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Title:

Wonder and the clinical encounter

[Original article submitted to Theoretical Medicine and Bioethics – revised version following Reviewers' comments]

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Abstract:

In terms of intervening in embodied experience, medical treatment is wonder-ful in its ambition and its metaphysical presumption; yet wonder's role in clinical medicine has received little philosophical attention. In this paper I propose the value, to doctors and others in routine clinical life, of an openness to wonder and to the sense of wonder.

Key to this is the identity of the central ethical challenges for most clinicians, being not the high-tech drama of popular conceptions of medical ethics but rather the routine of patients' undramatic but unremitting demands for the clinician's time and respectful attention. Wonder (conceived as an intense and transfiguring attentiveness) offers: an alternative and ubiquitous ethical source in place of the more familiar respect for rational autonomy; a source of renewal galvanising diagnostic imagination; and a timely recalling of the embodied agency of both patient and clinician.

Wonder and the clinical encounter

Introduction

Here are three writers not thinking particularly about medicine:

Were there no given, wonder could never spring on us its unpredictable surprise, would never be able to sneak up and startle us into realizing that we do not know what lies right here in front of us. Jerome Miller [1]

Wonder ... always points to something beyond the accepted rules. Because of this, the feeling of being overwhelmed, or the experience of humbleness and even awe could accompany it. But wonder is also consistent with a certain uneasiness towards the given, an inkling that there is more to it than tradition admits, and this more can be investigated. Paul Martin Opdal [2]

If this is the way the world is: extraordinary, surprising, beautiful, singular, mysterious and meaningful; then this is how I ought to act in that world: with respect and celebration, with care, and with full acceptance of the responsibilities that come with my role as a human being privileged to be a part of that community of living things. Wonder is the missing premise that can transform what-is into a moral conviction about how one ought to act in that world. Kathleen Dean Moore [3]

These writers had in mind, variously, questions in philosophy of religion, in developmental and educational psychology, and ecology and environmental ethics; but I believe their common theme – wonder – is always latent within medicine and at times suffuses it. Indeed, there is a sense in which all medical treatment, whether or not it works, is wonder-ful in terms of its ambition and, for want of a better word, its metaphysical presumption.[4] For many, a major reason for entering the profession of medicine is the mystery of the body and its physiological interconnectedness. [Footnote ¹] Yet for some reason wonder's role in clinical medicine is rarely spoken about.

In this paper I want to propose the value, to doctors and others in routine clinical life, of an active, cultivated, openness to wonder and to the sense of wonder. Wonder is a notion that in recent decades has attracted periodic interest among philosophers and theologians, [5-10] historians of science [11-13] and educationalists [14] among others (including recently at least one significant funding

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¹ I owe this point to APS Hungin.

body [footnote ²]) but so far as I know it has not been discussed in detail in relation to the practice of clinical medicine. An invitation to do so was issued in the form of an elegantly engaging short paper by sociologist Arthur W Frank, exhorting doctors and patients alike to 'recognize the wonder of the body rather than try to control it;'[15] and for my own part I have previously suggested an active sense of a wonder as a personal resource to the professional clinician [16] and its cultivation as an educational good to be aimed at via the integration of humanities within the medical school curriculum.[17] However no-one has attempted any sustained analytic discussion of the clinical relevance of wonder, nor exploration of the ethical or aesthetic aspects of wonder in relation to medical practice from the perspective of either clinician or patient. Yet the attention that wonder has received in other discourses including those concerned with human nature and flourishing, the active imagination, and the nature and development of science – all of which converge somewhat upon the goals and practice of the medical consultation – justifies its being considered in relation to clinical medicine. I aim to begin that consideration in this paper, which mainly concerns wonder's benefits to the clinician but inter alia recognises some of the phenomenology and dynamics of an active sense of wonder, something that I think springs naturally from the clinical encounter where, regularly, some of the most intense of human experiences are acknowledged, reviewed, or prefigured.

Clinical life: moral routine, extraordinary responsibility

Certainly, some medical contexts involving the drama, the high stakes and the conceptual challenges of dizzying technological interventions at the extremities of life – the survival of very low birth weight babies or of multiple trauma victims, or the recipients of combined organ transplantation – may provoke an almost too-obvious, too-banal recognition of 'modern wonders'. But this is not at all what I have in mind. I am thinking instead of the routine, everyday, hurly-burly of clinical life at its least glamorous, where the intellectual and ethical challenges are taxing precisely because, devoid of drama and obscured from the popular gaze, they are foreseeable, unremitting, and unsung.

