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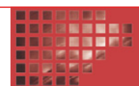

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EDITORIAL

Reason and value: making reasoning fit for practice

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Few would dispute the claim that sound reasoning in clinical practice is worth cultivating. That is, of course, because the claim is a platitude: it is hard to see how anyone could seriously maintain a contrary view. We might explain sound reasoning with reference to a number of evidently desirable qualities: we want practitioners who think critically, are reflective and perceptive, able to evaluate theoretical claims and evidence to assess their relevance in particular cases. We might add that this means understanding the value of particular outcomes to the care of individual patients, such that sound reasoning involves not just knowledge of causal mechanisms and the findings of research, but also an appreciation of and respect for the patient's autonomy and value.

To leave such claims unanalysed is to make them barely worth asserting. These are things that, outside of a management 'vision statement', might 'go without saying'. This is not because the nature of good reasoning is well understood or that cultivating it in professional environments is a straightforward matter. The moment we attempt to go beyond the platitudinous, to say something with substantive implications for practice, we find ourselves confronted by controversies of a fundamental nature. Even if we agree that 'critical thinking' and 'reflective practice' identify important components of good reasoning, when we try to spell out precisely what we mean by these terms, in a way that could enable us to recognize and develop these qualities in real situations, any initial appearance of general accord soon evaporates. Not only is there no broad consensus on the essential components of good reasoning in clinical practice, but where there are differences, we lack a clear and agreed method for producing answers that all rational parties will accept. We have entered the traditional intellectual territory of *philosophy* [1,2].

As we have noted in previous editions of this journal, philosophy requires us to identify and question underlying assumptions that frame our thinking about a vast range of issues. Discussions about the nature of evidence, the proper goals of practice or the nature, scope and limitations of clinical reasoning, can appear intractable because we bring to them assumptions that may typically lie in the background, rarely subjected to critical scrutiny [1]. It can initially come as something of a shock to discover that other apparently rational persons do not share assumptions that may have slipped so far into the background as to strike us as sheer common sense [2]. Even so, if we are to say something on such important matters that is at once substantive (going beyond platitudes) and defensible (justifiable in principle to other reasonable people) – if we are even to understand the nature of our disagreements, let alone find realistic ways to resolve them – then we cannot avoid doing philosophy in this sense.

This gives the lie to the much-touted opinion that philosophical questions have nothing to do with 'real life' [1]. While it is of course possible to declare oneself too busy, too practical, too scientific or even too ethical to do philosophy [3–8], one does not thereby succeed in thinking without the assistance of any conceptual framework or background assumptions – rather one simply assumes a framework that one fails to defend or even adequately articulate [9,10]. Whether motivated by arrogance, intellectual laziness or some other moral or epistemic vice, there is nothing pragmatic – in any worthwhile sense of this term – about such a

mentality. One is no less an inhabitant of the real world for being prepared to explain and justify oneself to its other inhabitants, even when doing so necessitates engaging with problems to which there is no ready-made solution, nor even a single, universally recognized method for finding the right solution [9,11].

The need for philosophy indicates, simply, that we have not reached the end of intellectual history [11–13]. Whether or not it is possible for any human society to reach a point when all of the really important, fundamental questions about life and practice have been definitively resolved, an honest evaluation of our current understanding of the world and our place within it suggests that we, certainly, have not yet reached that point. As such, we need to be prepared continually to re-evaluate our underlying assumptions when making pronouncements upon matters of substantive import. A culture that eschews the open discussion of underlying questions of this sort is prone to dogmatism and intellectual stagnation [14,15]. It should not surprise the thoughtful person that the evolution of the human intellect did not reach its final conclusion at just the point when she appeared on the scene [12], and this fact presents us with an exciting opportunity. Just as we owe what insights we currently enjoy to the extensive 'labours of our ancestors' on whose 'shoulders' we stand [13], so we have the opportunity to continue that evolution, to contribute to the process of criticism and analysis in the pursuit of intellectual progress – to provide a platform upon which our descendants may stand when making further progress.

