

# Ron Polansky, Joe Cimakasky

---

## Aristotle and Principlism Bioethics

---

Diametros nr 45, 59-70

---

2015

Artykuł został opracowany do udostępnienia w internecie przez Muzeum Historii Polski w ramach prac podejmowanych na rzecz zapewnienia otwartego, powszechnego i trwałego dostępu do polskiego dorobku naukowego i kulturalnego. Artykuł jest umieszczony w kolekcji cyfrowej [bazhum.muzhp.pl](http://bazhum.muzhp.pl), gromadzącej zawartość polskich czasopism humanistycznych i społecznych.

Tekst jest udostępniony do wykorzystania w ramach dozwolonego użytku.

## ARISTOTLE AND PRINCIPLISM IN BIOETHICS

– Ron Polansky & Joe Cimakasky –

**Abstract.** Principlism, a most prominent approach in bioethics, has been criticized for lacking an underlying moral theory. We propose that the four principles of principlism can be related to the four traditional cardinal virtues. These virtues appear prominently in Plato's *Republic* and in Aristotle's *Nicomachean Ethics*. We show how this connection can be made. In this way principlism has its own compelling ethical basis.

**Keywords:** Aristotle, principlism, bioethics, cardinal virtues.

Unlike the principles of Kant, Mill, and Rawls, those of principlism are not action guides that stem from an underlying, integrated moral theory.<sup>1</sup>

Principlism has been widely embraced and taken to have a most prominent position within medical ethics. Its four principles—autonomy, beneficence, non-maleficence, and justice—are often appealed to, yet in practice they are also often supplemented by considerations borrowed from consequentialism, virtue ethics, or other such approaches.<sup>2</sup> The reason for this, perhaps, as the quotation above from K. Danner Clouser indicates, is that principlism seems to lack “an underlying, integrated moral theory.” This criticism reflects how principlism has been applied, as a “principle-based approach to bioethics.”<sup>3</sup> Utilized in this way principlism intends to avoid any background theory, but instead merely to propose sound principles that can always be implemented.<sup>4</sup> The four principles offered may look to be a hodgepodge lifted from different ethical traditions, thus

---

<sup>1</sup> Clouser [1995] p. 219.

<sup>2</sup> See Campbell [2003].

<sup>3</sup> Gert and Clouser [1990].

<sup>4</sup> Clouser [1995] p. 223 says, “The principles of Rawls and Mill are effective summaries of their theories. Therefore, in a sense, the principles of principlism are somewhat misleading in that they strongly suggest—perhaps unwittingly—that there is a theory underlying them.” Page [2012] p. 7 observes, “people state they value these ethical principles but they do not actually use them directly in the decision making process.”

fostering the impression that principlism reflects no integrated or coherent view.<sup>5</sup> But we suggest that considerations of the historical development of medical ethics and what is contained in the principles of principlism indicate that despite its eclectic appearance, this approach in fact has important philosophical background. The four principles of principlism either derive rather directly from the most traditional ethics or can be brought into a closer connection with this tradition than has generally been appreciated. Principlism can be used in the ways that have received criticism, but we propose that its principles also should be seen to align with the four cardinal virtues – Plato and Aristotle’s style of ethics – and therefore it has a very substantial ethical basis. Our elucidation of principlism should show it in a new light that may deepen the ethical sensitivity of those employing the principles that constitute principlism. This promises to strengthen significantly the teaching of principlism.

## I

At the conclusion of World War II, subsequent to the gruesome experimentation upon humans by Nazi doctors, the Nuremberg Code (1946–1949) set out ten principles that ought to govern medical experimentation.<sup>6</sup> Revelation in 1972 of the unconscionable Tuskegee experiment further provoked efforts to establish standards that resulted in the Belmont Report (1979). This report announced three principles to guide research on human subjects: respect for persons, beneficence, and justice. The principle of beneficence was understood to cover both not doing harm and maximizing possible benefits and minimizing possible harms. Thus the principles that soon came to be called principlism were contained in this Belmont Report.<sup>7</sup>

---

<sup>5</sup> Clouser [1995] p. 224 states, “In fact, the principles of principlism appear to be *ad hoc* constructions. It looks as if each principle simply focuses on the key aspect of some leading theory of ethics: justice from Rawls, consequences from Mill, autonomy from Kant, and nonmaleficence from Gert. Thus they represent some historically important emphases, but without the underlying theories – and worse, without an adequate unifying theory to coordinate and integrate these separate, albeit essential, features of morality.”