In these contexts the phenomena most apparent to the doctor – a succession of patients mostly with routine signs, symptoms and stories – do not seem remarkable or even unusual; they provoke little surprise, they will be increasingly familiar as the doctor's experience lengthens, and they gradually constitute the 'staple diet' of the doctor's work. In precisely that guise, they bring challenges.

First, clinical life involves endless demands for, in effect, emotional support from doctors for needy patients whose underlying problems may often not even be primarily biomedical. This is a key part of what is certainly the most widespread, and arguably the most intractable, manifestation of the problem of resource allocation,

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² The Templeton Foundation in 2010 issued a call for research into the understanding of awe and wonder.

that is, the fair distribution of clinicians' time, expertise and attention among many more patients than they can possibly satisfy if their responses are to be full and sensitive. The alternatives clinicians face are to do less than full justice to all, or to defer to some patients whilst neglecting others. This is the 'small change' of moral life in the clinical context, but because it is unremitting it consumes the doctor's moral reserves more surely than do the high-profile dramas. Moreover it is the arena in which the clinician's humanity is, over time, cumulatively most tested and most abraded. The dramatic patient encounter is exceptional. The non-dramatic patient is unremarkable. The unremarkable patient becomes routine. The routine patient becomes uninteresting. How does one respond fully and attentively to an uninteresting patient — a patient from whom the telling details that would otherwise make him distinctively individual and memorable (and hence compellingly timeworthy) have been blurred or attenuated by what we might call 'patient-centred tedium'?

Second, seeing a succession of patients with similar symptoms that are consistent with a single or common diagnosis is bound to channel the doctor's mind in certain directions. Each succeeding patient who appears to fit the pattern will tend to attract that diagnosis and, moreover, add weight to the emerging pattern. Yet the doctor has always to remain alert to the possibility that the patient in front of her right now is different, and significant consequences may hang on this. The symptoms of an upper respiratory tract infection may mask underlying pneumonia – yet for some time the patient may simply resemble others diagnosed with pharyngitis. Or alternatively the patient may not be one of a series of similar cases of acute illness but may have presented repeatedly for the successful symptomatic relief of a chronic problem; many times the same, but perhaps this time is different. The successful relief of heartburn through medication may be a concurrent blessing for the patient yet might also obscure an underlying cancer. In either of these kinds of case, delayed diagnosis (or, still worse, a diagnosis that is missed altogether) can severely endanger the patient, yet it can arise from the doctor's noticing in the individual patient the very constellations of resemblances whose patterns, emerging in countless collective observations over time, first led to the identification of those diseases and the refinement of those diagnoses. The patient's history, his symptom duration, treatment response, his own perceptions, fears and expectations are all vital; but the recognition of patterns is also a diagnostically vital skill.[18] Somehow the doctor must be guided in judgement by the accumulated experience of 'cases' that genuinely belong together, whilst remaining free to see a fractionally yet crucially different 'case' for what it is. What intellectual and imaginative resources are at the doctor's side here?

Third, attentive history taking and imaginative and alert diagnosis bring consequences of their own; and if more is involved than 'watchful waiting' then the consequences essentially mean a physical intervention in terms of the medicinal (and perhaps surgical) management of the patient. Our nature as embodied creatures means that our experience of ourselves — as flourishing, languishing or withering — is grounded in and reflects our fleshly state.[19] It is, typically, a disturbance in our experience that sends us to our doctor. It is, typically, through

interventions in our physical bodies that doctors try to annul or ameliorate the disturbances, and to restore our experience to its pre-morbid range of possibility. Although the enterprise of physical treatments is familiar to the point of routine, any significant therapy is still a colossal responsibility (recognised by the stringency with which society licenses practitioners and medicines), and one that is intensified by the technology upon which modern medicine is increasingly dependent - 'meddling in the flesh' of patients, with good purpose but uncertain outcomes, is not only a physical but an existential undertaking. [20] This privilege of access to the patient's frail flesh, and the jealously-guarded licence to intervene in it, carries a heady obligation and one that must at some time or other daunt every clinical practitioner. (I would go so far as to say I would prefer not to be treated by anyone who had not at some time felt so daunted.) When, from time to time, her training, experience and vocation do not feel sufficient to the burden, what else can offer the doctor both the courage and the humility she needs to propose and signpost a burdensome physical and emotional path that, in the long run, only the patient and not the doctor herself can actually walk?

