Boundaries of the Educational Imagination

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Chapter 4

Charting the space between demons and angels

There is something startlingly different between physical matter and the mind/emotion/will of a human being. Both exist as a part of the universe, but one is contained within an interiority that is self-aware. In the last chapter we explored the relationship between the functioning of a brain/mind and how we learn. In this chapter we turn to our interior being in its fullness. There is something extraordinary about the universe becoming mindful of its own existence, waking up to its own nature as it were, and this is what has happened with us. We are the universe becoming aware of itself, and, as far as we currently know, there are no other types of existence with such intense levels of self-awareness. We still tell ourselves that higher levels of awareness exist in our gods, but even here their instructions are normally quite clear – look within.

What do we find when turning from the materiality of existence towards its interiority? Another whole world springs into focus with very different organising patterns and principles. Stare into a desk and stare into a student’s eyes. Something is the same – both exist. But something is different – the student stares back with an image of you in hir. Over the last three chapters we have been working with the architecture of schools, classrooms and minds. Pens and tablets are on desks and chairs in classrooms in schools that are in school districts, provinces, countries, and continents in a world that is materially divided in racial, gender and spatial terms. Stare into a student’s eyes and a different world opens up that is hard to see from the outside, even if this outside is the material functioning of the brain. We could perceive what was in a classroom by unpacking its contents on the field, but it’s harder to unpack a learner’s interior world onto the table,
even with sophisticated brain scans. Our friendly alien, Tau, who has watched and wept over the tragic development of our material school world, would need a very different set of tools to work with the interior developments of an individual. How could Tau find a way to externalise this interior world so as to observe what was happening inside learners?

*Opening the world inside a child – Piaget*

The first person to conduct systematic, scientifically controlled experiments on the minds of children was Jean Piaget and because this was a controversial thing to do he used his own children. There was no need for ethical clearance. The only clearance he needed was from his wife, who helped him with the study, and as a result both of them played with their children for a substantial part of their childhood. For example, Piaget noticed that his seven-month-old daughter, Jacqueline, stopped playing with her plastic duck when she dropped it in a fold of a quilt and it disappeared from her view. Fascinated by her behaviour, he got the duck out, showed it to her, made sure she was interested in it, and then made it disappear again behind the quilt, at which point Jacqueline lost interest. Only at around ten months old did she begin to search for hidden objects. Could it be that, unlike adults, babies did not know things existed when not in their view? Could the baby be a solipsistic being, both unaware that she exists and unaware of any reality other than what is directly in front of her at the time? From a baby’s perspective, maybe she is not born when emerging into the light of day from a long journey through a tight tunnel. Perhaps she only begins to realise she has a separate and lasting body that is different from the world over the first year of her life outside the womb: that there is an inside separate from an outside, that the inside is her, whatever that may be, and that the outside is not her, is different from her, but stays around even when she does not look at it.

It is an astonishing subject to stumble upon – the systematically different inner worlds of children and adults – and to chart in exquisite detail the developmental journey this inner world embarks on to reach maturity. Piaget is currently out of fashion, cartooned as a misguided biologist who experimented on individual children and thought they went through rigid stages of development that have now been disproved and supplanted by the work of Vygotsky. This is a caricature. Piaget published his first articles on snails in his middle teens; wrote a novel (*Recherché*) that chronicled his teenage angst and published it in the same year he got his doctorate, aged 22; chose humanities over the sciences; worked for the top psychologists of the previous generation and was fascinated by Freud and the unconscious; and was able to master multiple disciplines across the hard and soft sciences, continuing to do so for seventy years, meeting and engaging with many of the world’s top thinkers and scientists in the process. Einstein, for example, was fascinated by Piaget’s work, especially the problem of conservation of quantity.
Piaget loved to tell the story of Einstein grappling with the complexity of individual development, revealed in the example of conservation where you pour water into a glass of a certain shape, then into a glass of another shape, without changing the quantity. It was a delight for him [Einstein] to see what detours and complications you have to go through for the simplest bit of knowledge. He’d say, “It’s a lot more complicated than physics!” (Bringuier, 1980, p. 135). And it is more complicated: children stare back at you with curious energies in their eyes that are not reducible to E=mc2.

Piaget’s initial focus was on cognitive development. Basically he found that as children get older they move through levels of cognitive development that continuously increase their range of possibilities (Bringuier, 1980, p. 137). Let’s demonstrate this by asking you a simple question: what are the possible routes between points A and B below?