<sup>6</sup> Jonsen [2008] p. 100 observes regarding the Nuremberg Code, “The formal legal words veil the horror of the concentration camps in which these experimental subjects, totally stripped of their freedom and dignity, were mutilated and murdered under the guise of scientific research.”

<sup>7</sup> The Nuremberg Code’s “basic principles” prefigure principlism in several ways. The importance of autonomy or respect for the person is evidenced by the first principle and its declaration of informed consent as “absolutely essential”. The second principle relates to beneficence insofar as proposed experimentation must “yield fruitful results for the good of society,” while the fourth principle reflects non-maleficence as experimentation must be designed “to avoid all unnecessary physical and mental suffering and injury.” And all ten principles suggest that justice as fair dealing

The way in which the Belmont Report emphasizes respect for the person and secondarily beneficence makes it look likely that these principles were enlisted to combine the two most prominent modern approaches in ethics, Kantian ethics with Mills' style of utilitarianism. Respect for the person or autonomy surely is prominent in Kantian deontological ethics, while beneficence construed as maximizing benefits sounds appropriate to utilitarian and consequentialist approaches to ethics, though those proposing these principles clearly also had in mind the Hippocratic Oath urging that the doctor cause no harm. Evidently they were borrowing from different traditions to win broad acceptance. They added justice to round out the principles, and to guard against the abuses of 19<sup>th</sup> and early 20<sup>th</sup> century medical experimentation that often saw the "burdens of serving as research subjects fall largely upon poor ward patients, while the benefits of improved medical care flowed primarily to private patients" (Belmont Report). Justice was required as an additional principle despite Kant and Mill's focus on justice. Thus the principles constituting principlism give a strong appearance of eclecticism and in consequence loose organization.

What might nonetheless be the appeal of the four-principle formulation, with justice always coming last, is its surprising echoing of the four traditional cardinal virtues: wisdom, courage, moderation, and justice. These four virtues receive classic formulation and ordering in Plato's *Republic* IV. To defend justice, Plato has the city and soul divided into three parts, rulers, soldiers, and workers in the city and reason, spiritedness, and appetite in the individual soul. He then distributes four virtues to these three parts to ensure that having justice guarantees everything really good for city or soul. Wisdom pertains especially to rulers and reason, courage to the soldiers and spirited part, moderation to the workers and appetite, while justice applies to all, as each part does its own function in the city or soul. For the defense of justice in the *Republic*, Plato wishes to have each doing its own task, thereby being just and exercising its own virtue, and consequently achieving the happy life.<sup>8</sup> If each part acts on its own virtue, then each is already doing its own task, being just, and being happy. Even in the *Republic* more virtues are mentioned than the cardinal virtues, but it seems that such a set guarantees good persons and a happy life (see 402b9-c8 for other virtues).

---

and honesty is a vital concern in light of the medical experiments that had taken place in the concentration camps.

<sup>8</sup> We think that the rulers' wisdom already entails that they will be moderate, i.e., accept their position, and do their task, i.e., be just; the soldiers' courage, which is preserving opinion about what is fearful, will analogously keep them moderate and justly doing their task. The workers alone need moderation as a distinct virtue, though it should encompass their justly doing their tasks.

Aristotle also gives these four virtues a key role in his ethics, even if somewhat modified. Courage is the first character virtue treated (*Nicomachean Ethics* III 6–9), followed by moderation (*NE* III 10–12). Justice occupies a whole book, *NE* V, and practical wisdom (*phronesis*) is the principal intellectual virtue concerned with action (in *NE* VI). Whereas Plato in the *Republic* seems to be distributing these virtues to the different parts of the city or soul, Aristotle describes the person possessing all these virtues. For such a person, activity based on these virtues is a happy life.

