rules of their art, whereby they try to understand the legislator's mind with probability.

§ 7.

That which is known as declarative interpretation is either logical or linguistic. The former is the interpretation of a doubtful and obscure law from probable principles, so that the mind of the legislator is understood. In doing so, we must see, 1) whether the sense of the law is totally obscure, 2) where the obscurity comes from; on this subject see Christian. THOMAS. *Jurispr. divin.*, book II, Ch. XII n. 20 [74] and his *Logic*, P. II, book III [75]: and if 3) the sense is so clear that there is no need of an interpreter.

§ 8.

Logical interpretation is subdivided into extensive and restrictive. The former is relevant when the scope of the law extends further then the actual wording, the latter when the scope of the law is more restricted and narrow.

NOTE. In this species of interpretation verisimilitude is valid until closer verisimilitude is achieved, and the interpreter's opinion is valid until the contrary is proved.

§ 9.

Linguistical interpretation is the simple explanation of a law according to the wording by applying critical rules. In this sort of interpretation the primacy is disputed by CUIACIUS [76], SALMASIUS [77], BYNCKERSHUYCK [78], NOODT [79], etc. On this see DUCKER, de latinitate ictor. [80].

§ 10.

Rules

I. Every interpretation only makes progress in the case of an obscurity that can be remedied.

II. With every law (1) the actual wording, (2) the adequate sense of the law must be taken into account.

NOTE: The adequate sense is the legislator's end with relation to the underlying subject-matter.

III. When an express law exists, you must not appeal too much to considerations of humanity.

IV. Where there is the same sense, there is also the same disposition of the law.

NOTE. When the object and end are the same, then the sense of the law is also the same, and it is, as if you said: He, who wants an end, wants the means of obtaining the same end.

CHAPTER II

ON CONFUTATION

DIVISION I

On Practical Wisdom[1]) in Confuting Mistaken Persons

The practical wisdom in confuting mistaken persons is the *habitus* of an intellective act of the mind by means of which we concern ourselves with great circumspection with what is necessary in order to demonstrate to a mistaken person what error he has committed, how and why. There are two persons involved: the confuter and the one who is to be confuted.

§ 2.

I. Rules Concerning the Confuter

I. With Regard to Intellect

I. The confuter must not be ignorant in those matters in which he believes the one to be confuted has committed an error, so that he does not commit a fallacy of the elench himself, thereby exposing himself to the censure of others.

II. He must apply the rules of interpretation.

II. With Regard to the Will

I. All spiteful feeling and every calculation of personal advantage or profit must be absent, and the only considerations are love of and zeal for the truth.

II. Modesty must be shown together with dexterity and thoroughness in demonstrating.

III. With Regard to Practical Wisdom

I. It is no part of practical wisdom (1) to refute a mistaken person without necessity, (2) to refute a person in a very high position of authority, unless all circumstances and conditions are favourable and unless we know that the victory will be certain, so that we are not defeated and all the more exposed to ridicule. (3) Confutation succeeds best with persons of the same learning and rank, otherwise it may happen that whoever tries to confute somebody, is censured for polypragmosyne[2]), envy, impudence, arrogance and conduct ill-befitting his position. For most people take authority for truth, not truth for authority, as is shown by experience and by Francis BACON of Verulam in *Histor. Natural. et Experimental.* [86].

[1]) cf. note on p. 117.

[2]) cf. note on p. 110.

SPECIAL PART

SECTION IV

COMPRISING (I) AN ESSAY ON CONFUTING A MISTAKEN PERSON, (II) AN ESSAY ON THE ART OF DISPUTING

CHAPTER I

ON

CONFUTING A MISTAKEN PERSON OR ON CONFUTATION

CAUTION

The art of logic consists of a theoretical and a practical part, the former dealing with the more general things in the threefold act of the mind, namely intellect, will, and action; the latter being of a twofold application, as the *habitus* of contemplating and deliberating, (2) of demonstrating and defending discovered truth. Having dealth with the former in its proper place, we have still to speak about the latter, namely the art of disputing, which will be preceded by a short essay on confutation.

CHAPTER III

ON
THE ART OF DISPUTING

DIVISION I

General Remarks

§ 1.