Ask a little child and she will give you a line

Around the age of six the child will start to give you a small set of variations like straight, curved or zigzag lines.

You, on the other hand, will find both solutions cute but obviously limited because there is an infinite number of routes from A to B, something you understand in an abstract way that is not about adding every single possible route together, but by logically understanding the principle. As a child moves through levels of cognitive development she becomes increasingly able to work systematically and abstractly with a given situation. Notice that there are two key elements at play here. First, there is the given situation that has a particular context and a particular set of possible responses (routes from A to B). Second, there are the procedures the child invents and experiments with to solve the given problem. At the heart of
Piaget is the meeting point between all the necessities a given situation contains and all the possible ways a child can intersect with these necessities until it reaches a point where her possible solutions closely match up to the necessities demanded by the situation. We tend to focus on the different levels of cognitive development, as you will find if you do a search for Piaget on the Internet. What Piaget was interested in was what drove the process through the levels. The more time he spent researching these processes of transformation the more he became fascinated by what he called reflective abstraction. Allow me a personal example.

When my daughter was in Grade 2 (end of 2012), she had no difficulties with addition and subtraction, and I really enjoyed helping her with homework. Then multiplication came along, and I struggled to explain how it worked. She could do her 1x table and her 10x table because there are simple rules behind it (repeat the same number or add a zero); and she kind of got the 2x table, because it simply involves doubling, but I could see she did not initially understand what multiplication really was or why it worked the way it did. When I did multiplication with zero she had no problems with numbers up to a hundred, but then suddenly insisted that 100x0 = 1 because the number is so big. Why? Well it stumped me, as did trying to explain multiplication to her because it involved something more than addition; but what that more was was hard to show. Multiplication used addition but somehow also went beyond it. My daughter needed to use addition as an element of multiplication, not focus on addition whilst trying to do multiplication.

What Piaget became increasingly fascinated with was how we shift from absorption in the process of doing something (like addition) to being able to use the process as a stepping-stone to do something new (like multiplication). What initially immerses us, challenges us, takes up all our concentration slowly becomes obvious and easy. We are able to use it as a tool to do something new.

With multiplication, for example, we don’t focus on the mechanics of doing the addition, but how many addition operations have been done. The individual action of counting suddenly becomes the co-ordinated action of using addition for something fresh. Suddenly we are able to work in chunks of three rather than having to count to three each time. Addition becomes a stepping-stone to multiplication.

This process gripped Piaget because it revealed the inner activity of cognitive development. The child does not just go from concrete world to abstract concept (as real doggie in the world is named by the word concept dog), but then goes on to use the abstract concept as the base for new moves (for example, how dogs and cats are both animals). You can actually watch this happen.

Ask a child if there are more animals or dogs in figure 4.1. Chances are, if the child is under six years old, she will say there are more dogs than animals. She has got to grips with counting, and with dogs and cats, but not the fact that both dogs and cats are included in a larger category of animals. To do this, she would
have to stop focusing on the dogs and cats and shift to what makes both dogs and cats animals. She would also have to shift from what things look like on the page, where it is clear that there are more dogs than anything else, to a more conceptual space where she works with dogs and cats as categories, with both being types of animals. Piaget called this process reflective abstraction.

![Figure 4.1 'Are there more animals than dogs?'](image)

**Reflective abstraction – driver of the educational imagination**

The reason why reflective abstraction is so exciting is because it opens out endless new vistas of development beyond the concrete and everyday world. Rather than work with how things combine, you start to work with how the combinations combine, and then with how the combinations of combinations combine, and then with how the combinations of combinations of combinations combine. (This resonates with the previous chapter’s discussion of chunking into ever larger and more sophisticated networks).

Reflective abstraction is not an empty recursion like the ‘thank you for the thank you’ note I once sent to one of my obsessive compulsive friends who then sent me back a ‘thank you for the thank you for the thank you’ note (and confessed that although she found it funny she also just had to do it for what passes as peace of mind in her world.)

With reflective abstraction each higher level works with a set of principles different from those below it, but includes within it the basic operations of the previous level. You don’t just repeat the same step, but you include the step and move to something higher, like shifting from addition to multiplication; or from naming cats and dogs to a higher concept of ‘animals’ that includes cats and dogs. Often you have to alter how you thought about the step because the higher level reveals how restricted your earlier understanding was. You have to accommodate your earlier understanding to the changes and bring it in line with the higher level.