It is to the meeting of these extraordinary responsibilities that, I think, a sense of wonder may bring new resources.

What is wonder?

I have not yet said what I mean by 'wonder'. Wonder is more than one thing, of course, and any one of those things is better captured by a constellation of ideas than by any attempted synonym (and those who are unsympathetic to my overall purposes may begin by being unhappy with my version of wonder.)

So, in the present paper I am concerned with wonder's characterising a special kind of transfiguring encounter between us and something other than us. Wonder is a very particular attitude of special attentiveness (very much an attitude rather than an emotion) that arises within us, an attitude prompted by circumstances that may be entirely ordinary yet, through our active and responsive imagination, yield an object in which the ordinary is transfigured by and suffused with something extraordinary as well. The attitude of wonder is thus one of altered, compellingly-intensified attention to something that we immediately acknowledge as somehow important – something that might be unexpected, that in its fullest sense we certainly do not yet understand, and towards which we will likely want to turn our faculty of understanding; something whose initial appearance to us engages our imagination before our understanding; something at that moment larger and more significant than ourselves; something in the face of which we momentarily set aside our own concerns (and even our self-conscious awareness, in the most powerful instances).

Some related ideas 'cohabit' with wonder in our imagination, and wonder sometimes involves them, but must be distinguished from them nonetheless. Wonder is not the same as awe: its object need be neither sublime nor terrifying. It

is closer to marvelling; yet it is not confined to static gazing but has its own dynamic, leading on to the desire to understand. It has pale echoes in curiosity; but its objects persist in our imagination, even beyond the point where we have at one level explained them. It stands in relation to explanation rather as bumping into someone in the street stands in relation to conversing with them – though with greater gravity, greater concern and, in the moment, usually greater delight.

Now I am here giving a freestanding characterisation of wonder as I experience it, but since many have written on the matter already I am bound to be selective with regard to either endorsing or disputing prior sources. Among these, some have found wondering to be, variously: an essential characteristic of man;[21] 'a strong emotional experience containing elements of ideation and disposition to act;'[22] the acceptance of 'in some small degree the play of the imagination;' [23] something that is generally good or excellent; [24] 'an experience of the self' that is not yet an attitude but that gropes towards one;[25] susceptible to capacity or 'talent;'[26] disinterested, external and detaching us from our ordinary world;[27] 'a crisis;'[28] 'ineffable;'[29] an interruption that is embodied and physical;[30] purely passive;[31] a 'hinge' upon which turns the door to other worlds;[32] something full of 'unpredictable surprise;' [33] an 'eruption of the numinous in human life;' [34] something capable of 'arous[ing] and inflict[ing] terror, worship and grief;'[35] the converse of generosity;[36] an acknowledgment of difference in others;[37] a state of mind signalling the limits of understanding;[38] openness or receptivity leading one beyond a preoccupation with the self 'into a search for meaning beyond oneself;'[39] and the 'keystone virtue in our time of reckless destruction, a source of decency and hope and restraint.'[40]

With some of these I joyfully agree; with some I resolutely do not. The application of wonder that I am here urging into clinical life is the constellation of first-person ideas given above, centring around an attitude of special, intense, preparatory, transfiguring attentiveness to what may be revealed as extraordinary. Other constellations may be found, with different endorsements – or correctives – among the other sources briefly noted here; the precise constellation matters less than the goal of its being engaged with clinical life.

And so now let us bring our thoughts on wonder, whatever their sources and their inflexion, to the challenges of high responsibility found amid clinical routine.

Response (i): wonder as an ethical source

Effective treatments, like other good things, do not cease to be good by becoming commonplace, but as Parsons has noted they do tend to lose their interest.[41] They pass into the realm of the routine, in which curiosity is dulled by familiarity, a source of deadly staleness for the practitioner.

Yet the medically unremarkable patient is at the same time a remarkably rich ethical challenge. Recall that the 'small change' of clinical ethical life concerns the fair and

effective distribution of the doctor's time and attention to all her patients. All patients are, whatever else they are, the loci of a special vulnerability that commands our moral regard, and they are also particular instances of human embodiment which, as I will argue later in more detail, is itself intrinsically wonderful. Thus regardless of characteristics, the doctor's ten-thousandth patient needs and deserves the same recognition of his common humanity, and the same hushed acknowledgement of his tender fragility, as does her first patient. These needs inhere in all patients equally, and regardless of their personal qualities: they belong to the courteous patient and to the rude patient; the engaging and the aloof; the attractive and the repellent; the compliant and the rebellious; the grateful and the resentful; the prudent and the absurdly demanding; the interesting and the dull.