Since its inception, the *Journal of Evaluation in Clinical Practice* (JECP) has cultivated the rigorous, incisive analysis of topics crucial to progress in medicine, including the nature of evidence and its relationship with clinical judgement, where necessary challenging the prevailing wisdom of the time and always reminding us that the major questions in these areas are by no means settled [16–26]. It has produced two thematic editions devoted explicitly to philosophy in medicine and health care [1,2] and in this, the third philosophy thematic, we present a thorough, comprehensive collection of original, penetrating articles on the nature of clinical reasoning, examining in detail a broad range of associated problems, concepts and relationships [27–60]. These include the nature and status of medical knowledge; how we assess and apply research evidence; the role of intuition, tacit knowledge and perception in clinical reasoning; our understanding of causality, cognition, critical thinking, theory, data and inference; the role of normative judgements and the relationship between reasoning and value. Authors debate foundational questions about the basis for medical practice, the role of models in medical epistemology, the relevance of patient autonomy in rational decision making and the applications of concepts derived from biomedical theory and practice to psychiatric diagnosis. A particular concern is education and how to cultivate and sustain the right sort of dispositions in practitioners. Insights from virtue epistemology (presenting *dispositional* analyses of cognitive concepts) and historical epidemiology are used to cast light on our understanding of reasoning in practice. Discussion of such questions leads us finally to a series of debates about the nature of the inquiry itself, of the relationship between reasoning in medicine and the insights and methodologies of a number of academic disciplines – including the approaches of phenomenology, epistemology and ethics. The collection includes the products of a series of interdisciplinary workshops that addressed underlying questions about the reality of illness, identity, harm and value itself. These essays indicate the breadth of the topic considered in this issue, and invite us to challenge some of the traditional boundaries (for instance, between epistemology and ethics) that inform standard philosophical approaches to the problems of medical practice.

Reasoning in medicine

Is clinical reasoning a manifestation of cognitive ability, logical analysis skills, interpretive sensitivity or narrative sensibility? Is it an amalgam of all of the above interspersed with the use of statistics and probability? These are important questions that begin to find answers in the papers of this volume. These papers open up horizons for future exploration and investigation on the various types of thinking employed by clinicians.

The volume opens with an examination of the nature of critical thinking in medicine by Mona Gupta and Ross Upshur [27]. Are critical appraisal, reasoning and thinking integral to the practice of medicine? Should medical schools and other health professions devote resources to teach and evaluate such skills? The authors note the importance accorded to critical skills in documents such as the Lancet Commission on Health Professionals and in the revised US Medical College Admissions Test, indicating these to be highly valued and necessary skills. Yet, a series of review papers in the medical and nursing education literature demonstrate lack of consensus on how they should be defined, what sorts of competencies they represent and how they should be evaluated in trainees. The authors argue that, despite the lack of consensus on these topics, critical skills can be identified when they are exemplified in practice. Using the example of the controversy surrounding the efficacy and safety of selective serotonin reuptake inhibitors in psychiatry, it becomes evident that using critical skills requires courage as it may entail some risk. Gupta and Upshur then provide a provisional account of critical skills in a virtue theory framework, drawing on both virtue ethics and virtue epistemology. They argue for a more sustained enquiry into the relationship between the virtues, medical education and critical appraisal, reasoning and thinking.

Virtue theory and phenomenology come together in Hillel Braude's fascinating account of the perceptual foundations of clinical reasoning [28]. Braude argues that neuropsychological reductionism fails to provide a sufficient basis for the epistemology of clinical reasoning. Rather, a phenomenological perspective is required to provide an adequate grounding of how clinicians reason. Phenomenology is required, in Braude's argument because it can provide a detailed account of first person experience and consciousness. Braude strives to conciliate cognition and consciousness through phenomenology. This is then exemplified through a detailed account of *phronesis* and empathy. Braude argues that 'medicine occupies a privileged, though somewhat ambiguous place between *phronesis* and *techné*.'[1] He further seeks to elaborate how *phronesis* can provide a unified framework for the moral, ontological and epistemological components of clinical reasoning. This challenging and provocative paper opens up multiple lines of philosophical inquiry for future exploration. The idea

[1] The former term is typically translated from the Greek as 'practical wisdom' and distinguished from the latter, typically understood as referring to technical expertise.