This enables you to get closer to the fullness of reality as you move increasingly further away from it. You are able to perform increasingly complex transformations that get closer and closer to what is the most complex of all, the fullness of reality, but to get there you become more and more abstract. Piaget was not interested
in leaving reality, but getting closer to it. Reflective abstraction reduced the gap between the possible and the necessary, because it increased the reach and sophistication of the possible, enabling it to get closer and closer to the way the world actually works. As Piaget put it, ‘Knowing reality means constructing systems of transformations that correspond, more or less adequately, to reality’ (Piaget, 1970, p. 15). Reflective abstraction is the key generating mechanism of the educational imagination. There is no other mechanism that catches the heart of its basic functioning more than reflective abstraction. It continually expands outwards and upwards into ever-richer worlds of possibility, but in doing so comes nearer and nearer to the fullness of reality; or in Piagetian terms, ‘knowledge is a system of transformations that become progressively adequate’ (Piaget, 1970, lecture one). It is not enough to know that dogs and cats are animals – we need to get to the stage of understanding all the levels contained within ‘animalia’.

So just how many levels of cognitive development are there? If we continue to reflect and abstract upon a level, do we not land up in a world where there are infinite levels of development, each getting closer and closer to the fullness of reality but never quite reaching it? And what is the fullness of reality? Is it just physical reality, or do we have to include emotional and spiritual dimensions to the fullness? It is similar to Zeno’s paradoxes (figure 4.3) that have delighted and

Figure 4.2 Recurring but empty recursion

From babe to sage
frustrated philosophers for over two thousand years. We can start with the same
problem Piaget delighted in giving to children, the space between point A and B,
except what is at issue is not the number of possible paths, but the impossibility
of ever reaching your end point. You start off by making it half way (to how the
world works), but still have half the journey to go. However, the distance left
can also be halved, and so on, with the result that you get closer and closer to
your destination but never quite reach it because this ever-shrinking distance can
always be halved.  

Figure 4.3 Zeno’s paradox of arrow never hitting target, or of the possible never hitting the actual

Notice that this presents a very different model of the educational imagination
from its stereotype, where, as we exercise our educational imaginations we are
able to travel further and further to more and more exotic locations. On Zeno’s
model, the space we work in shrinks and shrinks as we get closer and closer to
an end point, making the work of the imagination harder and harder within an
increasingly confined space, with increasingly more intricate detail. At each level
of cognitive development we get closer to the full complexity of the real, but there
is always space for a new level of development in the infinite gap, no matter how
small, between levels of development and the fullness of being. Do we eventually
stop this ever intensifying process of reflective abstraction and just rest in the
fullness of being, whatever that is supposed to be? Do we reach a point where it is
impossible to perform the act of reflective abstraction, or where the act does not
produce any new level, only more of the same, where necessity and possibility
meet, not just in experiments but in our fully lived reality? Is there an end to the
educational imagination? Piaget worked with four basic cognitive levels, each of
which had many sub-levels or stages, but are there not many more levels waiting to take us way beyond the formal operational? Just as with the materiality of schools where we took all the schools of the world as our focus, should we not open out to all the levels of development human experience has shown us?

Let’s put it rhetorically. Do you think Jesus, Mohammed, da Vinci, Einstein, Gandhi, Steve Jobs and Mandela stopped at the formal operational level where the rules of logic are used on the world? Two immediate responses spring to mind. The first is that they might have been highly developed in other areas that have little to do with cognitive development. This opens up the issue of there being different domains (lines or streams) of development. The second is that they might have moved beyond formal operational thinking into new and higher levels of thinking. We have to keep these two responses clear. Just because you show high levels of development does not mean this is necessarily in cognition. To get really close to the fullness of being, maybe you need to work both at reaching the highest level of cognitive development but then also try to get to the highest level of all the other lines of development as well, whether they be moral, emotional, aesthetic, kinaesthetic, linguistic, or whatever. Only then can you claim to have got closest to the infinity of the real because only then do you gain a purchase on all the different facets of the real, not only its logical components. The interior world of an individual student, which opened out at the beginning of this chapter, suddenly deepens and widens.

