

Chapter 10

Goethe and Embodiment in Professional Education and Practice



Stephen Loftus 

Abstract In this chapter, I provide an overview of Goethe's science, with its emphasis on the bodily participation of the observer. I argue that Goethe's insights can help us understand the role of the body in professional practice and education, using the example of healthcare. For too long, those professions that claim a scientific basis have adopted a reductionist and Cartesian approach to how they understand their practice and how they implement their education. This approach has brought problems such as the alienation felt by many practitioners and the people to whom they provide services. Adopting Goethean insights can help us to rethink the role of experience, the body and relationships in how we conceive professional practice and education.

Keywords Goethe · Phenomenology · Holism · Hermeneutics · Experience · Relationship

An important first step in self-awareness in the clinical realm is the discipline of heightened consciousness of your thoughts, words, feelings, and actions. (Cassell, 2015 p. 279)

There is a problem in professional practice and education, especially in the health professions. A growing number of voices are complaining that the manner in which these professions are conceptualised, conducted and passed on to new generations is producing alienation (e.g. Boudreau et al., 2018). There is alienation between patients and clinicians with a growing number of patients feeling that mainstream technical-rational healthcare treats them as mere objects. One result is that many people are seeking alternative (often highly questionable) therapies where they feel they are regarded as people and are cared for. Another sense of alienation is that felt

S. Loftus (✉)

Oakland University William Beaumont School of Medicine, Rochester, MI, USA

e-mail: loftus@oakland.edu

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by many health professionals towards their own professional practices with an increase in moral distress, burnout and people leaving these professions (Durocher et al., 2016).

In this chapter, I argue that a sensitivity to embodiment can help us better understand these issues and how we may deal with them. The underlying assumption here is that we live in a world profoundly shaped by embodiment, “in the sense that the way of experiencing or living the world is essentially that of an agent with this particular kind of body” (Taylor, 1995 p. 62). My body not only permits, and restricts, the ways I can engage with the world but shapes my agency within the world and shapes the nature of my experiences. From this starting point, I argue that insights from the science of Goethe, which is an embodied science, can shed light on what it is that health professionals do, in ways that may then be used to counteract some of the problems described above. These insights have implications for how we educate people for these professions. I summarise the relevant points of Goethean science and discuss how these insights can inform how we think about professional education and practice as being embodied.

Goethe’s Science

Johann Wolfgang von Goethe (1749–1832) is not well known for his science, even though he regarded it as more important than his literary work. His scientific output was prolific and included geology, optics and biology, among other topics. He was, for example, the first to describe the intermaxillary bone in humans. He has, however, often been dismissed as a dilettante who would have been better off restricting himself to literature and poetry where his genius has long been recognised. In recent years, there has been a reappraisal of Goethe’s scientific work, and a small, but growing, number of scholars argue for the relevance of his work today (e.g. Bortoft, 1996; Seamon and Zajonc, 1998).

A well-known example of Goethe’s scientific work, which has often been condemned, was his attempt to critique Newton’s work on optics, in particular the work on colours. Goethe himself is alleged to have admitted in later life that he was mistaken to do this. However, a contemporary re-reading of Goethe’s work on colours reveals that Goethe was in fact doing something different to Newton. Whereas Newton was trying to establish a theory of light, Goethe was trying to establish a theory of vision, i.e. how humans experience light. This is quite a different goal. Indeed, as part of this work, Goethe is credited with developing the first ever colour wheel. Colour wheels are used by artists today. Artists have little interest in the physical nature of light, but they are concerned with how we, as human beings, experience light and the visual world around us. How humans *bodily experience* the world and its phenomena is at the heart of Goethe’s science.

Goethe’s science is a phenomenological science, although Goethe’s work predates phenomenology by almost a century. The extent to which Goethe influenced Husserl, the pioneer of phenomenology, is debatable (see, e.g. Robbins, 2006).

Goethe's phenomenological science is in marked contrast to the technical-rational ideal of science still prevalent in the Western world. The technical-rational view assumes that scientists must be completely objective and detached from the phenomena they observe. It can be argued that this attitude of detachment has been carried over into the health professions which generally see themselves as applied sciences and this detachment is a major reason for the disillusionment described above. In contrast, Goethe emphasised the importance of the direct bodily engagement of the observer with the phenomena being studied and the importance of the relationship established between them. In healthcare, this translates to the relationship between a clinician who must observe, and engage with, a patient.

