

Oxford Dedication  
Jerome Bruner Building  
13 March 2007

Cultivating the Possible  
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I am deeply moved to be back in Oxford again. I spent one of the most fruitful decades of my life here in this University -- a fruitful and stormy decade at that, for I was engaged not only in scholarly pursuits, but (inevitably, I suppose!) in the politics of education. For back in those days, in the 1970s, we had just discovered the importance of early childhood as the crucial period for developing the cognitive skills needed for young children later to benefit from regular schooling. We even had a lively Oxford Preschool Research Group working flat-out on that subject.

A word more about those dawning days. We were becoming convinced that inequalities in education provided a powerful if often inadvertent means for preserving a class system. "Educational deprivation," as we called it back then, kept the children of the poor from developing the aspirations and the intellectual skills needed for a better life. On the other hand, research all over the place was showing that if you gave the young children of the less well-off an enabling headstart, even in the years before they started school, they stood a better chance of developing the powers of mind and heart needed for later schooling and for a better life afterwards. Those early pre-school years were crucial.

Imagine my delight, then, when my good friend and summer neighbor of many years in Ireland, Margaret Jay, Lady Jay, told me last August that the battle now seems won, that preschool has at last become virtually de facto if not de jure compulsory in Britain.

So I'm encouraged to use today's occasion to try out another idea for the future -- one that I think is particularly appropriate

to our Oxford Department of Educational Studies, but also to the University more generally. It has to do with the crucial importance of cultivating a lively sense of the possible in the rising generation. Knowledge, I want to argue, is not just what we store inertly in our heads. It also provides a launching pad into the realm of the possible. And cultivating the uses of knowledge as such a launching pad must, I shall argue, become a crucial task of the educational establishment.

But, most of us would say, isn't that what we do all the time? And of course it is -- in a way. But the ways in which we do it, alas, are too often dominated by custom and habit, ones not bold enough to keep a new generation in phase with the transformations now occurring in our rapidly evolving world.

I also have a deeper, more theoretical reason for being concerned with cultivating a sense of the possible, a reason that springs from research on the nature of mind, a reason that has grown steadily out of my own half century of digging into the growth of mind and its dependence on culture. I've become increasingly convinced that the powers of mind reach their fullness not simply in accumulation -- in what we come to know -- but rather in what we can do with what we know, how we are enabled to frame possibilities beyond the conventions of the present, to forge possible worlds.

Let me be a bit autobiographical about what's moved me this way. Way back in 1957, inspired by two distinguished British scholars, I wrote a piece rather provocatively entitled "Beyond the Information Given."<sup>1</sup> The two scholars were, not surprisingly, Sir Frederic Bartlett and Sir Charles Spearman, and though they lived in very separate rather estranged worlds, they quite often conversed with each other inside my head!

Spearman was in search of general, rather physics-like principles that would render or "reduce" mind to a small set of

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<sup>1</sup> Jerome Bruner, "Going beyond the information given," in Jeremy Anglin, Jerome Bruner: Beyond the Information Given: Studies in the psychology of knowing. New York: Norton, 1973. This paper had appeared previously in Jerome Bruner, et al., Contemporary Approaches to Cognition, Cambridge: Harvard University Press, 1957.

elementary processes -- very 1920s, of course, inspired by the renowned conservation theorems of physics.<sup>2</sup> He duly arrived, in the grand manner of those times, at what he called three "noegenetic" principles, the first of which was a principle of apprehension: that human beings are capable of apprehending the world in which they live -- a touchingly naive view given today's constructivist dilemmas about perceptual "world building." His human perceivers were mere spectators.

His second and third principles were labelled, respectively, the "eduction of relations" and the "eduction of correlates," the first of which held that mind by nature responded to the relations between whatever was apprehended in the world. So, for example, the apprehension of "White" and "Black" evokes the relation "opposite" or "different." As for the eduction of correlates, "White" and "Opposite of" evoke "Black." Despite all this elementarism, though, Spearman was plainly trying to say that the function, the power of mind was to take us beyond the information given, though it seems odd today that he had so little to say about the role of context, particularly cultural context.

