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Thinking Beyond Rationalism

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I. Introduction

My claim is that we need to think more about what is called thinking in education. We need to think more, that is, about what happens when we think, about the things we think about, and about the nature of the human being *who* thinks. I claim that the theory of thinking is currently dominated by a limited conception of thinking, which I designate by the term of art "rationalistic". However, I also argue that a way beyond this conception can be opened via a phenomenological exploration of thinking, which does more justice to the possibilities of the *ways* we think.

In the later sections of this chapter, I will say more about this phenomenological account of thinking. I will also illustrate what an education for the development of thinking might look like following this kind of approach. However, I will begin by examining the current theories of thinking in education – in particular, the areas of critical thinking, thinking skills and philosophy for children. I will do so with a view to exemplifying that a shared conception of the nature of thinking is at work in such accounts.

II. Today's Thinking

Critical Thinking

I begin with the critical thinking movement: a major field of theory and a key place in which thinking has been conceptualised within education in recent years. The genesis of the philosophical literature on this topic can be traced back at least as far as the 1960s and the work of Robert Ennis, who defined the concept of critical thinking as "the correct assessing of statements" and, more fully, as "reasonable, reflective thinking, focused on deciding what to believe or do" (Ennis, 1989, p. 4). While subsequent conceptions of critical thinking were developed by theorists Richard Paul and John McPeck, perhaps the most influential account of critical thinking is that advanced by the American philosopher Harvey Siegel. For more than three decades, Siegel has defended a highly developed "reasons conception" of critical thinking. This resumes the idea that a critical thinker as one who is "appropriately moved by reasons" and has the ability to "believe and act on the basis of reasons" (1988, p. 3). A distinctive feature of Siegel's account, however, is the link it asserts between such reason assessment and the fields of *logic* and *epistemology*. For Siegel, logic affords subject-natural laws and models ideal forms of argument, and these constitute generic principles that are indispensible for the assessment of reasons and beliefs. Epistemology, meanwhile,

provides critical thinkers with "some understanding of why a given putative reason is to be assessed as it is"; that is, epistemology enables critical thinkers to have "a theoretical grasp of the nature of reasons, warrant and justification" (1988, p. 35).

Thinking Skills

In the last decade, focus in the theory of thinking has also turned to a discussion of "thinking skills". This notion first made its appearance within educational policy, and has been around at least since the British National Curriculum of 2004. Within the policy literature thinking skills were characterised as certain kinds of procedural knowledge ("know-how") – functional capacities that were generalizable across a number of contexts. A number of different types of skills were identified. For example, QCA defined thinking skills in terms of "information-processing"; "reasoning skills"; "enquiry skills"; "creative thinking skills" and "evaluation skills" (QCA, 2004, p. 22-23).

Thinking skills was thus a concept that covered a somewhat broader range of thinking than that in focus under the concept of critical thinking. As a result, some critical confrontation between theorists of critical thinking and thinking skills occurred. Thinking skills theorists claimed that their concept goes further than that of critical thinking, and charged the latter with perpetuating a too narrow focus on reasoning (see for example Smith, 2002). Nevertheless, it is also the case that a number of theorists of thinking skills have themselves been concerned at the potentially loose nature of the concept. One attempt to combat such a problem comes from Gerald Smith, who sought to provide a clearer analysis of what can be meaningfully identified as a "skill" in thinking. Specifically, Smith has argued that skills in thinking should be understood like physical skills – hence we should call thinking skills only those mental acts that have "procedural content" or a "procedural structure" (p. 663-664). In this way, Smith characterises thinking skills as cognitive acts that are (or are in principle capable of being) "schematised or purposively sequenced" (p. 661). Such procedures, Smith claims, are generic and transferable.

Smith finds his analysis of the concept of thinking skills to "strongly support the practice of teaching thinking apart from the domain-specific content" (p. 676). On this point, Smith's theory bears some comparison with what is happening in many educational programmes dedicated to the teaching of thinking in schools today. To take an example of a formal qualification currently on offer in the British curriculum, the Cambridge International Examination (CIE) A Level in Thinking Skills conceives its purpose similarly in terms of developing "a specific set of intellectual skills, independent of subject content" (CIE, 2013). Such an agenda is stated to be "reflecting the need voiced by universities and employers for more mature and sophisticated ways of thinking". Another formal qualification in thinking, the Oxford, Cambridge and RSA (OCR) A Level in Critical Thinking, claims to "provide candidates with a framework, which can be applied in a practical manner to a range of materials, situations, problems and issues" (OCR, 2013). On this course, the Specification asserts, "there is no obvious

major body of content to deliver", and the focus is instead on "a set of skills that candidates should be enabled to acquire" (OCR, 2013).