Each of these contrasts includes a challenge to the clinician's patience, but I am particularly concerned with the patient whose challenge consists in his being simply unremarkable. It is simply not his fault that his particular complaint and symptoms bring to the clinical consultation the full weight of demand for the doctor's moral regard, along with little or none of the intellectual or imaginative stimulation that might have made that regard more spontaneous. The unremarkable patient offers no obviously deep or rewarding challenges – he simply contributes his own needs to the accumulated clinical workload. He turns up in the consulting room in large numbers, and his needs, rightly, count in full. Cumulatively, making respectful time for him, day in day out, is the central ethical challenge in any clinical practice constrained by the doctor's time, energy and attentiveness. [Footnote ³]

Sustained moral attention and respectfulness within a routine requires us to be open to (and sometimes to look for) that which can call to us, or captivate us; it requires the doctor to be mindful of what is at stake for the patient, rather than for her need for professional gratification (and, when disappointed, for her consequent sense of tedium). How then can one continue to hear strong ethical callings from within such confined imaginative spaces (confined, that is, in an intellectual and perhaps aesthetic sense)?

Interwoven with this problem of sheer same-ness is another – the problem of where we ground the basis of respecting people. The orthodox autonomist basis of respect for persons [42-45] is tied so closely to the notion of the person as rational agent that ethically difficult cases tend to be seen precisely as the exceptions, as the departures from the norm, as diminutions of full autonomy and rationality. However whilst this may seem a plausible picture of the moral challenges in the dramatic scenarios of heroic medical ethics, it is a poor picture of the more pervasive moral challenge of clinical tedium. Here it is not the departures from the norm but rather

³ Medical ethics is not a technical species of morality; it is ordinary moral life, essentially inter-personal, carried on in the particular circumstances of the clinical encounter. Only those circumstances and their attendant purposes differentiate it, in this sense, from the ethics of other forms of personal consultation, such as those involving a lawyer, a counselor, a priest or a teacher; and of course each of these faces the problems of reconciling routine with engaged personal respect.

the very adherence to the norm, the very usual-ness of routine cases, that impedes our full respectful attention.

Yet it need not be seen like this at all. Briefly to anticipate the burden of Section (iii) below, key aspects of human embodiment can (indeed, should) be recognised as wonderful, most especially the emergence of conscious experience and intelligent agency from the complexity with which lifeless particles are combined to yield our flesh. This incredible constitution is shared by us all, and can inspire wonder wherever it is found. Thus a basis for respect for patients can lie partly in the wonder of embodiment – something that is held to the full by every patient, however impaired. The 'tedious' patient is tedious in relation to the existential and interpersonal realm; but as an object of wonder his own embodiment is undiminished. As a patient, Arthur Frank recognises this universality of wonder even in the varieties of illness:

Wonder is almost always possible; control may not be. If the ill person can focus on an ideal of wonder in place of control, then living in a diseased body can recover some of its joy. [46]

The challenge is for the clinician to be able to access this same resource in the service of maintaining respectful attentiveness under pressure. The characteristics of wonder and wondering that make wonder 'almost always possible' are, I think, found in the way that an attitude of intense attention and an active, responsive imagination can transfigure the ordinary. Wonder's dynamic springboard, from initial stasis into the desire to understand, has I believe an ethical as well as an intellectual/diagnostic or an imaginative/aesthetic dimension. Or, better, ethical attention is also intellectual and imaginative. The attitude of wonder allows the routine patient to be made present to the doctor in a new and compelling way: present, in his embodiment, as another representation of life's enduring and marvellous mystery.

Wonder defeats routine and tedium also through its being an outward, other-regarding gaze. In wonder we set aside our concerns with the self: wonder is among other things a momentary self-deferral. We attend to wonder's object for its sake, not for ours.[47] Where wonder's object is another person, then that person's 'sake' is (whatever else it is) an ethical concern, and it frames the wondering in ethical terms. Of course wonder is not wholly self-abnegating; the desire to understand returns our attention to ourselves eventually, and our delight in understanding must involve some self-awareness. Yet although the experience of delight must refer back to the self at some level, it would be corrupted if it became itself the object of attention. [Footnote ⁴] This diminishment of the self tends towards humility; in this way wonder becomes a clear source of the ethical.[49] (The diminished self is still a

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⁴ Compare CS Lewis's distinction between 'enjoyment' (as active wholehearted engagement) and 'contemplation' (as self-conscious, knowing, distanced reflection) in: Lewis [48]

self, of course; indeed humility requires a certain mindfulness of the self *as diminished*. A completely dispersed or discarded self could not even be humble.)