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of conciliating neuroscience with phenomenology as it relates to clinical reasoning is certainly novel and marks an advance in the field.

Critiquing assumptions frequently made about the nature of knowledge, and looking at the processes of knowledge creation, Laura O'Grady asks the fundamental questions, 'what is knowledge and when should it be implemented?' [29] Knowledge, she explains, is an elusive construct. The current model of biomedical knowledge emphasizes quantitative research data and the explicit knowledge of health care professionals. However, O'Grady suggests that the kind of knowledge that is worthy of translation into clinical practice will only come with 'wisdom'. Knowledge, as wisdom, gives equal weight to quantitative data, qualitative findings and experiential and tacit understandings in medicine. Her paper combines perceptive analysis and critique of underlying assumptions about knowledge, reliability and value with pragmatic observations and suggestions, explaining how making the electronic health record accessible to clinicians and patients could provide a way to move towards wisdom.

In another paper with challenging implications for the links between analytic and non-analytic aspects of reasoning and for the relationship between knowledge, thinking and dispositions, James Marcum draws on a dual-process theory of cognition and metacognition to propose an integrated model of clinical reasoning [30]. Echoing the concerns of the other contributors to this section [27–29], Marcum discusses the role of cultivating the right 'states of mind' or 'thinking dispositions': reasoning in medicine is, or should be, characterized in part by careful, regular, critical reflection on practice. He stresses the importance of non-linear models such as his in capturing the complex feedback loops characteristic of clinical reasoning. One significant advantage of such models is that they help us to make sense of how and why some clinicians become experts while others simply gain experience without expertise.

Reasoning, theory, data and practice

The debate about reasoning progresses with a series of papers examining the relationship between reason, theory, data and practice. While it is platitudinous to assert that clinical practice should be informed by research evidence [24–26], for too long the debate about the relationship between research and practice focussed insufficiently on making research fit for practice, with some authors preferring to diagnose any problems in the relationship between research and practice with reference to irrational or conservative 'resistance' to research evidence on the part of practitioners [3,4,9,11,61–64]. Mark Tonelli's study of 'compellingness' approaches the issue from a different direction [31]. Tonelli outlines 12 features of clinical research studies that affect how compelling the results will be to practising clinicians: prior knowledge/belief, biological plausibility, consistency/confirmatory, objectivity, applicability, effect size, value of outcome, safety, time to effect, alternatives, cost and ease of implementation. He suggests that an appreciation of these factors can and should affect decisions made by clinical researchers, insofar as they aim to produce evidence that is compelling to clinicians.

Dana Tulodziecki's detailed study of the reasoning processes that led John Snow to draw his important conclusions about cholera is not a 'merely' historical study of epidemiological reasoning. By looking at the principles that informed Snow, the author provides significant lessons pertinent to the contemporary debate about data, theory and evidence [32]. Dispensing swiftly with certain popular myths concerning Snow's methods, the author shows how a number of causal principles (especially Mill's Method of Difference and Mill's Method of Agreement) were epistemologically important to Snow, enabling him to draw conclusions that, at the time, were both non-verifiable and also against the popular view. She argues convincingly that the case of Snow shows the importance of these principles in guiding epidemiological reasoning, concluding that the assessment of medical hypotheses by health care practitioners ought to be not just data driven, but also informed by specific principles of reasoning.

One fundamental assumption that has passed unnoticed in some influential discussions of medical practice [3,61–63] is the idea that we need to find the right or best theoretical model of practice, and then set about promoting the use of that model to improve practice, defending the favoured model against all others. Advocates of particular models may typically claim that policy and practice should be 'based' on their model 'because it's the best' – an assumption Robin Nunn analyses and critiques in his contribution to this volume [33]. In a discussion in some respects reminiscent of debates about the nature of science that dominated the philosophy of science for many years [14,65–67], Nunn provides a summary of the many models that have been proposed for understanding (and improving) medicine and argues against the idea that we should attempt to unify these various approaches. Instead, he shows that there is good reason to think that a diverse collection of models is better than any single model could ever be.

