Introduction: Two-Way Powers: Historical and Contemporary Perspectives

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Introduction

Powers pervade the natural world, from a flame's power to burn to a plant's power to grow. Certain powers seem to be special in being *two-way*. A two-way power is a single, unified power to do something or its opposite. Whereas a plant's circumstances determine that it will grow, I seem to have the power to raise my arm or refrain from doing so: it is up to me whether or not to raise it. If this is right, then this power of mine is a two-way power.

Two-way powers are important because they are often taken to be the mark of agency. The possession of two-way powers is taken to be what separates agents, who can select from among options, from the rest of the natural world. There is disagreement over exactly what sort of agency is demarcated by the possession and exercise of two-way powers. Is the exercise of two-way powers limited to free agency, to rational agency, or to something broader? Philosophers have disagreed on this and have given interestingly diverse examples of two-way powers. Aristotle offers as an example the skill of medicine, which can be used either to heal or harm a patient. Many philosophers have taken the will to be a two-way power: the capacity to will to do something or will not to do it. Others have taken the power to engage in self-movement, or to refrain from doing so, to be a two-way power.

Our goal in this issue is to present a selection of the views of what two-way powers are, and of the philosophical work they can do. The issue includes a mix of historical and contemporary work. Unsurprisingly, we will see a lot of focus on Aristotle, who is perhaps

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the philosopher most associated with two-way powers, but the issue also focuses on somewhat less famous figures like Francisco Suárez and Christian August Crusius. One question of particular interest is how closely related the different conceptions of two-way powers are, in different eras and philosophical traditions. Are Aristotle and medieval thinkers offering different conceptions of the same thing, or are they pursuing completely different projects?

Our interest in these topics grew out of a reading group, followed by a workshop, at the Centre for Advanced Studies, Human Abilities, in Berlin. All of the authors contributing to this issue were involved in some way with the Centre, and some of the papers were presented at the workshop. Everyone involved at the Centre provided great encouragement and stimulation, and we would like to thank them for their support.

This introduction has two aims. The first is to sketch, in very broad strokes, the historical development of the concept of a two-way power from antiquity to this day. The second is to introduce the contributions to this special issue. We will introduce each of the contributions in the context of the historical narrative that we set out. The introduction has three sections, the first focusing on two-way powers in ancient thought, the second on two-way powers in medieval and early modern thought, and the third on contemporary work on two-way powers.

Two-Way Powers in Ancient Thought

Plato is the first author in the history of Western philosophy to discuss two-way powers. His most detailed discussion of them can be found in an early dialogue of his, the *Hippias Minor*. In this dialogue, Socrates discusses the virtue of truthfulness with the sophist Hippias. Hippias maintains that 'the truthful man' is 'one kind of person, and the liar another, and not the same' (365c3–4). A truthful person, Hippias thinks, does not, and cannot, lie, whereas a liar does not, and cannot, tell the truth. Socrates attacks this view. He points out that only someone who is an expert on a given subject matter can tell lies about it. For example, the same person is able 'to say falsehoods and to tell the truth about calculations' (367c4–6), namely, the arithmetician. Thus, contrary to what Hippias maintains, only someone who can tell the truth about something can lie about it.

Why is this so? Socrates is not at a loss for an answer. To be an expert on a subject matter, he argues, is to have a 'craft' (*technē*), and a craft can be used for well or ill by its possessor. Thus, an

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arithmetician can put his expertise to the good end of sharing arithmetic truths with others or to the bad end of spreading arithmetic falsehoods. An expertise is a kind of 'power' (*dunamis*), Socrates maintains (375d9–376a5), and while he does not say so explicitly, he clearly thinks that it is one and the same power that enables an expert to tell truths and say falsehoods.[1] A craft like arithmetic is, then, a two-way power.

At the end of the *Hippias Minor*, Socrates argues that virtue is likewise a two-way power and that this is because it too is a craft. He considers the virtue of justice in this context and argues that since virtue is a kind of craft, it follows that a just person can use their virtue of justice for well or ill. Indeed, he goes so far as to say that only the just person can perpetrate acts of injustice at will. For only they possess expertise on what constitutes just and unjust acts. Thus, he concludes, one needs to be just to voluntarily commit injustice (376a4–6).