Lastly on this point, routine may become particularly threatening through its being institutionalised. Perhaps especially, though not uniquely, publicly-funded healthcare systems institutionalise routine – partly in acceptance of the structural imbalance between patients' excess needs and doctors' limited time and energy. Simone Weil regarded the factory as the ultimate oppressive circumstance, [50] and although institutionalised healthcare is not quite yet a factory, it is sometimes (like education) complained of in those terms. [Footnote ⁵] The term 'alienation' comes irresistibly to mind in such a context, and weary clinical routine can provoke alienation as it tends towards the condition of other forms of production line. The clinician, constrained by pressure of time and dissatisfied, discouraged, even disengaged through a sense of superficial repetition, risks becoming (as do other production-line workers), externalised from her work and diminished as an ethicallyengaged self. Yet as we noted, wonder, too, involves a kind of abnegation, a diminishment, of the self. In alienation the diminishment is harmful because it merely increases the distance between the agent and object of ethical action. In wonder, the diminishment does the opposite: it removes the distance between object and agent by displacing the agent's concerns with herself (and with them, some of her sense of dissatisfaction with routine or superficiality). In wonder, inattention is replaced by close and mindful attention (something we shall consider further in the following section). The wondering self sets self aside, for the moment, and as a result is the more closely-engaged with what she wonders at. In this sense wonder redemptively opposes alienation, re-engaging the clinician with what is otherwise *merely* familiar, *merely* routine.

Response (ii): wonder and diagnostic imagination

In the quest for good management of the patient, diagnosis is an important enabling goal; classification in turn is its conceptual cornerstone. Into which pre-existing diagnostic category does the present patient's problem fall? Classification is a logical requirement of language as such: how can we refer to anything whatever except as this particular example of a general kind of thing (or event, or aspect, or circumstance)? But it is a psychological need as well: how else do we stabilise ourselves except by affirming that these are our circumstances, these are the challenges facing us, this is what needs to be done? Both logical and psychological needs take on a particular form and intensity in the clinical encounter. The patient's need for explanation and prediction concerning his very bodily self, and the doctor's need to respond with an exploratory model, must be assuaged first through the doctor's knowledge. But that knowledge consists in fitting the particulars of the

⁵ I owe this point to Simon Walker.

patient in front of her into an extraordinary classificatory matrix – the highly elaborate and hugely congested space of subdivisions of a single object that is the body of the patient, albeit qualified by the past and present circumstances of a material and interpersonal environment. Seemingly adjacent classifications jostle for elbow-room in terms of discernibility within the clinician's field of attention. [Footnote ⁶]

Upon the correct classification hang the prospects for producing a satisfying explanation for what is awry, and for lining up the treatment that might set things straight. The stakes can be very high, with the price of failure being paid physically by the patient but morally and psychologically by the clinician. Somehow the doctor must be guided in judgement by accumulated experience of 'cases' that genuinely belong together – pattern recognition is a diagnostically vital skill – whilst remaining free to see beyond the expected classification and discern a fractionally yet crucially different 'case' for what it is. What intellectual and imaginative resources are at the doctor's side here?

The clinician's primary intellectual and perceptual resources for discerning the proper classification come from her training and experience – the very resources that, of course, define the task of diagnosis (and its attendant decision-making and management) in the first place, and frame the differential alternatives facing her. Her pre-requisites in terms of knowledge and skills are to be found in the scientifically-grounded principles and practices of her profession. But she needs also to be able to stand aside, to view aslant: to let her imagination be the unseen comradely sceptic at her elbow.