Also developing ideas about the role of models and theory in diagnosis, Maël Lemoine looks in detail at the nature of inference in the diagnosis of mental disorder, challenging in the process some entrenched ideas about the relationship between observation, theory and value [34]. Lemoine argues that mental health practitioners can legitimately determine *that* a patient suffers from a mental disorder before they have identified the particular mental disorder in question. In other words, practitioners can make general assessments without specific assessments. Her careful defence of this provocative position illustrates the tremendous value of exploring all features of 'real life' clinical reasoning, however counter-intuitive they appear at first, before pronouncing on the relationship between data, theory and practice in diagnosis and clinical reasoning.

Reasoning, knowledge and causality

These challenging discussions are followed by a group of papers focussing specifically on the concepts of knowledge and causal reasoning. Katrina Hutchinson and Wendy Rogers argue that certain, now pervasive understandings of evidence-based medicine (EBM) rest on shaky epistemic foundations and fail to provide comprehensive support for clinical decisions [35]. Despite the many and well-documented 'evolutions' of EBM [24–26], these authors find that the gap between the knowledge required by practitioners and that offered through EBM remains wide. This paper adds further fuel to the fire of those critical of the ways in which EBM has been taken up in various clinical settings and resonates with the concerns of Nunn [33] and Tonelli [31] about the relationship between research methodologies and practice.

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Holly Andersen's paper is an important addition to the debate over the role of mechanisms in EBM [36]. She provides a clear justification for the claim that using information about mechanisms, instead of clinical trials, can tell us which treatments will work in a population. She argues, however, that knowledge of mechanisms plays an important role in applying the results of clinical research in the care of an individual patient. Cecilia Nardini, Marco Annoni and Giuseppe Schiavone compare the modes of reasoning associated with EBM and personalized medicine (P-Med) [37]. They suggest that both modes represent distinct ways of conceptualizing the role of evidence-making in medicine. EBM venerates epidemiological evidence, whereas P-Med emphasizes personalized and 'mechanistic explanations of molecular interactions, metabolic pathways and biomarkers'. Each approach, suggest the authors, is epistemically sound but insufficient, and is unable to be hybridized into a single model for informing clinical decision making. Instead, as independent modes of reasoning, EBM and P-Med signify complementary ways of informing clinical practice, whose integration will require the prudent exercise of clinical expertise.

We commend the authors' balanced analysis but call for a further distinction to be made between P-Med and person-centred medicine (PCM). While some influential commentators argue that PCM can, and should, synthesize EBM and other approaches such as P-Med [68] (which are each incomplete as coherent accounts of modern clinical practice), others argue that no such coalescence is likely and that the critical issue to address is how these approaches can best converse with, and learn from, one another [69]. The latter position seems consistent with that of Nardini *et al*. [37], and this is another issue that seems far from being settled.

Roger Kerry, Thor Eirik Eriksen, Svein Anders Noer Lie, Stephen D Mumford and Rani Lill Anjum discuss the ontology of causation with the goal of understanding what view of causality underlies evidence-based practice [38]. They argue that a dispositionalist account of causation best accounts for some of the issues raised in discussions of evidence-based practice, and provides the basis for a lasting solution to some of the problems associated with health research, including problems with inductive reasoning and the external validity of causal findings.

Dieneke Hubbeling draws on a paper by Cartwright and Munro [70] published in a previous JECP philosophy thematic issue, which examines the problems that arise when we attempt to draw conclusions about whether a proposed treatment will work on the basis of its successful application in a randomized controlled trial. Hubbeling argues that for complex interventions in psychiatry, Cartwright's concept of a capacity is too demanding; instead a notion of an 'approximate capacity' is required [39]. In her commentary on Hubbeling's paper, Robyn Bluhm notes that the broader moral to be drawn is that psychiatry, in general, needs better theories that can appeal to capacities in explaining why and when treatments work [40].

Reasoning and value

Five scholars from The University of Sydney's Centre for Values, Ethics and the Law in Medicine have collaborated on two contributions to this volume [41,42]. The papers are thematically linked, employing conceptual and empirical approaches to explore issues related to the role of values in medicine. The papers by Miles Little, Wendy Lipworth, Jill Gordon, Pippa Markham and Ian Kerridge are followed by an insightful commentary by Gideon Calder [43].