Disputation is a solemn act in which the truth found by a reflective act of the mind is firmly and publicly defended against objections and doubts arising from the critical reason for the sake of the further strengthening of truth.

NOTE I. Doubt is neither affirmation nor negation contrary to the thesis. An objection, however, is an antithesis based upon solid and firm reasons and proofs.

NOTE II. According to VARRO [87] disputing means 'making thoroughly clean.' This holds good with disputation, because by disputing the statement is purified of falsehoods. See R. P. Henrici MARCELLI, Part II, *Regina scientarium*, Tit. I, Distinct. I [88].

§ 2.

The ancients had four modes of disputing, the doctrinal, the dialectical, the tentative, and the sophistical. See this distinguished author, op. cit. Dist. II. Quot sunt disputandi species, etc. [89], and, besides, ARISTOTLE, book I, *Elenchorum*, ch. II [90].

§ 3.

The doctrinal mode, which is also known as demonstrative, is incorporated in science and is scientific, as it proceeds from the proper principles of the discipline, which in themselves cannot be called in question.

§ 4.

The dialectical mode is a mode of disputing which proceeds from probabilities and tends towards conjecture.

§ 5.

The tentative mode proceeds from the theses alone of the disputants that have been ventilated by both parties, and tends towards experiment.

II. Besides, it is not advisable to refute a person in whose debt you stand, lest you are accused of ingratitude. But in case you are driven by necessity you should show as much modesty as possible.

III. It is also not advisable to refute a person whom you consider to be your enemy, lest you are accused of vindictiveness. In case, however, the matter demands the opposite, the refutation must be thorough and without a trace of arrogance.

IV. You must always be ready and quick to rebut the objections both of the one to be confuted and of all others.

DIVISION II

On the Person to be Confuted

§ 1.

The end of confutation is acquiescence or complete absence of doubt. Therefore, the one to be confuted is one who must acquiesce in a truth demonstrated by the better method.

§ 2.

Rules

I. The one to be confuted must inquire with equanimity both into his own literary work or theses and into those of the confuter, and formulate well-founded objections against the confuter's antithesis.

II. All obstinacy and arrogance must be avoided.

III. The mode of confuting must be thought over and kept in mind, and not the person of the confuter, for truth is really not a matter of the person, but of the thing written down or said.

IV. If you are not allowed to revoke the error in writing or orally, it is enough to keep quiet. For where there is no more room for contradiction, silence is the best tactics.

V. But acquiescence is not to be found until the confuter has demonstrated determinately and adequately the error committed by the one to be confuted. So much on confutation.

is necessary to express our thoughts and cogitations briefly and perspicuously without any nervousness and hot-headedness. The results will be the avoidance of useless imprecise verbosity and of expressing with more words what could be said in fewer, according to the testimony of the philosopher, book 8 of the *Topica*, ch. 2, where you can read the famous axiom: What can be said in a few words, must not take more [94].

§ 4.

IV. Definite principles must be stipulated as a norm for the disputants. For every disputation must proceed from certain stipulations. One side of the logical principles is the idea, the other one the proposition. The former is the definition or description, the latter the demonstrative or probable proposition.

NOTE. In every disputation the explanation of the object of controversy is necessary. On this CICERO says: For every system which is adopted by the reason concerning something, must proceed from a definition, so that it is understood what the disputation is about. Book I. *De Officiis* at the end of ch. II [95]. For the essentials and extra-essentials of the disputation are determined by the definition.

§ 5.

V. A certain subject-matter must be prescribed. The disputants must remain confined within the limits of the determined subject-matter and proposition and must not shift over from one proposition to another quite alien to the purpose. For according to ARISTOTLE's testimony, book I of the *Posteriora Analyt.* ch. VII, text XX [96]: *The demonstration must not shift over from one genus to another.*

§ 6.

VI. The syllogistic form must be observed. Both opponent and respondent must be restricted to the syllogistic form, so that the force of the argument on the one hand and the truth of the solution on the other hand may become apparent. And neither the one nor the other of the disputants must be allowed to escape like a tub-thumper without order and method from the confines of the disputation into the fields of free declamation. For this course leads precipitously to squabbling.

