

## *Inaugural lecture: Professor Barry J Hymer*

### **‘Look back, but don’t turn back’ – towards an improvised choreography of talent development**

University of Cumbria

Hugh Pollard Lecture Theatre, Lancaster Campus

1<sup>st</sup> May 2012

I’d like to begin with a truth-claim: that all knowledge has a history. For many people here today, particularly those educators who, like me, are happy to see themselves as operating within the educational paradigm of social-constructivism, this will be a fairly self-evident and non-contestable truth-claim. Since we do not identify ourselves as hardline empiricists or as classical or logical positivists, we know that knowledge doesn’t exist pre-formed, complete, awaiting discovery by the first lucky explorer to come its way. It emerges slowly, imperfectly and imprecisely, as the fruits of a creative, interactive and dialogic act – between people and between the ideas communicated between people, orally, via the written word, and via the unspoken dialogues of gesture, tone and expression. Knowledge arises, therefore, as the gift of voiced and unvoiced *conversations*.

I stand today having been given the honour, as the Osiris Professor of Psychology in Education at the University of Cumbria, publicly to profess knowledge before an audience of friends, family and peers – a few of whom, like my parents, I’ve known all my life, most in my adulthood, and others I look forward to getting to know. During this lecture I intend to share some knowledge that I have constructed during my thirty years as an educator. I hope also to construct new knowledge with you and to invite you to construct your own. In an attempt to live my educational credo forgive me, therefore, if I choose from time to time to deviate from the transmission-model orthodoxy of these occasions and ask you to take some time to reflect for yourself, and to have a short conversation with someone sitting near you. Perhaps you’ll even be kind enough to share your reflections with all of us at the end of this lecture, or with others afterwards, whilst taking refreshments in *The View*. For those of you who are teachers, you will immediately recognize this process as the well-known thinking tool, Think-Pair-Share. Children take to it with great readiness, and often with wonderful and creative outcomes. Adults, with our defensive carapaces often masking self-consciousness, doubts and insecurities, commonly much less so. Today, however, we are not common – we shall recognize our self-consciousnesses and insecurities, then ignore them.

There are a number of meanings which are ascribed to the word *profess* – the root, of course, of my new title: To affirm openly, to declare or claim. To practise or claim knowledge of – as in to profess law or medicine. Or to affirm a belief in something – as in to profess a faith. It can also be used as a term for taking the vows of a religious order. I’m comfortable with all these meanings – even the last, as a novitiate monk in the monastery of academia. But I’m going to make the particular case today for the relevance in this specific context of yet another meaning of the word – to make a pretence of, to pretend – as in the sentence, “Despite his complicity in the burglary, he professed ignorance of the crime.” Today I will be professing a profound ignorance in the area of

talent development – which is, ironically, my particular area of academic interest and expertise. My reasons for doing so will be revealed later. In this lecture I will make three further claims:

1. That talent isn't caught, it's taught.
2. That talent development needs a metaphor better-adapted to our current understandings.
3. That talent development is at once lawful, and deeply anarchic.

### 1. Talent isn't caught, it's taught.

For this knowledge-claim, I make no additional claim to originality of scholarship – the evidence exists in others' published research, and sometimes in the public domain – through the work of skilled popularisers, provocateurs and social commentators – people such as Malcolm Gladwell, Daniel Coyle, David Shenk, Matthew Syed, Geoff Colvin, and many others. Despite these understandings, which we might conceive of as leading to the recent construction of Talent 2.0, large sections of society, and a small but diminishing number of academics – people like Prof Ellen Winner at Boston College and Harvard – still believe in the explanatory (and sometimes even the predictive) powers of rather magical and poorly-defined concepts. These have been researched more extensively than almost any other area of psychology, yet they still elude any semblance of scientifically consensual understanding. I am speaking of such concepts as *intelligence* and its equally problematic siblings and cousins, *ability*, *aptitude*, *genius*, *giftedness* and *talent* – the aetiological explanations for all of which tend to boomerang back to innatist notions around genetic inheritance. Until the latter parts of the 20<sup>th</sup> century, the circular reasoning that maintained the dominance of these ideas wasn't convincingly breached. It has been now.