In the first paper, they seek to expand the discussion related to values-based medicine (VBM) by providing a moral and philosophical interpretation of values [41]. They argue that VBM has not taken hold in medicine as EBM has done because of the failure to operationalize terms in ways that clinicians can grasp and incorporate into practice. Little and colleagues seek to identify foundational values and irreducible goals that humans universally accept as components of an acceptable life, and to link these to the practice of medicine. They argue for a 'modest foundationalism' by applying an 'iterative backward interrogation' to uncover the limits beyond which one cannot reasonably inquire. So an enquiry into value becomes an enquiry into the limits and foundations of reasoning. The authors apply this approach to value differences that arise within and between cultures and show that the approach is robust. This leads them to claim that medicine is based on 'foundational values of survival, security and flourishing'. Applying their analysis to clinical practice and medical research, they draw the conclusion that values drive the *telos* of medicine. This paper is densely packed with ideas suggesting a radical reformulation and repositioning of how values function in medicine. Some readers may take issue with their modest foundationalism, which opens up the possibility for a much more sustained discussion on the role of foundations in medical philosophy.

Their second contribution is an empirical study consisting of a document analysis of online ethics curricula and an analysis of in-depth interviews with doctors on faculty at The University of Sydney [42]. The study investigates the gaps between stated curricula and the stated concerns and needs of the practitioners. Lipworth *et al*. point out two significant gaps, in that the curricula reviewed do not sufficiently address and thus leave graduates unprepared for the sociological and epistemological dimensions of values that arise in the practice of medicine. There is a possibility that 'standard curricula will miss important ways in which meaning and value are actually represented in contemporary medical practice'. The authors call for a broad reframing of these curricula to acknowledge that medical practice is imbued with moral and professional issues that are not well addressed by the standard examination of ethical issues. They argue that training should not focus on the pursuit of singular correct responses to complex value issues, but should encourage '*phronesis*, prudence and a moderate or dialogical approach to ethical dilemmas'.

While some may question the warrant for such an ambitious reframing of ethics and professionalism curricula on the basis of one sample, there is ample evidence to support their concern about the gaps between formal curricula taught in training programs and the informal and hidden curriculum experienced by trainees and practitioners. Calder notes that their findings are unlikely to surprise anyone who has thought seriously about the difficulties in designing and delivering professional ethics courses that help to develop the skills of practical reasoning [43]. The findings of the empirical study certainly gel with the concerns of other contributors to this volume [27–30,46] about the need to find ways to develop the epistemic and ethical virtues to support wise practice, and Calder notes the difficulties in cultivating such essential character traits as 'resilience'. Certainly similar studies in other contexts are warranted.

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The crucial role of judgements of value in the reasoning process is addressed by Natalie Banner in her important discussion of assessments of mental capacity [44]. Banner begins by discussing clinical uncertainty in assessing a patient's mental capacity to make health care decisions. Clinical assessments need to balance the autonomy and protection of the patient. However, a tension can arise between descriptive criteria for objective testing of a patient's cognitive capacity, and clinical intuition regarding how to interpret whether the patient meets these criteria in the ways s/he ought. Epistemically limited, the clinician – suggests Banner – needs to assess whether the information used or weighed by the patient has the *right* kind of impact on the decision-making process. Recognizing the right kind requires clinicians, guided by normative assumptions, actively to assess the appropriateness of how the patient's beliefs, values and emotions underpin their capacity to engage successfully in the decision-making process.