It was Bartlett, of course, who called the alarm on such reductive elementarism -- though Spearman's name only appears once in Bartlett's famous book, and respectfully at that, in a short footnote early in the opening chapter of the classic 1932 Remembering. Sir Frederic argues throughout that book that atomism with its emphasis on the underlying "elements" of mind inevitably ignores or obscures the crucial and basic meaning-making functions of mind. For it is not the associative grouping of discrete elements that brings order into experience, but, rather, a larger scale, culture-sensitive form of schematization -- a schematization fueled by mind's never-ending "effort after meaning." Such schematization, moreover, cannot be just private and individual. It must be shared with others, for it is through such sharing that human culture is created and sustained. [Sir Frederic, recall, had early on been a junior member of that famous New Guinea expedition to the Torres Straits Islands and had early discovered that those Islanders were not just little Englishmen!]

How well I remember the mind-freeing effect of reading Remembering as an undergraduate, and not just its compelling

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<sup>2</sup> Charles Spearman, The Nature of Intelligence and Principles of Cognition. London: Macmillan, 1923.

rejection of atomistic elementarism. Without realizing it, I became a cultural psychologist!

But a puzzle still remains. What precisely shall we mean by that glib word, "culture"? My anthropologist friends had early convinced me that nobody ever knows or could know the whole of the culture in which they live. A "culture," as my good friend Clifford Geertz always insisted, is basically local: we know a little hunk of the whole of it, but what is the "whole" of it?

Enter another old friend, Thomas Kuhn -- the Graduate School at Harvard was a turbulent scene in those days. It was Kuhn who argued that science was not just some "big whole," but was organized, rather, around what he called paradigms, widely shared but particular ways of organizing whatever we knew about nature. You accepted and worked within those agreed-upon paradigms if you were to get into and stay in the science club. And it is from them that you leapt ahead

But isn't all of shared mental life organized that way, around those taken-for-granted productive paradigms?

Could it be, then, that when we speak of a "culture," we're referring to human being joined together by loosely connected, rather implicit but sharable paradigms? Alfred Kroeber long ago taught us that a "culture" as a complete and integrated system "exists" only in the minds of the anthropologists who study it, compelled as they are to present their account to their colleagues in as neat and derivationally structured a way as possible. Those who simply live in a culture aren't burdened in that heavy way. Cliff Geertz was indeed right in reminding us that culture is local -- though at times we try (often ingeniously) to put it together so as to leap beyond it, as Claude Levi-Strauss has so brilliantly reminded us.<sup>3</sup>

Culture's principal function for the individual, I think, is to render the strange familiar. It guides us in putting things in their familiar places -- William James's "Aha, thingumbob again!" Yet, anomalously, cultures also provide means for rendering the conventionally familiar strange again: "the hand of God" or the spirit of Abraham in the background. No known culture is without means for doing both of these -- the latter through uncertainty-provoking myth, through tale-telling (of which more

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<sup>3</sup> Cit Levi-Strauss, but also my Toulouse and Copenhagen papers.

presently), through the power of poetry. All known languages, indeed, even have grammatical case markings for indicating the might-or-might-not-be, the possible.

It is principally through the use of both -- making the strange familiar and the familiar strange -- that we (and our culture) cultivates just such a sense of the possible. Indeed, those cultural paradigms to which I made reference earlier come in both forms. My childhood culture, to be autobiographical, makes no sense without both: its wicked bogeyman pitted against sense of the familiar and the banal. And it is through just such juxtapositions that our culture tempts us into a concern for possible worlds, for the possible generally.