Goethe's Method

Goethe's studies of plant morphology are the best-known example of how he implemented this scientific phenomenological approach (Goethe, 2009). Essentially, he engaged in careful, and intense, observation that attempted to see underlying patterns that gave unity to the observed variations in the phenomena. He claimed that through this approach, one could, eventually, with the right training and practice, develop a "delicate empiricism" and learn to discern the "ur-phenomenon", the archetype, that underpinned the observed entities and gave them their wholeness and their identity. He was also insistent that the well-trained observer could be equivalent, in many ways, to the best scientific instrument in being able to perceive a phenomenon in its wholeness. The emphasis on the phenomenological engagement needed to reveal the ur-phenomenon has implications. One major implication of Goethe's scientific approach is the need for the observer to be prepared to carefully observe the phenomenon and that this might take some training. Goethe's observational method has been described as having three stages. They are "intuitive perception, perceptive imagination and the ability to synthesize" (Bywater, 2005, p 299).

Intuitive Perception

Intuitive perception requires paying careful attention to what is there in front of the observer and learning to recognise how the phenomenon reveals itself to the bodily senses of the observer. Bortoft (1996) said Goethe's approach is like carefully looking at a complex picture to see what is there, hidden in full view of the observer. Bortoft contrasts this with the technical-rational view, typical of modern science, where the observer looks behind the picture to see what underlying mechanism may be present. This latter approach assumes a mechanistic universe where everything can always be reduced to cause/effect mechanisms and is based on the foundational work of Descartes and Galileo. Another assumption, from Galileo, underlying the

technical-rational approach, is the distinction between primary and secondary qualities.

Primary qualities are those, such as mass and position, that can be reliably quantified, whereas secondary qualities are those that are sensed by the body such as touch, sight, sound and smell. Technical-rational science tends to focus on the primary qualities, and this is seen in healthcare where great importance is placed on numerical test results, such as blood sugar levels, etc. Goethe accepted the need to quantify what could, and should, be quantified but also placed emphasis on the secondary qualities and felt this emphasis was missing from the emerging science of his time. How do phenomena reveal themselves to the senses? How are they bodily experienced? How does the observer relate to the phenomena? The argument is that if we pay more attention to this process of revelation to the senses, then we can learn to see important things that are not obvious to the untrained observer and may be ignored by the technical-rational approach.

Learning to Observe

Bortoft, a contemporary commentator on Goethe's work, demonstrated simple examples of this approach to perception in his lectures when he showed the audience how to see figures, hidden in plain sight, in various graphics (Bortoft, 2016). Once an audience member can see the figures, it is not possible to "unsee" them, and the figures are, from then on, easily recognised. The importance of helping people to see what is "there" can also be related to more abstract phenomena. I have an example from my own experience. As a graduate student, I sought a meeting with a scholar whose work I much admired. I was granted a meeting on condition that I gave a short presentation to the staff in her department about my research. I agreed to this, and eventually the meeting took place. After the presentation, there was a very useful discussion, and, at one point, I was advised to inform myself about rhetoric and to take another look at my data through this theoretical lens. At the time, I knew little about rhetoric beyond the fact that it was the ancient art and study of persuasion and often had a bad reputation, as people often spoke of "mere rhetoric" or "empty rhetoric".

In due course, I read some introductory texts to modern rhetoric and, when I returned to my data, was astonished to find that rhetoric leapt off the page. It had been there all along but I had been unable to see it. However, once I had been "rhetoricised", I was unable not to see it. The insight here, from Goethe, can be summarised as that we can only perceive what we can first conceive (Brady, 1998). In other words, we need the idea before we can observe an instance of it before us and recognise what it is we are experiencing. Sometimes, as in my case, the perception then becomes straightforward and unproblematic. In many cases, though, such as in professional practice, the perception may be more complex, and careful, meticulous training in observation is needed.