§ 7.

VII. Whoever is disputing must know the signification of the terms and understand the art of syllogising, of disputing and of interpreting.

§ 6.

The sophistical mode proceeds from apparent principles which are (in fact) directed towards deceit and pretentiousness. This mode of disputing is otherwise called contentious. The captious jingle of words, and unprecise verbosity also belong here. See AUGUSTIN, book II *De Doctrina Christiana*, ch. XXXI [91].

§ 7.

So much on disputation in general. As regards the disputants, their duties are of various kinds, for some are common, others are special. The former belong to all of them, the latter do not belong to all, but either to the chairman alone or to the opponent or to the respondent.

DIVISION II

On the Common Duties of the Disputants

§ 1.

I. It is one of the first the duties of the disputants to show alacrity and ingenuousness of mind. Alacrity of the mind is the straight-forward and correct faculty of the mind for judging what is thrown up by the adversary and for quickly finding a suitable response to the antithesis and objection. Ingenuousness consists in a due acknowledgement of the truth without any obstinacy and calculation of gaining vainglory. The former, known in French as 'la présence d'esprit', is with us known as momentary reflexion. On this see here in this special part sect. III, ch. I, div. II. The latter is called 'generositas' (la générosité) by Cartesius in his *Tractatus de passionibus animae* [92]. For when we are irritated and fight tooth and nail with words, we find ourselves on slippery ground, rushing headlong into the ways of the sophists, who have a bad reputation for quarrelling obstinately for the sake of showing off and vainglory.

§ 2.

II. Next comes serenity of mind, whereby we overcome our worry and nervousness in the arena of learned controversy and address ourselves to the unruffled defence of our chesis without allowing ourselves to be upset by the force of our adversary's words and thus to be driven in the wrong direction. As the saying goes: We are ready to refute without obstinacy and to be refuted without anger. CICERO, book II of the *Tusculanae*. Quaestion. [93]

§ 3.

III. Perspicuity and brevity of words and phrases is no less necessary. Perspicuity in words is a consequence of candour of the mind. Therefore, veracity united with practical wisdom

§ 4.

IV. The universal, particular and individual theses must be examined with regard to coordination with and subordination to the end (a) in themselves, (b) as to whether the individual theses are duly subordinated to the particular ones, and the particular ones to the universal ones, (c) or whether the coordinated theses sufficiently explain the thing to be explained, which of them are affirmative, which negative, which doubtful, whether they are deficient or redundant, whether they contradict (a) one another, (2) the title, (3) the truth, (4) the opinion of others.

§ 5.

V. Above all must be examined (1) the subject of the controversy and dissertation, (2) the predicates of the thesis, the principal and non-principal things, (3) their conformity with the common subject and the purpose of the dissertation, (4) which of the predicates are affirmative, negative or doubtful.

§ 6.

VI. What seems redundant or deficient with regard to the title, what belongs to the thesis and what is alien to it, what might and must be present or absent, and what is neither possible nor necessary must be examined.

§ 7.

VII. All the sections, paragraphs, propositions and controversies joint and several and all the texts must be compared with the subject of the controversy which is either contained in the title or in the definition appended to it, to see if all the propositions can be deduced from them, to what extent and in which respects.

§ 8.

VIII. It might happen that we agree in the subject or the predicate or in both; namely in the definition either of the predicate or of the subject or of both, but that we disagree about the connexion of the subject with the predicate. In this case it is necessary (1) to have an explanation of the ideas of the subject and the predicate, (2) to have the connection between the predicate and the subject demonstrated.

§ 9.

IX. If the disputation does not contain what it can and must with regard to the author's intention, it is inadequate; if it is alien to the purpose, we raise the objection that it contains either useless, superfluous things or other things that it should not contain.

§ 8.

VIII. The arguments and their solutions must be thought out, (2) the better arguments be noted, (3) the ideas and theses be defined and described for future use.

§ 9.