A sense of wonder grows out of a grasp of the ordinary, of ordinary relations, expected meanings, assumed explanations, things that are in themselves seemingly non-curious. Things may provoke sometimes because they are indeed wholly-unexplained, but sometimes also because they are merely almost-explained. An active, playful imagination invites us to seek for other meanings, other patterns, from those we know already; a responsible intellect grounds the playfulness in the practical requirements of the situation. A habitual openness to wonder can enable her to bring imagination to her clinical vision, in part by fertilising the seed of curiosity:

Wonder retains an element of detachment or ideation, a minimal curiosity, a control of emotion that gives psychic distance to the event and permits at least in some small degree the play of imagination.[51]

The essential thing here is to be able to see *beyond* established patterns, especially those that have become routinised by the very inductive processes that ordinarily make classifications possible and probabilities meaningful. The accumulation and repetition that are implicit in anything properly called 'a practice' have ambiguous

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⁶ Not least, there is the problem that symptoms can become typical for age rather than arising from unexpected pathology. I owe this point to APS Hungin.

consequences. Familiarity makes possible not only fluency and skill but also casualness and disregard. Balancing the repetition of skilful action, against sensitivity to what is new in the particular, is a tough task. A well-attuned, wide-awake sense of wonder holds open the mind's doors to delightful surprise, but it also guards those same doors against complacency and numbness precisely because it can – must – wait at one's elbow in the routine cases where surprise seems to have evaporated. As Parsons puts it:

The wonderful is any object of any wondering, excited interest. So far as a person's perceptions, activities and meanings are not entirely routinized and stereotyped, so that he responds to the unique qualities and forms of things, then in principle every particular occurrence may become an object of surprise and curiosity for him, i.e., something wonderful in greater or lesser degree.[52]

In wonder, objects and circumstances can become newly present to us, and in more vivid ways; our perceptions are subtly intensified and made alive to that which is subtly different; we attend *intently* to the previously-unnoticed among what was expected.

But, then, what to do with the newly-noticed?

The essential thing is to retain it in the imagination past the point where curiosity dwindles. As Fuller suggests, wonder 'excites our ontological imaginations', leading us to seek deeper patterns in the universe.[53] But these need not be the dramatically deeper, concerning whole fields of enquiry in their generality — as in tectonic plate movement, in natural selection, in the mathematics of fractals just about everywhere in nature. Wonder is still, I think, at play in finding merely subtly-deeper ways of attending to the nearly-understood, having only particular scope.

In habitual openness to wonder, we learn to understand the particular in its own right. Putting these things in the right words is not easy, and is a matter deserving careful thought elsewhere. Here we can at least say that our ability to see new patterns – a key basis, surely, of hypothesis formation in bioscience and clinical diagnosis alike – has its edges sharpened by co-existing with a sense of wonder. But in addition – as I will try to explore a little further in the next section, there *is* a deeper obscurity of understanding concerning the mystery of embodied human nature as such; and this surely is always at stake in the clinical encounter.

Response (iii): wonder underlying embodiment

The third challenge of moral routine in clinical life concerns responsibility for the experiential consequences of treatment. We have recognised this 'meddling in the flesh' of patients as not only a physical but an existential undertaking, carrying a daunting burden of responsibility. When the doctor's training, experience and vocation are not in themselves enough to support it, what can justifiably embolden

the doctor to initiate the (perhaps burdensome) physical and emotional travail that only the patient must or can directly undergo?

Powerful help lies in recognising our embodied nature as enduringly worthy of 'clinical wonder': for as both the object of wonder and the ground of wondering experience, human embodiment is central to the clinical gaze. This brings both challenges and consolations. Consider first what we might call the anatomy of experience.[54] Our bodies make our worlds just as in turn they are made by those worlds. Their shapes, sizes and functionalities make possible and also limit what we can do. But our actions are also mysterious to us, even when the whole neurophysiological story has been laid bare, concerning the material links in the physical chains of events that we can see and describe. When for instance I use my hands to type these words, they act in the world yet I have not the faintest conception of how my thoughts and intentions, in terms of the words that I want to type, can possibly launch the accomplishments of my hands, in terms of sequences of keystrokes correctly delivered. More generally (and to put the point in inevitably dualist-sounding terms) I do not have – and it seems to me that I cannot have – any true and deep knowledge of how my will is manifest in physical action. Equally, experience is the inward expression of outward events and processes: yet I do not have – and it seem to me that I cannot have – the slightest conception of how the physical, material sequences of touch and sensation and perception come alive in the non-material reality of felt, qualitative experience. This brings into sharp focus the primary aspect of the wonder of embodiment, upon which rests the corresponding wonder attaching to treatment – namely the incredible constitution of experience and even of the possibility of experience, by that subtly and minutely organised substance that we call flesh.