Further questions about the relationship between value judgements, reasoning and autonomy are raised by Mary Twomey's thoughtful discussion of treatment choice in breast cancer [45]. Based on studies reflecting patients' concerns about making decisions with such serious and long-term consequences, the paper focuses on the limitations of current conceptions of autonomy as informed consent and choice. Twomey argues for a conception of autonomy that 'goes beyond' the idea of 'rational individuals making their own decisions', calling on clinicians to work with relational models of autonomy, 'to better involve women in their own care' by enabling them to engage in the kind of reasoning that promotes a more meaningful exercise of autonomy. Twomey's conclusions about the need for a rethink of models of autonomy, with reference to the idea of decision making as a social enterprise or practice, cohere with current developments in person-centred medicine [68]. A theme emerging from the discussions in this volume of a number of contemporary problems in practice seems to be the need for a serious reappraisal of certain contemporary dichotomies (between knowledge and reason on the one hand, and questions about value on the other) in favour of a more integrated conception of reasoning that better addresses the problems of practice. The concepts of virtue and practical wisdom seem as much at home in discussions of the problems of contemporary clinical practice as they were in the writings of the ancients. Even where authors have not called explicitly for a revival of virtues-based approaches to reasoning, it is clear that the problems they consider challenge us to re-examine the relationship between reason and value.

Appropriately, then, this section concludes with a paper that combines a virtues approach with insights drawn from the work of a key exponent of pragmatism in philosophy. Drawing on the philosophies of Aristotle and John Dewey, Kim Garchar describes the discipline of clinical ethics as an active, sometimes messy but fundamentally moral undertaking in the real world of the everyday [46]. Clinics ethics is foremost a practice of virtue that responds to problematic situations. This practice requires practical reasoning to minimize uncertainty, yet Garchar questions whether one ever becomes good at addressing moral quandaries. Her engaging discussion therefore insists on the need for epistemological *humility* in practice. This humility requires the acknowledgement that knowledge, both personal and existential, is incomplete and provisional. We must constantly act to improve this knowledge, even though the study and pursuit of the good life will always take place imperfectly.

KCL workshops on philosophy and medicine

In our previous thematic issue, we published a report by Elselijn Kingma and colleagues on an interdisciplinary workshop on concepts of health and disease, organized by the King's College Centre for Humanities and Health [71]. In this issue, we are able to present two detailed reports of the important interdisciplinary dialogue generated by the second and third of these workshops, on Personhood and Identity in Medicine [47] and on Death [50]. The reports raise fascinating questions about the obstacles to serious interdisciplinary dialogue, ranging from differences in theoretical perspectives, jargon and methodology to apparently more mundane (but practically crucial) matters of a social and interpersonal nature, concerning the different professional networks in which the protagonists typically move and their preconceptions about the nature of dialogue and academic exchange. If we are serious about the need to promote dialogue between professionals and academics from a broad range of backgrounds, then these basic organizational questions about how to facilitate such dialogue need addressing. As we have argued previously [2] and as the foregoing account of the papers in this issue of the JECP illustrates, such a dialogue is essential for progress both in practice and in our theoretical understanding. It serves the dual purpose of equipping practitioners to question the conceptual basis of their practices and enabling intellectuals to ground their thinking in a profound engagement with some of the most important realities of contemporary life.

The reports are accompanied by a selection of papers presented at the workshops. The papers cover concerns of a very fundamental sort, regarding identity, mortality, value, experience and the relationship between knowledge, science and ethics – raising questions that range beyond, but include the underlying concerns of medical practice. The collection includes an essay by the influential philosopher Peter Goldie, who died last year. His presentation to the workshop on personhood and identity presented arguments from a section of a book that is in press as we write [72], and the paper published here is an extract with editorial comments [48]. Goldie argues against the strong claims of some philosophers about the level of psychological continuity needed for personal identity. Questions about the relationship between memory, a sense of self and what it is to be a person have profound implications for debates in neuropsychiatry and person-centred medicine, and the answers given by some philosophers to these questions have caused serious concerns among professionals working with patients who have profound intellectual disabilities [73,74]. Literary scholar Neil Vickers takes up the thread of Goldie's paper, focussing on the various ways in which illness may threaten one's personal continuity [49]. In an argument linking narrative and the perceptions of others to issues of personal identity, Vickers makes a case for the importance of social relationships in preserving or threatening personal identity. These papers complement Iona Heath's engaging discussion, based on her presentation to the workshop on death [51]. In a paper that combines insights from medical practice with ideas from literature and the humanities Heath, President of the Royal College of General

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Practitioners, argues that in the 21st century, 'we have forgotten how to die and have even forgotten that death is itself a gift'. She laments the fact that, despite having a longer life span than previous generations due to advances in medical science, today's inhabitants of the richer nations are still dissatisfied and seem to want 'to push it further and pretend that life can be indefinitely prolonged'. Heath concludes that if we are to forge 'a more humane contract between science and nature in the care of the dying, we will need all the help we can get from all the different dimensions of human wisdom that are explored within literature and the other humanist disciplines – and perhaps particularly within poetry'.

