University of Windsor Scholarship at UWindsor

OSSA Conference Archive

May 18th, 12:00 AM - May 21st, 12:00 AM

The Willingness to be Rationally Persuaded

Michael D. Baumtrog

Follow this and additional works at: http://scholar.uwindsor.ca/ossaarchive Part of the <u>Philosophy Commons</u>

This Paper is brought to you for free and open access by the Faculty of Arts, Humanities and Social Sciences at Scholarship at UWindsor. It has been accepted for inclusion in OSSA Conference Archive by an authorized administrator of Scholarship at UWindsor. For more information, please contact scholarship@uwindsor.ca.

The Willingness to be Rationally Persuaded

MICHAEL D. BAUMTROG

ArgLab – IFIL Universidade Nova de Lisboa Avenida de Berna, 264º Andar Lisboa, Portugal baumtrog@fcsh.unl.pt

Abstract: In this paper I argue that underlying *phronêsis* is the more foundational virtue of a willingness to be rationally persuaded (WTRBP). A WTBRP is a virtue in the sense that it fulfills the doctrine of the mean by falling between two vices – never sticking to your position and never giving it up. Articulating a WTBRP in this way also helps address problems *phronêsis* faces in light of implicit bias research.

Keywords: open-mindedness, phronêsis, rational persuasion, virtue

1. Introduction

To outline my approach in this paper and shed some light on what I see to be some contributions and limits of the discussion to follow, I would like to begin by explaining a little bit about the motivations behind preparing it.

The main motivation is a fascination with people who will not change a settled upon belief or intention no matter the reasons presented for them to do so. I think we are all at least somewhat familiar with attempting to argue with someone, either about their (potential) actions or beliefs, but then finding ourselves stonewalled by their unwillingness to be rationally persuaded.¹ As Thomas Paine wrote: "To argue with a [person] who has renounced the use and authority of reason [...] is like administering medicine to the dead, or endeavoring to convert an atheist by scripture." And more technically, as Andrea Rocci once commented: "A willingness to be persuaded seems to be a precondition for rationality."

I am also most interested in practical reasoning – reasoning to intention or action – as opposed to theoretical reasoning – reasoning to belief or determining what is the case. I have two general reasons for this preference. First (but not most important), within the study of argumentation there is noticeably less work on practical reasoning. Most often, the theoretical is taken as the paradigm and the practical is treated just as a special case of the theoretical: reasoning or arguing to a *belief* about what to do.² The second, related reason, is that they are importantly different. In my experience, people may hold all kinds of crazy beliefs and I never notice. In the silence of one's mind beliefs come and go change and develop all the time without me having any idea. However, when someone acts there is an observable immediacy and permanence to their actions which impacts themselves and those around them. A person with racist beliefs but who nonetheless does not take racist actions is importantly different from one who practices racist discrimination. To be sure, however, and as will be addressed briefly below, there is important –

¹ How this refusal manifests is open-ended and would be an excellent topic for further research, especially in terms of extremist reasoning.

 $^{^{2}}$ I conceive of practical reasoning as concluding in an intention rather than a belief. One may believe they ought to do something, but it does not necessarily follow that they then intend to do it. I may believe that I ought to do the dishes, but getting to the intention to do them is something else.

Bondy, P., & Benacquista, L. (Eds.). Argumentation, Objectivity, and Bias: Proceedings of the 11th International Conference of the Ontario Society for the Study of Argumentation (OSSA), 18-21 May 2016. Windsor, ON: OSSA, pp. 1-10.

though unclear – overlap between the practical and theoretical. Here, I am not meaning to neglect the importance of the theoretical, but simply highlight the importance of the practical.

In sum, the motivation for this work spawns from observing the refusal to accept or acknowledge reasons and their authority resulting in the performance of (or intention to perform) one or more bad decisions.

