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Discretion in Professional Practice and in Engineering Ethics

Abstract

There is an ongoing investigation by scholars of ethics and economics into whether human decision making and the resultant acts should be guided by rules and procedures or by judgment and discretion. Although each of these modes offers advantages and disadvantages to decision makers, they are by no means neutral in their effect on professional development. The paper presents an in-depth view of discretionary decisions using an Aristotelian-Thomistic framework.

This is the first of the series of papers which focus on the application of realistic philosophical principles to ethical professional behaviour and decision making in daily practice. Results indicate that classical philosophical theories which use virtues and truth as indispensable components still may give rise to desirable and moral conduct among individuals who apply them.

Keywords: personalistic professionalism in engineering ethics, discretion, Christian personalism, human decision making, truth

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1. Introduction

The concept of discretion has proliferated so far in the economic, ethical and managerial literature, which offered a series of valuable insights into various aspects and instances of professional business and vocational behavior and decision mak-

ing. The applicability of this discretion capability has ranged from managerial, judicial and accounting practice, nursing and engineering, to service plants with high-contact management of service encounters. It is noticeable that the engineering ethics literature has devoted relatively limited space to this concept in comparison with other professions, although it appears to be important to professional behavior in terms of the use and application of professional discretion.

2. *Discretion defined*

Discretion is an important capability for professional vocations. In fact, it is considered one of the hallmarks of professionalism. Fleddermann ascribes the following attributes to any profession:¹

- (1) 'The work requires sophisticated skills, the use of judgment, discretion, and cannot be mechanized,
- (2) membership requires extensive formal education, rather than mere apprenticeship or training;
- (3) specific public control over the professional members through societies, which set and enforce standards i.a. for admission to the profession,
- (4) significant public good results from the practice of the profession.'

Harris, Pritchard and Rabins mention similar characteristics of professionalism, albeit they indirectly indicate discretion as one of the key features.² Professionals may exercise a large degree of individual judgment and creativity in carrying out professional responsibilities. The justification for this autonomy in the workplace is sufficient knowledge to determine the appropriate professional services in a given situation. This clearly indicates that, in both cases, the authors consider discretion to be a capability indispensable to professionalism.

To grasp the content of this term we must refer to its Latin source: *discerno*, which denotes: (1) 'the ability to separate, mark off,' (2) 'to distinguish with the mind or senses, or to show difference' and (3) 'to settle or decide' (a dispute etc.).³ We can find the same meanings in thesauri and dictionaries of the English language, e.g. in Merriam-Webster. The term *discretion* conveys the sense of *discernment*, i.e. (1) 'the act or faculty of discerning, discriminating, or judging,' but also the two remaining semantic fields: (2) 'power of decision, individual judgment,' (3) 'power of free decision or choice within certain legal bounds' (e.g. of a judge, doctor, engineer). It also specifies additional two meanings: (4) 'an ability to make decisions which represent a responsible choice and for which an understanding of what is

¹ Ch. Fleddermann, *Engineering ethics*, 3rd edition, Pearson – Prentice Hall, 2008, pp. 18–19.

² They explain it: (1) extensive training, (2) vital knowledge and skills, (3) control of services, (4) autonomy in the workplace, (5) claim to ethical regulation. Ch.E. Harris Jr., M.S. Pritchard, M.J. Rabins, *Engineering Ethics: Concepts & Cases*, Wadsworth, Cengage Learning, 2009, pp. 2–3.

³ Oxford Latin Dictionary (1968), pp. 549–551.

lawful, right, or wise may be presupposed' (e.g. the age, level of discretion, i.e. maturity), and (5) 'the quality of being discreet, able to maintain a secret, and cautious reserve especially in speech'.⁴

All of these notions are crucial to the right performance of professional duties and moral obligations. We can also observe the dependence of the profession's ethical practice on the prerequisites which characterize it in the above definition. Specifically, the interesting link under consideration is the relationship of discretion to vocational practice.

3. Christian views of human *discretion* and its operation

The power of making right choices depends on a number of prerequisites. The proper execution of one's own discretion in any sphere is interconnected with other psychological capabilities of the human soul. First, it is based on *prudence*, as it is understood as discernment, i.e. 'the act or faculty of discerning, discriminating, or judging' and *reticence* (restraint in speaking or communicating),⁵ since 'prudence is merely a certain rectitude of discretion in any actions or matters'.⁶

Second, discretion uses virtues, above all, *prudence*: the wisdom shown in the exercise of reason,⁷ forethought, self-control, and the sagacity or shrewdness in the management of affairs. Prudence is exemplified by instances of skillful selection, adaptation, and use of means to a desired end. Aquinas discerns three types of prudence: false, imperfect and the perfect.⁸ Whereas the first is named only metaphorically, as it does not take for its end good, but its likeness or the evil itself,⁹ the second one is called imperfect for it perfects only special business skills, like thrift, brinkmanship or trade. The third type is perfect as it perfects counsel, judgment, and command in view of the end of the whole of human life.