In sharp contrast, Geoffrey Scarre defends the 'bold claim' that there is, strictly, 'no such thing as a good death' [52]. If this is so, then it would seem that 'the assumption of many health professionals that, with the right management, people can be encouraged or assisted to have a good death' is false. By drawing a careful distinction between the harm of death and the process of dying, he develops implications that are not quite so disastrous for those working in the care of the dying as this claim might initially suggest. Scarre welcomes the recognition by medical personnel, palliative care workers and hospice staff that 'dying is an existential predicament as well as a physiological condition', which he argues has enabled more people to avoid a 'soulless death in intensive care'. However, even this recognition 'pays insufficient regard to the personal virtues that we need if we are to mitigate the worst evils of dying'.

These provocative papers raise philosophical questions about the value of life, what we mean by 'harm' and the relationship between medicine and 'nature' – themes explored in the remaining contributions to the workshops. In an argument that resonates with Scarre's paper, David Galloway distinguishes the harms inflicted upon us by the aging process from the harm of death itself [53]. Whereas Heath complained that 'the whole of health and social policy seems predicated on the belief that everyone wants to live forever' [51] it would seem that Galloway would not see anything wrong in principle with such a desire. He critically analyses the claims made by Bernard Williams [75] that, even if a medicine or potion existed that could release us from the physical decay of the aging process, death is something that eventually all of us would choose because an immortal life would ultimately become a valueless one. Galloway notes that Williams' arguments are based on assumptions about personal identity that, echoing Goldie, he rejects. He also notes that Williams makes assumptions about value and finitude that might at least be worth questioning. The nature of value and harm are further explored in the paper by David Papineau [54], which makes the case that people can be harmed by events that happen after they have died. Papineau's position justifies the common assumption that we have reason to respect the wishes of the dead (and also the intuitions of some that we have reasons to respect advance directives, even if they appear to go against the interests of the present person). Yet, it is a position surprisingly hard to justify with reference to assumptions that are also common (and enshrined in various theories of value) about what it is that makes something good or bad and the relationship between value and subjective experience.

Anna Luise Kirkengen and Eline Thornquist take up the question of value and subjectivity in a paper that seeks to challenge entrenched dichotomies in the modern (post-Cartesian) world view, which the authors argue has shaped much contemporary thinking about biomedicine [55]. This framework divides the world into 'objective' and 'subjective' categories, with science and reason on the objective side of this divide, and value and experience on the subjective side. The result is to saddle practice with a conceptual framework that makes it hard to account coherently for many human problems – a claim they illustrate with reference to extensive research on integrity violations. Instead, they propose an alternative framework that provides an integrated view of human life via the concept of the 'lived body', and using arguments derived from phenomenology and social science they argue the case for a reconsideration of the relationship between epistemology (theory of knowledge) and ethics – for an 'ethically informed epistemology' to replace the currently dominant biomedical reductionism.

The section concludes with a paper by Tania Gergel on phenomenological approaches to medicine, which reviews and critically examines many recent claims that phenomenology can contribute to and improve medical practice, perhaps (as Kirkengen and Thornquist seem to be claiming) even contributing to a radical philosophical revision of medicine's fundamental assumptions [56]. Gergel argues that many claims about phenomenology in medicine are so broad and weak that it is not clear that the philosophical underpinnings of phenomenology do any work in them: the claims might have been arrived at by a multitude of routes. Stronger claims, she argues, do not stand up the kind of philosophical rigour and scrutiny that they purport to espouse. Gergel concludes that phenomenology can contribute to medicine, but only if its proponents engage with the difficult debates and controversies within the phenomenological approach, rather than avoiding them.