Now back to schematization in the Bartlett sense. It was Bartlett who made me first aware that we schematize our experience principally through story-telling, through narrative. It was he that first planted that idea in my head -- and it has grown steadily, if slowly, ever since. Indeed, our guiding paradigms are narrative in nature, familiar little local tales, like (even now!) what to expect at a first meeting of a seminar. And when, more reflectively, we try to make sense of "the larger picture" we do so by creating familiar "continued stories" about life more generally. And in doing so, we rely upon the customary genres on offer in our culture -- ones that serve the culture's need to make the strange familiar, but, as well, to make ourselves distinctive and "private."<sup>4</sup>

What, more precisely exactly is a story, a narrative, and how constructed so that it can fill this double function? A story begins by taking for granted some form of canonical ordinariness in the world to which it relates -- some banal paradigm. It gets launched when that initial canonical ordinariness is breached by the unexpected: what Aristotle in The Poetics called the peripeteia. The violation is then followed by an account of how the initial reigning canonical state was either restored, or if not, how it got modified. To all of this is then often added a coda, or "moral" -- "coda" being a late Latinization of the early Latin cauda, which literally means a dog's or horse's tail -- and now you know why a story whose coda seems to have over-tailored the story that preceded it is said to be "a tail wagging the dog."

There's yet another couple of reason why stories provide such

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<sup>4</sup> Jerome Bruner. Making Stories: Law, Literature, Life. New York: Farrar Straus Giroux, 2002

a useful way of organizing experience -- over and beyond their organizing power in schematizing and their cultural connectedness. The first is their astonishing range of uses -- as confessions, excuses, justifications, or just to tell "what happened." We'd be virtually mute without them. The second thing is that (as we know both intuitively and from some classic psychological research) everybody is troubled by incomplete stories. The need to complete them guides us, pushes us to completion -- the famous Zeigarnik effect.<sup>5</sup> Stories, as it were, help keep us all of a piece.

Not surprisingly, then, that our lives in culture are more aptly described in easily modifiable story form than in an inflexible true-or-false logic of derivation from first principles. Stories, indeed, provide the most generative and the most preservative medium for both making the strange familiar, and for doing the reverse.

Given all this, why are we so intellectually dismissive toward narrative -- inclined to treat it as rather a trashy if entertaining way of thinking about and talking about what we do with our minds? A kind of faute de mieux. Why do we not spend more serious time brooding more deeply about the formal nature and the powers of narrative -- how it works, how it shapes the familiar yet goads a sense of the possible? And it is about that latter matter that I want to speak finally and more specifically -- about narrative's power to create possible worlds

I want to do that with a story about how to create possible worlds by story making -- an autobiographical tale about what drives one to possible-world-making. It has to do with the challenge of incompleteness, how it often drives us in search of a whole story that integrates disconnection into some coherently possible form. I tell it as well because it's amusing -- which suggest there's something to it. It's intended as an illustration of possible world building, one that might have some relevance, indeed, to education.

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<sup>5</sup> B. Zeigarnik. On the retention of completed and uncompleted task. Psychol. Forschung, 1927, 9, 1-85. For a summary account, see Kurt Lewin, A Dynamic Theory of Personality. New York: McGraw-Hill, 1935, 243ff.

It's about a lively historian presenting a lunch talk at the N.Y.U. Institute for the Humanities not long ago -- the Institute being an eccentric organization dedicated to academic fence-jumping. Our speaker that week told us that he wanted to present a "precis" of a "novel" he was writing, whose title was to be, simply and brazenly, 1848: America. He offered a succession of lightly sketched, presumably unrelated happenings in that out-of-the-blue year, 1848, beginning with the turbulent California Gold Rush, then on to how San Francisco in the ten years after grew from a sleepy little village to a thriving city of over 100,000, then on to how the invention of the telegraph at that time first changed how business firms in New York managed "personal" visiting and then how, some years later, the transcontinental telegraph changed how people on America's two coasts kept in touch personally. Did that in turn spur the building of an American transcontinental railroad a few years further on?