Third, discretion also operates with *conscience*, which is the ability of the intellect 'to witness, to bind, or incite, and also to accuse, torment, or rebuke'.¹⁰ In all of these functions, conscience 'follows the actual application of knowledge to what we do,'¹¹ and applies this knowledge to an individual case. Therefore, a person must already have at hand both valid knowledge and general ethical norms to be able to aptly exercise conscience and arrive at a discretionary decision. The knowledge of rules

⁴ Merriam-Webster Dictionary (2000).

⁵ *Ibidem*.

⁶ T. Aquinas, *Summa theologica*, literally transl. by Fathers of the English Dominican Province, Burns Oates & Washbourne, Benziger Brothers, New York, Cincinnati, Chicago 1922, Ia IIae, q. 61 a. 4; q. 65 a. 1.

⁷ *Ibidem*.

⁸ *Ibidem*, IIa IIae, q. 47 a. 13.

⁹ Sometimes used in metaphors containing antinomic connotations, e.g.: a prudent thief, virtuous liar, thrifty neglecter, magnanimous abductor.

¹⁰ T. Aquinas, *Summa...*, Ia Iae, q. 79. a. 13.

¹¹ *Ibidem*.

according to which the intellect witnesses, binds, incites, accuses, torments or rebukes operates most often intuitively, habitously, without any explicitly rational or discursive reasoning, although reason is necessary to arrive at the knowledge of rules. This multiple form of acting conscience, judging from natural principles, was called *synderesis* by St. Thomas, and the ability to apply this habit to a particular situation is *syneidesis*.

So long as the intellect is able to apply this true knowledge of the rules, the conscience operates correctly and validly. Then the discretion given to a person can yield the right result: to do good and to avoid evil choices and acts. But how does a person know that his knowledge of the rules is true? Here another, fourth, indispensable component comes into play: *truth*. The power of discretion¹² is conditioned by the attainment of the truth.

Aristotle claims that there are five states of the soul in which the truth can be grasped 'by affirmation or denial', namely: skill, scientific knowledge, practical wisdom, wisdom, and intellect.¹³ Skill is concerned with production rather than action (i.e. with instrumental activities rather than ends-in-themselves), while scientific knowledge grasps the necessary and eternal truths, such as mathematics. Wisdom is the good in itself and concerns the acquisition of the most honorable i.e. philosophy. Intellect relates to practical wisdom and the non-demonstrable first principles. Practical wisdom – the embodiment of 'practical truth', is independent of what we think. This requires experience, time and consists both of the ability to see, to understand, and to give orders. Practical wisdom requires a virtuous person to apply the general knowledge and wisdom to the given circumstances.¹⁴

Although Aristotle did not explicitly mention the discretion among the virtues, Aquinas did explain how it operates.

Aquinas states that truth remains mainly in the intellect, and is defined by the conformity of intellect and the thing.¹⁵ To uncover the conformity means to learn the truth. Truth is the object of the intellect and is related to it just as good is related to will. The difference, however, is that good is desired by will,¹⁶ whereas the truth is directly related to intellect. The notion of good adds the desirability to the truth which

¹² To be precise, operating conscience is an act, not a power or potentiality, for it implies a relation of knowledge to something, cf. T. Aquinas, *Summa...*, Ia IIae, q. 79, a. 13.

Therefore, discretion insofar as it denotes discernment is also an act. Aquinas makes there a reservation however, that conscience sometimes denotes the principle of an act, i.e. the natural habit – *synderesis* – the 'natural power of judgment' (ibidem).

¹³ Prof. Gromska interprets these categories as follows: '*sprawność techniczna* (τέχνη), *wiedza naukowa* (ἐπιστήμη), *rozsądek, czyli mądrość praktyczna* (φρόνησις), *mądrość teoretyczna, czyli filozoficzna* (σοφία) i *myślenie intuicyjne* (νοῦς).' Cf. Arystoteles, *Etyka nikomachejska*, przekład, wstęp i komentarz, D. Gromska, Wydawnictwo Naukowe PWN, Warsaw 2007, VI.3 1139b with footnotes Nos. 16 and 17.

¹⁴ Aristotle, *Nicomachean Ethics*, transl. and ed. by Roger Crisp, Cambridge University Press, 2004, p. XXV.

¹⁵ T. Aquinas, *Summa...*, Ia, q. 16, a. 2.