This rather startling conclusion has puzzled commentators, and it has been a matter of considerable debate whether Socrates and, by extension, Plato are committed to it (Jones and Sharma 2017). Some scholars think both thinkers are committed to it because Socrates affirms the analogy between virtue and craft in the dialogue. Others maintain that they are not committed to it and that the argument about justice at the end of the dialogue is meant to be a *reductio ad absurdum* of the craft analogy. Plato doesn't settle the matter because he has Socrates tell us that 'on these matters, I waver back and forth' (376c3).

Whatever Plato's views on the craft analogy, his student Aristotle clearly rejected it. Virtuous acts 'must proceed from a firm and unchangeable character', Aristotle writes in *Nicomachean Ethics* II.4, 1105a30–b4. For example, a just person has a stable character trait, the virtue of justice, and this character trait makes it impossible for the just person to do something unjust. Virtues, then, are not two-way powers. In contrast, crafts are, Aristotle argues in *Metaphysics* IX.2. As examples of crafts he adduces not so much theoretical sciences like arithmetic, as Plato did, but rather productive sciences like medicine. And going beyond Plato's *Hippias Minor*, he explicitly says that a craft is a single power that enables a person to do opposite things. In his words, a productive science is 'capable of contrary effects' (*Metaphysics* IX.2,1046b5–6). For example, medicine enables a physician to heal or harm a patient. In

[1] Our thanks to Ian Campbell for pointing this out to us.

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this respect, Aristotle thinks, crafts differ fundamentally from other powers, which are one-way. Take fire's power to heat. It can only bring about the effect of heating. It cannot heat or cool.

Why is it that a productive science, unlike a one-way power, can produce contrary effects? Aristotle proposes an answer in *Metaphysics* IX.2. He maintains that a productive science is a power that involves an 'account' (*dunamis meta logou*) (1046b2), and this account discloses one thing and its privation (1046b8–10). For example, medicine discloses health as well as its absence, sickness. Thus, the physician knows what health is and what sickness is, and this enables them to bring about either.

The fact that a productive science can produce contrary effects raises a puzzle that Aristotle discusses in *Metaphysics* IX.5 (1048a8–9). The puzzle has to do with how such a power produces its characteristic effect. The story of how a one-way power produces its characteristic effect is straightforward, Aristotle thinks. When such a power is in conditions propitious to the production of its effect, this suffices for the power to produce its effect. For example, if a fire is in the presence of material that can be heated such as wax, and no impediment gets in the way, the fire heats the wax. But this story does not work for two-way powers, Aristotle argues. For suppose a physician finds themself in conditions propitious to the application of their medical knowledge: they are in the presence of a patient, and nothing prevents them from effecting a change in the patient based on their medical knowledge. If these conditions were sufficient for the physician's medical knowledge to produce its characteristic effect, then, since medical knowledge has two effects, namely health and sickness, it would produce both of them at the same time. But this is impossible. Therefore, Aristotle reasons, there must be an additional factor that determines which of the two contrary effects a two-way power produces when it is in propitious conditions. This factor is 'desire or choice' (*Metaphysics* IX.5, 1048a8–9). To effect a change through their medical knowledge, then, the physician must choose whether to use it to heal or harm a patient. Only this guarantees that their two-way power produces one of two opposite effects rather than both.

The first two papers in this special issue deal with Aristotle's conception of two-way powers. The first, by Kim Frost, examines what sort of knowledge a two-way power requires according to Aristotle. Frost argues that it requires what he calls 'systematic knowledge'. By this he means that the account of a thing and its opposite that a two-way power involves must be a sophisticated one. For example, in order for someone to have a two-way power to heal or harm

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a patient, their account of health must disclose 'rich connections' between health and other things, such as the uniform state of the body, body temperature, and the like. An additional aim of Frost's paper is to argue against a view to which Aristotle's conception has given rise. Some contemporary advocates of two-way powers like Maria Alvarez and Helen Steward have taken Aristotle to hold that the capacity for voluntary action is a two-way power. Not without reason, Frost concedes, because there are texts where Aristotle appears to endorse this view. However, as Frost argues, a close analysis of these texts reveals that Aristotle does not in fact posit two-way powers for voluntary action, and on this basis, Frost concludes quite generally that 'Aristotle's account of two-way powers has little to do with freedom'.