Believe it or not: undergraduates also develop

What would happen, for example, if we took university students as our focus, not little children? Would they not show levels of development very different from those described by Piaget? Take a fresh-faced, first-year humanities undergraduate student and put her next to a more worldly-wise third-year student. What happened in three years? It turns out that students go through a recognisable intellectual and emotional journey (Perry, 1970). Normally students start out with a strong sense of right and wrong imbibed from family and community. His or her own point of view is right, everyone else is wrong. The complex world of university life quickly makes them aware that there are many things they actually don’t know about. Their dualistic world breaks open to the recognition of multiplicity, that there are things in the world they have not dreamt about, shattering their sense of obvious rightness. Initially, when they enter this world they just want to know which theory is right. Students often stop me when I try to get a debate going with a demand that I just tell them which view is correct. They quickly shift into a world where diversity dominates and tumble enthusiastically into an anything goes attitude. Every perspective is valid as a personal opinion. Within this sea of choice students eventually have to take a stand based on what they think, feel and believe. But what a student now believes is not the same as
when she arrived, having undergone a process of doubt and expansion, resulting in her being able to make an informed choice based on a variety of attractive alternatives. This is not just a cognitive move, it’s an ethical one where the student commits to an informed way of being and acting in the world and continues to refine her identity and values based on these commitments.\textsuperscript{23}

Notice in the move from Piaget to Perry we have done two things. First, we have started to explore if there are levels beyond Piaget’s four. Second, we have shifted from a focus on how a child’s cognitive schema get closer to the necessities of the real world to the way a student self-actualises. It’s about becoming everything you are capable of becoming rather than getting cognition closer to reality. Curiously, at higher levels of development, self-actualisation and getting closer to reality come together. Perry focused on undergraduate students and they certainly do not have the last word on levels of human development, given their struggle to assert who they are in a complex world, and given the limited sample of students (Western, middle class, white). We need to work with studies that focus on the full range of possible development, not just children or students and not just cognitive development.

*Self-actualisation and self-transcendence*

We find such a focus in the work of Abraham Maslow. He saw his work as a complement to Freud: ‘It is as if Freud supplied us the sick half of psychology and we must now fill it out with the healthy half’ (Maslow, 1968, p. 5). Maslow was interested in the best we could become, famously developing a hierarchy of needs in which the final level was self-actualisation. Rather than a cognitive line, he explored the needs human beings have and express. Maslow used highly developed individuals like Einstein who clearly had fulfilled their potential across a number of lines as his data source. You can check your own levels of self-actualisation by asking yourself the following 10 questions:

1. Do you (a) work with reality the way it is, or (d) fight for your version of it?
2. Do you (a) do what feels good and natural for you, or (d) do what others expect of you and pretend it’s actually your own initiative?
3. Are you (a) focused on problems of society and other people, or (d) focused on your own problems but tell yourself they are of great importance to the world?
4. Do you (a) enjoy solitude, privacy and self-reflection, or (d) keep the TV on for company and/or have lots of friends around most of the time? Put differently, do you think that all your 500 Facebook friends are really your friends?
5. Are you (a) comfortable in silence with friends, or (d) continually feel the need to fill space with your wit, wisdom and gossip?
6. Do you (a) enjoy playing the games you did as a child, or (d) are you happy to leave the children doing their own thing while you drink beer and watch sport, or resent the men drinking beer and watching sport?
7. Do you (a) celebrate deep and profound experiences when they come along, or (d) deny any knowledge of such experiences and laugh dismissively at such accounts?
8. Do you (a) feel in tune with reality, or (d) must reality tune into your wavelength?
9. Do you (a) believe that people are essentially good and can be trusted, or (d) are just waiting for the chance to take advantage?
10. Do you (a) have deep and meaningful relationships with a few people, or (d) are known to be a slag or bastard, or suspected at least of having the tendency?
11. Is your sense of humour (a) philosophical, unhostile and good natured, or (d) sarcastic and crude?
12. Did you (a) try to answer the quiz honestly, or (d) try to score all ‘a’s even though it’s a meaningless quiz meant only to demonstrate self-actualisation?

Of course you both answered honestly and scored 12/12. You can see from the quiz that self-actualised people are realistic about the world and themselves; focus on helping others and finding solutions to real concerns; are spontaneous both in thought and action; enjoy autonomy and solitude; continue to have freshness of appreciation; and enjoy peak experiences when they come around.

The problem was that the more Maslow researched fully self-actualised human beings, the more he realised he was at the tip of a new phenomenon that had more to do with self-transcendence than self-actualisation. In 1969, the year before he died, he established the Association for Transpersonal Psychology. He was interested in climactic peak experiences and more serene forms of contemplative plateau living. What opened out in front of Maslow just before his heart gave in was the massive treasure trove of transpersonal experience to be found in the spiritual psychologies of Taoism, Buddhism, Judaism, Christianity and Sufism. His own articulation of transpersonal levels of development was an inevitable hodgepodge, put together in a rush of excitement and energy, called Theory Z. Here are 10 of the 24 characteristics (Maslow, 1971, pp. 283–294).