¹⁶ By the so called the *appetitive* part of the soul, cf. ibidem.

is prior to good. Hence the intellect knows truth by reasoning, and arrives at it by composing and dividing.¹⁷

Eventually, discretion is an act which, if practiced well and long enough, can be turned into a *good habit*. Aristotle uses here the term $\epsilon\tilde{\zeta}\iota\varsigma$ and Aquinas uses the synonymous term *habitus*, which means ‘good state of being, condition, demeanor, manner, attitude, dress, constitution, or character.’¹⁸ For Aristotle, good habit, alternatively called ‘permanent disposition’,¹⁹ is acquired in the process of habituation.²⁰ *Habitus* is then a matter of getting it right within particular spheres of human life. Habituated ability becomes a virtue.²¹ The virtuous person is able to get it right in each sphere without guidance from others, and his capacity to do that is what generally constitutes practical wisdom. Discretion, on the conditions stated above, should enable one to decide, judge, discern and generally behave virtuously and rightly on one’s own, without any reference to or guidance by rules or laws. *Habitus* can be called virtue in one or two of the following meanings: first, it gives the power to act well (potentially), and secondly, that with this power there is also the correct use of the power. Only intellect, but not will, is perfected by speculative intellectual habits. Virtues therefore can be called virtues only in the first sense, because they do not provide a good use of power or habit. They are not, therefore, virtues in the second sense. But virtues which perfect the will, such as charity, hope, justice, or prudence, cause one to use these speculative habits well.

Aquinas maintains that there are three speculative intellectual virtues. Self-evident truth, in other words *principle*, means that both mind and its virtues are perfecting the intelligence to the contemplation of such a principle. This resulting virtue is called *intellectus*. Truth may also be learned indirectly in the course of a selected research method – this virtue is called science – *scientia*. The third virtue is the ultimate end in all human thought: the wisdom (*sapientia*). The fourth intellectual virtue may be art, which gives the power to produce good work. Art may be called an operative rather than a speculative virtue, however, it does not guarantee the good use of the work.²²

Prudence, which we earlier determined to be the source of good discretion, is classified as an intellectual operative virtue.²³ It gives both the power to do good work, and to make good use of things already done. Prudence assumes that a man should be well predisposed towards the ends at which he aims and have good motives. Thus it is indispensable for human welfare, health and good life. It is not only the human action toward the due end, which must be good but also the means for doing so must be good, i.e. the motives, desires and dispositions of the will of the

¹⁷ B. Bonjoannes, *Compendium of the Summa Theologica. Pars Prima*, transl. into English by Fr. Wilfrid Lescher O.P., with Introduction and an Appendix Explanatory of Scholastic Terms by Fr. Carlo Falcini, Benziger Bros, New York 1906, p. 47.

¹⁸ Oxford Latin Dictionary, pp. 782-783.

¹⁹ Cf. Arystoteles, *Etyka...*, translator’s introduction, p. 60 seqq.

²⁰ Aristotle, *Nicomachean Ethics*, I.1, 1103b; II.2, 1104a.

²¹ *Ibidem*, II. 5, 1106a, II.6 1106b.

²² *Ibidem*, Ia IIae, q. 57.

²³ J.J. Elmendorf, *Elements of Moral Theology Based on the Summa Theologiae of St. Thomas Aquinas*, James Pott & Co., New York 1892, p. 65.

person involved. Also, the right choice of reason should not be moved by an impulse of, especially bad will, passion or a fad.

For a man to act well both reason must be characterized by a habit of intellectual virtue, and the will and desires must also be characterized by a habit of moral virtue. Virtues like wisdom, science and art are insufficient conditions for moral virtue, but spiritual understanding (*intellectus*) and prudence are indispensable for it. Moral virtue is a habit by which moral (i.e. good) choices are made. To achieve the good choice, the will must seek a good which accords with reason as its due end, and the means for attaining this good must also be good. This requires right reason prudentially deliberating, considering, judging and commanding. Therefore, moral virtues cannot exist without prudence, nor without the spiritual understanding.²⁴

As we have seen from the above, the proper operation of discretion requires a number of components which only when taken together, give the desired result: correct, valid and morally valuable decisions and the acts of an acting person. The whole person, not just reason, must be involved in the act. It is equally important for such a person to attain the requisite *level of discretion*, sometimes combined with age (*age of discretion*).²⁵ We can speak of differentiated levels of discretion dependent on personal closeness to the truth in a given sphere. In this sense, for example, an experienced civil engineer will have a higher level of discretion in civil design than a surgeon, whereas the latter will have it in conducting surgical operations. In both cases, the spheres of competence combine knowledge and practical skills.