The second paper in this special issue, by Ian Campbell, also attacks the view that Aristotle takes the capacity for voluntary action to be a two-way power. Additionally, Campbell's paper challenges a long-standing view among scholars of Aristotle according to which the manifestations of a two-way power are the effects that this power produces in another entity, such as health and sickness in a patient in the case of medicine. Against this view, Campbell argues that 'the manifestation of a rational power is a matter of knowing or contemplating the account (*logos*) of one or the other of two "opposed" items'. For example, the manifestation of medicine is contemplating health or sickness. It is *not* producing health or sickness. This is not to say that medicine isn't also responsible for the production of health and sickness. It is. However, these are not the characteristic manifestations of medicine, Campbell contends. Rather, they are remote effects downstream of the characteristic manifestation, which is contemplating health or sickness, and medicine produces these remote effects only in conjunction with other powers such as desire.

As should now be clear, Plato and Aristotle both have a craft-centred account of two-way powers. For them, a craft or expertise, whether theoretical or productive, is the paradigm of a two-way power. This was a prominent account of two-way powers in antiquity, but it was not the only one. As Michael Frede (2011) has shown, in late antiquity, specifically in the context of Stoic thought, another account of two-way powers emerged.[2] According to this account, the 'will' is a two-way power to make choices, where a choice is a mental act distinct from, but causally productive of, a voluntary

[2] Admittedly, Frede doesn't use the term 'two-way power', but we don't think that using this term distorts his insight.

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action, such as walking.[3] As Frede argues, this notion of the will was readily taken up by Christian authors in late antiquity, notably by Augustine. Augustine posited a 'faculty of the will' (*facultas voluntatis*) (*On the Trinity* X.11.17) and claimed that nothing explains why the mind does good or evil 'but its own will and free choice' (*On Free Choice of the Will* I.1.21.76). This Augustinian account had a profound impact on the history of Western thought.

Two-Way Powers in Medieval and Early Modern Thought

Its immediate heirs were thinkers of the Latin Middle Ages. They generally thought of the will as a decision-making power, and for this reason, they standardly referred to it as a *potentia ad utrumlibet*, that is, as 'a power for either of two outcomes'.[4] The will gave rise to many different philosophical debates in the Middle Ages. Arguably one of the most important ones concerned the will's relation to another power of ours that medieval thinkers countenanced, namely, our 'practical intellect' (*intellectus practicus*). The will cannot make choices, medieval thinkers held, unless it is guided by the practical intellect, which enables us to deliberate about what to do. When we deliberate, we typically consider various courses of action and conclude that one of them is best all things considered. The question that greatly exercised the minds of medieval thinkers was whether the will was bound to follow the final, all-things-considered judgement of the practical intellect. For example, if Peter deliberates whether to deny Christ and concludes, out of fear, that denying him is all things considered the best course of action, must he then choose to deny Christ or could he choose not to deny him? Intellectualists maintain that Peter's choice has to follow his intellect. Voluntarists deny this.

Prominent advocates of the intellectualist position were Godfrey of Fontaines (see, *e.g.*, Wippel 1981) and, on one reading at least,

[3] See Irwin (1992) for the view that already Aristotle had a notion of the will, though Irwin uses the term 'will' differently from Frede, namely, to denote a rational desire rather than a decision-making power.

[4] We find this description as early as the twelfth century, for instance in Peter Lombard's *Sentences* II.24.3, pp. 452–453: 'Liberum vero arbitrium est facultas rationis et voluntatis, qua bonum eligitur gratia assistente, vel malum eadem desistente. Et dicitur "liberum" quantum ad voluntatem; quae ad utrumlibet flecti potest.' Note that we are not saying here that Peter Lombard was the first to describe the will this way.