I take as emblematic of our earlier conceptualisations of talent development, the dualistic phrase *nature versus nurture* – which has seen extensive service for over a century. Like so many resonant phrases, it has its origins in Shakespeare (Prospero's description of Caliban as, "A devil, a born devil, on whose nature nurture can never stick ..."), but it was adapted and popularised by the brilliant Victorian polymath Francis Galton, many of whose inventions, creations, ideas and neologisms are still in use today and many of which have become discredited in response to new scholarship or historical events – for instance eugenics, and extreme hereditarianism. To these obsolescences might be added the term *nature versus nurture*. Most contemporary psychologists believe this to be a dated and deeply-flawed conceptualisation: we can no longer believe in a notion of genes somehow overlaid by environment (G+E) in an age when all the evidence is that genes interact with the environment (and vice versa) from the moment of conception – i.e. it's GxE – a very different algorithm – which renders the nature-nurture framework good for its author's time – but hardly the 21st century.

Knowledge grows as something new from an interaction with something else; it becomes something greater than the sum of each constituent element. Of course genes matter, but all the weight of gene-studies suggests (particularly via twin studies) is that there is, on average, a statistically detectable genetic influence on intelligence in the region of 60% - but the variability is huge, depending on a multiplicity of factors (which group?, when measured?, how?, and so on). A neat model of genes overlaid by environment doesn't adequately capture the dynamic and complex interplay of both. Both have an influence *only* in interaction with each other, not independently *at all*. Whatever figure emerges, and from whatever study, applies only to groups (and to that specific group) – not to any one individual within that group. To believe otherwise is to misunderstand how statistics work. In other words, twin studies and the like tell us nothing at all about anyone's individual potential – hence my lack of serious engagement in this issue as an educator.

Since I have made no personal contribution to it, I am keeping my coverage of the claim that talent is not caught fairly short – but I'll be happy to refer anyone who is interested to recent studies that support the alternative claim that talent grows in response to an auspicious and multifactorial educational climate, rather than emerging either primitively or fully-formed as a result of some

caught genetic predisposition. For present purposes I will confine my substantial evidence-base to the work of K. Anders Ericsson and his co-researchers. It was Ericsson's seminal 1990 research in the Music Academy of West Berlin, as it was then-called, that gave us the now well-known term "the 10 000 hour rule" – an idea which has led many people to believe that Ericsson was somehow showing that 'all' it takes to achieve mastery and associated eminence in a domain is the investment of 10 000 hours of practice – which, by the way, corresponds to three hours a day, every day, for ten years. I never notched up quite those hours during my adolescence and undergraduate years as an obsessive chessplayer and schoolwork-avoider, but I notched up quite a few – as my parents' memories of my near-disastrous secondary education scholastic record will testify. Enough hours, I would have thought, to make a decent living as a professional chessplayer in the UK when I emigrated from South Africa in 1983. It took me six months of penury and near-starvation to realize that I needed to find an alternative route to economic independence. A decade or so later, as a professional educator and amateur chessplayer, I won the Cumbrian Chess Championship, a handsome trophy, and £20. It remains the modest pinnacle of my youthful ambitions for world chess domination.

In fact Ericsson was offering no assurances that sustained practice guaranteed eminence – his claim was much more nuanced. The 10 000 hour rule encompasses the notion of '*deliberate practice*' – i.e. practice that is often least 'enjoyable' but most effortful and designed to bridge the gap between existing and desired performances. He observes that "Merely performing the same practice activities repeatedly on a regular daily schedule will not lead to further improvement, once a physiological adaptation to the current demand has been achieved. The key attribute of deliberate practice is that individuals seek out new challenges that go beyond their current level of reliable achievement – ideally in a safe and optimal learning context that allows immediate feedback and gradual refinement by repetition."<sup>1</sup> Vygotsky memorably characterises this space as the zone of proximal development. This helps us understand the findings of research, such as that by Grape et al,<sup>2</sup> that professional singers report focussing on improving their singing when singing, whereas amateur singers (like my wonderful wife) report the experience of singing as something akin to self-actualisation ("I feel most alive when I'm singing!") and as an enjoyable release of tension. Contestants on the X-Factor, please take note.

I will acknowledge to anyone who asks that this taught-not-caught claim requires us to respond to extreme-case outliers who at first glance give the lie to it – the Mozarts, Einsteins, Fischers and Beckhams of human achievement. I will refer them to the evidence. Popular images perpetuate popular myths – Mozart, for instance, for all his prodigious skills – which were celebrated as marvellous in his own childhood – can actually be seen as something of a late-developer, musically-speaking: he was remarkable *for his age* as a young musician, but he was not thought remarkable in comparison with adult musicians of his time. He took almost 20 000 hours to achieve eminence as a performer and especially as a composer. If all we had to listen to today were the fruits of his first 18 000 hours of deliberate practice, we wouldn't be choosing to listen to him today. We listen instead to his rich late harvest, and it's those works – and only those works – that reveal the sublime majesty of his developed genius, second only to Van Morrison in the pantheon of musical achievement. The film *Amadeus* is a great film, but academically it has a lot to answer for (as does the previous disclosure of my low musical tastes).

