Deliberation, Capability and Action Research: knowledge and becoming

Abstract

In this short paper I examine whether obtaining the capability to change practice can be solely achieved through reflective action research, and how. I take as our framework of analysis that offered by Aristotelian thought, especially in the discussion of powers and potential. I conclude that action research as a way of changing practice cannot be only deliberative, but must be based on learning new, propositional knowledge through what Dunne calls 'technical rationality' (Dunne, 2011). This is needed so that reflecting, as understanding, on existing practices can be better realised and, importantly, augmented by new capabilities. This may support the idea of continued professional learning taking priority over reflective practice in reaching and maintaining professional mastery.

There have been many significant contributions to the understanding of action research, particularly exploring its social critical theory heritage, that have resonance with contemporary thought. In preparing this paper I was struck not just by action research's epistemological modernity (see Elliott 2007b), but how it engages with the ontological in terms of emancipation and its application to learning as a validating practice of professionals. It is the use of reflection in the action research process of becoming a professional that interests me, and to explore this I specifically refer to Aristotle's works in the *Nicomachean Ethics* and *Metaphysics* (1995) to examine the process of obtaining the capability to become and maintain a professional identity and status. I take as my framework of analysis Aristotle's discussion of powers and potentiality in *Metaphysics IX*, with reference to commentaries by Heidegger (1995), Witt (2003) and Eikeland (2008).

I propose that it is not enough to suppose that a practitioner can engage in action research without the capability to change, regardless of any desire or intention to effect change in others or their own practice. Practitioners must address a range of knowledge needs including how they might develop their potential to understand, to benefit from action research. In this I support Papastephanou in her claim that the 'issue of the ends of action persists and demands a constant critical vigilance on the part of the practitioner' (2012:110). In agreeing with her that actions include both an act and an end, I wonder how this vigilance is first obtained and then practised by a

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professional. In other words, what is the relationship between a practitioner's capability to engage and to understand, and to act with intention to effect change for the good of others and themselves? How does the evaluation of action revealed through action research relate to the existing learnt capabilities of the professional? Do these current capabilities restrict deliberation and in specific situations limit our potential to act for personal change? That is, what is the relationship between the unknown capabilities revealed through deliberation, a disposition to learn new capabilities through experience and the limitations to our capabilities to act that are passive, and our ability to reflect upon our actual practice of that agentic potentiality in reaching our goal of being a good, masterful and wise practitioner?

Aristotle might answer these questions by means of a discussion on the virtuous accumulation of practical experience in the *Nicomachean Ethics*, where he concludes that 'practical wisdom, then, must be a reasoned and true state of capacity to act with regard to human goods'. (1995, 1140b: 20/21). I draw two distinctions here. The first concerns one's desire and ability to be, and the second one's capacities for being and for becoming.[1] In the first, Aristotle is not assuming one can be whatever one wants to be; rather, one has a disposition to become what one is able to be – an ability or talent. Aristotle points to the relationship between being actually and being potentially (1048a–1048b6). The second is discussed throughout this paper. They are linked, however, in a dialogue on whether action research is an instrumental tool for the enframing of practice within a form of epistemological scientism, as in the presencing of the 'formed' professional or the capability to change towards, always becoming, in the sense of 'can be' clearly intended by Aristotle in the opening lines of both books, Δ and Θ, of his *Metaphysics.* It is through the Aristotelian notion of *dúnamis* (potential based on capacity to change other entities and ourselves) by *energeia* (action towards actuality) that the questions about our being and becoming are addressed (see commentaries by Heidegger, 1995; Weiss, 1987; and Dunne, 1993).