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Thomas Aquinas (see, *e.g.*, Löwe 2021). Consider the following text from Aquinas, which suggests a commitment to intellectualism: 'On the part of the cognitive power it is required that there be deliberation, through which one judges which of the alternatives is to be preferred, whereas on the part of the appetitive power it is required that the judgement made through deliberation be accepted by desiring it' (*Summa theologiae* I, q. 83, a. 3, c.). Aquinas here says that the practical intellect and the will both contribute to choice. But while the practical intellect is in charge of reaching a verdict about what to do, the will, to which Aquinas here refers as 'an appetitive power', simply 'accepts' said verdict. This suggests a passive picture of the will.

Voluntarists vigorously oppose this passive picture. On their view, the will ultimately decides what to do, and it is not bound by the all-things-considered judgement of the practical intellect. A particularly staunch voluntarist was John Duns Scotus. In his commentary on Aristotle's *Metaphysics* IX, he describes the will as a power that 'is not of itself … determined, but can perform either this act or its opposite or can act or not act at all' (*Questions on Aristotle's Metaphysics* IX.15.22, 2000, p. 371). Thus, for Scotus, our will is our power to choose one thing or another or not to choose either way. And, as Scotus sees it, the will need not obey the dictates of the intellect. Thus, even if Peter's deliberation led him to the conclusion that denying Christ would be all things considered the best course of action, he could have chosen, through his will, not to deny Christ, or he could have refrained from making a choice as to whether to deny him altogether.

Scotus's account of the will as a two-way power unbridled by the intellect was influential well beyond the Middle Ages. For example, the late-sixteenth century thinker Francisco Suárez adopted it (Penner, 2013, p. 18). Suárez describes the will as a 'free cause', and he defines a free cause as 'indifferent as regards operating or not operating' (*Metaphysical Disputation* 19.2, 1994, pp. 289–290). Furthermore, Suárez emphasizes, like Scotus, that the final judgement of the intellect is not binding for the will (*Metaphysical Disputation* 19.6, 1994, p. 356).

The third paper in this special issue, by Dominik Perler, examines Suárez's conception of the will and its relation to the practical intellect. It focuses on the following question: 'on what ground is it possible for the will to reject the action-guiding judgement [of the practical intellect]?' Perler argues that, for Suárez, the will does not reject a judgement groundlessly. If it rejects a judgement, it does so because the course of action presented by the judgement is not

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good in every respect. Is this rejection rational? Perler maintains that there is nothing irrational about the will's rejecting a judgement that recommends a course of action that is less than completely good. However, as Perler points out, for Suárez, the will can also reject a judgement recommending a greater good and instead follow a judgement recommending a lesser good, provided the greater good is not good in every respect. This is not rational, Perler argues, and Suárez provides no good explanation as to how the will can will a lesser good instead of a greater one.

In the seventeenth century, as is well known, the entire edifice of scholastic thought came under attack. But the Scotistic account of the will survived, and several early modern thinkers adopted some version of it (though without explicit reference to Scotus). Thus, for instance, Descartes seems to adopt it when he writes in his *Meditations* that 'the will simply consists in our ability to do or not do something (that is, to affirm or deny, to pursue or avoid)' (*Fourth Meditation*, p. 40). And Thomas Reid describes the will in the following terms: 'This power which the mind has thus to order the consideration of any idea, or the forbearing to consider it, or to prefer the motion of any part of the body to its rest, and *vice versa*, in any particular instance, is that which we call *the will*' (*Essays on the Active Powers of Man* I.5, 2010, p. 29, italics in original).

We see the reverberations of the Scotistic account of the will even in the eighteenth century, in particular in the German philosophical tradition. The fourth paper in this special issue, by Sonja Schierbaum, considers one important figure from this tradition, namely, Christian August Crusius. Schierbaum investigates how reasons explain our choices according to Crusius, our choices being the acts of a two-way power of ours that Crusius calls 'freedom'. She argues that, for Crusius, reasons do not explain our choices in the strong sense that they are necessary and sufficient conditions for them. Rather, they explain our choices in the weaker sense that they are necessary conditions for them. While this account does not make our choices irrational, Schierbaum maintains that it does introduce an element into the explanation of choice that is not grounded in reasons, namely, what Crusius calls the agent's 'active embrace' of one option over another. Schierbaum argues that Crusius makes a good case for introducing this element into the explanation of choice because it allows us to make sense of choices between equally good options.