- They speak easily, normally, naturally and unconsciously the language of Being … the language of poets, of mystics, of seers, of profoundly religious men.
- They see sacredness in all things at the same time that they also see them at the practical, everyday … level.
- They seem somehow to recognise each other and to come to almost instant intimacy and mutual understanding even upon first meeting.
• They are more responsive to beauty.
• Not only are such people lovable as are all of the most self-actualizing people, but they are also more awe-inspiring, more ‘uneary’, more godlike, more ‘saintly’ … more easily revered.
• Transcenders, I think, should be less afraid of ‘nuts’ and ‘kooks’ than are other self-actualizers, and thus are more likely to be good selectors of creators (who sometimes look nutty or kooky) … [To] value a William Blake type takes, in principle, a greater experience with transcendence and therefore a greater valuation of it.
• They are more apt to regard themselves as carriers of talent, instruments of the transpersonal, temporary custodians so to speak of a greater intelligence … This means a certain peculiar kind of objectivity or detachment toward themselves.
• Transcenders … would have … more of the fascinations that we see in children who get hypnotised by the colours in a puddle, by the raindrops dripping down a windowpane, by the smoothness of skin, or the movements of a caterpillar.
• Transcenders have throughout history seemed spontaneously to prefer simplicity and to avoid luxury, privilege, honours, and possessions.
• I cannot resist expressing what is only a vague hunch; namely, the possibility that my transcenders seem to me somewhat more apt to be Sheldonian ectomorphs [lean, nerve-tissue dominated body-types] while my less-often-transcending self-actualizers seem more often to be mesomorphic [muscular body-types].

As I read this I was struck by just how tentative Maslow was about his theory. He candidly admits that he has only carefully talked to and observed three or four dozen subjects, and that he has not been able to verify the reliability of his information or ensure the representativeness of his sample. All the references, bar two, are from his own work. Before he could take this new area of transpersonal psychology into formally verified science, he died. But what we see opening before us with him is a vast territory far beyond the developmental levels with which Piaget worked. So whenever you use Maslow’s hierarchy of needs, please use the one that includes transcendence (figure 4.4).

Maslow did not provide a fully worked-out exposition of transcendence. The person who has become famous for synthesising this vast space is the American, Ken Wilber. He is in no way at the same level as Piaget and Freud, or Jung for that matter. Much of his work comes from synthesising the cosmic traditions of spiritual mysticism and his own personal experiences, not from a lifetime of engagement in research. But that said, he does provide a simple overview of the field that both uses Piaget and places Piaget within the broader field of human developmental studies.
Wilber was able to do what Maslow only glimpsed at: engage the world’s spiritual traditions with a sympathetic integrating eye for what they tell us about advanced levels of human development; not how they have resulted in pillage, looting, burning at the stake, and condemnation of most of humanity to eternal damnation. What would you find if you took the whole world’s experiences of human development as your brief: East and West, North and South, ancient and modern, sacred and secular? What would you find if you tried to explore the heights of development we can reach inside ourselves?
You can find an early account of his synthesis in the humbly titled *A Brief History of Everything* (2007) or the more detailed and impressive *Sex, Ecology and Spirit* (2000), in which he outlines four levels of human development beyond the formal operational: vision-logic, psychic, subtle, and causal. What for Piaget was mystical gibberish and for Maslow a chaotic list of 24 characteristics is for Wilber a clearly demarcated set of levels to climb, each with a number of different lines articulated by different researchers (cognitive – Piaget; needs – Maslow; moral – Kohlberg), its own pedagogic strategies and sets of educational practices. Like Piaget and the process of reflective abstraction, each level is approached by taking the previous level as its working base and producing something new above that both including and transcending its earlier version in a three-step process. First, you enter the new level of development and identify or fuse with that level. Second, on reflection, you start to recognise that there are problems and begin to disassociate and differentiate from the level. Third, you begin to see how to use the problems and practices of the level as an abstracted base to move to a new level. And this happens not just in one dimension like cognition, but in many dimensions, all at different rates and intensities, depending on the individual. The world inside a student is slightly more complex than all the desks of the world.

The problem is that it’s not so easy to demonstrate what these higher levels actually are because they are hard to recognise if you have not been there yourself, and not many of us have hit these higher stages across different lines in any sustained way. When we examined some examples of children answering questions about moving from point A to B, or about dogs and cats and animals, you did not struggle because you have already gone through these levels and intuitively knew the answers. But once we get into these transpersonal levels much of it sounds paradoxical or kooky, not helped at all by the large number of real crazies out there. You only really get it once you have transformed your consciousness, but then it’s an open question as to whether you have gone crazy yourself.