As for the limits of the paper, through my investigations into hard-headedness I was led to discussions of open-mindedness. It then quickly became clear that almost all discussions of open-mindedness occurred within or led to work on virtue. Exploring the virtue literature while maintaining my focus on the practical, led to the notion of *phronêsis*. As such, in what follows I try to work within and contribute to what has come to be known as the virtue approach to argumentation, while maintaining a focus on the practical. I am doing so with the knowledge that I am setting aside an important and vast contemporary literature regarding both practical reasoning and a number of other developed approaches to argumentation which do not take up the virtue banner. I do so not because there is anything wrong with the other approaches, but because virtue is the forum where the most developed discussion of the topic at hand has occurred and nothing says that developing ideas here leaves them inapplicable or unusable elsewhere.

To proceed, then, I will begin by briefly characterizing *phronêsis*, outlining how it is acquired, and pointing to what I see as a few unaddressed difficulties for the notion. In section 3, I will propose a definition of a willingness to be rationally persuaded (hereafter WTBRP) and unpack the definition in distinction with open-mindedness (hereafter OM). The concluding section will argue that the notion of a WTBRP is more fundamental than *phronêsis* for bringing about the good and that speaking in terms of a WTBRP alleviates criticisms which have been launched against the notion of OM. Without further ado, then, we will now turn to our discussion of *phronêsis*.

2. Phronêsis

The term *phronêsis* is most often translated as either "common sense" or "practical wisdom" and is most readily distinguishable from "theoretical wisdom" (Ryan 2014). Whereas theoretical wisdom is characteristic of the philosopher and deals with necessary truths and the understanding of the universe, practical wisdom is characteristic of the political leader/ruler (Surprenant 2012; Kraut 2014 p. 44ff) and deals with the means to achieving good goals: "Virtue makes the goal right; *phronêsis* is responsible only for what contributes to the goal. That is, practical intellect does not tell us what ends to pursue, but only how to pursue them; our ends themselves are set by our ethical characters" (Moss 2011, p. 205).

Despite being called "practical" wisdom, however, *phronêsis* is still considered an intellectual rather than an ethical/character virtue. As intellectual it can be considered a theoretical part of practical wisdom and in this way constitutes part of the overlap between the practical and theoretical mentioned above.³ To contrast, as mentioned, the ethical virtues instruct what the right thing to do is – be honest, courageous, compassionate, etc. These and other virtues fulfil what is known as the "doctrine of the mean" which indicates that they fall between the two extremes of deficiency and excess. For example, courage as a virtue can be considered to fall between the deficient extreme of cowardice and the excessive extreme of rashness. *Phronêsis*, on the other hand, is an intellectual virtue in that it helps determine the best way to achieve ethical virtues but

³ The overlap and interplay between practical and theoretical reasoning remains an important contemporary philosophical issue as well. See for example, Broome (2009).

also helps to sort out conflicts between the virtues in particular instances. For example, there may be a conflict between honesty which may be hurtful and compassion which may be dishonest. Accordingly, "A person who has acquired *phronêsis* has thus, *inter alia*, the wisdom to adjudicate the relative weight of different virtues in conflict situations and to reach a measured verdict about best courses of action" (Kristjánsson 2014, p. 155; Kraut 2014, p. 15). In this way, *phronêsis* both completes the ethical virtues and functions as a meta-virtue by reigning over them (Kristjánsson 2014, p. 159. See also Hursthouse 2013; Kraut 2014).

As for acquisition, Aristotle tell us that the ethical virtues are acquired during childhood through habituation and that *phronêsis* comes later, through experience (1142a12-1142a21). As such, *phronêsis* is conceived of as a paternalistic virtue – unavailable to the young (1143b6-1143b14).⁴ Importantly, however, both the ethical virtues and *phronêsis* are described as learned virtues which can be developed and improved over time. Kristjánsson (2014) explains that,

The standard developmental story about the trajectory of moral virtue and *phronesis* [...] all starts with *habituation*: best defined as an intentional process of inculcation of character through the exercise of action and reaction in a repetitive pattern under outside guidance (see Lawrence, 2011: 249). Gradually, however, that initial process – which is basically non-rational and achieved via conditioning – is superseded by a rational process whereby learners continue to be conditioned, but through a conditioning that is accompanied by description and explanation – leading, over time, to the formation of the learners' own *phronesis*. (p. 156)