Please take a few moments for personal reflection and conversation with someone near you.

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<sup>1</sup> K Anders Ericsson, 2009; Enhancing the development of professional practice: implications from the study of deliberate practice. In: *Development of Professional Expertise* by K Anders Ericsson (ed.), p.425

<sup>2</sup> Grape, C., Sandgren, M., Hansson, L-O, Ericson, M., & Theorell, T., 2003; Does singing promote well-being?: An empirical study of professional and amateur singers during a singing lesson. *Integrative Physiological & Behavioural Science*, 38, pp.65-71

## 2. Talent development needs a metaphor better-adapted to our current understandings.

The field of talent development is hardly short of metaphors. Very many of them are variants of an explicitly horticultural simile. They denote or imply some ‘blossoming’ of a latent capacity: talent can ‘germinate’ or ‘unfurl,’ it can ‘grow’ or ‘bloom’; it can ‘flower’ and ‘flourish’ but it can also be ‘stunted’ or ‘blighted’ or ‘wither’ when the climatic conditions are too cold or arid. In that case, we ask, in surprise, “Where have all the flowers gone?” We also hear the phrase, “Talent will out” – as if to take for granted that it was always in. Talent even in this sense takes on an implicit botanical metaphor, becoming some sort of Japanese knotweed, vigorously expressing itself in inhospitable places.

This metaphor does have some definite appeal, which is why it has prevailed for so long. Indeed it’s proved as prolific and durable as dandelions: seeds can be seen as repositories of promise, full of locked-in potential, awaiting propitious circumstances – the warmth of a sympathetic teacher, perhaps, or the nurturing circumstances of an enriched and challenging curriculum. Jung himself invoked this metaphor when he observed that, *The curriculum is so much ... raw material, but warmth is the vital element for the growing plant and for the soul of the child.*

So far, so good, but let’s dig a little deeper in this rich ground. I will argue that our current knowledge of talent development would suggest that botanical metaphors are at best stretched, and at worst, downright misleading. We now know, despite superficial appearances to the contrary, that there *is* no pre-formed genetic kernel of nascent talent lying deep within ourselves – some seed-blueprint simply waiting to be expressed when the climate is right. This is not how talent develops – just opening a packet and exposing the seed to the light – as described vividly, but naively, by the mother of one of the young Matildas currently delighting audiences in the eponymous West End musical. I quote from an interview this mother gave in *The Guardian* last month, in which she uses the metaphor of talent as a literal gift: “People have talents and gifts, and the question is do you keep them in a box or unwrap them, and do you unwrap them when they’re younger or older? And we’ve chosen younger.”<sup>3</sup>

I suggest that this justly proud mum has been too impressed by the homespun philosophies of Miss Honey – admittedly more attractive than the brutal Miss Trunchbull’s – plausible, yet false. Genes overlaid or ‘unwrapped’ by the environment, G+E, as I’ve indicated earlier, inadequately describes their intricate interplay – in which one can only be expressed in interaction with the other, and in which subtle differences in these interactions can multiply in both predictable and unpredictable directions. Any parent with two or more children knows that these siblings, ostensibly sharing the same environment, can be wildly dissimilar in temperament, preferences, behaviour, etc. It makes apparent sense, therefore, to attribute these differences to the other big independent variable and predictable fallback – genes. The reality, though, is that these siblings have *not* shared the same environment since birth – except at the most superficial level. They have been shaped by countless subtle differences in their respective environments, acting in concert with their genes – for instance, the time and adult attention available to each child (compare your first-born’s immaculate, triple-mounted, abundantly-filled baby album with the sad symbol of neglect that passes for your second-born’s), or the immediate availability to the second-born of a 24-hour playmate and associated linguistic discourses, or the conscious and sub-conscious psychological scripts that each child is given to rehearse and perform by their parents – scripts which may indeed have some small early foundation in ‘reality,’ but which over time will be built upon and extended, and which quick judgments we’ll declare to ourselves, to others, and most influentially, to them: “Our Clare is the sensitive artist, Miriam the verbal adventurer.” And they read our scripts, and feel moved to act them out.