What has helped to chart these wild waters is a combination of increased scientific and scholarly scrutiny on the one hand and the opening out of local and historical practices to international awareness, allowing a more critical and cosmopolitan awareness. This has enabled a synthetic account of levels and lines of development that ranges across the full spectrum rather than stopping in middle adolescence (Piaget), undergraduate student (Perry), or early transcendence (Maslow). Using Wilber as our close guide, what would you experience as a self-mover through these different levels and lines (figure 4.5)?
I follow chapters 10–13 of a *Brief History of Everything* closely in the following account.

1. **Sensori-physical**: As an infant you don’t yet know the difference between inside and outside: your thumb and blanket are part of the same experiential matrix. Your physical self and the physical world are fused, or in Piaget’s phrasing ‘The self is here material’ (Wilber, 2007, p. 158). It’s true that self and world are one, but not in a transcendent way, more in a primary narcissistic way that is very shallow. You cannot take on the role of the other and see the world through your mother’s eye: how can you when the world is you and you are the world? Immediate impressions dominate in a unitary flow. Around four months you start to differentiate yourself from the world. Sucking your thumb somehow feels different from sucking a blanket and there is a strange difference between the two. Mahler calls this the hatching phase (Wilber, 2007, p. 162) where the physical self emerges from primal existence. With this emergence of a physical self a new level opens out that builds on the base of a physical self, but is different from it.

2. **Phantasmic-emotional**: You have a realistic boundary to your physical being, but have not yet established boundaries to your emotional self. Your
emotions are fused or identified with those around you, especially your mother. Again this is not deep love. It’s still narcissistic and you treat the world as an emotional extension of yourself. What you feel, the whole world feels. You are not being selfish here, you are not thinking just about yourself; it’s more that your own perspective is the only perspective around, your own emotions and vital life feelings flood the world. Between 15 and 24 months the emotional self begins to differentiate from the emotional environment and you experience the birth or emergence of your psychological self (Wilber, 2007, p. 165). You wake up as a separate self in a separate world. With the emergence of an emotional and physical self a new level opens up that builds on this base, but is different from it.

3. **Representational mind:** You have a realistic boundary to your physical and emotional self, but have not yet established what your mental or conceptual self is. As you enter a linguistic world, symbols and concepts take on increasing importance. You use symbols to name what is most important to you (Ma, Da, Hadeeda in Lexi’s case). Around four years of age you begin to grasp how concepts work. The word cat is different from ‘meouw mouw’ and Ticky. You are not just a bundle of sensations, impulses and emotions but also a set of symbols and concepts (Wilber, 2007, p. 169). It’s a new world where you can think about the past and anticipate the future, where it occurs to you with a jolt that your parents will die and that you will die, where you remember what it was like to be a baby and long for its peaceful cocoon. Around six or seven you begin to realise that symbols and concepts give you purchase on a whole world of mental rules and social roles you did not suspect existed. A new level opens up that builds on the emergence of a physical, emotional and mental self, but is different from it.

4. **Rule-role mind:** You have a realistic boundary to your physical, emotional and mental self but have not yet established your social self or the rules by which you operate with mental concepts and emotional states. Slowly you begin to be able to put yourself in other people’s shoes and imagine what it is like to view things from their perspective. Your view is not the only view of the world and you shift quickly from a pre-conventional stance where you did not really understand the order of the world to a conventional world where you uncritically take on, in the most conformist of ways, what your mother, father and teachers say is right and wrong. Your moral line of reasoning shifts dramatically into a law and order phase. Now that you can see what their perspective is, you take it right into yourself. Your cognitive development shifts from pre-operational to concrete operational where you are able to work logically with the world so long as it is concretised for you. You know that when you pour water from a wide, short glass into a tall, thin glass the volume of water remains
the same even though the level is higher in the thin glass. When you are shown a video of your younger self saying that the tall, thin glass has more water than the wide, short glass, you will laugh and deny that it was you or insist that some kind of trick is being played because it is obvious that the amount has not changed. You are not caught out by how things appear, can hold more than one variable in your mind at the same time, and show a continued decrease in narcissistic and egoistic behaviour as you shift to more socio-centric ways of being. You fuse yourself with the roles and rules into which you are inserted. You are a pleasure to teach at primary school because you want to know what the rule is so you can follow it. You wait for your teacher so you can carry her bag. Around the end of primary school and the beginning of high school something starts to happen to you. It’s as if you don’t want to listen to us any more, you start to have your own thoughts based on possible worlds. The given rules and roles are not enough; you want to experiment with new possibilities, not old givens. A new level opens up that builds on the emergence of a physical, emotional, mental and rule/role driven self, but is different from it.