Although *phronêsis* can be learned, it is important to note that it is not a decision procedure (Curzer 2015; Kraut 2014). One who acquires *phronêsis* has not learned a method of deliberation, but rather, has acquired a certain ability to "see" the solution. Kraut (2014) explains that

To say that such a person "sees" what to do is simply a way of registering the point that the good person's reasoning does succeed in discovering what is best in each situation. He is "as it were a standard and measure" in the sense that his views should be regarded as authoritative by other members of the community. A standard or measure is something that settles disputes; and because good people are so skilled at discovering the mean in difficult cases, their advice must be sought and heeded. (pp. 19-20)

Further, this characterization of the practically wise person as a dispute settler whose advice is sought and heeded, is exactly why *phronêsis* is the virtue of the political leader or ruler concerned with government and action rather than the philosopher who is concerned with first truths and understanding the universe.

Thinking of the practically wise as one who knows what to do in ethically tricky situations and who can figure out or see the best way to achieve good ends is rather appealing and fits with intuitions about what makes a good leader and how experience can separate the old and wise from the young and, perhaps good, but still ignorant or naïve. However, looking at this characterization

⁴ Aristotle advises: "Therefore we ought to attend to the undemonstrated sayings and opinions of experienced and older people or of people of practical wisdom not less than to demonstrations; for because experience has given them an eye they see aright" [1143b6-1143b14].

with contemporary glasses, not to judge it, but merely to consider the implications of its contemporary application, brings a few problems to the fore.

First, recent research into implicit biases has revealed that what we often "see" to be the right answer or what we do seemingly naturally can be wrought with biases and poor reasoning which can lead to ethically bad or questionable decisions and conduct (cf. Kahneman 2011; Peters, et al, 2000; Baumtrog 2015, pp. 127-136). Importantly, there is also no conclusive evidence that age or experience are sufficient to counteract these factors. For example, Strough and colleagues (2011) report that while the sunk cost fallacy does decrease with age, the framing effect remains stable from middle adolescence to late adulthood.⁵ Even directly teaching about problematic biases might not be enough to counteract them. Kenyon & Beaulac (2014) argue that simply teaching awareness about biases is relatively ineffective in preventing them but that "[a] range of strategies [do] work to varying degrees, depending on the bias" (p. 347).

To illustrate, there is no evidence that having experience in particular cases helps in avoiding biases like the availability bias. In fact, it is exactly the availability bias which causes us to over-emphasise recent and salient events (Tversky and Kahneman 1973; 1974, pp. 1127-8; Kahnemean 2011, pp. 129ff). Thus, even a leader with *phrônesis* could give too much consideration to temporally close and salient events at the expense of a broader and more accurate statistical analysis. While working with groups has been shown to help counteract the availability bias (Sunstein and Hastie 2015, p. 53), as we have seen, the one with *phronêsis* is the standard of judgement and dispute settler and as such is not subject to the challenge of others.

Second, in many parts of the world, though sadly not all, the days of the ruler are now over. This means that instead of one political leader, there are many. Moreover, it is not a stretch to imagine that more than one of these leaders could be said to have acquired *phronêsis*. In a democratic setting where leaders disagree, which one is to be considered the standard and measure? Surprenant (2012) argues that

all of these participants would possess "a share of excellence and practical wisdom" when acting as co-legislators (Pol 1281b4). Thus, "when they meet together, just as they become in a manner one man, who has many feet, and hands, and senses, so too with regard to character and thought" (Pol 1281b5-7). Like the individual citizen whose judgment or opinion becomes *phronesis* when occupying the position of ruler, each citizen in a democracy has a share in legislative process, and so likewise has a share in *phronesis*" (p. 224).

Unfortunately, however, as ideal and optimistic as this sharing in *phronêsis* sounds, it has been shown to be highly unlikely to ever occur. As Sunstein and Hastie (2015) have shown, groups may amplify biases and errors and run a greater risk of making the wrong decisions than working together to achieve wisdom.