Like Plato, Aristotle has additional character virtues, but these are introduced for the purpose of giving practical guidance regarding spheres of life that are inevitably of concern, such as honor, money, anger, and friends. Aristotle holds, as does Plato, that it does not so much matter exactly how many character virtues are included since they all come together in the good person. For Aristotle, like in Plato's *Protagoras*, with the acquisition of the appropriate wisdom, all the character virtues will be possessed (*NE* VI 13.1144b32-1145a6 and *Protagoras* 352c-d, 361a-c). Aristotle has the fullest development of character virtue require acquisition of practical wisdom, and practical wisdom is only attained with the development of character virtue (*NE* VI 13.1144b30-32). Character is formed primarily by habituation, i.e., by practicing appropriate sorts of emotional responses and actions, but perfection requires the good judgment and appreciation of the appropriateness that comes with practical wisdom. And practical wisdom is not merely intellectual understanding but an intellectual engagement powered by well-formed character.

We cannot trace to what extent the writers of the Belmont Report and subsequent expositors of principlism were aware that the four-principle formulation manages to parallel the cardinal virtues. We have only the Report's own explication of the three or four principles. Yet principlism can be taken to be in one-to-one correspondence with the cardinal virtues.<sup>9</sup> We suggest that it enhances the appeal of principlism that it can be seen to incorporate these very traditional cardinal virtues.<sup>10</sup> Despite the extent to which deontological and consequentialist motivations may have entered into the formulation of principlism, its strongest ethical basis is the cardinal virtues. This we now attempt to explicate.

---

<sup>9</sup> Beauchamp and Childress [2012], which in its many editions helped popularize principlism, lists the principles in this order, autonomy, non-maleficence, beneficence, and justice, perhaps to accord with the Belmont Report's explication of beneficence, which has do no harm as the first prong. We believe our reordering of beneficence and non-maleficence better discloses the fit with the traditional cardinal virtues.

<sup>10</sup> With respect to Eastern philosophy, Tsai [1999] p. 320 argues that "the four principles are clearly identifiable in Ancient Chinese medical ethics."

## II

We should recognize that bioethics or medical ethics is directed to a particular area of interest, the treatment of patients or of experimental subjects. In consequence, medical ethics or bioethics does not expect to be a full ethical system, even if it presupposes such a system or systems. The main concern of medical ethics or bioethics is the way health care is delivered or biological experiments are conducted. We surmise, then, that principlism aims primarily to regulate the conduct of health care providers and experimentalists with respect to living beings rather than to formulate a full ethical system for human life generally. Nonetheless, if we display convincingly the way in which principlism connects with the traditional cardinal virtues, then we can see that it presupposes an ethical system, and we have defended it against some of the objections leveled against it. Moreover, we believe that our reflections should provoke those utilizing principlism to a fuller appreciation of its rich traditional background, and hence to use it more sensitively. The teaching of principlism can thus put it into closer relation to a most worthwhile general ethical system.

In Aristotle's division of the sciences, medicine, despite close connections with theoretical science and practical science, is basically a productive science aimed at engendering health. The productive sciences each provide knowledge of some particular sort of product, as shoemaking makes shoes and medicine should produce health. Inasmuch as this sort of knowledge aims to make a particular sort of useful product, its goal is only a part of the overall human good. Therefore it remains for practical science, which is concerned with the overall human good (happiness), to govern the productive arts. This is the point of Aristotle's speaking of a hierarchy of arts with the political art or science in the top place directed at happiness (*eudaimonia*, NE I 2). Statesmanship or ethics has as this highest human end happiness in view, and hence it might order the rest of the arts in service toward this end. If medicine is to be practiced well, either it should be overseen by statesmanship, or the practitioner him- or herself should have sufficient practical wisdom to guide the practice appropriately. Again we see that the political and ethical concern with medicine cannot comprise the whole domain of ethics and politics. Still the great need for practical science in connection with medicine and experimentation is confirmed by Aristotle's recognition that productive knowledge gives the capacity to produce contrary results (see *Metaphysics* IX 2). A productive science that has knowledge of the form of its product thereby also has knowledge of its contrary. Hence the health care provider, like other possessors of craft, can help or harm. Nazi doctors and the Tuskegee experimenters glaringly demonstrated this two-way ability of productive art and the need for regula-

tion. Choice determines whether the productive capacity makes the good product or deliberately causes harm; regulation was developed to guide choice (*Metaphysics* IX 5).

