The perennial issues of which historians remind us are issues of pressure - those we experience as adults and those we put on our children. The recurrent ambivalences concern progress. Every generation imagines itself the first to be forced to confront the pellmell pace of modern life. History is nothing if not a study in unintended consequences. And developmental psychology is finally accumulating a sufficient store of longitudinal studies to enable psychologists to come to a comparable skepticism about linear continuity of character. Never forged in accordance with deterministic developmental laws, character is always subject to the vagaries of temperament, interpretation, and the exigencies of the historical and cultural moment. Psychologists, who see subjects predominantly at a single historical moment in a single culture, sometimes overlook such vagaries. Historians cannot do so. One of the best accounts of the persisting anxieties and perplexities of parents across the past few centuries in the West is a book ("Technics and Civilization," by Lewis Mumford) which traces the emergence in the modern West of mechanistic conceptions of nature and of man. It is that mechanization of our ideas of our world and ourselves to which we owe our perennial impasse. Nowhere more than in America, we are believers in the machine. (RH)
PLUS CA CHANGE:
THE HIGH-TECH CHILD IN HISTORICAL PERSPECTIVE

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One hundred years ago, almost to this very day, the great American psychologist of his time, G. Stanley Hall, published an essay in the great intellectual journal of the era, *The Nation*. The essay was entitled "Overpressure in Schools," and it asserted a "real and grave danger" in which the republic stood from the conspiracy of circumstances which "favor precocity and make a simple, quiet, healthful life for children increasingly hard."

The decay of religion, the decline of the countryside, the rise of the city and its ever-accelerating "haste and excitement," the "entirely artificial condition which school life involves," the "violent opposition" to alleviating that artificiality by shortening school hours or altering the emphasis from mental to physical exercise or from intellectual to ethical development - all of this and more presented a prospect of "alarming invalidism" among American youth, and especially among talented American youth. For in Hall's view the "overpressure" fell primarily upon "clever children," who were "forced forward" by the "stimulus of competition" that Hall, following Ruskin, called "the most entirely and directly diabolic of all the countless stupidities" into which we had "of late" been "betrayed by" our "avarice and irreligion."

Hall placed the blame for this forcing of the intellectual faculty almost indifferently upon schools and families, teachers and parents. There were "many teachers 'so possessed by the demon of education,'" he said, "and so 'professionally nearsighted,'" that they claim the almost exclusive right to the child's time, so that he has no opportunity to pursue privately" his own interests and pleasures and "no chance for independent growth." And there were
many parents who aided and abetted such teachers. "Long before a child's capabilities to be known, parents with false views of life and of school, and perhaps not without vanity and cupidity, not only allow but sometimes encourage teachers to overpress their children, and sow seeds of suffering and incapacity." ¹

Hall was hardly alone in such concerns a century ago. Three years earlier, at a widely reported banquet in his honor at Delmonico's in New York, Herbert Spencer, the commanding intellectual figure of the day, gave the assembled audience of bankers and businessmen not the paean to progress they expected but a "doleful warning against overwork." This apostle of Social Darwinian survival of the fittest, himself "broken by years of battling with nervous exhaustion," took the occasion of the gala dinner to declare his alarm at "the frequency of suicide and nervous collapse among American businessmen." As he saw the situation, "Americans did not know how to relax; they were bored out of harness, driven within it; they were even passing on their nervousness to their children, through high pressure public schools." ²

More even than Spencer's denunciation of such undue stress was the fact that no one was noticeably shocked by his indictment. One editorialist blandly observed that the celebrated Englishman had merely "added his corroboration to the immense mass of testimony which has, ever since the introduction of railroads and telegraphs, been convicting Americans of taking too little relaxation." Another maintained that it was already "universally admitted" that "something must be done...to lessen the strain in modern life." And a forum of leading American educators, convened in
1883 to consider the country's "Educational Needs," came back again and again to fears for "the anxious, nervous, worrying tone so generally seen in the faces of" the nation's "brain-worked" children. Participants in the symposium saw a "sallow languor" in the students, an unmistakable "physical deterioration." Felix Adler spoke for them all when he said, "the public are growing uneasy. It is feared that the brains of our little ones are overworked in the schools."³

Each of the educators who contributed to the colloquium concurred in the diagnosis: American children were mentally overdeveloped, physically stunted, and morally malnourished. And each of the educators agreed as well on the source of that dismal diagnosis: American children were subject to an unwholesome competitiveness which afflicted home and school alike, creating a climate of "worry, terror, and overwork" for the very young, who seemed to "struggle with their studies as weak swimmers struggle with a stormy sea."