5. *Formal-reflexive:* You have a realistic boundary to your physical, emotional, mental and rule/role self, but have not yet established what this new world of abstract possibility and potentiality offers. You begin to think about thinking. You can do more than try out various concrete combinations on a table, you can hold all the possible combinations of something in your head and work from the possible to the actual. Possible worlds open out to your imagination. You start to judge the rules and roles you followed so enthusiastically just a few years before. You start to criticise your parents, teachers and culture and embrace counter stances, completely transforming your identity and look. What is most important is that you look different, listen to different music and hang out with different looking friends who must look the same as you. Hopefully, if you have done a good job of integrating the previous levels, these new roles and ideas take you away from an exclusive identity with conventionality into a more world-centric position where you ask not only what is right and fair for you and your group, but for all people. From being completely unaware of the world as a separate entity, you now have the whole world as your focus and a post-conventional attitude begins to emerge about how to live within it. But with the questioning of conventional roles and rules comes the strong likelihood of an identity crisis where you start to search for who you are beyond all the roles and rules you absorbed in the past. What also emerges is a deep relativism of the ‘anything goes’ variety, where everyone is entitled to their point of view, especially you. But you begin to sense that this is too easy a position, that there are better and worse ways of living and thinking; and that you have to start synthesising and integrating as well as
just allowing everyone their own freedom. A new set of possibilities opens out that looks for holistic patterns and tries to live by them.

6. Vision-logic: You have a realistic grasp of your physical, emotional, mental, rule/role and abstract/alternative self, but have not yet established how all these differences and possibilities hold together in an integrated and holistic manner. You are not only thinking about thinking, but about all the patterns and networks thrown up by thinking about thinking. The embrace of alternative possibilities has left you with a massive set of openings that is dizzying: there is no pillow to rest your head and say ‘I got it’. And if it’s an ‘emo’ alternative existence you have embraced, then your pillow will be too wet anyway. You can experience it as a wonderful embrace of different perspectives or as a dangerous paralysis where all is possible, but nothing is better than anything else. At the heart of it you have the task of becoming authentic rather than merely alternative, of finding your own authentic being in the world (as Heidegger describes it) or of self-actualising (as Maslow puts it). The full weight of existing in the world without comforting illusions comes to bear. You have reached your three As – autonomous, authentic and actualised – but somehow it all feels a little meaningless, given that you are not going to be around for very long and all you do is going to fade and crumble anyway, just like that face of yours staring at you in the mirror. But occasionally you have a different experience that takes you out of your triple-A rating into a broader and deeper awareness. Like Maslow, you are not really sure what that is, but it involves some kind of intensification of awareness of Being, not your being, but of all Being.

7. Psychic: You have a realistic grasp of your triple-A self, but beyond this lies a new world hinted at by occasional peak experiences. The most common is a form of nature mysticism when a pleasant walk through the mountains or forests suddenly turns immersive. Natural beauty intensifies from being enjoyable to astonishing. Your perspective deepens, colours intensify, sounds and silence magnify and you forget all your own existential crap as the exquisiteness of existence overtakes you. This happens a lot in Cape Town, by the way, where Table Mountain has a lot to answer for, although recorded cases of nature mysticism by taking the cable car are hard to find, so most tourists do not quite get it. As you fuse more and more with these kinds of experiences you de-centre from your own existence and become intensely aware of the world and all its being, whether this be stone, plant, animal or human. This also accounts, by the way, for the large number of vegans in Cape Town and the refusal to participate in the mass suffering of animals across our world. What happens on the Cape Flats is a different matter, of course. A powerful sensitivity to the environment takes on a lived and ethical dimension. You start to see the world differently. Animals and plants take on
individual identities that are precious and obvious to you. You become more aware of and sensitive to who people are, what they are doing and what they are going through, often just in a revealing touch or glance. People’s individual natures shine out of them, while perception of physical ugliness disappears and is replaced by an intense seeing of character. But as these sensitivities increase you begin to develop a more subtle sensitivity to energies beyond nature. These energies sometimes take on a life of their own.