Of course it is possible for people who disagree to come to agree and at least some biases may be mitigated. However, learning dispute resolution and debiasing techniques are not articulated as a part of the acquisition of *phronêsis*. On the contrary, experience is expected to mitigate bias and the one with *phronêsis* is understood to be the dispute settler by decree, which

⁵ There is noticeably little work regarding the effect of aging on cognitive and implicit biases. This could be due to the correspondence between the lengths of time it takes to conduct such longitudinal studies and the only recent emergence of research on heuristics and biases.

does not leave room for the mutual continuance of disagreement required for its eventual rational resolution.

For the sake of the argument, however, even if we imagine a best case scenario where these two abilities - disagreement resolution among other equally wise people and effective debiasing - are also included in the training leading to *phronêsis*, there still seems to be a more foundational virtue required for their successful implementation. That virtue, I argue, is the willingness to be rationally persuaded. The political leader in training would have to already be willing to be persuaded to sincerely engage in the rational resolution of a difference of opinion and would have to be willing to be persuaded that a decision they (cannot help but) come to results from an implicit bias and should be changed. Without a willingness to be persuaded, neither of these outcomes would be possible.

At this point, you may be thinking, "you're talking about the ruler being open-minded!" and in a casual conversation, I would probably say you are right. But since this is an academic philosophical work, this is an appropriate venue for expressing that I think there is a benefit to using a more precise notion like a willingness to be rationally persuaded. Let me explain why.

3. A willingness to be rationally persuaded and open-mindedness

I consider a willingness to be rationally persuaded to be: *a self-governing quasi-policy of an agent* to submit to the power of recognizably rational reason(s) in overcoming the inertia of an absent or held, belief or intention, whenever practically viable and/or exceptionally important.

Clearly, this definition needs some unpacking. To help unpack the definition I will address each of its component parts in order, but do so in explicit relation to OM. I will also try to show some of the interplay between the component parts as we proceed. This process will serve the double function of helping to clarify what a WTBRP is as well as to distinguish it from its broader relative.

First, the notion of a "self-governing quasi-policy" comes from Michael Bratman (1987, pp. 56-57; 2007) who incorporates policies into an entire philosophy of human agency and practical reasoning. Briefly, for him polices "are intentions that are appropriately general in their content. They support treating, over time, like cases in like ways, and doing this as a matter of (and so, with reference to one's) policy" (Bratman 2007, p. 6). The qualification of *quasi*-policy indicates a WTBRP's status as a higher-order policy – not aimed at each and every particular instantiation – which prevents it from being held to the same standards of consistency and coherence as a first-order policy (pp. 42-44).⁶

I think Philosophers working on OM would generally agree with including this feature for that notion as well. In particular, this framing seems more or less consistent with Adler's view of OM as "a second-order (or 'meta') attitude toward one's beliefs as believed, and not just toward the specific proposition believed" (2004 p. 130) which he also links directly to the notion of a policy (p. 132). In this way, for Adler OM is also an attitude toward oneself (like a self-governing quasi-policy) rather than toward a specific belief. Similarly, Bratman's ideas also generally fit with Higgins' (2009) description of subliminal OM as a "full and lingering perception" (pp. 46-47) that "represent[s] a sort of meta or organizing virtue" (p. 58).

⁶ Compare, for example, having a first-order policy to go for a run every morning but deciding one morning not to - against a higher-order policy to be monetarily charitable but not giving to a charity worker you pass on the street one time. In the first instance the policy of going for a run has clearly been broken, but the case is not so clear in the second instance. Similarly, a policy to be willing to be rationally persuaded may admit of exceptions without losing its punch.

There are, however, important upshots to using Bratman's developed characterization of policy. First, doing so grounds the notion in an established realm of research which consequentially also immediately allows us to start to make sense of how a WTBRP and OM can apply beyond the realm of beliefs and into the realm of intentions. In addition, it provides inroads for future research to develop the notion in relation to other philosophical streams such as articulating the role that a WTBRP can play in human agency. Thus, using this notion can be useful for developing both OM – insofar as it is/remains conceived of in terms of a policy – and a WTBRP.