We also find something like the Scotistic account of the will in Crusius's slightly younger but significantly more famous contemporary, Kant. Kant posits in addition to what he calls the 'will' (*Wille*),

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which he takes to be the power to act on the basis of laws, a power to make choices, which he calls *Willkür*. He thinks that we need to invoke this latter power to explain human wrongdoing (*Religion within the Boundaries of Mere Reason*, 1998, p. 33). Thus, the account of the will as a two-way power that emerged in Stoic thought and became widespread in the Middle Ages had a lasting influence in the history of Western philosophy.

Two-Way Powers in Contemporary Philosophy

Making a huge leap, let us now turn to two-way powers in analytic philosophy. In analytic metaphysics, two-way powers languished somewhat for much of the twentieth century, though they did play a role in the work of some more historically-oriented philosophers, such as Anthony Kenny (1975). Two-way powers underwent a resurgence in the 2000s in the work of E. J. Lowe, Maria Alvarez, Helen Steward, Thomas Pink, and Kim Frost, among others. Much of this work has been focused on the same issues regarding freedom that occupied medieval and early modern thinkers. Lowe (2008) in particular develops a volitionalist account of freedom on which the will is a two-way power. Other work has focused on broadening the scope of two-way powers. Steward (2012) argues that not only free human agency, but also animal agency, requires libertarian two-way powers of self-movement. Such two-way powers are present whenever the agent selects among two or more genuine options, settling what happens. Yet other work looks specifically to Aristotle: Kim Frost (2013) has developed an account of rational agency that is heavily inspired by Aristotle. Frost's contribution to this special issue is a more historically-focused part of this overall project.

Much has been written about two questions concerning the metaphysical nature of two-way powers. First, are they compatible with determinism? Alvarez (2013) and Frost (2013) explore ways of defending compatibilism, whereas Steward, Pink, and Lowe argue for incompatibilism. Second, are two-way powers *causal* powers? That is, are they powers to cause, or not cause, some outcome? Alvarez (2013) defends the view that they are causal powers. Thomas Pink (2016, 2019) argues for an incompatibilist conception of two-way powers on which the agent exercising them *contingently determines* the result of her action. Pink argues that such powers cannot be causal powers. For the result of an exercise of causal powers is either causally determined or not determined at all, but causal determination cannot be contingent.

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The fifth and final paper in this issue, by Vanessa Carr, builds on Pink's argument. Carr argues that the problem with contingent determination is not specific to causal powers. No kind of determination, causal or non-causal, can be contingent; contingent determination is impossible. Carr then develops an incompatibilist view on which the agent non-contingently determines the results of her actions, whenever she exercises her two-way powers. This might seem inconsistent, for non-contingent determination seems to imply determinism. But Carr points out that determinism follows only if the result is determined by prior states or events. On Carr's view, the agent's action determines the result, where the result is not distinct from the action: it is a part of the action, or constitutes it, or is identical to it. This determination is clearly non-causal. And so two-way powers are not powers to cause a result or refrain from causing it, but rather are powers to non-causally determine a result or refrain from doing so. Carr argues that this is the best way to make sense of incompatibilist two-way powers.

Conclusion

Let us conclude by saying that the topic of two-ways powers is a place where it is especially fruitful to bring together historical and contemporary work. Recent accounts of two-way powers have drawn heavily on the whole span of Western philosophy, from Aristotle to Scotus to Reid to twentieth-century analytic philosophers like Kenny. Contemporary work has combined this historical inspiration with engagement with recent work in metaphysics and action theory, such as work on dispositions, causation, and abilities. And the influence has also gone in the other direction, with historians of philosophy drawing on contemporary tools to understand past thinkers. For this reason, we hope it will be particularly beneficial to present, side-by-side, historical and contemporary papers on two-way powers.

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