Philosophy for Children

Holding out on an analysis of these theories and practices a little longer, let us consider a third related branch of educational theory of thinking: Philosophy for Children. This is a diverse field with many factions. Yet an emphasis on the development of thinking has been present within this movement since its inception in the 1970s (see Gregory, 2011, p. 120). Patricia Hannam and Eugenio Echeverria's book *Philosophy with Teenagers* (2009), provides a representative example of this kind. A distinctive aspect of this field is the appeal to the pedagogical technique of a "community of inquiry". This is an arena for discussion and, as Hannam and Echeverria put it, as a tool to "promote cooperation in illuminating a path to come closer to the truth of things" (p. 8). Notably, however, when adding more detail to what is involved in such a process, Hannam and Echeverria, cite the activities of "constructing, defining and clarifying concepts", and conceive the goals of such a process as the "gradual development of thinking and reasoning skills" (p. 8).

In recent years, a series of broader arguments have been made in defence of the role of philosophy in schools – some of which have also asserted a link between philosophy and the development of thinking (see for example the collection by Hand, 2008). For example, Carrie Winstanley (2008) has defended two theses regarding the connection between philosophy and thinking: firstly, that "critical thinking is the essence of philosophy" and secondly philosophy is a subject that is not dependent upon any "substantial empirical knowledge base" (p. 92). The first claim turns on the idea that philosophy is a discipline principally concerned with the "validity of inferences, the quality of arguments, and the meaning of words", and is "the embodiment of the abilities of exploring ideas with logic and rationality" (p. 87 and p. 92). The second thesis suggests that philosophical discussion focuses on "concepts, ideas, and the logic of arriving at the views held", and that discussion of the "reasons, coherence of argument and the rationality of the notions under examination" can be achieved without recourse to any substantial knowledge base (p. 92). Philosophy is seen as a tool for developing thinking, then, because it is taken to be a subject principally concerned with how to "assess reasons, defend positions, define terms, evaluate sources of information, and judge the value of arguments and evidence" (p. 93).

III. Lines of Rationalism

I want to claim that there is a *family resemblance* – a series of overlapping similarities – between the theories of thinking just rehearsed. While it is not possible to offer a full picture of this here (though see Williams 2016; 2015), in what follows, I will draw out show two central resemblance structures and seek to expose the philosophical assumptions that stand behind such structures, validating their idea(l)s.

Narrow argument

The first set of resemblances regards the foregrounding of particular conceptions of rationality, reasoning and argument. On the basis of what has been sketched above, it is not too hard to see that the notions of reasoning and argument are central constituents of accounts of critical thinking and philosophy for children. Moreover, it is not too hard to get a sense of what reasoning and argument are themselves being taken to consist of - usually, processes of activities such as conceptual analysis, inferential reasoning, and the production of logically sound syllogisms. Although theorists of thinking skills on one hand sought to get beyond an emphasis on reasoning, it can also be seen that similar notions of reasoning and argument also play a part in this tradition. Indeed "reasoning skills" are featured in the inventory of presented by the policy literature. Furthermore, and on reflection, it might also be said that a number of the supposedly additional cognitive capacities invoked in the thinking skills literature themselves may not be all that far removed from what goes under the banner of "reasoning", especially in the way it is conceived within the critical thinking movement. Are "evaluation skills" and "enquiry skills" not themselves part and parcel of what good reasoning consists in? Perhaps, then, it is not all that surprising that Gerald Smith's more sophisticated analysis ends by specifying that "deductive reasoning, causal diagnosis, argument construction and conceptual analysis" are the only candidates to which the concept of "thinking skills" can be meaningfully applied (2002, p. 665).

It is important to be clear about where I am going with the reference to this resemblance structure here. What I am not working towards is the simple suggestion that just because all predominant theories of thinking show a commitment to rationality, reasoning and argument, they are problematic. Indeed, it would be absurd to say this and it would be quite contrary to what I wish to suggest. For I take it that reasoning, rationality and providing arguments are key to thinking education – but, and this is a crucial caveat, *there are different ways of reasoning and of exemplifying rationality*. The problem with the predominant accounts of thinking in education, as I want to contend, is not, then, that they foreground the importance of rationality or of reasoning, or even of arguments. *It is rather with the determined conception of reasoning and argument that is at work in the predominant accounts*.

What conception is this? As I see it, the predominant accounts of thinking education all buy into a particular philosophical model, whereby effective reasoning is taken to be tantamount the presence of an "argument" – itself understood in a highly specific way as (ideally) a discussion that moves through a series of explicit and articulated inferences (using what philosophers call "propositions"), with a view to reaching a conclusion. I say "highly specific" so as to highlight how this conception is depending on a particular philosophical commitment – for having an "argument" in ordinary life often does not often proceed in this kind of way. Simon Glendinning has used the term "narrow argument" to characterise this "step-by-step" or "plain-speaking argumentative mode", which is held up as being exemplary in certain areas of philosophy today (2007, p. 20-22). This is a view that is further connected to the idea (1) that it is our *ratiocinative capacities* that are "of first importance" when it comes to

formulating arguments and offering reasons (p. 20). We shall come back to this point shortly.