In many professions, such as medicine, newcomers must learn to recognise important information that may not be obvious to most people. For example, there was the medical student who, sent to assess a patient, saw that the patient had “glaring cardiac signs” (Loftus, 2006, p. 199) as soon as she stepped into the patient’s room, signs that a layperson was likely to miss. This is not simply an issue of learning facts, although that is involved. Bortoft (2012 p.53) compares the “verbal-intellectual mode of apprehension” with the “sensuous-intuitive experience of phenomena”. The latter is characteristic of Goethe’s science and requires that the observer must bodily engage with the secondary qualities of the observed phenomenon. Medical practice and education tend to focus on the verbal-intellectual mode and downplay the sensuous-intuitive experience. Medical practice needs both. This training to observe with one’s whole being almost certainly occurs in medical education and practice but tends not to be recognised or given much importance when it is acknowledged.

Perceptive Imagination

The second stage of Goethe’s method is called perceptive imagination. Goethe gave detailed descriptions of his use of perceptive imagination when studying plants (Goethe, 2009). He paid careful attention to the variations he saw in leaf forms within a plant. He claimed that he could discipline his imagination to postulate intermediate forms that were likely to be part of an overall pattern that would be characteristic of the plant and that these imagined forms would help to reveal the underlying pattern, the archetypal plant, the ur-phenomenon mentioned earlier. In medicine, the equivalent of Goethe’s ur-phenomenon is an entity that the textbooks call the typical patient. Most experienced clinicians will admit that they have never seen a typical patient because all patients are different. Real patients are all variations on a pattern, each with their own idiosyncrasies.

Newcomers to a profession need to develop this ability of perceptive imagination so that they can be confident in recognising variations even if they have never seen a particular variant before. Developing this ability often needs careful guidance from more experienced practitioners who must help newcomers distinguish “the subjectively projected from the inter-subjectively perceivable” (Wahl, 2005, p. 69). Wittgenstein, influenced by Goethe, picked up this theme in his discussion of family resemblances (Wittgenstein, 1953). Individuals may share a number of features that identify them as belonging to a group, but no one individual has all the features, and it is not necessary for an individual to have all the features in order to be identified as a group member. This leads us to the final stage of Goethe’s method which has been called synthesis.

Synthesis

According to Goethe, the nascent science of his time was too preoccupied with analysis and tended to ignore synthesis. “A century has taken the wrong road if it applies itself exclusively to analysis while exhibiting an apparent fear of synthesis: the sciences come alive only when the two exist side by side like exhaling and inhaling” (Goethe in Miller, 1995, p 49). It can be argued that Goethe was prescient and that science since his time has continued to be preoccupied with analysis and breaking phenomena into smaller and smaller parts that can be manipulated and controlled. It has to be admitted that, in many ways, this analytic approach has been enormously successful and, in healthcare, has given us many of the medical advances we enjoy today. However, by paying less attention to synthesis, many problems have arisen. The resultant fragmentation, from more and more analysis, makes it harder and harder to see patients as complete human beings, leading to the alienation mentioned earlier. A Goethean approach to synthesis can help us have a deeper understanding of this issue.

In synthesis, the observer must learn how to bring together what is perceived with possible (realistic) variations, in order to grasp the wholeness of what is being revealed. This can be very difficult because, in real-world settings, phenomena may reveal themselves only partially and over time. There is often ambiguity, and this is frequently seen in professional practice. The reality of healthcare is that clinicians are often confronted with difficult diagnoses when only some clinical features of a condition are present. In addition, each feature that is present may only be partially present. Even the objective measures from test results may not always help. It is a common experience for a clinician to find that test results are not yet available or, even worse, have been lost or are ambiguous or contradictory. However, decisions must still be made, based on an overall judgment of what are emerging as the issues to be dealt with. A problem with how we conventionally conceive phenomena is that we tend to think of them as they are when they are fully formed and fully apparent. The typical patient of the textbooks, with all the expected clinical features and all the test results (and who is rarely seen in real clinical practice), is an example.

Bortoft (2012) calls this focus on the fully formed phenomenon “downstream thinking”. He contrasts this with what he calls “upstream thinking” where phenomena are still being revealed. He claims this upstream focus is one of the great strengths of the Goethean approach. There is an emphasis on the appearing of what appears and how it appears to the bodily senses of the observer. Heidegger too was aware of this when he said, “Let me give a little hint on how to listen. The point is not to listen to a series of propositions, but rather to follow a movement of *showing*” (cited in Rowe, 1991 p, 300 emphasis in original).