Action research as building wise professional capability

There is a comprehensive literature on action research and its place in stimulating the professional practitioner actively to evaluate the quality of their practice (Li, 2008). The debate on its role as either as an instrument of professional practice development or as

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[1] Beere suggest that he believes that 'Aristotle's definition of motion requires us to accept capabilities for being that are distinct from capacities for becoming and whose *energeia* is a case of being, not becoming' (2009: 204). This notion seems to make phenomenological sense and is seen in the interaction of social life by Schatz (1967).

the prime investigative tool is illustrated by Elliott (1998, 2005, 2007a, 2007b); Hammersley (2004); Papastephanou (2006, 2012); Kemmis (2009); and McNiff and Whitehead (2010), amongst others, and I do not intend to explore it further here. It is sufficient for this investigation to note Hammersley's conclusion that 'the core feature of action research seems to be that there should be an intimate relationship between research and some form of practical or political activity—such that the focus of inquiry arises out of, and its results feed back into, the activity concerned' (2004: 165). Action research, then, may be considered as a *praxis* that reveals opportunities for personal change, albeit initially revealed in a specific situation (in a form of practical reasoning), as discussed extensively by Kemmis and Smith (2008); or it may be considered a *poiesis*, a form of production intent on improving the efficiency of the practitioner in respect to external quality criteria.[2]

A clear theme in the literature is recognition that it is not sufficient for the practitioner's use of action research to have no teleological purpose; the intention must be to improve professional practice. Action research is a way for the professional to take a stance on who they are or who they desire to be. It is not a process of discovery that can only be concluded once our journey has ended. Action research has made a significant contribution to an understanding of our agency in our everydayness that contains intention and may have moral, political and utilitarian objectives beyond the presencing of the research and into the ontological preparedness of being. Moreover, if these intentions they are to be realised they require both the latent ability to perform the change required (to act) and a worthwhile reason to do so. Is it impossible to undertake action research with no consideration of professionals' potential capabilities, for they will determine the scope of response to reflection and feedback Then, the limitations of their potential critical powers and their knowledge will constrain the advantages of such reflection.

Our very being is thus constituted by our choices and our actions and is thereby contingent. The temporal stability of our practical identity is about how, through deliberation, we decide the form of our being in the process of becoming the entity we seek to become. For Aristotle, action is normative:

> (T)he man who is without qualification good at deliberating is the man who is
> capable to aim, in accordance with calculation, at the best for many of the

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[2] This definition excludes the notion of *theoria* that some maintain (e.g. Hammersley, 2004), but this argument does not need such a concept.

things attainable by action. Nor is practical wisdom concerned only with universals – it must also recognize the particulars; for it is practical, and practice is concerned with particulars. (1141b: 12–15)

We engage with new activities supporting this notion of our reconstituted self, and avoid others, as a process of becoming, giving a consistency to our identity through the choices we take and the actions we engage in when our practical identities clash. This creates dilemmas to be solved in ways that best protect the form of identity we use to guide our actions. Guidance is provided in the principles and practice upheld by the professional body, once the will to be such a professional is disclosed and admitted. However, how do we make the judgement of knowing even whether to act, and what capability is required to deliberate on the actions undertaken; and how do we develop the skills and practices(*téchnē*) to act? This raises a key issue. How do acquired skills and the practice that they form become powerful enough to shape new circumstances, when their use differs from how they were originated so as to be ready-at-hand in new and novel situations? This awareness of oneself and one's action, and any consequential capability to act to change, comes from our understanding of the work world in which we exist, our familiarity with it and our disposition to move towards the becoming of a professional, and the call upon us to respond. Thus our potential to be, the power to change what and who we are, is linked to our actuality and our judgements and values.

The point in returning to Aristotle's notion of gnoseology is not to deny the benefits of action research, of which there are many well documented instances. A leading contributor, Kemmis (2010a), discussed action research in changing practice and understanding, and in praxis (2010b), in scholarly examples suggesting a wide notion not restricted to a constrained notion of *phronēsis* and *praxis* reliant on experience. This is supported by Dunne's claims that in 'becoming experienced, he has been involved not only in acquiring information but also, through this very acquiring, in a process of self-formation' (Dunne, 1993: 130). Without an externality to mediate what is already unfolding into something transformative, action research is either limiting regarding what is known, or it is overly idealistic, implying that a world outside the person either does not exist or is not available to the person

Aristotle introduces *phronēsis* in his earlier books, *Posterior Analytics* and *Problems,* but discusses it in most detail in Book VI of *Nicomachean Ethics.* Here he discusses the nature of truth and places practical wisdom in the five forms of knowing;