Formal mapping

Let me now bring in the second resemblance structure I wish to highlight. This connects in important ways to the special conception of reasoning and argument we have just been unfolding. The structure in question relates, specifically, to the valorisation of generic and universal procedures of thinking within predominant discussions of thinking in education and the nearly ubiquitous reference to non-domain specificity. The very coinage "thinking skills" enshrines such a standpoint most evidently rendering as it does the idea that there are formal operations of thinking that can be mapped, sequenced, and exercised in a number of different contexts. Yet it is worth noting that the conception of "skills" such a picture hereby invokes - as bundles of knacks whose exercise does not involve and specialised knowledge - is something that has been elsewhere called into question as itself a false and reductive view of skills. It is not possible to attend to this argument in full here.ⁱ Yet my claim is that an emphasis on generality and universality is not a feature of the thinking skills literature alone. It is perhaps worth noting here that, as we saw above, in the realm of educational practice where the teaching of thinking has come to be formally included on the school curriculum, it has tended to take the form of qualifications that emphasise the teaching of "skills" and "frameworks" rather than "independent subject content" or a "major body of content." Yet a similar commitment is also exemplified in the other predominant theoretical discussions of thinking in education. Hence, as we saw above, recent defences of the role of philosophy in schools have asserted a link between philosophy and the development of thinking on the grounds that the discipline has no "substantial empirical knowledge base" of its own - a sentiment that appears to be echoed in the way that philosophy is employed as by certain factions of the philosophy for children tradition. Meanwhile, the tradition of critical thinking also exemplifies a commitment to the idea(l) that reason assessment can hold consistently across a number of domains. As Siegel argued, criteria governing reason assessment are not subjectspecific, but are rather the subject-neutral laws or principles of logic. For Siegel, moreover, such principles are generated by the philosophical tradition of *epistemology* - a universal tool for acquiring "a theoretical grasp of the nature of reasons, warrant and justification".

What can we make of all this? I once again want to suggest that this shared commitment to generic and universal processes of thinking is grounded in specific *philosophical assumptions* – about the nature of thinking and the way thinking happens. At this point, it will be useful to draw upon what Charles Taylor has identified as the "representational" conception of thinking. Representational views of thinking are the product of a particular philosophical tradition that can be traced back to Descartes. Descartes time was one of scientific revolution, and new aims for thinking at this time came to prominence. One in particular was the construal of thinking in terms of a project of *knowledge* – itself determined as "the correct representation of an

independent reality"; "a certain relation holding between that is 'out there' and certain inner states that this external reality causes in us" (Taylor, 1997, p. 3-4). In connection with this, a new emphasis came to be place on the discovery of reliable *methods* – adherence to which was thought to generate confidence in our mental operations and produce certainty in knowledge (p. 4-5). Taylor argues that, as a result, thinking came to be understood *mechanistically* – the content of our thoughts needed to be analysed and ordered explicitly "according to clear and distinct connections" (p. 5). Moreover, in line with the "representational" characterisation Taylor presents, thinking came to be understood as a *depiction* of the outer world. And these, in turn, have certain consequences for understandings of the thinking being or the picture of the mind-inworld.

The point of Taylor's analysis of the representational view is to open up the realisation that, even when the particular enterprise for knowledge instigated Descartes came to be repudiated (by contemporary work in analytical epistemology that rejects his foundationalism, for example), certain wider and deeper assumptions this project gave rise to – particularly about the nature of thinking and the human being who thinks – have been retained. Taylor specifically pinpoints such retention within the "strong draw towards distinguishing and mapping the *formal* operations of our thinking" enshrined by computer models of the mind (1997, p. 5-6). For Taylor, such domains manifest a "widespread faith that our intelligent performances are ultimately to be understood in terms of formal operations" - a faith whose strength derives from "the depths of our modern culture and the ... model anchored in it" (p. 6). I would suggest that a similar faith pervades the predominant theories of thinking today. For via the notions of generalisability and universalisability, such accounts promulgate a mechanistic and representational picture of thinking. They manifest a similar draw towards the mapping and sequencing of thinking in formal and controlled procedures - a similar unquestioned belief in methods as the means for generating confidence in oneself and the ways one thinks.