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<sup>3</sup> *The Guardian* Family, 7<sup>th</sup> April 2012, p.3

I'm suggesting that the familiar metaphors of talent development – plants being cultivated and nurtured and gifts being unwrapped – are not too simple (for simple is desirable), but they are too simplistic, given our current knowledge. We would benefit from a new metaphor – one which better fits this current knowledge but which retains the beauty of simplicity; one which can convert occasionally recondite subtleties into accessible understandings.

With this need in mind, I'd like to share with you some insights offered by young people during the course of a piece of research I've been conducting with my friend and long-time colleague and collaborator, Deb Michel, who I'm delighted is with us today. Deb and I have been working with around 90 Year 6 and 7 students in North Yorkshire, all of whom had applied directly, by letter, to be part of the study. These students already have emerging talents, in the form of interests and passions in a wide range of areas considered of value in our culture – sport, dance, drama, creative writing, cinematography, maths, music, etc – and very few of which passions can be fully exercised, let alone fully realized within school alone. During our first contacts with them, we asked the students simply to "Draw what your learning looks like." We had set up the activity via a stilling exercise and guided visualisation, and we'd provided them with basic materials and a conducive space, but other than inviting them to make free with metaphors and images of their choosing, we'd left them to it.

Subsequently, Deb and I attempted an interpretative phenomenological analysis of these drawings, using their own words and explanations where available, and looking for plausible themes and recurrent metaphors. Though positioned firmly in hermeneutics, we've stayed clear of the more fanciful interpretations that the field of visual semiotics might have seduced us into creating. We are aware, nonetheless, that our interpretations provide, at best, a very partial and tentative glimpse into a complex range of unique lived experiences, expressed visually and metaphorically. I will leave the methodological descriptions and detailed analysis to another forum, but I offer you the constructed categories, with one exemplar from each – not always the most aesthetically pleasing example of each category, but one which captures well its nature. These categories are presented in order of their numerical representation [see ppt slides 2-18].

Though the children were working independently and in three geographically distinct cohorts, overwhelmingly represented is the metaphor of step-taking movement, on a journey pregnant with perils, challenges, opportunities and choices – as in these representative examples, presented now in a rapid dance of succession [see ppt slides 20-35].

These representations around talent development as unique manifestations of stepping offer us, I believe, the prospect of creating a metaphor that is better-suited to the current state of scholarship in the field, and which eludes the deterministic shackles and easy botanical assumptions of seed plus climate – G+E. The skill of *stepping* is the primary element of any intent to project oneself forward in locomotion – to move with intent and with agency. And the form of stepping that is celebrated in all cultures as denoting its highest and most creative state, is dance. To develop a talent, I propose, is analogous to the process of learning to walk, and ultimately to dance – from the trials and failures of our first tentative and clumsy steps to the later joyous, fluid mix of secure skills, flow and free expression. Once we have acquired the antecedent stepping skills, dance is accessible to everyone at its entry levels – we can all, with minimal effort and support, come to enjoy dance for its capacity to bring intrinsic pleasure, and at all stages of our lives. I have a fond and vivid memory of my father-in-law's joyous participation at a ceilidh held to celebrate his younger brother's and his sister-in-law's retirement a couple of years ago: the effects of his Alzheimer's Syndrome were at that stage already quite profound, but the gusto with which he threw himself into a simple community circle dance, wild animal noises and all, revealed for those few joyous minutes the man he had always been – socially involved and at ease, spontaneous, puckish and uninhibited.

Dance is universal in our species, yet it has infinite form both between and within cultures. No child is born with a predisposition to dance in just one way or in just one style – he or she habituates to the prevailing traditions and orthodoxies of his or her culture. Dance is therefore both

taught and expressed in many different ways, and its greatest exponents have always found ways to innovate, to interpret familiar routines uniquely, and to give these routines new meanings. And it is one of dance's greatest exponents, the dancer and choreographer Martha Graham, who described so beautifully that obsessive compulsion that talent development demands of its disciples – the relentless, intrinsic drive for continual improvement that fuels Ericsson's deliberate practice. She called it simply, *divine dissatisfaction*. For at its highest levels, dance – and the development of all talent – demands an astringent dedication, perfectionism and discipline that to many of us can seem to border on self-abuse or masochism. Moderation in all things is good advice, except perhaps in the achievement of excellence.

Please take another few moments of reflection and, if you wish, conversation, before I introduce the third and final element of this lecture.