'art, knowledge, practical wisdom, philosophic wisdom, comprehension' (1139b15). The goodness of *poiesis* can be determined by judging the quality of the product or end achieved, that is, the object produced by using craft knowledge or skill (*téchnē*); for example, the goodness of the practice of teaching shipbuilding is determined by the quality of the ships constructed. Determining what counts as a good end, however, is ultimately the result of theoretical deliberation (*theoria*), with its own form of generalisable knowledge (*epistēmē*) and judgement (*sophia*). *Praxis*, on the other hand, is concerned with a different kind of end: ethical action.[3] The end or *telos* of *praxis* is not an end in the usual sense at all, but some morally worthwhile good that cannot be determined in advance and must be discovered in particular contexts and situations. *Praxis* involves acting appropriately to lead a good life, meshing ends and means, since the 'discernment of the 'good' that constitutes its end is inseparable from a discernment of its mode of expression' (Carr, 1987: 169). The ends and means of *praxis* cannot be easily distinguished: how teachers teach becomes *what* they teach.

Such knowledge informs Aristotle's observation: 'practical wisdom, then, must be a reasoned and true state of capacity to act with regard to human goods' (1140b: 20/21), and is a form of rationality that deals with opinion. Moreover, Aristotle argues that the experience of the practically wise gives their opinions equal validity with demonstrated (empirical) fact. Green (2009) suggests that professional practice is an interrelationship of:

- *Phronēsis* which covers practitioners' capacity to employ practical rationality (not technical rationality)
- *Praxis* which deals with practitioners acting in ways that further the goods of the practice. Here, the moral dimension of professional practice is being emphasised
- *Aporia which* refers to the 'confrontation in one's practice with irresolvable problematics, or paradoxes' (2006: 11).

Kristjánsson (2005) discerns three perspectives from which the revival of Aristotelian ideas has been carried out: the *ethos* perspective, the *logos* perspective and the *phronēsis–praxis* perspective (PPP). Kristjánsson makes a compelling case against the dominance of the PPP in thinking about *phronēsis,* and I suggest that such a reading is correct where *phronēsis* is taken as a unitary, self-contained way of being

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[3] Kemmis and Smith hold that praxis is distinct from both *theoria* and *epistēmē* (2008: 271), not a position supported by my reading of Aristotle's gnoesology, which is integrated.

that elevates it beyond constitutional knowledge. I would argue that Aristotle balances *epistēmē* and *phronēsis* so that the latter is not too self-indulgent, and recognises the need for constant reference to epistemic givens. The answer might be in the way Aristotle understands theory: *theoria*, not as something detached from practice as in *theorisis,* but as something of an overview of an issue to be ontologically decided. It is feasible at least that the good *theoritikos* will review the whole issue and realise that a phronetic decision cannot be grounded on available knowledge. This creates a distinction between views as effective thinking rather than critical thinking. The kind of thinking that pertains to this paradigm is 'effective', and we reserve the term 'critical' for a more comprehensive kind of thinking that has a strong *aporetic* quality (Papastephanou and Angeli, 2007: 614). It is feasible (Eikeland, 2008; Papastephanou, 2013) that *theoria* can be the connecting element mediating between *epistēmē* and *phronēsis* and this support the position of Lear (1988), that *episteme* itself is reflective, for one 'cannot understand the world unless one understands the place of understanding within it' *(ibid,* 8).

This, of course, needs textual evidence from Aristotle.[4] It is through the quality of our deliberative reflection that our power to realise our potentiality in achieving a prior actuality is revealed. However, such a revelation requires the mediation of *phronēsis*, the practical wisdom that, combined with perception and intuition, enables action within the phenomena of everyday life, whereas *epistēmē* or theoretical knowledge concerns itself with principles rather than the practicalities of living within the mortal world.[5] The ability to make practical judgements is based on deliberation and practical reasoning, mediated by experience and a discernment of the situation. Outside of the strictly Aristotelian framework, an easy way out is to say that the decision maker will know that more *epistēmē* is needed if the problem persists in one way or another. What is more demanding is a case where the problem is solved (though in a way that challenges the felicity of *phronetic* decision in ways that remain imperceptible to the decision maker). In response to this is the kind of *aporetic* critical thinking that problematises the unproblematic. So, the decision maker will not quite know that they need more knowledge, but rather suspect that they do through

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[4] A view expressed in a private conversation with Papastephanou, 24.4.2013.
[5] According to Papastephanou (2012), Aristotle's *gnoseology* (knowledge) is determined by the fact that the knower is always related to a known in multiple ways. Those segments of reality that are not produced, modified or developed artificially invite theoretical ways of knowing. This effort may result in *episteme*, that is, in a systematically searched, adequately stabilised and secure knowledge about external things that display some regularity.

awareness of the inconclusive character of thought procedures and by asking deeper questions that thematise the very apparent questionless-ness of daily normalcy.