IX. The purpose must be truth and its strengthening without any calculation of self-interest.

DIVISION III

On the Duty of the Chairman

Single paragraph

I. The chairman's duty in particular is the formulation and reestablishment of the vital point of the controversy. In the formulation of the vital point of the controversy he mentions (a) the stimulating cause, (b) the object, (c) the end, (d) the usefulness of the dissertation.

II. The issue of invitations, in which he a) thanks the disputants or commends himself to them, b) promises the solution and discussion of doubtful points. This latter is the task of the respondent.

DIVISION IV

On the Duty of the Opponent

§ 1.

Rules

I. According to the rules of interpretation he must submit the thesis or disputation to an examination. In order that this may proceed successfully, fundamental propositions must be formulated out of those which are to be found on the front page of the theme, both on the part of the subject and on the part of the predicate, by fixing in advance the definitions and descriptions of the respective ideas.

§ 2.

II. The stimulating cause of the dissertation, the vital point of the controversy, the object, the purpose, and the usefulness must be thoroughly examined.

§ 3.

III. The definite foundation and principle of the antithesis must be laid down.

§ 3.

II. He should in his home play the part of the opponent of the thesis to be defended; in so doing, he will foresee the arguments against the thesis, and they will do him no harm, for "forewarned is forearmed."

§ 4.

III. The opponent proves the antithesis against the respondent, the latter the thesis against the former, in both cases either directly or indirectly. If indirectly, he must take up the question, if directly, the argument, so that the vital point of the controversy becomes clearer and time is gained to scrutinise the argument and to think the answer over.

§ 5.

IV. Before answering the argument or the question, its nature and force and the intention of the adversary must be thought over by a quick act of reflection, so that the answer is to the point and concedes nothing against the thesis. The antithesis either touches upon the thesis or not. In the former case this is done either universally or particularly or individually, in the latter case there exists a transition from genus to genus, from which a fallacy of the elench results.

§ 6.

V. The argument must be considered formally and materially. Where, however, a proof is required, either one of the premisses must be denied or the argument conceded in a limited and distinguishing way. That this may be done more easily, let the text be in clear agreement with the heading, before descent into the arena.

§ 7.

VI. In the assumption pay attention to the conclusion and the minor. For the conclusion is the antithesis itself, the minor, however, its hypothetical proof, the major is the universal reason both of the hypothesis and the conclusion. Then, however, the major must be proved most of all, (1) because it is wider or narrower, according as it contains more or less than the proof of the minor and the conclusion; (2) according as it proves either the minor or the conclusion alone; (3) if either premiss can be admitted at least under certain conditions; (4) if the predicate of the major is either wider or narrower than its subject, and if there is no room for limitation and distinction, proof must be produced; (5) with regard to the minor, account must be taken of what hypothetical reason the opponent has, which must be proved in the same way as the conclusion itself is to be proved, for when the minor breaks down, the conclusion breaks down as well.

§ 10.

X. All the propositions joint and several must behave like conclusions, whose principle and source, from which they flow and to which they must flow black and be conducted, is the definition of the subject of the thesis and of the vital point of the controversy. Thus, whatever is either contradictory or redundant or deficient with regard to both gives an occasion for dissent.

§ 11.

XI. The essentials of the dissertation must be clearly distinguished from the accidentals. The essentials are those things which constitute the essence of the dissertation, namely the affirmative, negative, doubtful propositions, and moreover, the universal or the particular or the individual ones; (1) the thesis, (2) the proof or demonstration of the thesis. The accidentals or formal things are the method, the style, the quotations. These are determined in accordance with the title.

§ 12.

XII. The opponent examines or casts doubt upon either the idea or the proposition; the former, in order to see whether it is complete, determinate and true or incomplete, indeterminate, false or not corresponding with the archetype; the latter, so that its universality or particularity, truth or falsity may become apparent.

§ 13.

XIII. Finally, the arguments must be arranged in such a way that firm arguments come first, less firm come second, and the strongest come last. These are the duties of the opponent.

DIVISION V

On the Duty of the Respondent

§ 1.

With regard to the defence of the thesis the chairman and the respondent are taken as one and the same person. In particular, however, the respondent has duties of his own.

§ 2.

I. In the first place comes the determinate and adequate cognition of the thesis to be defended, which is acquired by applying the rules of interpretation.