Because productive arts such as medicine have a narrow good as their focus and because such knowledge is capable of contraries, a more general sort of wisdom must guide and regulate them. Can this role of wisdom be observed in play in principlism? Autonomy or respect for the person may seem to take the place of wisdom in the new presentation. But autonomy looks toward the sort of treatment the patient or experimental subject is to receive, and this can well be what the wise practitioner will offer. An obvious reason for emphasizing respect for the person and autonomy is that the patient in treatment or the subject of medical research is often not competent to judge the advantages and disadvantages of a proposed course of action. In the case of the patient, their poor medical condition may have them limitedly aware or completely oblivious of what is happening. The expectation for the patient or experimental subject cannot, therefore, be that they are wise, but instead that they be dealt with in ways that give consideration to their aspiration for a good life. Where wisdom enters more strikingly, as we should anticipate since principlism focuses on how practitioners should treat those upon whom they practice, is with regard to the expectation for the practitioner of medical care or experimentation. These should be wise enough to treat those with whom they deal as persons worthy of suitable respect.<sup>11</sup> Respect for the person and his or her autonomy should require considerable wisdom in the practitioner. And adherence to the rest of the principles secures the wisdom of medical staff and experimenters. The four principles taken together and seriously observed should motivate the practitioner to develop and maintain the wisdom relevant for effective treatment and efficacious experimentation.

The character virtue that follows wisdom in the traditional arrangement is courage, which Plato adumbrates as holding to the opinion of what should be feared (see *Republic* IV 429a-430c). In other contexts in Plato (see, e.g., *Republic* III 410a-412a, *Theaetetus* 143e-144b, and *Statesman* 306a-311c) there is suggested the weaving together of aggressiveness with gentleness to achieve suitable character. Clearly the harder side more relates to courage. Aristotle's account of courage similarly expects the brave person to face dangers and to endure adversity. In place of courage, principlism has beneficence. Beneficence enjoins the care provider or ex-

---

<sup>11</sup> As Gardiner [2003] p. 299 rightly observes, "This can be challenging when a patient chooses to reject a doctor's guidance — for example, refusing treatment, which the doctor knows may adversely affect her patient's wellbeing."

perimeter to seek the benefit of those worked on. For the care giver or experimenter to look toward the benefit of those worked on is to keep hold of what is fearful. Despite temptations to do otherwise, urgings to go against the best interest of the patient, or laziness, the practitioner devoted to beneficial care must have fortitude in confronting the tasks involved in treatment or experimentation. We can all too readily, alas, conceive many sorts of pressures on health care givers or experimenters not to work in the best interest of the patient or subject of experiment. Courage is needed to stand up to these. Benefiting the person to be treated or experimented upon may also require the sort of assertive energy expected in those with courage. The medical practitioner and experimenter must act confidently in the best interest of those upon whom they act.

Moderation or temperance (*sophrosyne*) in the scheme of the virtues must correspond to non-maleficence. Moderation in *Republic* iv 430d-432a is self-control and unanimity in accepting the assigned role in the city or soul. If courage is ambitious in aspiration, moderation maintains a sense of realism about what is possible under the circumstances. It is this sort of appreciation of what can be done that prevents the health care provider or experimenter from rushing rashly and without sufficient consideration to do what may cause harm.<sup>12</sup> The Belmont Report states, "one should not injure one person regardless of the benefits that might come to others." Thus an implied self-restraint is crucial to preventing harmful experimentation and medical abuses. Moderation upholding suitable caution is what supports non-maleficence.<sup>13</sup> Likewise, the Nuremberg Code's tenth principle establishes that

[...] the scientist in charge must be prepared to terminate the experiment at any stage, if he has reason to believe, in the exercise of the good faith, superior skill and careful judgment required of him that a continuation of the experiment is likely to result in injury, disability, or death to the experimental subject.

This is accepting the role and position within present constraints. As Aristotle affirms, "temperance is accompanied by discipline, orderliness, shame, and caution" (*On Virtues and Vices* 1250b10-11). The self-control consistent with moderation protects against temptations to ignore good practice.<sup>14</sup>

---

<sup>12</sup> Aristotle asserts, "This is also how we come to give temperance (*sophrosyne*) its name, because we think that it preserves prudence (*sozousan ten phronesin*)" (*NE* VI 5.1140b13-14).