As Mary Putnam Jacobi put it, a principle that ought to have been axiomatic - that strain should not be imposed on growing children - was instead "utterly and necessarily disregarded" by a "system which engaged children in competitive strife." That system fostered a few of the intellectual faculties at the expense of all the rest of the child's capacities. As Jacobi said, "imagination, invention, judgment, reasoning, and perception" were "left without systematic training," the "senses" were ignored "altogether," and "ethical education" was "entirely left out of sight." All this was almost commonplace criticism a hundred years ago. And if that is not enough, add another tidbit. As if Jacobi knew that I'd be citing her a century later, in the age of Ronald Reagan, she wrote
in 1883 that that era's "somewhat absurd squabbles over the reading of the Bible" served only "to emphasize a tenacious adherence to a name which conceals a real indifference to the thing."4

The French have a phrase for all this. Plus ça change, they say, plus c'est le même chose. The more things change, the more they stay the same. And historians have an annoying habit of searching out such persistences and inflicting them on audiences, as I am doing here. I'm not sure why we do this. I think it has something to do with what people call historical perspective, but I've never been able to figure out whether we provide historical perspective of this sort because you demand it or whether you get it because we supply it.

In fact, I've never been able to figure out exactly what historical perspective means in the first place. As close as I can come, it seems to mean that you want us to tell you that things are bad, but they've been bad before, and we've somehow survived before, so maybe we'll muddle through this time too.

Of course, there are variations on this theme that are also permissible. We can play the part of Pollyanna and tell you that things are bad but they used to be worse and they're getting less bad. Or we can thunder like Jeremiah and prophesy that things are bad and they're going to get a whole lot worse unless we return to the good old ways we knew in some distant good old days.

But the basic business of the historian, so far as I can see, and the essential function of this historical perspective we're always dispensing, is primarily ritual. We come to meetings like these the way clergymen come to political conclaves like the na-
tional party conventions. We inaugurate the proceedings, lend a touch of tradition, and then get out of the way so that the real business can begin. We take a good bit longer than the clergy do - and today there are two of us, so we take longer still - but our function is a lot like theirs. We confer a quantum of psychic comfort. We provide a measure of reassurance that affairs are manageable, or at least endurable, for folks who are by no means sure that affairs are actually manageable, or even endurable.

The element that mystifies me in all this is why you draw comfort or reassurance from such sorts of historical perspective. Myself, I find it pretty depressing to tell you that it's bad now but it's been bad before. I find it more depressing still to tell you that it's been bad in the same ways before, and that we've heard the same hopes for relief before, and that those hopes haven't panned out before, and that no one even remembers any more. I find it most depressing of all to tell you that we never remember, never learn, and endlessly replicate the old patterns anew.

Our techniques and terminology change, to be sure, but the deep structures beneath the surface never seem to. We remain anxiety-ridden about the exact same issues - are we pushing our kids excessively or insufficiently? are we too competitive or not competitive enough? and what is it that will make our youngsters happy anyway? - and we oscillate endlessly about the exact same ambivalences.

The perennial issues are issues of pressure - the pressure we experience as adults, and the pressure we put on our children - and the recurrent ambivalences are ambivalences over progress. We are
tantalized by the possibility which technology holds forth of relief from present pressures, and at the same time we are terrified by the probability that technology presents of intensifying those very pressures. And every generation among us imagines itself the first ever to address such dilemmas, the first to be forced to come to terms with the pellmell pace of modern life. Every generation among us envies its ancestors their exemption from such stress, discounting or indeed dismissing their dealings with equally dizzying dislocations.