Subjects and Objects

I should like to go a little further with the analysis at this point. For I also want to suggest that these resemblances structures – of reasoning and the narrow argument, and of generalisability and universalisability – themselves depend upon certain assumptions about the human being *who* thinks (and about the things we think about). We began to glimpse something of this above within Taylor's account, but let me now make this more explicit. For I would claim that a precondition for understanding thinking as the depiction of reality and as what is to be conceived in formal terms, is the positioning of the human being *who* thinks as somehow separate from the world and standing apart from it. That is, the representational a view depends on the idea that the human being is *disengaged* from the world – and is dependent or reliant on the world in any way. Such disengagement in fact appears to be logically necessary once the aim of thinking is conceived in terms of knowledge and the accurate representation of external reality. For this achievement involves the idea(l) of grasping the world "objectively" – as it is

in itself. And this means, as Charles Taylor (2013) has pointed out, grasping the world as "a third person observer would." For this to happen we must step away from the world of our ordinary everyday experience. We must disinvest the world of objects around us of any meaning – for example the everyday meanings of a light switch that is out of reach; a deadline for work that is pressing on me; or a person who attracts me (Taylor, 2013). Furthermore, we must divest ourselves of intuitions, sensibilities and affective endowments. This is a radical sense of disengagement – from our ordinary modes of existence and from things as we ordinarily find them. It is an exclusion of anything that is not capable of being mapped in formal, third personal terms - hence we come to think according to articulable, quantifiable, formalisable lines or principles. This enshrines a certain valorisation of the cerebral and cognitive endowments of the human being. Our relation to the world becomes, as David Wood puts it, "in a real sense ... a priori". In doing this we come to occupy a position of mastery with respect to the world - like "a god enthroned, surveying its territory" (Wood, 2002, p. 47). Hence we can impose the generalizable principles whenever we are called to think, and whatever we are thinking about.

IV. The Ways We Think

A way beyond

Having now discussed what philosophical assumptions I take to be informing the current predominant approaches to thinking education, I want to start to question these assumptions. However, in what follows I will not be providing 'knock down' argument of these assumptions. Rather, I will appeal to a range of philosophical accounts of thinking to work, via a kind of a cumulative effect, to bring into view a conception of thinking that goes *beyond* such assumptions and such ideals.

It is perhaps worth saying something about what connects the philosophical accounts I will draw on here together. I want to suggest that this approach to thinking can be broadly construed as *phenomenological*. Now, phenomenology is a development in philosophy that took place during the twentieth century. I should like to follow Simon Glendinning (and others) in reading this development as one that "includes some of *the* major figures in contemporary philosophy" (2007, p. 5). More specifically, what I mean by "phenomenology" names not only a specific philosophical tradition, is rather exhibited in a *particular kind of commitment*. This is the commitment to *doing justice to what is given in experience* – to taking on the "imperative of staying with experience, acknowledging experience" (Wood, 2002, p. 33). In the context of the present discussion, this translates into the attempt to set aside philosophical presuppositions and assumptions about the nature of thinking, and instead do justice to the *actual ways we think* – which includes doing justice to *the human being who thinks*, as well as the *things we think about*.

This is not to say that phenomenology can be taken as a unilateral philosophical method.ⁱⁱ In fact, there are significant differences between individual philosophers' and

philosophical traditions' phenomenological approaches. This means that certain evaluative work is called for within this project. I will reflect this in what follows where I will discuss two pairs of couplets, comprising thinkers from contrasting (and at times opposing) philosophical traditions.

'Ahead of all beaten tracks'ⁱⁱⁱ

The first couplet to explore are the British ordinary language philosopher Gilbert Ryle and the German philosopher Martin Heidegger. What is particularly significant about the Heidegger-Ryle relation is the way both philosophers seek to provide a serious philosophical analysis of what is at stake in our everyday, engaged ways of thinking and behaving. This leads them to consider, not primarily intellectual and abstracted episodes of thinking (which had often been taken as exemplary in previous philosophy), but rather everyday episodes ranging from riding a bike, to hammering a nail into a wall. Through this, crucially, both Ryle and Heidegger come to offer quite a different – and more wide-ranging – account of our rational behaviour. In Ryle, this takes place through the discussion of what is at stake in what he calls knows *how* – practical modes of knowledge that he contrasts to *knowing that* (theoretical knowledge).^{iv} Heidegger's philosophy, meanwhile, discusses how humans are primarily and the for the most part beings who are involved and engaged in a world of concerns and projects.

I read both Ryle and Heidegger as opening, through this, accounts of the conditions of thinking that go beyond philosophical traditions that construe human beings' relation to the world primarily in terms of a detached, contemplative, theoretical grasp of an object. Of course, this is not to say Ryle and Heidegger are not in total agreement with one another. A source of critical confrontation is Ryle's Review of Heidegger's early text Being and Time. Yet one way of interpreting Ryle's Review is that Ryle is himself still too wedded to those conceptions of Subject and Object, discussed above, to fully appreciate the Heideggerian position. For Heidegger's account suggests that human beings come into a world that is already populated by a matrix of involvements, meanings and significances passed down to us by history and by culture. Such meanings are not wilfully and autonomously taken over by the human being, but are rather the background conditions that make all autonomous acting and behaving possible in the first place. This has implications for the ways we understand our practical modes of worldy comportment, but also for our contemplative and theoretical modes of thinking. For Heidegger, in fact, knowing as the contemplative grasp of a thing is itself 'a *founded* way of being-in-the-world, a way which is always possible only on the basis of a noncognitive comportment' (Heidegger, 1985 [1925], p. 162-164). Hence, Heidegger suggests, are *always* thinking within frameworks and matrices - detached, neutral thinking is a false ideal. These frameworks cannot themselves be turned into objects for critical reflection - or rather, if they are, such reflection will always be partial and selective, for there will always be further meanings and significances that remain unreflected upon.