<sup>13</sup> "Above all," argues Pence [2011] p. 349, "this maxim implies that physicians not technically competent to do something shouldn't do it."

<sup>14</sup> Galen in: Singer [1997] p. 33 suggests that the philosophical doctor therefore "practices temperance and despises money: all evil actions that men undertake are done either at the prompting of

In Plato's *Republic* justice is doing the task naturally or otherwise assigned. This presupposes the other virtues and has them in action to result in the happy life. Since the *Republic* defends justice as good for its own sake, it turns from justice *vis-à-vis* others toward justice within a city or soul. Aristotle takes a more standard approach and views justice as the disposition to what is fair toward others. Principlism also has justice as its fourth principle. What could be more appropriate for the medical practitioner or experimenter than that they do their job, and in doing it that they should be fair to those upon whom they work? In addition they should be fair to co-workers and to their superiors within their institutional framework. Also, they must view themselves as functioning within a national and even international setting with resources that are to be utilized fairly for the local and wider communities. Justice then overlaps all the other principles within the principlist scheme, while also being secured through each of the others. In this way, justice in principlism strongly resembles the traditional depiction of justice.<sup>15</sup>

We believe that we have offered a suggestive and hopefully convincing account of the way the principles enunciated in principlism correspond to the classic cardinal virtues. Thus principlism ceases to be merely a hodgepodge that needs to call rather desperately for supplementation from some system outside it. Instead principlism stands upon an ethical approach that serves for life generally as well as the medical and experimental situation. We thus can take advantage of principlism's formulation in principles that may readily guide even those who are disinclined for much reflection. In this way the principles should safeguard practitioners from the most flagrant disregard of the objectives of medicine. And for those more inclined to reflection, principlism has great appeal through its ties with the compelling scheme of the virtues. They may discover through principlism a path to cogent understanding of the happy way of life. Yet there may be some hesitation to embrace this background for principlism in reservation about Aristotelian ethics.

---

greed or under the spell of pleasure. And so he is bound to be in possession of the other virtues too for they all go together." Galen further states, "We must, then, practice philosophy, if we are true followers of Hippocrates. And, if we practice philosophy, there is nothing to prevent us, not only from reaching a similar attainment, but even from becoming better than him" (ibidem, p. 34).

<sup>15</sup> Bulger [2009] p. 121 argues agreeably that the four principles "as a comprehensive moral approach, is just another term for justice" and that "each principle seems to include each of the other three principles."

### III

It is often supposed that Aristotle's ethics cannot withstand the modern rejection of essences, formal causes, and a fixed human nature. The appeal to human nature in *Nicomachean Ethics* I 7 is frequently misunderstood.<sup>16</sup> Aristotle is not relying here on any of his theoretical positions, since it is inappropriate in practical science to appeal to any theoretical principles. Rather he is observing that humans, unlike the beasts, can reflect about what they do, as Aristotle himself is reflecting in his ethics. This is what distinguishes peculiarly human action. What enables humans to speak, pray, tell jokes, make up games, pursue money, and so on, what enables them to do all that they do especially as humans, is that they reflect about what they do. Human reflection is possible on many levels, and at a high level reflecting is philosophizing itself and even theoretical philosophizing. But if Aristotle only employs the fairly obvious point that humans do things for purposes about which they can reflect, we do not have to discredit Aristotle's eudaemonist approach to ethics due to any supposed appeal to discredited theoretical principles, for he does not in fact ever appeal in his ethics to such principles.

Neither is Aristotle, as sometimes suggested, bound in his account of the virtues to his own time and place. He is careful to have the virtues pertain to inescapable spheres of human life. In giving his accounts of the virtues he relies on poetry, praise and blame, common sayings, argument, and his careful observation. In accord with the saying that "fine things are hard," Aristotle looks for the virtue to manifest itself in the hardest sort of action. This is why he makes his account of courage focus on battle and temperance on pleasures of touch. In this way he points for practical purposes to the greatest test for the virtue of character rather than displaying cultural prejudices. Being able to do well here in the hard case should ensure doing well in lesser circumstances. Thus his accounts of the virtues do not have the elitist Greek narrowness as may be supposed.