The second part of my proposed definition requires the agent submit to the power of recognizably rational reason(s).⁷ The main thrust behind this stipulation is to avoid extra/non-rational or irrational reasons from counting as rational persuasion. What counts as a "recognizably rational reason" is a deeply philosophic topic which I do not pretend to answer here. For present purposes it will do to take up an intuitive notion of what counts as recognizably rational and consider it a basic qualification inexplicable in more fundamental terms – an approach also taken up by Scanlon (1998 p. 17ff) and Searle (2001 pp. 117-118).

It should be noted, however, that I do not currently see any major issues with strengthening this requirement, especially if the context calls for it. For example, one could count recognizably rational as meeting the conditions of Siegel's (1988; 2009) reasons assessment component of critical thinking. In addition, certain institutions – such as in law – have regulations for what counts as rational (or reasonable) and those regulations could be inserted into the definition if need be. The overall point is that the reasons must be *at least* recognizably rational – but more detailed accounts of what should fall under this label remain open for debate.

Including this stipulation also addresses concerns raised in nearly every article on OM – that an agent could be too open-minded, too credulous, which could be epistemically detrimental (see for example, Cohen and Miller 2008; Kwong 2016). Requiring recognizable rationality begins a sort of filtering of the influences that could lead to a change of belief or intention too easily. This requirement works in co-operation with the third part of my proposed definition, so I will now move on to that one and re-address this concern there.

The third component specifies that the policy of being willing to submit to recognizably rational reason be used "to overcome the inertia of an absent or held, belief or intention." First the notion of inertia is meant to help explicate the idea that the status quo has force. Whether absent or held, a (potential) belief or intention should not be overcome willy-nilly. At minimum, the takeup or change of a belief or intention requires the force of a positive recognizably rational reason. If you have never thought about a topic and are thus neutral in respect to supporting or opposing it, it should require at least one positive reason for you to adopt a position this way or that. Mere awareness of one position rather than another, or arbitrarily picking without a reason, is outside of rational persuasion.

This stipulation further helps address the concern raised above that being open-minded could be epistemically detrimental, especially in cases where a true belief is held. The objection has it that if one is open-minded about a true belief s/he runs the risk of erroneously abandoning it. In the present characterization, a true belief would ideally carry an unsurmountable level of inertia.⁸ As such, maintaining a WTBRP against a true belief may have other benefits but it would not risk its abandonment. For example, epistemically, it may allow both arguers to uncover deeper

⁷ I am not yet sure if the stronger requirement of submitting to recognizably rational reason – as a cover noun – should be used here instead. Consideration of this option will have to await a future work.

⁸ I am not yet sure about how this would apply to an intention.

and more complex reasoning in support of the belief, and socio-politically, it would allow the dissident the chance to be heard and taken seriously.

Taken together with a willingness to submit to recognizably rational reasons, the requirement to overcome the inertia of an absent or held, belief or intention, also explains how a WTBRP may be seen to fulfil the doctrine of the mean.⁹ It prevents the agent from being too credulous while also all preventing them from being too hard-headed. Nothing about the "open" in open-mindedness signals a hesitation or restriction on belief or intention change without specific stipulation. Rather than "open" minded, a WTBRP could better be described as "filter" minded – a title never explicitly used but consonant with many OM descriptions and (re)articulations (Hare 2006, 2009, 2011; Baehr 2011; Adler 2004; Cohen 2008; Kwong 2016; Riggs 2010).

The end of my definition calls for an agent to be WTBRP "whenever practically viable and/or exceptionally important." This component fits together with and narrows down (albeit only slightly) the expanse of the policy coverage. "Whenever practically viable" is meant to save the agent from the unrealistic expectation to *always* be WTBRP – sometimes there just isn't time – and the term "willingness" in a WTBRP should not be understood as entailing an obligation to engage.

The "whenever practically viable" condition also addresses a concern Baehr (2011, pp. 203ff) raises regarding the difference between being willing to be OM and having the ability to be OM. Here, if you are unable to be WTBRP, it is clearly not viable and thus you are excused without having to bear accusations of being unvirtuous: the virtue simply does not apply. I think this rings true with the intuition that we ought not to fault someone for failing to do something outside of their ability.