I have students in some numbers, in a course I teach on the history of the 1960s, who speak seriously of television as the essential source of the turbulence of that decade. I ask them what they mean, and they answer in all earnestness that the eruption of that mass medium upon the American scene altered consciousness, aroused conscience, and brought Americans to common concerns as had never been possible before. They are, to all appearances, utterly innocent of this country's history of almost two centuries as the world's first mass culture. They are entirely ignorant of the mass circulation of newspapers and pamphlets which already prevailed by the end of the eighteenth century, and of the dispersal of magazines, religious tracts and dime novels that knit the nation together in the nineteenth. They allow nothing of the unparalleled experiment in the democratic diffusion of information attendant upon the advent and elaboration of the telegraph, the public lecture circuit, the telephone, the news wire services, the phonograph, the radio, and the movies; they forget entirely the railroad and the automobile, which had shattered provincial insularity irrepar-
ably decades before Milton Berle or *I Love Lucy* ever did.

Yet virtually every one of the technological innovations I have just cited was heralded in its own day with the same breathless rhetoric of social renewal as television was in its time or the computer is in ours. Commercial telegraphy was barely a year old in 1847 when it was trumpeted as the harbinger of a new epoch in human history, a means of promoting "harmony among men and nations," an instrument of inconceivable "Moral Progress." Its advocates claimed it would be as much a "missionary of peace and good will to the world" as "The Church," that it would have a "humanizing influence" of extraordinary proportions, that it would, indeed, alter consciousness to the point of "breaking down the barriers of evil prejudice" and promoting "an end to international hostility." 5

A generation later, editorialists and educators were connecting the introduction of the telegraph with the coming of the railroads and the rise of the cities as causes of the overstimulation of the senses and overexcitation of the intellect that they feared flowed too readily into overpressure and nervous exhaustion; but by then others were already envisioning another technological innovation, the telephone, as a source of renovation and regeneration. "The fables and fairy tales of old pale before the facts of the present day," proclaimed one pundit after another. In the very days in which G. Stanley Hall and his fellow students of development were fretting over the fruits of earlier inventions, the prestigious *Scientific American* was predicting that the telephone would promote "nothing less than a new organization of society - a state of things in which every individual, however secluded, will have at call every
other individual in the community." Alexander Graham Bell's revolutionary device would provide at once a "technique of democratization," an "instrument for regulating masses, criminals, natives, servants, and whatever other underclasses might need restraint," and a means of minimizing all the "little evils and annoyances" which seemed in 1880 "to make life laborious and unsatisfactory." 6

By the time it was evident that the telephone might magically enhance the reach of the human voice but that it would not mystically make life satisfactory, the siren songs of other cuckoos were heard in the land. The technological transformation of conduct and consciousness which had not attended the telephone would be wrought by radio, or movies, or TV. And today, when it is all too apparent that an entire generation brought up on television has managed to remain as anxious, as self-centered, as career-conscious, and as competitive as any of its predecessors - when it is apparent, indeed, that the kids who grew up tied to the tube can't read, write, sustain attention, analyze issues, tolerate ambiguity, or even score on SAT tests as well as their parents or grandparents - we have a whole new host of enthusiasts trotting out a whole new host of extravagant forecasts of new days dawning for the generations which will come of age with computers. I wouldn't hold my breath waiting for the superpeople whom these putative superbabies are supposed to become.

But that is not to say I wouldn't worry as so many Americans before me have worried about the pressures we put upon our children, or the exaggerated demands we make of them, or the inflated hopes we invest in them. I worry a lot when I read that the parents of four
daughters with IQs over 150 held a Donahue audience spellbound with stories of how they began teaching their girls even before birth.

I worry a lot when I see that, in a recent survey of the qualities they most desired in their offspring, most parents in the United States put intelligence at the top of their lists. I worry a lot when I hear people praise Sesame Street, with its endless emphasis on reading readiness and abiding indifference to emotions and attitudes, and dump on the Saturday morning cartoons, which at least make gestures at dealing with aggression and conflict and other issues central to life in this society. I'd feel a lot better if I thought that parents wanted their kids to watch shows brought to them by junk cereals and Japanese robots which might teach them to come to terms with debased appetites and desires than I feel thinking that parents prefer that their children watch shows brought to them by the letter R, or G, which can teach them only a debased intellectual technicianship.