This clearly needs time away from action and a learnt capacity to reason critically. Moreover, this criticality has to be one where the reality in which thinking is undertaken considers the realities in which *theoria* and *epistēmē* have their relevance. Aristotelian notions of the level for mortal understanding and deference to ultimate understanding (*sophia*) to the gods may be indicated as sympathy within Aristotle's own gnoseology. This idea's argument follows the propositions of critical realism that question a mono-pre-determined reality, but support a laminated notion of realities for research (Bhaskar and Danermark, 2006). Such a conceptualisation allows insights to be drawn about the unknowable and ends of the action. Moreover, it avoids the cynical trap found in Socrates' dialogue with *Meno* (Plato, 80: d–e) of not being able to know what one does not know because, if one could know it, then one would have known it! The response reviewed in the *Nicomachean Ethics* is the multi-dimensional realities of morals and Gods that constitute Aristotle's gnoseology.

For Aristotle, *dúnamis* is both the power to change and the potential to change. For instance, we need to want and have the disposition to change the state in which we currently exist; but that is not sufficient. We also need the means to do this, and the two need to be synchronised. To want to be actually better at something is not sufficient to warrant the end one wants. One must also have learnt and understood the skills necessary to be capable of achieving the end. We might want to play for Arsenal, and have learnt the skills of a football player as we see them, but morphologically we are too small, heavy or tall to be able actually to achieve the status of becoming a professional football player. We may be timid, thoughtful or unable to comprehend the tactics or the social norms of football players.

Quoting directly from Aristotle on what he means by *dúnamis*:

> it is clear that actuality is prior to potentiality. And I mean by potentiality not only that definite kind which is said to be a principle of change in another thing or in the thing itself regards as other, but in general every principle of movement or rest.... To all such potentiality, then, actuality is prior both in formula and in substance: and in time it is prior in one sense, in another, not. (1049b: 5–11)

Aristotle sees the relationship between potentiality and actuality as one where actuality takes priority over potentiality. In this he means that our potentiality is towards something that must exist prior to our current state, in order that we can potentially become that. His examples from nature make this point more directly. A child is potentially an adult, and not to seek to be so is unnatural; a craftsman seeks to be a master builder and needs an image of what this is to aspire to it and take a stance on becoming. These two examples, of course, concern different aspects of the actualisation of potential. One is the progress of nature, the other the deliberate use of one's powers to shape what one might be. Witt summarises this well when she states that the priority 'in being is ontological priority, it refers to the existential dependency of being potentially on being actually' (2003: 78). However, this is not an issue of suddenly coming to know without learning or practice. In all cases learning is based on existing skills and capabilities, as Aristotle claims, 'of that which is coming to be, some part must have come to be, and, of that which, in general, is changing, some part must have changed' (1049b: 35). Moreover, as Ide points out, 'capacity is necessary for potentiality although capability is divorced from possibility' (1992: 25). That is, we might have the potential but not actualise the possibilities this may confer. This distinction is both a counter to actualism and tends to be overlooked in the action research literature (See Dick's review of the literature, 2011). For Aristotle, the agent power is an entity acting upon the passive power of the recipient of the action. They are distinctively different and form two entities. The distinction is the separation of acquired powers of learning and practice from natural, maturational powers. This is a problem for my use of *dúnamis* in personal change through professional development, as foreseen by Witt (and by Beere 2009: 59) who comment that if 'an object changes itself, as, for example a doctor might cure herself, then Aristotle's different object requirements holds that we must divide the doctor into agent and patient' (*ibid*: 42).