The "and/or whenever exceptionally important" clause is added to ensure that when the stakes are high, due consideration is emphasised. There are of course tricky situations of tension between the viability and importance condition. For example, consider a commander who has to decide whether to send troops into battle. In such an instance, a decision may need to be reached quickly which takes away from the practical viability, but since the stakes are so high it becomes more crucial to maintain a WTBRP. I don't have a clear solution to these rare cases,¹⁰ but hope that placing both aspects of viability and importance in the definition at least helps identify that both factors should be taken into account when deciding to favour one or the other.

Finally, these two factors taken together are also meant to address a pair of concerns that one cannot and should not be OM about every proposition all of the time and that OM may require newly initiated investigation into held but unquestioned beliefs. The stipulations I have presented prevent one from having to question everything or actively investigate unquestioned beliefs. On the story forwarded here, an intention or belief only needs to be assessed under a WTBRP when it is brought to attention and placed in conflict with the status quo. This is not because I do not see value in more questioning or actively searching out held beliefs to improve, but only because I think such a task is better described on its own terms as a willingness to inquire. Discussion pertaining to what is involved in a willingness to inquire would address issues not pertinent for a

⁹ Although the doctrine of the mean typically applies to ethical virtues, it seems valuable here as well.

¹⁰ One possible route would be to investigate what it might mean to maintain a "willingness to engage" – which could be addressed in dialogical/polylogical terms as well as in terms of a single agent attitude/disposition. Such a discussion would also pair well with the open issue regarding an arguer's dialectical obligations (Johnson 2000).

WTBRP such as the scope of what should be inquired about, the appropriate depth of inquiry, the duration of inquiry, and how curiosity might kill the cat (cf. Hamby 2014, p. 69).¹¹

4. Conclusion

To conclude, in this paper I hope to have successfully made the case for two claims: 1) there is a more foundational virtue than *phrônesis* required for determining how to bring about the good which I call a willingness to be rationally persuaded, and 2) though very similar, it is worthwhile to distinguish a willingness to be rationally persuaded from the broader notion of being open-minded.

If experiential wisdom is not enough to guarantee coming to the best determination for how to bring about the good, and if two practically wise people might disagree, then maintaining a WTBRP is more foundational than *phronêsis* in this pursuit.

Further, the notion of open-mindedness has been subject to some understandable criticisms, such as placing epistemic quality at risk and being too vague regarding its scope of application. The name open-mindedness is also not indicative of the characterizations philosophers have stipulated for it. Speaking in terms of a willingness to be rationally persuaded preserves some of the essential features of OM such as taking opposing considerations seriously while also refining it to avoid some of the criticisms. Further, characterizing a WTBRP in the way I have grounds it in other developed and developing philosophy which provides a strong basis for continued research and development of the central ideas.

Acknowledgements: I am grateful to the attendees of the ArgLab research colloquium – operating as a part of the "Values in Argumentative Discourse" series [FCT-funded project PTDC/MHC-FIL/0521/2014] – for valuable insights and suggestions for improvement.

References

- Adler, J. (2004). Reconciling open-mindedness and belief. *Theory and Research in Education* 2 (2), 127-142.
- Aristotle. (1991). Nicomachean Ethics. In J. Barns (Ed.), *The Complete Works of Aristotle* (Vol. 2, pp. 1729-1867). Princeton: Princeton University Press.
- Baehr, J. (2011). The structure of open-mindedness. *Canadian Journal of Philosophy* 41 (2), 191-214.
- Baumtrog, M. D. (2015). Improving practical reasoning and argumentation. *Dissertation*. New University of Lisbon.
- Bratman, M. E. (1987). *Intentions, Plans, and Practical Reason*. Cambridge: Harvard University Press.
- Bratman, M. E. (2007). Structures of Agency: Essays. Oxford: Oxford University Press.
- Broome, J. (2009). The unity of reasoning? In S. Robertson (Ed.), *Spheres of Reasoning: New Essays in the Philosophy of Normativity*. Oxford: Oxford University Press.

¹¹ Hamby has highlighted a willingness to inquire as the central critical thinking virtue, but has described it in terms that cover much more ground than the way I am thinking of the notion here: "Willingness to inquire' is the term I propose to refer to a person's motivation to employ her intellectual skills appropriately, aiming towards reasoned judgments when reasoned judgments are called for (in short, when there is time to make a reasoned judgment, and when the stakes of the judgment are substantial)" (Hamby 2014 p. 69).