Aristotle's ethics considers the best sort of life to lead rather than as modern moral theory along the lines of Kant and Mill to seek a criterion for right or moral action. Why Aristotle's ethics is arguably superior to these theories is that his ethics is about life as a whole and not about morality as some special sphere of action. As concerned with the best sort of life to lead and the way to live this life rather than pursuing some criterion for picking out right actions, he need not distinguish what is morally relevant and what is not. This effort to demarcate a realm of morality can be seen in the modern distinction between the good and the right, where only the right is of moral interest.

---

<sup>16</sup> E.g., by MacIntyre [2007] p. 58, 148, 162, 196–197; Williams [1993] p. 161 and [1985] p. 52.

Anscombe [1958] argued that concern with the moral and morality is rather hopeless. Kraut [2006] has reinvigorated this attack with special attention to Aristotle. Anscombe observes that though the word ‘morality’ derives from Latin translation of character virtue, *mos* and *mores*, our modern understanding of ‘morality’ derives from and even depends upon a Christian tradition of divine and natural law.<sup>17</sup> Kraut further rejects distinguishing two sorts of justifications for action, the good and the right, with the right taking precedence. We believe that we may add to the motivation for the modern sort of morality the concern to make it highly practicable, as became the concern in modern political thought.<sup>18</sup> This can be seen especially in the emphasis upon egalitarianism and self-governance. Consider the claim of Clouser:

Impartiality and rationality are two universal and essential features of morality. Whatever morality requires or prohibits of one person must be required or prohibited of everyone *in the same morally relevant circumstances*. Furthermore, the system must be such that it would be rational for a person to follow it and to urge others to do likewise. Thus it must also be understandable to all persons and must be based only on beliefs that it would be irrational for persons not to accept.<sup>19</sup>

What is objectionable here is the expectation that everyone has good understanding.<sup>20</sup> We might recall Socrates’ questioning of the supposition that everyone other than himself is a teacher of virtue (see Plato’s *Apology of Socrates* 24c-25a; cf. *Meno* 89c-93c, *Protagoras* 319a-320b, *Alcibiades I* 109d-112d). Is ethics more like a specialized knowledge requiring practice and training so that some are considerably better at it than others, or is it like speaking one’s native language that nearly everyone does successfully? Is Aristotle correct to maintain that there is practical

---

<sup>17</sup> Referring to Aquinas, Luther, and Calvin on natural law, Schneewind [1998] p. 17 asserts, “These different Christian interpretations of natural law were far more significant for the development of modern moral philosophy than the ethical writings of Plato or Aristotle.”

<sup>18</sup> In Cimakasky and Polansky [2012] we show how Descartes is revolutionizing not only metaphysical reflection but also ethics. His ethical innovations interestingly take the form in *Discourse on Method* part 3 of replacing the classical cardinal virtues with his four new moral rules.

<sup>19</sup> Clouser [1995] p. 228.

<sup>20</sup> Schneewind [1998] p. 522 traces the view that everyone can know what to do to the 18<sup>th</sup> century and Butler, Kant, and Bentham. He says, “Butler and the intuitionists who followed him held that everyone just sees or knows what to do, in almost every case; but they offered no systematic method for obtaining moral knowledge. Kant holds that everyone can use the categorical imperative to reason out what they ought to do in particular cases, and to see also why they ought to do it. Bentham made the same claim for his greatest happiness principle, though he did not emphasize its availability to the common understanding as Kant did. They are, to the best of my knowledge, the first philosophers to make such claims.”

wisdom less widely shared than we might hope, or should we suppose that nearly everyone really knows what ought to be done and the emphasis is on willing to do what we ought to do, i.e., self-governance such that we give preference to the right rather than the good? This seems one-sidedly to make ethics primarily about courage, i.e., the courage of our convictions.<sup>21</sup>

If anything like our account of the way principlism parallels the classical cardinal virtues holds, we have succeeded in showing that an “underlying, integrated moral theory” fits within the principles of this scheme that has such prominence in bioethics. Rather than being merely a small set of principles that can be applied without any further ethical understanding—though we allow that even such a use may well have considerable value as a caution to health care providers or experimenters—and without needing to appeal to extrinsic moral theories, principlism has real backing by an ethics of good standing, the tradition of the cardinal virtues. With this basis in the cardinal virtues, principlism ceases to appear barren and to call for reinforcement from outside, such as deontological or consequentialist theories. Principlism stands on a sufficient ethical understanding in Plato and Aristotle’s ethics. We hope that our account of the relation of the principles of principlism to the cardinal virtues of the philosophical tradition will enrich the future teaching of principlism in connection with bioethics.