8. **Subtle:** As you stabilise in a new world of Being as well as the old world of existence, you begin to work with subtle energies in their own right, not as they express themselves through a plant, animal or human. You start to become adept at seeing, feeling and participating in the energies on their own terms. You begin to experience internal luminosities, sounds and thoughts and emotions that are of the state itself rather than attached to an object. Feelings of love and compassion flood through you without thoughts of someone you love. You experience forces in their own terms. If you are a Christian, for example, you don’t experience Christ as a man with a beard and white tunic coming towards you with a soulful but still sexy smile; you experience a flooding of pure love or grace that has a subtle rather than physical structure. As you become able to hold yourself in these states something beckons behind these subtle energies, something more silent, emptier, but somehow also more full.

9. **Causal:** To reach and hold onto states of psychic and subtle awareness you have to become more and more adept at silencing yourself and opening out to the energies both inside and outside you. You begin to be attracted to actual silence rather than what silence enables you to experience, no matter how subtle, beautiful and profound the energies. Rather than being an empty opening or clearing that allows existence to dance, you start to stay in the clearing in its own terms and when this happens the fullness of being hits you without any attachment, image, energy or name. The Isness of Being hums as a vast freedom. You experience it as a timeless, spaceless, objectless creative ground from which everything springs, so it is sometimes called the causal level. It’s the state that allows other states to arise from it. Reflective abstraction finally meets its match. The problem is that it is a really hard state to reach, never mind sustain, but it is also a state that’s pretty empty in its own terms. You have experienced the watcher rather than used it to watch, so what? The challenge that arises is to hold the state while going about your everyday life and so a new challenge opens out to you even though you have travelled into the depths of your being to the point where you have experienced pure Being. It gets you up off your backside and into the world.
Even though you have stabilised in a transpersonal world at psychic, subtle and causal levels, what most attracts you are not these states, but living life, of getting back into the world at all its levels, physical, emotional, mental, social, abstract, existential, psychic, subtle and causal, and giving it your best shot (not that you would now use a language that involves shooting.) It’s not that you don’t experience desire, love, anger, hope or sadness. A journey through these levels does not leach you of all that is human, but it makes you experience them with a new intensity and clarity. Spend some time with Bishop Desmond Tutu, Nelson Mandela (RIP) or the Dalai Lama and you will quickly find they are the most intense and character filled human beings around. Jonathan Jansen has a similar way about him. They would all resonate with most of the account above, but of far more importance to them is what they have done in the world and how they have answered the call to work lovingly, intelligently and critically on a difficult but beautiful planet called Earth. And Tau, circling above us, would hopefully nod her head, if she has one.

Obviously I have given a highly simplified tour of what is an astonishingly complex process and normally the above account comes with all sorts of hedges, qualifications, intricacies and alternatives. But what I want you to experience is the stretching of your educational imagination. First, I want your mind to stretch from a school outwards to all the schools of the world. Second, to shift focus inside the school to all the elements that make it up. Third, to shift from the smallest material elements of schooling to the smallest functional process of learning at a neuronal level and its behavioural correlate found in working and long-term memory. Fourth, to shift from this micro-focus on the intersection between brain/mind to the incredible developmental range human beings have that takes us on a journey from the basic act of working out that our bodies exist; to entry into a logical and social world; and then into the most transcendent of human experiences, all potentially contained in the form of an individual student sitting at a defaced desk with a grin on her face.

What this fourth expansion should do is open you up to the realisation that pedagogic techniques extend far beyond getting us to read, write and think in logical and critical ways. Yoga is a pedagogy, as is meditation and prayer. Sri Aurobindo and Patanjali’s texts on Yoga are pedagogic texts as are Plotinus’ *Enneads*, Augustine’s *On the Trinity* and St John of the Cross’ *Dark Night of the Soul*. I have tracked the Western types of these pedagogies in *Ladders of Beauty* (2007), but here want to emphasise that the educational imagination reaches upwards into the heights of human spiritual practice. For at the highest of the high there are pedagogic practices that enable our reaching and at the heart of this reaching lies the process of reflective abstraction, the queen activity of the educational imagination.
The interior world of an individual student might be a wonder to behold, but it only exists as a part of a human world that gives hir the language, tools and experiences to explore an internal world. It is to this human world that we now turn, not to understand how humanity works, but to understand how education intersects with humanity at its broadest and most particular levels. We might have, in this chapter, reached the heights within our interior, but what of the heights we have reached as a human species; and how has education helped us arrive there?