When we speak of such moral spheres, different levels of discretion can be achieved and result in handling of situations by undertaking moral acts and making moral decisions with differentiated levels of complexity and differentiated burden of responsibility. Senior executive engineers who exhibit a high level of integrity are usually given more discretion in their daily duties which require much higher level of expertise and responsibility than those of newly hired novices or practitioners.

4. The role of discretion for engineering profession

For many decades there was the intention that professional ethics would offer protection of the public and private spheres from professional negligence or misconduct, committed both by engineers, managers, professionals in general and the rank and file. Engineering ethics attempted to protect the public health and welfare from the possible adverse effects of technologies and external harmful effects resulting

²⁴ *Ibidem*, pp. 67–68.

²⁵ T. Aquinas, *Summa...*, Ia IIae, q. 89, a. 6; Suppl. q. 6, a. 3; Suppl. q. 39, a. 2; Suppl. q. 58, a. 5; cf. T. Aquinas, *Of God and His Creatures*, transl. by Joseph Rickaby, Christian Classics Ethereal Library, Burns & Oates, Grand Rapids, MI, London 1905, p. 284.

from them. This discipline underlined the importance of sensitivity to risk, environmental protection, social influences of technologies and commitment to the public good.

Various codes of engineering ethics addressed such a general professional orientation, which some authors call *preventive ethic*.²⁶ This orientation has been directed to professional individuals and was explicitly communicated mainly in the form of rules to be observed. There has also been another orientation present in professional ethics, called *aspirational ethics*, which advanced the use of professional knowledge to promote the human good, health and societal welfare, especially in its material dimension.²⁷

The third ethical orientation which has recently has become a matter of some concern is *virtue ethics*, sometimes called ‘ethics of character’. Its main goal is to complement the deficiencies and create opportunities which the rule-based approach in ethics was not able to overcome. Harris briefly specifies the advantages of virtue ethics applied to professional engineering. First, a virtue is a permanent disposition which manifests itself in certain categories of behavior whenever specific circumstances arise. Second, virtuous living gives satisfaction to the virtuous person – a genuine pleasure of being good and true to oneself. Third, knowledge of correct, moral decisions and the application of virtues are matters of practical wisdom gained over time with experience, which an immature, young person cannot have. Fourth, virtues are divided into intellectual and moral categories, with the former using such abilities as contemplation, deliberation and practical wisdom, while creativity and intelligence are not direct guarantees of moral acts. The latter however, like honesty, generosity, loyalty and trustworthiness, are personal character traits. Fifth, this approach has recently begun to offer a *virtue portrait* of an ideal person, one who possesses the virtues needed (or at least as many as possible)²⁸ for the successful practicing the profession. This virtue-based orientation of professional ethics which has recently prevailed in engineering can be found in many codes of engineering ethics in combination with the rule-based approach.²⁹

The discussion in previous paragraphs attempts to propose another orientation in professional ethics, which is focused on the personal perfection of a professional. We may call it ‘personalistic virtue ethics’ or ‘personalistic professionalism’, since it emphasizes the need for the personal perfection of a professional as the condition of moral behavior, both personal and professional. There are noteworthy advances in professional engineering ethics which attempt to enrich the overall ethical competencies of professional engineers based on virtue ethics with emphases added on the necessity and use of conscience,³⁰ however without a deeper, comprehensive and systematic approach.

²⁶ Ch.E. Harris, Jr., *The Good Engineer: Giving Virtue its Due in Engineering Ethics*, “Science & Engineering Ethics” 2008, Vol. 14, doi: 10.1007/s11948-008-9068-3, pp. 153–154.

²⁷ *Ibidem*.

²⁸ *Ibidem*, p. 157

²⁹ E.g. in the codes of professional ethics of NSPE, ASME, AIChE; cf. Ch. Fleddermann, pp. 139–151.

³⁰ Cf. G. Baura, *Engineering Ethics: An Industrial Perspective*, Academic Press, 2006.

As we have described earlier, the power of good action and the knowledge of the right act are not enough to secure the good use of the power of good habit in a virtuous act, especially in the face of many impediments, like fear, social pressure, customs, anger etc. Prudence plays here an indispensable role since through discretion, conscience and command of the right reason the person can overcome the impediments and act virtuously. Not only should the professional engineer be able to arrange for a piece of art, but also to deliberate and decide how to use it well and for good ends. For the latter, prudence and discretion play vital roles.

5. Conclusion

The Aristotelian-Thomistic ethical system provides an objective and realistic categorical framework with which one can achieve a stable transition from principles of knowledge and practical science to moral imperatives of what is good and what is evil, what should be done and what avoided. The stability of such an evaluation is carried out within productive truths in engineering, e.g. how to design a product, an effective circuit, a safe motorway, bridge, machine tool or set up a welfare-increasing natural park. It requires the application of valid scientific knowledge of the physical world to particular circumstances.

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