I can't for the life of me see what difference a few months headstart in reading - or rather, in recognition of the letters of the alphabet - might make to a child. I can't for the life of me fathom all the fuss over a few IQ points, as though IQ scores could confer success, or satisfaction. And I can't for the life of me imagine what warrant anyone thinks there might be for supposing that parents can create their progeny in these over-intellectualized images or, for that matter, in any other images.

Even psychologists are finally beginning to see what historians and poets could have told them from the first, that the best-laid schemes o' mice an' men gang aft a'gley. History reveals nothing
more readily than the fatuousness of our faith in our ability to achieve our ends in any straightforward fashion. History is nothing if not a study in unintended consequences. And developmental psychology, which has been scandalously indifferent as a discipline to long-term development, is finally accumulating a sufficient store of longitudinal studies to enable psychologists to come to a comparable skepticism of linear continuity of character.

A recent collection of essays by Jerome Kagan, The Nature of the Child, summarizes a substantial number of such studies. It concludes that infant attributes commonly fade and that infant experiences generally fail of lifelong impact. Some of them are left behind in the process of maturation. Others are undone by subsequent experience. One way and another, the early years of childhood prove to have paltry predictive power even for the later phases of childhood, and less for adulthood. One child capitalizes on initial advantages, another is incapacitated by them. One child is crippled by early adversity, another transcends it. But on the whole adults are not creatures of their infancy or youngest years. "The factors related to adult satisfaction, behavior and emotional problems are almost invariably other adult experiences, not childhood ones."

Of course, Kagan does not claim that parents and other elements of the child's early environment make no difference. Manifestly, they matter a great deal. Kagan only insists - as any orthodox historian would - that parental stimuli elicit no predictable response from children. Parents who cherish, or dread, their power to form their offspring are simply mistaken, for such parents simply do not determine as much as they hope, or fear.
Our children are not ciphers, not blank slates on which we inscribe aptitudes according to our abilities as parents. And because they are not, we cannot engineer their intelligence or control their capacities in any mechanistic sense. We cannot even groom such qualities in any horticultural sense implied by the auspices under which we gather this morning, the hot housing of children.

Our children bring at least a couple of crucial elements to every encounter, elements that we are powerless to command. They meet the world according to their own temperaments, and they infuse it with their own interpretations. Events are never, therefore, defined solely by what parents do. They are shaped every bit as decisively - perhaps even more decisively - by the intentions and significances that the child sees in the parents' actions. And as Kagan reminds us, those imputed intentions, those childish definitions of the situation, can be idiosyncratic indeed.

Different children in the same community, even in the same family, can find different significances, and consequently draw different strengths and suffer different debilities, from the very same experiences: a harsh word, a smile, a beating, a trip to the shore. And of course children from entirely different cultures can find even more disparate meanings in the same overt behaviors.

No adult conduct carries its own intrinsic significance, independent of personal and cultural and historical circumstances, or its own irresistible causal efficacy, apart from the complicity of the child himself or herself. Character is never forged in accordance with deterministic developmental laws or along inexorable predictive paths. It is always subject to the vagaries of temperament, inter-
interpretation, and the exigencies of the historical and cultural moment.

Psychologists, who see subjects predominantly at a single historical moment in a single culture, sometimes overlook such vagaries because the comparative homogeneity of the social situation muffles them. Historians, who deal predominantly with deeper diversities - of religion, of national culture, of class, over centuries and indeed over millennia - cannot do so. And just because they cannot, they have long since abandoned the predictive enterprise. In the study of transactions between generations, in past time, they do not even pretend to anticipate the effect of isolated parental behaviors in the complicated context of child-rearing. They do not seriously seek to see how the younger generation turned out but only aspire to ascertain the prevailing views and values of the elders as those views and values reveal themselves in the treatment of children. Thus there is scarcely a historical study extant on the impact of Benjamin Spock's canonical bestseller, _Baby and Child Care_, on the youngsters of the postwar world, and it is hard to see how there could be when successive cohorts of youth raised on the very same advice grew up to become the silent generation of the fifties, the raucous activists of the sixties, and the narcissists and careerists of the seventies. But there is a battery of books and articles which analyze _Baby and Child Care_ in an attempt to illuminate adult American assumptions, aspirations, and anxieties as they were implicitly addressed in a book which parents persisted in buying and relying upon for thirty years and more.\(^9\)