[22] Marcus Tullius CICERO: Oratio pro A. Cluentio 26; in: Opera Omnia, vol. 4 (part 5), Amsterdam 1724, p. 1722.

[23] Johann Burkhard MENCKE (1674–1732); professor of history at the University of Leipzig, historian to the Saxon court.
—De Charlataneria Eruditorum Declamationes Duae, Leipzig 1715.

[24] PETRUS A S. J. FUL., Idea Philosophiae Rationalis, loc. cit.

[25] CICERO, De Officiis I, 43, p. 3544.

[26] ibid. I, 6, p. 3440ff.

[27] ibid. II, 2, p. 3553.

[28] ibid. I, 11, p. 3452.

[29] Adam RECHENBERG (1642–1721), professor of classical philology, history and theology at the University of Leipzig.
—Lineamenta Philosophiae Civilis, 6th edn., Leipzig 1719, II, 1, p. 122ff.

[30] Sirach—Ecclesiasticus 18, 8.

[31] Ps. 89, 10 (vulgate numbering.)

[32] AUGUSTINUS A VIRGINE MARIA (Guillaume DE GOAZMOAL): Philosophiae Aristo-Thomisticae Cursus, vol. 1, Lyons 1664 (not available.)

[33] ARISTOTLE: De Anima (*Περὶ Ψυχῆς*) I, 3; in: Opera Omnia, Graece et Latine, pub. Guillaume DU VAL, vol. 2, Paris 1654, p. 8ff.

[34] THOMAS AQUINAS: Commentaria in Tres Libros Aristotelis De Anima I, 6–8; in: Opera Omnia, pub. Cosmas MORELLES, vol. 3, Antwerp 1612, p. 6bff. (quotation p. 9a).

[35] ibid. I, 8, p. 9a.

[36] MELANCHTHON, op. cit., p. 103a.

[37] EPICTETUS, op. cit., 38, p. 85ff.

[38] CICERO, De Officiis, I, 4, p. 3434.

[39] Publius OVIDIUS Naso: Metamorphoses, 7, 20ff.; in: Opera Omnia, pub. Peter BURMAN, vol. 2, Amsterdam 1727, p. 447 (cf. also Romans 7, 15ff.)

[40] PETRUS A S. J. FUL., op. cit.

[41] AUGUSTINUS A VIRGINE MARIA, op. cit., vol. 1, Lyons 1664 (not available).

[42] FRANCISCUS BONAE SPEI (Francois CRESPIN) (1617–1677), Belgian Carmelite; historian of the order and theological writer.
—Commentarii Tres in Universam Aristotelis Philosophiam, Brussels 1652, Commentarius Primus in Logicam Aristotelis I, 1, 4–7, p. 28.

[43] Paulus IRENAEUS (Pierre NICOLE) (1625–1695), French moral theologian (Jansenist); not clear which work is meant.

[44] BLASIUS A CONCEPTIONE (Bernard RIQUET) (1603–1694), French Carmelite and writer on philosophy.
—Metaphysica in Tres Libros Divisa, Paris 1640 (not available).

[45] PETRUS A S. J. FUL., op. cit.

[46] Jean Gabriel BOYVIN: Philosophia Scoti a Prolixitate et Subtilitas Eius, 4 vols., Paris 1681 (not avail-able).

[47] Titus Maccius PLAUTUS: Truculentus 489 (II, 6, 8); in: Comoediae, publ. Johann Friedrich GRONOVIUS (GRENOV), vol. 2, Amsterdam 1684, p. 541: Qui audiunt, audita dicunt: qui vident, plane sciunt.

[48] PETRUS A S. J. FUL., Idea Philosophiae Rationalis.

[49] CICERO, De Officiis I, 20, p. 3476.

[50] PETRUS A S. J. FUL., op. cit.

[51] Sacrosancti et Oecumenici Concilii Tridentini . . . canones et decreta, Cologne 1665, VII, 1, p. 86ff.

[52] EPICTETUS, op. cit., 57, p. 113.

[53] PETRUS A S. J. FUL., op. cit.

[54] EPICTETUS, op. cit., 76, p. 145.