Even before we come to the dazzling array of neural circuitry within which we take consciousness to be administered, if not exactly to reside, the possibility of continued animal life at all lies spectacularly in the visceral manifold lying within the chest and abdomen. These engines of circulation, respiration, and digestion cleave together in a complex coloured heap of flesh whose untidy, haphazard scrambling nonetheless conforms closely to a regular blueprint: it sustains all higher forms of air-breathing, warm-blooded, locomotive life. This gaudy pile, in equal measure revolting and wondrous to behold, is our inner permit to exist at all; without it our brains and sensory organs can neither function nor arise in the first place. It is the invisible boiler-room of fleshly life; and our life is a fleshly one.

So the extraordinary fact of embodiment – of embodied human experience – is both immediate and inexhaustible. Recognising it knocks all the cynical stuffing out of us in an instant: yet for millennia art and philosophy – more recently joined by science – have been trying to explore it, more or less full-time, and their labours continue with no end clearly in mind, let alone within sight.

Finally, then, the clinician may be consoled and inspired by recognising that both the most mundane, and the most arduous, of treatments equally involve embodied agency (both scientific and ethical), and agency is perhaps that manifestation of

embodiment that most provokes wonder. Both illness and treatment are – in different ways – organised disruptions to an existing 'arrangement' of the matter of which we are made. Treatment is not conceived in these terms, of course, but nonetheless materially that is what it comes to. Astoundingly, our 'arrangements' are patterned in ways so consistent that, as organisms, we can conform to a specification allowing us to come into the world, survive, beget offspring, and even come to a rudimentary understanding of what our patterns are meant to be and how they might be therapeutically restored or their disruptions palliated. In drawing on an understanding of this conformity, the fact and success of treatment invites a further level of wonderment.

Yet still more worthy of wonder is the accident (unless one's religious belief suggests otherwise) that at some level of increasing complexity amongst simpler, inert forms of matter an entirely new phenomenon emerges – consciousness, finding (so far as we know) its highest and perhaps only truly self-reflective form in embodied human nature. We are fantastically complex arrangements of very simple, lifeless, parts. How mere complexity gives rise to the inner reality of sensation – let alone experience and self-reflection, and the ability to ponder questions of wonder – is as much a philosophical as it is a scientific mystery: perhaps more so. Treatment is an intelligent, purposive, intentional and inter-personal activity. In the clinical consultation two intelligences - two emergences of intelligence from patterns of mere inert matter – jointly consider the problem that one of them has an altered experience. This is already astounding enough. But in treatment, they intervene in the pattern, in the arrangement of parts, hoping thereby to intervene in the experience. In recognising this, we are drawn to further wonder. And in recognising this – this 'drawing to wonder' – we open the door to ontological wonder: [55] wonder at ourselves, our agency and, indeed, our own capacity to wonder at all.

Like all other human agency, the doctor's agency is after all an embodied one. Fluency in decisive acting; keenly-honed perception underlying judgment [footnote ⁷]; the 'cool intimacy' 57,58] of interpersonal proximity; virtuosity and grace in clinical procedure, endless improvisation within a standard repertoire of performance (general practice has been described as the 'jazz of medicine' [footnote ⁸]): each of these bespeaks an embodied agency that is fundamental to patient and doctor alike. Because this is how our world is, the mode of our experience, it is ordinarily silent, invisible, taken-for-granted. Only exceptionally does it become the focus of our attention – in art and philosophy where we acknowledge its mystery, or in clinical medicine where we seek to adjust or restore its smooth working. Embodied agency is both the means and the object of the doctor's professional attention – uncanny as well as commonplace; extraordinary as well as routine. Faced with it, the proper attitude of the clinician is to combine intelligence with a proper form of reverence: an attitude neither of terrified awe at responsibility, nor of

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⁷ Cf. Kathleen Jamie's description of a meticulous clinical examination of her husband, suffering from pneumonia. [60]

⁸ This remark is widely attributed to Marshall Marinker, for instance by Per Fugelli in his keynote lecture to the 17th Nordic Congress for General Practice, 2011.

immobile marvelling at the incomprehensible, but of dynamic, transfiguring wonder in the face of shared embodiment. When the doctor addresses the patient's wonderful fragility she also, and thereby, re-engages with her own.

Revised HME 7th November 2011

ACKNOWLEDGMENT

I am very grateful to Professor APS Hungin, to Dr AM Woods and to an anonymous reviewer for exceedingly helpful comments on the manuscript.

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