What task emerges for thinking following this picture? It is interesting to note that, in their later work, both Heidegger and Ryle come to stress the receptive nature of thinking. Ryle, for example, characterizes thinking in terms of a gradual event of 'dawning', and as involving organic processes such as 'germinating' – and he contrasts this to academic conceptions of 'disciplined' thinking, which attempt make thoughts move 'like soldiers on the barrack-square' (i.e. in a highly regimented and controlled lines). Heidegger, comparatively, speaks negatively about the propositional and calculative ways of thinking that enact a kind of appropriating grasp of what is thought about. Against this, Heidegger construes thinking as a 'handicraft' - which invokes a sense of responsiveness that is further brought out by discussing the etymological relation between thinking and thanking. Heidegger's term here also invokes the sense that learning to think is an apprenticeship. It is not, as Ryle also puts it, a 'five minutes task'. Rather, learning to think is learning to dwell with and amongst the things we think about. Through this, new possibilities are opened for thinking, which are closed down if we just consider things one time, for one purpose, with a one-track mind. Some commentators read Heidegger's later work as a misguided move in the direction of mysticism and romanticism. Yet I would see it as an attempt to carry through the exploration of the conditions of thinking that were already implicit in his early work. Through this Heidegger – and Ryle – bring us to see that thinking is not the act of an already-constituted subject that presides over already-constituted objects. The ways we think are made possible by structures of meanings and significances that are beyond us. In and through our reception of these structures, however, our thinking is inceptive and projective – it opens the possibilities of something new.

Following the sign

At this point, I want to cross over to a second philosophical couplet: John Austin and Jacques Derrida. For I would suggest that, through their particular attentiveness to language, these thinkers take further the account of thinking I have just been articulating. To understand why, it is important to recognise that, as Heidegger himself came to suggest in his later work, language is not simply a *tool* for human use – the 'outer external clothing' for inward private thoughts that are in themselves fully fixed and secure in their intentional content. This view of language, in fact, goes somewhat hand in glove in the history of philosophy with the tradition of Subject and Object discussed above. Against this, however, is an alternative conception of language: one that takes language as itself the horizon within which human beings live their lives. This means language is fundamental to our thought and $\arctan - \ln fact$ to our being human. Moreover, this is not just language in the abstract but the particular language(s) we speak, and it is clear that different languages reveal the world in subtly different ways. In the light of this, it is worth considering the nature of the words and other signs (gestures, etc.) that we use, a topic to which few philosophers have given sufficient attention. Yet Derrida and Austin are notable exceptions.

Austin's exploration of language led him to discuss the nature of what he terms the "performative utterance". A simple example of the "performative utterance" is an

utterance such as "I declare this meeting open." Such a phrase, as Austin puts it, does not *describe* a state of affairs in the world but rather *does* something – the utterance is itself the opening of the meeting. Moreover, what makes such an achievement happen is *not*, contrary to what is traditionally assumed, the fact that there is some hidden, internal intention in the mind of the speaker. Rather, as Austin points out, the success of a performative utterance is guaranteed by the specific nature of the *context* in which the phrase is uttered and the conformity of a phrase to a particular conventional procedure. Such a view tallies with Wittgenstein's famous dictum that "meaning is use": words get their meaning not by being attached to objects or thoughts like labels are placed on items, but rather in the way they are used and put to use within communities and cultures.