Witt (2003) explains the difference between the non-rational and natural potential for being that is biologically triggered – child to man – and the rational potential caused by agency towards other and ourselves as in trying to become a good professional. Witt proposes that 'what exists potentially is ontologically dependent on what exists actually, but what exists actually is not ontologically dependent on what exists potentially' (2003: 13).

Aristotle distinguishes how powers are acquired; some are innate and others, those that are rational, are obtained through learning and practice (1047b: 31–35) and how they may be used. Acquisition of these powers is to a being already able to

undertake and use the learning so acquired, which supports Aristotle's premise that actuality is prior to potentiality but only in the sense of being able to learn and act. How to act with these capabilities upon those we might decide to do is deliberation: we deliberate through critically thinking about things that are in our power and can be done (1112a: 31), and 'not about ends but about what contributes to ends' (1112b: 13). We deliberate where we recognise we have a choice, and where we may involve others 'to aid us in deliberation on important questions, distrusting ourselves as not being up to the task' (1112b: 10–11). The deliberation of what might be otherwise is a type of plausible reasoning that, according to Aristotle, is the syllogistic form of deductive logic. Deliberation is not about ends but 'what contributes to ends' (1112b: 12) and, moreover, once we have made our choice, Aristotle leads us through *The Rhetoric* to the 'use of persuasive speech to lead to decisions' (1939b: 18).

Deliberation is, according to Eikeland, a 'general and common competence that presupposes more specialised and substantial competences and insight' (2008: 459). This does not contradict the notion of acting in a recognised but unfamiliar situation without deliberation, as an expert is able to do; rather, it is a complement and offers justification where others need to be convinced. In this is reveals theory, technical knowledge, judgement and values and may well signal changes in practice (Luntley, 2001).

Clarity needs to be sought here in respect of the realisation of latent capabilities in action, for one would assume that these may be revealed through contemplation prior to deliberation. For Aristotle, however, such transformation is not evident. Contemplation is not a precursor to action but to intellectual reasoning (1178a:8–1179a: 32), and therefore is not the equivalent of self-reflection.[6] Indeed, Aristotle scoffs at such an idea (1213a: 1–8) for reasons diametrically opposed to Marx's comment: 'philosophers have only interpreted the world in various ways; the point is to change it' (1998: 571).

But this is a shift from the priority of actuality to the priority of possibility. The idea seems to be that you either possess a capability evidenced in action or not. Indeed, Beere claims that Aristotle prioritises what he calls the 'Being-in-*energeia* over the being-in-capability in terms of a person who merely has but is not using their knowledge is a knower to a lesser degree (than)… the person who is using their

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[6] It has been suggested that Aristotle considered self-reflection as self-control but not as self-realisation (Pakaluk, 2005). However, I prefer to consider it as a dialogue between passive and active agentic within the agentic I. In this way Aristotle's premise that reflection on action is first amongst friends (1172a10 – 14) and internalised once it has been established in the company of others. (see Eikeland, 2008: 352–355).

knowledge fully really, truly, and is in the higher degree a knower' (2009: 176). The support for this comes from Aristotle when he claims that the 'actuality is the end, and that it is for the sake of this that the potentiality is acquired' (1050a: 99–10). Dunne attributes this almost exclusively to *téchnē* (as the transformation of *dúnamis* and *energeia* this has resonance with certain models of action research: see Kemmis, 2010a and Dunne, 1993). My point, developed from a reading of Burnyeat (2012), is that the critical issue is not simply achievement of the end by the best conceptualisation of the end: it requires not just knowledge in practice, but understanding. This understanding requires one's being aware of insufficient or inadequate knowledge and needs knowledge as *epistēmē*. For Aristotle the problem is clear, in that we make mistakes in our presumption of truth when 'either we cannot grasp anything higher apart from the particular, or we can but it is nameless for objects of different in sort or that of which it is proved is in fact a whole which is a pert of something else' (74a7/8).