In healthcare, this translates as the difference between thinking of illness as a series of completed events and ongoing and dynamic processes that are unfolding as you observe a patient. According to Cassell (2015), reflecting on a long career in medical practice and education, novice doctors tend to think in terms of textbook

events, whereas experts think in terms of unfolding and dynamic real-world processes:

events are easier to think about than processes ... It requires a habit of mind to see everything changing all the time, but once that habit of mind is acquired, clinical medicine becomes easier too. (p. 290)

Cassell is articulating what is essentially a Goethean approach to patient assessment. Acquiring a habit of mind that is bodily attuned to processes still unfolding, and still changing, is what Bortoft means by upstream thinking. In the clinical encounter, sick patients often, gradually and dynamically, reveal themselves in ways that textbooks do not. This is the reality of clinical practice which is why, once Cassell's habit of mind is acquired, the practice of clinical medicine can become easier. The upstream thinking, the openness to dynamic and unfolding processes, combined with the focus on synthesising the parts, means the observer will need a hermeneutic view of what is happening, where complex interpretation is required.

Hermeneutics

Bortoft (1996, 2012) emphasises the hermeneutics of a Goethean approach to science and claims this is closely related to the phenomenological. Upstream thinking can be seen in terms of the hermeneutic circle in relating the parts that are experienced with the whole that is emerging and back again. Bortoft argues that because of our Western preoccupation with analysis of parts, we tend to have an impoverished view of what the whole might be. Too often, we think merely of totalities which are simply the sum of the parts. Bortoft often refers to totalities as counterfeit wholes. This is because in a Goethean approach, there is a richer understanding of what the whole might be and the whole is very much more than the sum of the parts. The whole includes the relationships between the parts, the relationships to the context and the many ways that the whole can have meaning. In a text, the collection of words is a mere totality, but the meanings of the whole text are not restricted to the totality of the words, although the words do put constraints on the ways in which we can interpret the whole.

There is a strong connection here with the works of other more recent scholars, such as Gadamer who was probably influenced by Goethe, at least indirectly through the later work of Wittgenstein. Commentators on Gadamer's work remark that, in this view, the whole includes what is revealed along with what has not been revealed (e.g. Davey, 2006). This is in keeping with the Goethean viewpoint on the emerging whole with the emphasis on the relationship between the phenomenon, the observer and the context.

Gadamer (1989) tells us that in a genuine encounter with a phenomenon, we not only question the phenomenon but allow ourselves to be questioned and possibly changed by the encounter. This is very much Goethe's view. Charles Taylor summarised the contrast between this more hermeneutic view with the technical-rational

when he said that it was the difference between learning facts and coming to an understanding with an interlocutor (2002). In the health professions, both approaches are needed. The clinician must gather objective facts about a patient. At the same time, this must be balanced with developing a relationship with the whole person who is present in the clinical encounter. The balance may be different depending on the clinician-patient relationship, but a balance must be sought.

Relationships

The importance of the clinician-patient relationship is based on the experiences that occur within the clinical encounter where the participants bodily meet each other. Cassell laments that “contemporary medical practice and teaching have cast aside the fundamental importance in medicine of relationships: the doctor-patient relationship and the teacher-student relationship” (2015 p. 5). Cassell echoes Goethe’s emphasis on the importance of experience when he goes on to say “what clinicians come to know about sick persons – patients – is primarily experiential” (p. 3).

From my own experience in dentistry, sometimes I had patients who wanted nothing more than a quick, technical fix for their toothache, and sometimes I had patients with chronic conditions who needed ongoing compassion far more than they needed a technical procedure (Loftus, 2015). Learning to discern the difference, and responding appropriately, is one of the ways in which a clinician is questioned and challenged by the patients one encounters. However, the technical-rational approach puts emphasis on the objective facts rather than the human relationship, and there are several reasons for this. One reason has been already mentioned, and this is the preoccupation with objective facts. Another reason related to this is the preoccupation with modern technology.