Derrida shared Austin's rejection to the traditional picture of language and meaning. However, in an infamous essay Signature Event Context Derrida also argues that Austin's re-formulation of language has its own limitations. Derrida's argument was controversial for Anglo-American interpretations of Austin, and sparked critical, and some hostile, reaction. Yet Derrida's main concern was that Austin had held back from following through on a key insight about language that his discussion of the performative had, at the same time, opened. This is, in short, the way that it is a characteristic of the signs we use that they are "unsaturated" with meaning. This means that the signs are always available to new connotations and connections, and to new interpretations: in other words, they always have effects beyond our full control, beyond our intentions. At first sight, this looks both unconvincing and disturbing: is this not a new expression of the scepticism that says "we can never really know what we are doing?" That this is not the case is clear when it is seen that Derrida is describing the fundamental ways in which signs must function, the conditions within which we are sometimes clear about what we are doing and sometimes not. The signs that animals use are unlike the more or less mechanistic signs that charaterise the behaviour of the higher animals: their signs function in a more or less predictable functional way, and they function without remainder: animals carry on behaving the same way from generation to generation. The signs that human beings use, by contrast, are not static: a word is open to new connections and associations, we make inadvertent puns and Freudian slips, and we can project words into new contexts of use. A clear example of this last point is the use of the word "mouse" for the handy device that sits by the side of our keyboard. In poetic writing especially the possibilities of words and their potential connections, in sound and semantics, are explored in innovative ways. When small children speak they play with words, exploring new associations and connections. The fact that children, even in the earliest stages of language learning, produce original setnences is further testimony to this. This leads Derrida to a further claim, which again on the face of it is very surprising. This is that the unsaturatedness of the sign means that it depends upon something that is absent – upon connections and associations that have not yet been made. For the sign to be a sign it must be available to occasions of use that are not anticipated. We can imagine the unique construction of a tool for a particular purpose – a tool that existed for that purpose but then was never produced

again. But a word *qua* word can never be like that. Even a neologism must be available to further contexts. Derrida's expression for this is that the sign is iterable. A related way of thinking of it is that any sign, in order to be a sign, must be quotable.

Hence, it is the idea of the human dependence on a necessary absence that has been so powerful in his work. But why is this of significance? It is important because it opposes any idea that good thinking brings the object of thought under control, grasping it fully. Once again, this is not to outlaw the idea that we can sometimes grasp things or to deny that we can ever be sure what we are doing. What is under attack is a more metaphysical assumption that typifies the epistemology in question: this is that the best kind of thinking is epitomised by my holding something fully present in my mind, here and now, in a way that is autonomous and independent. The fantasy of independence here – one seen at its extreme in both Descartes' cogito ergo sum and in logical positivism (where my experience, here, now, are the ultimate authentication of the real) – derives from the fact that I lose sight of my necessary dependence not only on a background world but on the fact that the very terms of my thought depend upon usages that precede me and extend beyond me in ways beyond my control. This emphatically does not mean that I am simply determined by them, for the unsaturated nature of signs means that in my own thinking too they constantly find new connotation and connections. This is very engine of imagination and creativity and culture itself. Rigour and refinement in thinking will depend upon our attunement to these conditions.

Beyond rationalism

I have only provided a sketch of the alternative account of thinking I should like to propose here, and a number of threads that have been left hanging. However, we should already be coming to see how this conception moves beyond the lines of rationalism sketched above.

For one, curtailing thinking to narrow argument will not do justice to openness that is constitutive of human thinking. For another, focusing on generic procedures of thinking that can be formalised does not do justice to co-dependency between the ways we think and what we are thinking *about*. Moreover, and linked to this, the guiding assumption that thinking happens through a detached and disengaged subject does not do justice to the mediated and constituted nature of the human being *who* thinks. That is to say, when we think we do not simply represent things and make calculations: our thinking is productive in that, as receptive, it allows the world to open to us in new ways; in a sense it is productive of the what the world can be, which is evident not only in the products of writers and artists but in the achievements of science and engineering themselves. We are not masters of what we think; we think productively when we are receptive and responsive in these ways.

All of this is not, of course, to say that the rationalistic account is entirely redundant. It is not to say that we cannot do things like reason to reach a conclusion, use a technique for judging the credibility of evidence, or submit an idea to conceptual analysis.

However, it is to warn against the unquestioning adoption of certain philosophical ideals that cause us to over inflate such practises and hence exclusively focus on them as the bread and butter of an education for thinking. Furthermore, we must recognise that the rationalistic way of thinking is itself an approach that is made possible on the basis of a certain disclosure or revealing of the world. This is an important point to make for, as we noted above, current conceptions of thinking, bolstered as they are by their underlying philosophical assumptions, have a tendency to overinflate themselves and set themselves up as *the* way in which thinking in education should operate. They thus have the corresponding effect of producing the idea that the way the world is disclosed under their guise is the way the world essentially is. Hence the relative ease and confidence, the sense of "of course-ness" that marks so much of the literature on thinking education today. And yet such values are important only if we are approaching the world in a certain way. Of course there is a place for such approaches, but there is a danger if such approaches masquerades as the best kind of thinking or the most rigorous kind. Hence they *must be* placed within the broader understanding of thinking that I am advocating here.

Perhaps this discussion is taking place on too abstract a level. We want after all to say something about the education of thinking. Let me now turn to say something on this.

V. Lived Experience

What would a phenomenologically inspired approach to thinking in education look like? In what follows I will appeal to an example from my own work experience as the philosopher-in-residence in a UK secondary school (2008-2015).