How, then, do we explain those situations when we say, 'I did not know I could do that!', or 'I did not know I should have known that', even when such lack of knowledge did not prevent me securing the end of my willed action'? For the moment, I assume that reflecting on the actuality of practice maintains priority over the potentiality to learn from reflection, provided the passive powers exist and are sufficient for reflection upon action research to activate this potentiality. Such capabilities, however, may be missing if they were not previously learnt or practised, because the agent is unable or unwilling to obtain them for use in the reflective cycle of action research. For example, if teachers do not recognise (both in the sense of knowing and understanding) a specific form of learning difficulty in a child, they are less able to offer support by reflecting on a specific problematic instance than those who do have this *epistēmē*[7] or *theoria* to conceptualise an end, regardless of their perceived wisdom. As Aristotle proclaims, 'potentiality is discovered from actuality' (1051a: 31). However, it seems for Aristotle that to have capability, learnt or practised, does not reflect one's level of competence or expertise. You may have the capability to be great or average, yet your actualisation of that capability constrains your possibilities. If I know about distributing drugs as a nurse but do not care about the patient, I will not understand what it is to be a good nurse. This is the essence of motion as the sense of alteration that is, utilisation of capability as '*actual exercise, activation* of the capable as capable;

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[7] I am using *epistēmē* in the sense of Burnyeat (2012), where he claims Aristotle uses it in the *Posterior Analytics* either to refer to the cognitive state of the knowing person or to a body of knowledge.

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for example, it is not simply the presence of the wood as buildable, but the actual exercise of this potential in the activity of building' (Gonzalez, 2006: 536).

So how does one acquire *dúnamis,* and what is its relationship to knowledge; to Aristotle's gnoseology? Exploration of our being provides the potential for us to understand our life project and to seek it (of course, we need more substantial change if we are on the wrong trajectory). It is not deterministic, but neither is it unencumbered; it requires a blending of knowledge, such as *téchnē*, *praxis* and *epistēmē*, in order that we might have power to reflect and deliberate on the good to be achieved by our actions. The thinking that is the deliberative act is not contemplation by critical thought. This is the key to the *dúnamis* transformation from abstract idea to concrete form (Eikeland, 2008: 176). Through deliberation, it amounts to an examination of our way of dealing with knowledge and how, through *noeis*, we are able to consider the fallibility of our actions and the alternatives that might have been. Through this form of thinking we come to understand our actions and reflect on more suitable ways of achieving our goals. Critical thought reveals the deficiency in both our potential to act and our ability to do so; our deficiency in critical thinking constrains our ability to master our profession. Critical thinking, aided by epistemological interventions, operates through theoretical frameworks and the praxis of our actions. In so deliberating we are able to move in 'a more comprehensive way, towards a practical act as is conclusion instead of producing just another theoretical assertion deductively, saying something about something' (Eikeland, 2008: 134–135). Such deliberation presupposes adequate knowledge of the subject; lack or insufficiency, will limit change to 'good enough' solutions at best. Indeed, I propose central to the learning process of action research is the revealing and problematising of the unknown.

Concluding comments

Returning then to the action research literature, I am drawn to the argument (e.g. Elliott, 2007a) that action research can contribute to the building of capability for worthwhile change. In this respect, action research is not a specialist set of skills relevant onlyfor certain circumstances although, according to Carr and Kemmis, it might well be that we have a multifaceted and transdisciplinary way of being. Action research can have a function of transdisciplinary production that leads to new ideas and knowledge becoming available to others. Indeed, Barnett (1997) suggests that practice might be shared across disciplines to build 'critical interdisciplinarity' (Barnett, 1997) in which the different assumptions and values underlying disciplines are

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explored, thereby reconnecting questions of professional development and pedagogy to academic disciplines and research.

Moreover, action research may 'improves practice by developing the practitioner's capacity for discrimination and judgement, in particular complex situations. It can unify inquiry, improve performance and 'the development of the person in their professional role' (Elliott, 1998: 54). This capability is an ontological driver of the actuality of becoming what we desire to be. It is made manifest by questioning the reality, of our everyday experience with the knowledge that we have, and with a preparedness to create new knowledge. Yet this might be insightful to act for new possibilities to shine through. Reflection in context is reflecting on the mirror image of what is set to be, the trajectory of closure rather than one of difference[8], So whilst I acknowledginge the development of action research within Stenhouse's notion of teacher researcher (1984), about it has a substantial contribution beyond one's professional situation. Action research, in the sense of creating and reproducing practical knowledge testable in the world of practice, ais the a fusion of practice and theory in *praxis*. It creates an understanding of how the potentiality of being can be made manifest as performance. .
For Indeed many this will seem like a teleological approach where we take a stance on the authentic being we want to be. Luntley inventively argues, 'it might turn out that expert practice brings to light rules and discriminations hitherto missed' (2011: 37), It is this questioning of what might be rather than the ability to be what one takes oneself to be but some how better As Haraway and Barad sugges the use of diffraction not in place of self reflection where this is meant but where change is desired the metaphor diffraction open up more possibilities, it is "about making a change in the world rather than being endlessly reflective(Haraway, 2000: 104). That is diffraction" does not produce 'the same' displaced,