He ended with a casual reminder that 1848 was, as well, a tortured year of political uprisings in Europe with much internal dissent -- and then sat down. No conclusions, just a string of well recounted happenings, all in that single year.

These are discussion lunches as well, and the very first questioner demanded: "What are you trying to tell us, a true fable about the origins of modern America, how we got to be what we are today?" "Do I have to answer that," our speaker replied, laughing. "This is a novel not history! If you'd like to turn it into 'history,' please feel free to do so. As an historian, I wouldn't dare!" He never budged from that stance! And just as the lunch session was ending, he inquired of us, "What do you all think, should I publish this novel under an assumed name?" We all laughed.

That lunch talk and the discussion that followed had a curious, rather pedagogical effect on me. I'd never really given much thought to the doings of 1848 in America, not even wondered why politically stormy 1848 in Europe hadn't spread to America. But strolling back to my office in Vanderbilt Hall after the lunch ended, I found myself buzzing with conjectures aroused by our tease of a speaker!! Like: What about that famous landmark case in 1842, Prigg v. Pennsylvania,

six years before, in which the United States Supreme Court upheld the right of the Commonwealth of Pennsylvania to protect freed slaves resident within its borders from kidnap into bondage by slave-snatchers from neighboring slave-states like Maryland? Was a new sense of individual autonomy and opportunity becoming rife in the land? Was Montesquieu (an inspiration to our more highbrow Founding Fathers like Thomas Jefferson) finally getting down to America's grass roots a half century later?

The spell was there even the next morning. Perusing the newly arrived issue of the TLS at breakfast, I learned that London had doubled in size in the half-century just before San Francisco's population explosion. Was there something, what did I call it?, some kind of urban insouciance going on in the world at large?<sup>6</sup> And by dinnertime I'd even got to the point of wondering what really makes a "turning point" in history -- certainly not charismatic leaders -- America surely had none then. And then, on to bed.

Next day I found myself wondering why I'd been so caught up trying to make connections between things that happened to take place in the same year. Then I thought, "Wish I'd been taught history that way!" What way? Well, I don't quite know, except for one thing: that clever historian colleague knew a trick or two about luring into reflecting on possibility. Reflecting? Perhaps "pursuing" would be a better word.

He'd turned history from its date-and-fact emphasis to a lively exercise in exploring human possibility. But isn't that the way in which any subject can, maybe should, maybe even must be taught? Oughtn't we, in a word, be doing more about cultivating a sense of the possible -- and particularly in our schools?

Having said all that, I might even be tempted to dress up my brief conclusions in the manner of Sir Charles Spearman's old-fashioned "noegenetic principles," though this time in modern dress, and with a view to cultivating the possible. My set of three

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<sup>6</sup> See review by Paul Smith of Boyd Hilton, A Mad, Bad, and Dangerous People: England 1783-1846, Times Literary Supplement, August 18 & 25, 2006.

might go somewhat as follows:

- I. The multiplicity principle: Any way of accounting for or for "explaining" any set of events or phenomena in the world is always to be taken as one of several that may be possible.
- II. The perspectival principle: All generalizations are products of the particular perspective that one adopts toward the world of events with which one is dealing. It follows then, that their verifiability also depends upon the perspective one has chosen. There is no truth "from nowhere."
- III. The comparative principle: The range and power of any explanation one may offer is always in some measure dependent upon an awareness not only of the perspective in which it is framed, but also upon an awareness of the perspectives that have been excluded.

In a word, one always knows the world in the light of the perspective one has chosen (or has had imposed upon one!). There are always other ways of knowing (even of seeing) it. Those "other ways" constitute the realm of possibility. I want to end by insisting that this point of view toward the possible forms of knowledge and of knowledge seeking is as relevant in kindergarten as it is at the Institute for Advanced Study or at All Souls. It is what I mean by "cultivating the possible."

And may the Jerome Bruner Building, the home of Oxford's distinguished Department of Educational Studies, thrive in this spirit!

Thank you.