Vergheze (2008) discussed how modern technology can interfere with the relationships that clinicians must develop with patients. He related how he started as a senior clinician, at a new hospital, and found that the junior doctors expected to do a ward round sitting in a room where they had access to computers that would provide them with electronic records and all the test results for the patients. Vergheze helped the juniors discover a new balance between the direct physical examination of patients and over-reliance on computerised test results. He describes the joy the juniors discovered through doing this and of what they were able to learn. Vergheze was helping the juniors to reconnect with patients and develop their skills of experiencing the patient with their bodily senses. He was making use of secondary qualities. He was not discarding test results but balancing them with, what is, essentially, a more Goethean approach. There are echoes again here of Gadamer who warns us of the dangers of substituting an image for reality (2006). The imagery of technology can be seductive. The apparent certainties offered by the objective facts of technology can lead us away from the relationships we need to develop with patients. Another reason that the technical-rational approach can fail us is because modern health professionals now tend to learn only the discourse of the technical-rational,

Bortoft's verbal-intellectual mode. There is a need for other, balancing discourses to be present in healthcare.

Balancing Discourses

When Sackett et al. (1996) recommended a more evidence-based approach to healthcare, they also made other recommendations that are in keeping with a more embodied Goethean approach. They said that a clinical decision should be made by synthesising the best available (scientific) evidence with the values of the patient and the experience and expertise of the practitioner. Since the advent of evidence-based practice, nearly all the attention (and research funding) has been directed towards the first part of their recommendation, towards the best available evidence. This is probably because the best available evidence falls within the scientific and technical-rational discourse of the biomedical disciplines. Because of their education and training, clinicians are comfortable with this way of talking about the world and this way of viewing healthcare. The values of patients (and their families) and the expertise and experience of clinicians do not fit easily within this type of discourse. This is why the medical humanities and social sciences need a more prominent role in medical practice and education. They do have the vocabularies to articulate values, experience and expertise. Again, it is not a question of replacing the technical-rational but of balancing it with these other discourses so that objective, measurable, scientific facts can be contextualised within the meaningful life-world of the patient and the repertoire of embodied experiential knowledge accrued by the practitioner over time.

A small, but growing, number of contemporary scholars are now using discourses that integrate the technical-rational with the bodily engagement of the clinical encounter. There is the embodied relational understanding of Todres (2007) that is based on a synthesis of Gendlin's (1997) logical order and responsive order. The logical order is the technical-rational, whereas the responsive order is based on the dialogical relationship between language and bodily experience. Likewise, Svenaeus (2000) talks of the bodily attunement needed in the clinical encounter and takes his inspiration from Gadamer and Heidegger. Svenaeus goes on to use both hermeneutics and phenomenology to articulate the clinical encounter.

Articulating Clinical Experience

A few clinicians have attempted to articulate their experience of the clinical encounter in ways that try to express what happens to them in hermeneutic, phenomenological and bodily terms. Here, for example, is a clinician describing how a more experienced practitioner worked through a difficult diagnosis:

What intrigued me even more was Dr. Meryl. As I watched her scan José and then examine his elbows, she wasn't so much thinking as feeling, performing a quiet, unhurried search inside a huge experience, not linearly but globally, feeling around in her Self for that wholeness, that solution which is the right diagnosis and fits all the clues. (Sweet, 2017, p. 131)

Later, Sweet describes this experience in herself:

It was subtle, but there was some global way I was registering her state of health and illness, not the individual changes but the whole change. Just as a musician registers the harmony of a piece of music, my body, my self, had somehow learned to tune itself to hers. And if I could do that with one patient, then I could do that – whatever it was I was doing – with others. (p. 154)

There are several points to note here. First, there is the acceptance that the whole being of the practitioner is involved in the experience of the clinical encounter in a Goethean sense. As Franses and Wride (2015) note:

Thus, there is a shift from a static world that we are separate from and which we view from the “outside”, that we can fix, pin down and explain, to a dynamic world that is constantly in process, which has to be participated in to be revealed. (p. 344)

The practitioners here are bodily participating in the clinical encounter and relating to their patients in a part-whole way that engages their whole being.