[55] ARISTOTLE, Analytica Priora (*Ἀναλυτικὰ Πρότερα*), 1; in Opera, vol. 1, Paris 1654, p. 73ff.

[56] PETRUS A S. J. FUL., op. cit.

[57] ARISTOTLE, Topica (*Τοπικά*), I, 1; in Opera, vol. 1, p. 256ff.

[58] PETRUS A S. J. FUL., op. cit.

[59] ibid.

§ 8.

VII. Where the argument consists of the antecedent and the consequent, either the antecedent or the consequent has to be proved.

§ 9.

VIII. Stating the truth is not sufficient unless the cause of the false is defined. For this is the best way of carrying conviction. For nothing can be affirmed or denied without cause. See ARISTOTLE, *Ethics*, book VII, at the beginning of ch. 14 [97].

THE END

NOTES

[1] The prorector for the first half-year of 1737 was the jurist, Karl Gottlieb KNORRE (d. 1753).
"*Fridericiana*" was the official name given to the University of Halle which was founded in 1694 by Friedrich III, Elector of Brandenburg (after 1701, Friedrich I, King of Prussia). It was headed by an elected Prorector, the dignity of "Rector" being borne by a member of the royal house.

[2] Johann Peter VON LUDEWIG (1668–1743), professor of history, philosophy and jurisprudence at the University of Halle, historian to the Prussian court and university chancellor.

[3] Justus Henning BÖHMER (1674–1749), professor of jurisprudence at the University of Halle.

[4] Friedrich HOFFMANN (1660–1742), professor of medicine at the University of Halle.

[5] Vulgate numbering is Ps. 90, 11. (English bible, ibid., 90, 10).

[6] Polydor VERGIL (ca. 1470–1555), Italian writer.
—De Rerum Inventoribus libri octo, Basle 1575, I, 1, p. 1ff.

[7] Philipp MELANCHTHON: Liber de Anima, Wittenberg 1562, p. 103a.

[8] EPICTETUS: Enchiridon (*Ἐγχειρίδιον*), Graece et Latine, Wolfenbüttel 1692, 38, p. 85ff.

[9] PETRUS A SANCTO JOSEPHO FULIENSI (Pierre CORNACÈRE de Saint-Joseph à Feuillant): Idea Philosophiae Universalis seu Metaphysica, Paucis Multa Complectens de Rationibus Universalibus Rerum. Pars Secunda Universae Philosophiae, Paris 1654 (not available).

[10] Marcus Tullius CICERO.
—De Officiis II, 2; in: Opera Omnia, pub. Isaac VERBURGIUS, vol. 10 (parts 15–16), Amsterdam 1724, p. 3553.

[11] PETRUS A SANCTO JOSEPHO FULIENSI: Idea Philosophiae Rationalis seu Logica . . ., Pars Prima Totius Philosophiae, Paris 1654 (not available).

[12] Corpus Iuris Civilis, Institutions, I, 1, 1.

[13] CICERO, De Officiis, loc. cit. see note 10.

[14] Title not traceable.

[15] Aulus GELLIUS, Noctes Atticae, XI, 18; in: Noctium Atticarum libri XX, publ. Johann Friedrich GRONOVIUS (GRENOV), Leyden 1706, p. 538ff.

[16] Hermann CONRING (1606–1681), professor of medicine, philosophy and politics at the University of Helmstedt.

[17] Claudius SALMASIUS (Claude de SAUMAISE) (1588–1653), French classical scholar, professor at Leyden.

[18] Giulio Cesare SCALIGER (1484–1558), Italian author and philosopher.

[19] Daniel Georg MORHOF (1639–1691), literary historian and author, professor of poetry, oratory and history at the Universities of Rostock and Kiel.

[20] Lucius Annaeus SENECA, Epistulae Morales ad Lucilium, I, 2, 2 (2); in: Opera, vol. 2, Amsterdam 1672, p. 4.

[21] Christian THOMASIUS, Introductio ad Philosophiam Aulicam, Leipzig 1688, 26, p. 241ff. In appendix: Ulrich HUBER: Oratorio de Paedantismo, p. 245ff.