One of the best accounts of the persisting anxieties and perplexities of parents across the past few centuries in the West is a
book which scarcely speaks of child-rearing at all. It is a book about mining pumps and machine tools, steamboats and spinning jennies, windmills and watches, a classic book by Lewis Mumford called Technics and Civilization. It is pertinent to our purposes because it traces as well as anyone ever has the emergence in the modern West of mechanistic conceptions of nature and of man.

It is that mechanization of our ideas of our world and ourselves, at least as much as anything else, I think, to which we owe our perennial impasse. It is that mechanization of our apprehension of experience which impels our recurrent readiness to seek technological escapes from technologically induced dilemmas, that mechanization of our very imagination which promotes our presumption that the only way out is forward.

The mechanization of the Western world-picture evolved over a prolonged period, but it was essentially in place by the seventeenth century. It overturned notions of space and time contrary to the common sense of the middle ages and the common experience of people even to this day, notions of the homogeneity and uniformity of spatial and temporal units such as we see epitomized in perspective painting and in clock time. And such notions expressed a conception of experience inconceivable to the men and women of the middle ages, who had counted numbers but never supposed that only numbers counted. The mechanistic conception converted tangible commodities into intangible cash values. It changed personal ties of feeling into impersonal relations of regimentation. Under its aegis, abstraction and calculation emerged as the essential modes, and standardization and mass production the ascendant norms, in
institutions as different as the army, the workplace, and the school.

Since the seventeenth century, mechanization and the mechanistic mentality have ramified ever more elaborately. By now, vast numbers of us are "more at home with abstractions than...with the goods they represent."10 We buy and sell soybean futures or AT&T shares without the slightest knowledge of soybean cultivation or telephonic technology. We even daydream in abstractions, fantasizing that we might be millionaires without much more than the remotest notion of what we'd do if we were.

And the same sensibility that shapes our ideas of what we ourselves are worth shapes also our ideas of what our children might amount to. The same rage to rate everything and everyone according to simple quantifiable criteria permits us to reduce our intricate appreciation of childish intelligence to Intelligence Quotients and of youthful aptitude to Scholastic Aptitude Test scores, entailing upon us the necessity of taking seriously such idiocy, as if we really could distinguish among our young with any utility from one percentile to the next and as if we really should spend significant energy in the attempt. The same ardor to understand our own development on the model of the machine allows us to embrace deterministic doctrines such as Freud's which make us indeed, by such complicity, prisoners of childhood.

Such sublime, self-debasing faith in mechanism has been constitutive of modern Western culture for several centuries now, and nowhere more than in America. It defines us. It is our destiny, unlovely though it may be. We will still be calling conferences such as this one, chafing at our technological dependence and at
the strain it entails on our children, a hundred years from now, just as we were convening such colloquia a hundred years ago. And those conferences too will purport to speak of children but in fact betray a rampant adult unease at our technological drivenness and our inability to stop the machine.

For the truth seems to be that we cannot stop - machine, and do not even truly want to. Perhaps we are simply playing out our allotted string, for the perverse satisfaction of seeing, in macabre where it leads. But I think there is more to it than that. I think we are committed to the machine in more than mere agnostic obstinacy. I think we are, in the end, believers in the machine. It is our god, almost our only god. I just hope that, like the rather more human god of the bible, it spares a few of us for a remnant when it finally explodes in wrath. I just hope that, unlike the biblical god, it does not take for such a remnant its most devout and faithful followers.
NOTES


ity: Dr. Benjamin Spock's *Baby and Child Care,* *American Quarterly* 29 (1977), 519-46. See also Jay Mechling, "Advice to Historians on Advice to Mothers," *Journal of Social History* 9 (1975), 44-63.