Thinking with Camus

About two years ago, I was invited by a colleague in the Foreign Languages Department to join one of her lessons, in which they had been reading the play by Albert Camus, *Les Justes*, which is based on the true story of a group of Russian socialist revolutionaries who plan and execute the assassination of the Grand Duke Sergei Alexandrovich. In the course of studying this text a number of themes for discussion had emerged within the class. Knowing my background in philosophy, my colleague invited me along to stimulate further discussion of some of the themes. The brief was quite open; the teacher simply wanted her students to have the chance to re-engage with some of the interesting themes that had arisen in the course of the lessons.

I hence decided to structure the lesson loosely around a number of themes that I had found prevalent within the text, offering a hand-out of five key quotes from the play as illustrative examples. I stated at the outset that the themes I had picked out were likely to have been largely informed by my prior knowledge of Camus as a philosopher. I thus invited the pupils to challenge my interpretations (and, it should be noted, they did not need too much encouragement!). We read and re-read the passages I had selected, opening up and negotiating new meanings and significances. One pupil, for example, drew the class's attention to the epigraph at the outset of the play, which had interestingly not been included in my English translation. It was a quotation from Romeo and Juliet, Act IV Scene 5: "O love! O life! Not life but love in death". Does this mean the play, which is often cast as having a political message, could be re-read as a love story? And what kind of "love" is being invoked? We also pondered the differences between reading text in the English translation I had provided and the original French version the students had studied. One student felt that it seemed like a different play to her when she read it in English; this provoked discussion about whether one language can ever do justice to another, or whether there is a sense in which something is lost in translation. I do not think we got past the first two quotes I had selected in the forty-minute lesson.

This lesson did not end with a sense of self-satisfied contentment — as though we had got to the bottom of *Les Justes* and worked it all out. Rather we left realising the openness and richness of the text and the possibilities of interpretation that had emerged from our engagement with just a few sections of it.

Contrasts

This example does not serve to offer a complete picture of a pedagogical structure for teaching thinking. This has not been the aim. Rather it has been to appeal to a rich experience that can happen when we think - gesturing towards what thinking education might faithfully be. Often at present, the teaching of thinking is happening via *stand-alone* courses in their own right – qualifications that emphasise the teaching of "skills" and "frameworks" rather than "independent subject content" or a "major body of content".

Moreover, I was struck at the end of this class by just how different such a lesson had been from my usual experience of teaching existentialism within the A Level Philosophy course. Here, Sartre's philosophy is introduced as a version of "Libertarianism", and is pitted against the "other views" on the Free Will-Determinism debate, cast as "Determinism" and "Compatibilism". Given the demands of the A level course (Free Will and Determinism is only one module out of four required to be studied in the first year), I am barely able to spend two forty-minute lessons discussing existentialism. The result is that there is no room for thinking about and responding to existentialism as there was in the above-cited Camus lesson. In fact, what my students (and we might recall here that these are philosophy students) often end up with is a sense that they know all there is to know about Sartre's philosophy, simply because they can cite his argument in nugget form, and are able to roll out stock "criticisms" of it (that often largely comprise those listed in mark-schemes for previous exam questions). Of course, this is not necessarily my students' fault. It is a result of an exam system that is driven by quantitative assessment, by the tick-box culture that pervades over education as a whole. Rather than provide the space for open and rigorous thinking of the kind I have articulated in this thesis and would contend is in operation in the above-cited example of the Camus class, the A Level Philosophy lesson on Sartre rather seems to enforce a thinking that works by way of closed regurgitation.

Final words

This example does not, of course, serve to offer a complete picture of a pedagogical structure for teaching thinking. This has not been the aim of the present chapter. Rather, I have tried to offer an account of a non-rationalistic conception of thinking — one that will overcome current closures and open new possibilities for thinking in education. If we are to take the non-rationalistic account seriously, it seems appropriate that we should not end with a fully spelled-out, definitive programme. It seems appropriate, indeed, that we should rather end by gesturing towards what thinking education might faithfully be. This will not be an education that would satisfy the rationalistic criteria for what counts as "good thinking" or, indeed, the good *teaching* of thinking. For teaching thinking will not be a matter of developing technical skills in reasoning or argument. It is not an approach that advocates a standing back, and a judging of what is being thought about in terms of objectively defined criteria or standards. Neither is it an approach that seeks to make explorations of issues reach a stable and steady, fixed and firm conclusion. The ways of thinking I want to explore are not the activity of the self-secure, autonomous and independent subject. Rather, they are ways of receptivity and responsiveness - in other words, the possibilities of thinking beyond the narrow straits of rationalism.

NOTES

ⁱ See for example Winch, 2009.