- Cohen, D. H., & Miller, G. (2008). Gods, gadflies, and bulldog tenacity: in praise of closedmindedness. *Open-mindedness and the Virtues in Education: A Conference Celebrating the Work of Professor William Hare*. Halifax: 3rd October, 2008.
- Curzer, H. J. (2015). Aristotle's practical syllogisms. The Philosophical Forum 46 (2), 129-153.
- Hamby, B. (2014). The virtues of critical thinkers. *Dissertation*. McMaster University. Retrieved from http://hdl.handle.net/11375/15847
- Hare, W. (2006). Why open-mindedness matters. Think 13, 7-15.
- Hare, W. (2009). What open-mindedness requires. Skeptical Inquirer 33 (1), 36-39.
- Hare, W. (2011). Helping open-mindedness flourish. Journal of Thought 46 (12), 9-20.
- Higgins, C. (2009). Open-mindedness in three dimensions. Paideusis 18 (1), 44-59.
- Hursthouse, R. (2013). Virtue ethics. In E. N. Zalta (Ed.), *Stanford Encyclopedia of Philosophy*. Retrieved from http://plato.stanford.edu/entries/ethics-virtue/
- Johnson, R. (2000). Manifest Rationality. Mahwah: Lawrence Erlbaum Associates.
- Kahneman, D. (2011). Thinking Fast and Slow. New York: Farrar, Straus and Giroux.
- Kenyon, T., & Beaulac, G. (2014). Critical thinking education and debiasing. *Informal Logic* 34 (4), 341-363.
- Kraut, R. (2014, April). Aristotle's ethics. In E. N. Zalta (Ed.), *Stanford Encyclopedia of Philosophy*. Retrieved from http://plato.stanford.edu/entries/aristotle-ethics/#Aca
- Kristjánsson, K. (2014). Phronesis and moral education: treading beyond the truisms. *Theory and Research in Education* 12 (2), 151-171.
- Kwong, J. M. (2015). Is open-mindedness conducive to truth? *Synthese*, Online first. doi:10.1007/s11229-015-1008-6.
- Moss, J. (2011). "Virtue makes the goal right": virtue and phronesis in Aristotle's ethics. *Phronesis* 56 (3), 204-261.
- Peters, E., Finucane, M. L., MacGregor, D. G., & Slovic, P. (2000). The bearable lightness of aging: judgment and decision processes in older adults. In P. C. Stern, & L. L. Carstensen (Eds.), *The Aging Mind: Opportunities in Cognitive Research* (pp. 144-165), Washington: National Academy Press.
- Riggs, W. (2010). Open-mindedness. Metaphilosophy 41, 172-188.
- Ryan, S. (2013). Wisdom. In E. N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy*. Retrieved from http://plato.stanford.edu/entries/wisdom/
- Scanlon, T. M. (1998). What We Owe to Each Other. Cambridge: Harvard University Press.
- Searle, J. (2001). Rationality in Action. Cambridge: MIT Press.
- Siegel, H. (1988). *Educating Reason: Rationality, Critical Thinking and Education*. New York: Routledge.
- Siegel, H. (2009). Open-mindedness, critical thinking, and indoctrination: homage to William Hare. *Paideusis* 18 (1), 26-34.
- Strough, J., Karns, T. E., & Schlosnagle, L. (2011). Decision-making heuristics and biases across the life span. *Annals of the New York Academy of Science*, 57–74. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3755606/
- Sunstein, C. R., & Hastie, R. (2015). *Wiser: Getting Beyond Groupthink to Make Groups Smarter*. Boston: Harvard Business Review Press.
- Surprenant, C. W. (2012). Politics and practical wisdom: rethinking Aristotle's account of phronesis. *Topoi* 31 (2), 221-227.
- Tversky, A., & Kahneman, D. (1973). Availability: a heuristic for judging frequency and probability. *Cognitive Psychology* 5, 207-232.

Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: heuristics and biases. *Science New Series* 185 (4157), 1124-1131.