as reflection and refraction do. Diffraction is a mapping of interference, not of replication, reflection, or reproduction (Haraway, 1992:300). Reflection can lead to a closed approach rather than providing the conditions, language and conceptual metaphors for significant transformational change. To this extent the notable work of Haraway significant.

Supporting some of the claims of Kristjánsson (2005), action research cannot be just *phronēsis*, for *phronēsis* is practical perfection of both ethical and intellectual virtues. Action research is an act of being and *phronēsis* contributes to that. The stipulation for action research, surely, is that it is worthwhile and contributory.

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[8] I am grateful for a reviewer of this paper for the insight shown to me here.

Undertaken in any workplace, it needs to be performed with a virtuous disposition and realised in worthwhile action as simply the application of the *téchnē* of action research cannot do. Without a sound prior understanding of the issues, there is little potential for action research to offer the desired significant ontological change to professional lived experience. The argument is that, in order to question the observed situation effectively, basic capabilities need to be present in order that a difference might to achived. Reflections about snow, for instance, differ with one's historical perspective. If you are an Eskimo, the range of your potential actions differs from that of a nomad from the Sahara Desert. This is a question of practice in relation to the reality of snow or how one might choice to take snow to be. Snow has different meaning depending on the skilfulness of the practitioner and the use to which it is put. Following the lead of Eikeland (2008: 465), I ask whether action research has been too easily adopted into enquiry without sufficient attention to the development of *epistēmē and téchnē,* and whether critical thought is able to act in the most appropriate (not perfect, but well informed) way on the potential for change revealed by the action research process as reflection for action. This might be seen as a specific and individualist question, and I would support the idea that, unless one understands what is good for 'one', it is difficult to know what is good for others. However, action research needs others and isolation from the social context of knowledge production. To ignore this closes the open spaces and systems that are combined in the philosophical position of critical realism and the emergence of transdisciplinary knowledge and transdisciplinary professions. Such emergence is coherent with the reading of Aristotle's gnoseology as a more practical way of knowing suggested earlier, but a detailed examination is beyond this current paper.

Without what Rorty (1999) would describe as systematic learning, we are not in a position to inquire and question what we have taken for granted to gain an understanding of our tradition and limited way of being. Certainly, help from others in the form of critical companions may be a helpful way to improve one's potential to reflect on action but, unless help is at hand to engage in the change, the implicit value of action research may be lost.

There is a concern that if action research is accepted in the form taken as unproblematic for professional development, it assumes that reflection will provide the potential for change. My argument is that reflection releases exciting capabilities, learnt prior to the capability to reflect but is fallible for it can not extend beyond one's exiting knowledge or readily reveal alternatives. Action research can only provide change to

the extent that participants are able to recognise the full potential for change, and that this recognition is directly related to their capability pre-existing the reflection to act. It is because of this that one needs to be cautious about professionals engaging in action research when their aim is not the realisation of the potential to take a stance on one's being, but the confirmation of existing knowledge sets. Action research should involve a personal change in the agentic professional, supported by others whose own reflections increase the potential empowerment of capability to act wisely for themselves and for others. This practical, wise identity judges as a creator, blending dynamic experiences in a complex manifold of skills and experiences. The skill is in knowing when, and then to make judgements based on deliberation, interpretation, reflection, and practical reasoning, mediated by experience and a discernment of the situation. Specifically, deliberation is not measured by time but by the correctness of what is beneficial; about the right thing, the right way, and at the right time.

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