^{iv} Notably, Ryle's appearance within a project assessing the nature of thinking in education is not unprecedented. In fact, Ryle's philosophy is often drawn upon in educational discussions of thinking; and paradoxically his distinction between "knowing how" and "knowing that" is often drawn upon to articulate the nature of thinking skills. However, I wish to point towards an *alternative* reading of Ryle —one that brings out the potentialities within his philosophy for a re-description of thinking that seeks to do justice to what actually happens when we think.

REFERENCES

Austin, J. L. (2009 [1962]). *How to Do Things with Words*. Oxford: Oxford University Press.

ⁱⁱ Sometimes it is taken in this way, however. For more discussion see Glendinning, 2007. ⁱⁱⁱ The phrase "ahead of all beaten tracks" is used by Ryle in to illustrate the nature of philosophical thinking (Ryle, 2009b [1953], p. 312). It bears relation to the way Heidegger characterised philosophical thinking as the "way" and the Holzweg. Heidegger's epigraph in *Off the Beaten Track* reads: "Wood is an old name for a forest. In the wood there are paths, mostly overgrown, that come to an abrupt stop where the wood is untrodden. They are called Holzwege . Each goes its separate way, though within the same forest. It often appears as if one is identical to another. But it only appears so. Woodcutters and forest keepers know these paths. They know what it means to be a Holzweg (2002 [1950], p. 1)." The Heideggerian motif of the "way" informs my own notion of the *ways* we think.

CIE. (2013). "AS and A Level Thinking Skills". Retrieved June 04, 2013, from *Cambridge International Examinations*: http://www.cie.org.uk/qualifications/academic/uppersec/alevel/subj ect?assdef_id=765

Derrida, J. (1973b [1967]). "Difference". In J. Derrida, *Speech and Phenomena And Other Essays on Husserl's Theory of Signs* (pp. 129-160). USA: Northwestern University Press.

Derrida, J. (1988 [1972]). "Signature Event Context". In Derrida, *Limited Inc* (pp. 1-21). USA: Northwestern University Press.

Ennis, R. (1989). "Critical Thinking and Subject Specificity: Clarification and Needed Research". *Educational Researcher*, 4-10.

Hannam, P., & Echeverria, E. (2009). *Philosophy with Teenagers: nurturing a moral imagination for the 21st century*. London: Continuum

OCR. (2012, June). "AS GCE Critical Thinking". Retrieved September 01, 2013, from *Critical Thinking*: http://www.ocr.org.uk/Images/130276-questionpaperunit-f501-01-introduction-to-critical-thinking.pdf OCR. (2013). Critical Thinking. Retrieved June 04, 2013, from OCR: http://www.ocr.org.uk/qualifications/as-a-level-gce-critical-thinkingh052h452/

QCA. (2004). "The National Curriculum: Handbook for Secondary Teachers in England". Retrieved April 04, 2013, from *National Archives*: http://webarchive.nationalarchives.gov.uk/20130401151715/https://w ww.education.gov.uk/publications/eOrderingDownload/QCA-04-1374.pdf

Glendinning, Simon. (2007). In the Name of Phenomenology. Oxford: Routledge.

Heidegger, M. (1985 [1925]). *History of the Concept of Time*. Indiana: Indiana University Press.

Ryle, G. (2009a [1928]). "Heidegger's 'Sein Und Zeit'". In J. Tanney, *Collected Essays Volume 1* (pp. 205-222). Oxford: Routledge.

Ryle, G. (2009b [1953]). "Thinking." In J. Tanney, *Collected Essays Volume 2* (pp. 307-313). Oxford: Routledge.

Ryle, G. (2009b [1958]). "A Puzzling Element in the Notion of Thinking." In J. Tanney, *Collected Papers Volume* 2 (pp. 404-419). Oxford: Routledge.

Siegel, H. (1988). Educating Reason. Worcester: Routledge.

Smith, G. (2002). "Thinking Skills: the question of generality" in *Journal of Curriculum Studies* 34: 6, 659-678.

Taylor, C. (1997). "Overcoming Epistemology." In C. Taylor, *Philosophical Arguments* (pp. 1-19). Cambridge, Massachusetts: Harvard University Press.

Taylor, C (2013). "Retrieving Realism." Schear, J.(ed). *Mind, Reason and Being in the World*. Oxford: Routledge. pp. 61-90

Williams, E (2015). "In Excess of Epistemology: Heidegger, Taylor, Siegel and the Conditions of Thought". *Journal of Philosophy of Education* 49 (1). pp. 142-160

Williams, E. (2016). *The Ways We Think: From the Straits of Reason to the Possibilities of Thought*. London: Wiley-Blackwell.

Winch, C. (2010). Dimensions of Expertise. London: Continuum.

Winstanley, C. (2008). "Philosophy and the Development of Critical Thinking". In M. Hand, & C. Winstanley, *Philosophy in Schools* (pp. 85-95). London: Continuum.

Wood, D. (2002). Thinking after Heidegger. Oxford: Polity Press.