### 3. Talent development is at once lawful, and deeply anarchic

That which is most personal is also most general. This we were taught by the great therapist and founder of the tradition of client-centred therapy, Carl Rogers. As a callow 21-year-old postgrad student I had the chance to meet and talk to Carl Rogers when he visited South Africa on a speaking tour in 1982, just a few years before his death. With a few fellow students at the University of Port Elizabeth, as it was then called, we travelled some seven hours to see him in Stellenbosch. The fact that this great man wished to listen with manifestly genuine interest and real connectedness to young adults like ourselves, who had in truth very little of any significance to say, gave life to his words. That which is most personal is also most general. Closer to home, I am reminded of a similar thought expressed by Alan Bennett, who opened this lecture theatre in 1993 as a tribute to his friend and founder of St Martin's College, Hugh Pollard: "The best moments in reading," Bennett said, "... are when you come across something – a thought, a feeling, a way of looking at things – which you had thought special and particular to you. And now, here it is, set down by someone else, a person you have never met, someone even who is long dead. And it is as if a hand has come out, and taken yours."

Nowhere are Rogers' and Bennett's sentiments more true than in the study of education. It is possible in 2012 to read the ideas of the great educators, of Socrates, Comenius, Rousseau, Pestalozzi, Froebel, Newman, Dewey, Montessori, Steiner, Buber, Vygotsky, Freire, Bruner, Donaldson, Lipman, Heathcote, most of these long-dead, and to be struck by how often their thoughts collide with our own half-realized experiences and insights. It is these moments of personal connection that simultaneously give traction and longevity to the ideas of the great educators, and legitimacy to our own capacities for theory-making. But an authentic legitimacy requires us to put the vast machineries that govern our lives to one side, however temporarily, and to reconnect with the idiosyncratic truths of our own unique lives – and to know that these have value.

Yes, we are in many respects directed by the enabling and in some cases disabling structures of our professional lives – the TTA, HEFCE and its REF exercises, validation documents, the DES, OfSTED, etc. – and yes, we should properly have regard for the forms of social sciences research that still carry such weight in our society, couched as they usually are in the language and constructs of positivism. Indeed I have invoked some such studies during the course of this lecture. But in our attempts at securing compliance, convergence, and lawful and generalizable systems of operation, do we run the risk of losing the unique, lived, more anarchic experiences of the individual in all of this, and the deeper truths that these rich and personal narratives offer us? In our quest for statistical significance, do we sometimes forget that all experimental populations consist of groups of individuals, each with his or her unique constellation of values, beliefs, experiences, hopes, fears and ambitions?

It is this awareness that prompted me, at the start of this lecture, to profess a genuine ignorance in the field of talent development. This isn't a rhetorical device. It is, I believe, the only honest stance to take. Yes, we can learn much from laboratory studies and other traditional research models seeking lawful rules – as we would from the natural world. We can admire and respect the finest scholarship in this tradition, especially when robust and creative research design is combined with a valuing of qualitative evidence – Mihaly Csikszentmihalyi's work perhaps being pre-eminent here – but in the end we must also find ways of valuing the unique, lived experiences of – and meanings created by – individuals if we are to buttress and in some cases challenge the established truths and dominant orthodoxies. No study in the hard or social sciences tradition that I have read has ever given us a new metaphor for understanding talent development.

We must therefore look also to the forms of research that respect and give voice to people's unique stories, metaphors and meanings and which foreground individual agency *in medias res* – in the middle of things. I am speaking of traditions like hermeneutics, phenomenology and interpretative enquiry, action research and living theory, visual semiotics and critical theory. I am speaking in this instance of the careful and not-so-careful drawings of individual children, straining to express their experiences in visual form; of their words as they seek to capture their experiences of autotelic investment in an area of great interest and unknown outcomes; of the ten-year-old boy who summarised his own journey of talent development with the words, "Look back, but don't turn back" – a reminder first to himself and only incidentally to others, that reflection supports progression, not regression or surrender.

I am speaking of the mess and loose ends and uncertainties that this research must necessarily involve, since as educators we are seeking to understand ourselves in relation to other people – and there's nothing as complex and resistant to lawful predictability or generalisability as ourselves. When Bennett observes that, "Briefing is terse, factual and to the point. Reading is untidy, discursive and perpetually inviting. Briefing closes down a subject; reading opens it up," let us as educators substitute 'briefing' for 'training' and 'reading' for 'education'. The new claim now reads: training is terse, factual and to the point. Education is untidy, discursive and perpetually inviting. Training closes down a subject, education opens it up. Let us recognise, when we see education in these broad terms, that the development of talent is merely a cypher for all education. We have, ultimately, to move on from the easy certainties of G+E and embrace instead the much messier improvised choreographies that can allow us all, truly, to dance. Thank you for listening, and for your conversations.