This kind of clinical encounter is not just an exercise in cognition, of how much can be remembered from a textbook. Cognition is certainly involved, but to stop there is to miss much of importance. There is a meticulous Goethean observation. There is a careful, Goethean use of the imagination in the attempt to be open to whatever unfolding and dynamic processes may be revealing themselves. There is a Goethean attempt to synthesise all that is occurring. There is emotional and bodily commitment as well. There is embodied attunement between the practitioner and patient. It is likely that the practitioner will be transformed by the experience. In this kind of professional activity, the ontological matters as much as the epistemological. There are implications here for how we think about preparing people for this kind of professional practice.

Educational Implications

In these descriptions, of the clinical encounter, we can see real experts in action, being stretched to the limit of their expertise and the limits of their being. Note that Sweet (2017) finds it difficult to articulate just what was happening, the “whatever it was I was doing”. The competency-based approach that is currently popular in higher education is wholly inadequate to capture what Sweet is trying to describe. The descriptions above assume competency but go far beyond it. However, if we want our clinicians to have Sweet's level of expertise, and I assume we all do, then we must ensure that we make stronger efforts not only to articulate this expertise but to consider how it can be passed on and taught to others for all our sakes. These

efforts to address professional education must also include the being of the students as well as their skills and knowledge. There are possibilities.

Our students need a community of practice (Wenger, 1998) made up of mentors who can guide them, coach them, demonstrate to them and role model for them what is involved. They need the chance to see experts like “Dr Meryl” stretching themselves with difficult cases. They need to hear the “war stories” of these experts as they try to explain what they were doing and why they did it that way. They need to be immersed in the narratives of their profession (Loftus and Greenhalgh, 2010). The students also need to engage in practice for themselves and experience, bodily, at first hand, the challenges, the complexities and the uncertainties that come with real patients. In addition to the mentoring of people like Dr Meryl, they need to reflect deeply on their own embodied experience and what it offers to teach them. Simulations and other forms of training can be excellent learning opportunities, but there must come a time when students need prolonged, bodily immersion in the challenges of practice where they find out that the textbooks can be of limited use and that methods and protocols need thoughtful modification in the moment of their application.

A Practice Focus

This ability, the disposition to work out, in practice, what is best for this particular patient, at this particular time, in this particular place, under these particular circumstances is often called practical wisdom or phronesis. Our students need opportunities to face challenges to their knowledge, their skills, their emotions and their being. Part of this includes cultivating a “discipline of heightened consciousness of ... thoughts, words, feelings, and actions” (Cassell, 2015 p. 279). Good professional education is transformative of the whole person, mind and body, and is never finished. It needs ongoing experience and exposure to practice so that professionals can keep on developing their Goethean abilities to observe, imagine, synthesise and relate.

These insights can lead us to a more sophisticated view of what professional practice is and its educational implications, best summarised by Davey:

What makes a practice a practice rather than a method is precisely the fact that it is based upon acquired and accumulated experience. The acquisition of discernment, judgment, and insight is based not so much upon what comes to us in a given experience but upon what comes to us by involvement and participation in a whole number of experiences. ... Experience of this order affords a wisdom. (2006, p. 245)

The importance of involvement and embodied participation in a practice is at the heart of a Goethean approach, and from this comes the personal transformation of a practitioner who can develop further discernment and judgment.

Conclusion

A growing number of voices are calling for a reappraisal of practice and education in the health professions with the realisation that the Cartesian technical-rational approach often fails us. An approach informed by the embodied and phenomenological science of Goethe offers a way forward. There is an emphasis on a more appreciative, qualitative, meaningful and bodily participatory engagement with sick patients. This is an approach based on “a science of qualities and conscious awareness of the relationships and interactions between the parts out of which the whole emerges and which are dependent on that whole” (Wahl, 2005 p 68). This can open the way to a professional education that is more phenomenally based and that can be more personally developmental rather than a quest to simply acquire knowledge and apply it. Such an education promises to give us practitioners who care more for their patients and care more for themselves. We shall give the final quote to Goethe with his emphasis on the dynamic reality of the whole:

[Nature] is complete, but never finished. (Goethe)

We can paraphrase this in terms of professional education. Our educational programmes should aim to produce graduates who are complete, but who know that they are never finished.

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