## References

- Anscombe [1958] – G.E.M. Anscombe, “Modern Moral Philosophy,” *Philosophy* (33) 1958, p. 1–19.
- Beauchamp and Childress [2012] – Tom L. Beauchamp and James F. Childress, *Principles of Biomedical Ethics*. 7<sup>th</sup> edn., Oxford University Press, New York 2012.
- Bulger [2009] – Jeffrey W. Bulger, “An Approach towards Applying Principlism,” *Ethics and Medicine* (25) 2009, p. 121–125.
- Campbell [2003] – A.V. Campbell, “The Virtues (and Vices) of the Four Principles,” *Journal of Medical Ethics* (29) 2003, p. 292–296.
- Cimakasky and Polansky [2012] – Joseph Cimakasky and Ronald Polansky, “Descartes’ ‘Provisional Morality’,” *Pacific Philosophical Quarterly* (93) 2012, p. 353–372.
- Clouser [1995] – K. Danner Clouser, “Common Morality as an Alternative to Principlism,” *Kennedy Institute of Ethics Journal* (5) 1995, p. 219–236.
- Clouser and Gert [1990] – K. Danner Clouser and Bernard Gert, “A Critique of Principlism,” *Journal of Medicine and Philosophy* (15) 1990, p. 219–236.

---

<sup>21</sup> For a somewhat fuller defense of Aristotle’s ethics, see Polansky [2014].

- Galen [1997] – Galen, “The Best Doctor is Also a Philosopher,” [in:] P.N. Singer, *Galen: Selected Works*, Oxford University Press, Oxford 1997, p. 30–34.
- Gardiner [2003] – P. Gardiner, “A Virtue Ethics Approach to Moral Dilemmas in Medicine,” *Journal of Medical Ethics* (29) 2003, p. 297–302.
- Jonsen [2008] – Albert R. Jonsen, *A Short History of Medical Ethics*, Oxford University Press, Oxford 2008.
- Kraut [2006] – Richard Kraut, “Doing Without Morality: Reflections on the Meaning of *Dein* in Aristotle’s *Nicomachean Ethics*,” *Oxford Studies in Ancient Philosophy* (30) 2006, pp. 159–200.
- MacIntyre [2007] – Alasdair MacIntyre, *After Virtue*. 3<sup>rd</sup> edn., University of Notre Dame Press, Notre Dame 2007.
- Page [2012] – Katie Page, “The Four Principles: Can They be Measured and Do They Predict Ethical Decision Making?” *Medical Ethics* (13) 2012, p. 1–8.
- Pence [2011] – Gregory E. Pence, *Medical Ethics: Accounts of Ground-Breaking Cases*, McGraw-Hill, New York 2011.
- Polansky [2014] – Ronald Polansky, “Introduction: Ethics as Practical Science,” [in:] *The Cambridge Companion to Aristotle’s “Nicomachean Ethics,”* R. Polansky (ed.), Cambridge University Press, Cambridge 2014, p. 1–13.
- Schneewind [1998] – J.B. Schneewind, *The Invention of Autonomy: A History of Modern Moral Philosophy*, Cambridge University Press, Cambridge 1998.
- Singer [1997] – P.N. Singer, *Galen: Selected Works*, Oxford University Press, Oxford 1997.
- Tsai [1999] – Daniel Fu-Chang Tsai, “Ancient Chinese Medical Ethics and the Four Principles of Biomedical Ethics,” *Journal of Medical Ethics* (25) 1999, p. 315–321.
- Williams [1985] – Bernard Williams, *Ethics and the Limits of Philosophy*, Harvard University Press, Cambridge 1985.
- Williams [1993] – Bernard Williams, *Shame and Necessity*, University of California Press, Berkeley 1993.