Debates

The debates section contains a response to a paper published in the previous thematic edition of the JECP on the philosophy of medicine, and a counter-response by the author of the original article. The paper by Lillian Geza Rothenberger [57] responds to Mona Gupta's previous discussion of the ethical goals of EBM [76] by claiming that the only goal of EBM is to provide 'the best reliable scientific data on a specific primary research end point' and distinguishing this 'value-free' process from the uses to which research data may be put, which clearly do incorporate normative decision-making processes. In her reply, Gupta notes that to EBM's authors, EBM is not merely a data generator, but goes further, entering the arena of clinical decision making [58]. She further questions, on philosophical grounds, Rothenberger's assumptions about the possibility of generating 'value-free data'. She argues that health itself is a normative concept and that medical practice is always tied to achieving outcomes that reflect some conception of the good life. People often confuse the (almost universal) consensus about the beneficial nature of certain health outcomes with the idea that they are 'value-free'. Gupta concludes that the ongoing confusions about EBM's goals that her initial research uncovered remain salient and pressing.

Book reviews

The edition closes with two papers providing detailed, essay-length critical reviews of important and recently published texts in

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the philosophy of medicine and health care. Stephen Buetow [59] applauds the rigorous and insightful analysis of the role of intuition and tacit knowing in clinical reasoning presented in Hillel Braude's work [77] but disputes Braude's assertion that EBM is premised on the dismissal of tacit knowing and antithetical to clinical reasoning as understood by Braude. For Buetow, the EBM debate has moved on to the extent that EBM is now able to embrace a much broader conception of evidence than the one espoused by the earliest statements of the position [61].

Similarly, AJ Pritchard [60] finds much to applaud in Sirdhar Venkatapuram's work on Heath Justice [78], with its detailed explanation and defence of the 'capabilities approach' to health. At a time when governments across the developed world are recklessly dismantling the social networks that sustain a healthy and civilized social order, Venkatapuram's reminder of the social nature of health and human flourishing is particularly welcomed. However, Pritchard laments the author's tendency to 'hedge his bets', making claims that initially sound radical and exciting, only to qualify them to such an extent that much, if not all, of their critical content evaporates on analysis, and what began as a significant moral challenge to the powerful in defence of public health becomes a position compatible with any number of health policy positions and decisions.

Concluding comments

Judging by the considerable quantity of high-quality submissions to this edition, we conclude that the philosophy of medicine is thriving and we look forward to the continuation of the debates generated in the thematic editions to date in the next special issue of JECP. We have noted in the previous thematic issues that philosophy is an extension of our everyday reasoning processes, and something we all engage in whenever we reflect systematically upon the assumptions that underlie our practices [1]. In the absence of philosophy, the questioning of fundamental assumptions is abandoned and progress is stifled [2]. But just as significantly, progress within academia is thwarted if academic discourse is based on anything less than a thorough engagement with the problems of practice. The lively debates in the pages of this volume are an occasion for true *intellectual excitement*: just as Socrates went to the marketplace to engage, attentively, with the 'everyday' concerns of the broader populace, so today's philosophers must engage seriously and fully with the problems of practice if the discipline is to survive and flourish. Applied philosophy is not an offshoot of the subject but a much-needed return to its roots [2,9].

Themes emerging from the papers in each of the three thematic issues thus far include the need for an urgent revival and detailed examination of the idea of practical wisdom or *phronesis*, a persistent focus on education and what is involved in promoting the skills and dispositions required to practice well, and with this, a focus on the social nature of reasoning and the sort of environments that promote good practice. In many of the discussions, we see an interest in a virtues approach and calls for a radical review of the relationship between the study of knowledge (epistemology) and value (the traditional concern of ethics) in order to do justice to the nature of real-world reasoning. With this comes a focus on aspects of reasoning often ignored or disparaged in mainstream discussions of medical practice, including tacit awareness, intuition and empathy and the lived experience of health. These important contributions present as serious a challenge to contemporary categories employed in academic philosophy as in the analysis of medical practice and policy. They require us to reconsider the basis for thinking that has helped to shape our current intellectual landscape in ways that extend beyond the concerns of medical practice.

We look forward to further contributions in response to the papers we have presented thus far and to authors challenging us with new approaches and insights that we have so far failed to consider. These matters are by no means settled and therefore the debate is by no means closed.

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