

ParadigmShifting: A Brief Note on Betty Wallace and an Educational Paradigm Shift

By
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ParadigmShifting¹ happens. And it happens because of odd people who are different, in unlikely places, over extended periods of time. And, paradigmshifting happens painfully. That is the message of Thomas Kuhn.

Thomas Kuhn fathered his idea-children about the history of radical change in the science community as a young Harvard graduate student. He introduced them formally in a series of eight public lectures in 1951 as a Junior Fellow of the Society of Fellows of Harvard University. And Kuhn's ideas about paradigm shifts finally appeared in 1962 as *The Structure of Scientific Revolutions*.² The rest is vocabulary and intellectual history.

Though most reports of Kuhn's work center around his concept of a definition of paradigms and paradigm shifts, I consider it ever more important to note that Kuhn actually points to a fourfold schemata for how paradigm shifts happen historically. In other words, you can have a different way of seeing things in your head, but for history to be different, four things must happen.

I have given four designations to Kuhn's considerations, illustrating them from the paradigmatic shift brought by educator Betty Wallace³ to Vance County School District, North Carolina during a decade on the doorsteps of the 21st century.

¹ *Paradigm*: a model, a metaphor vision; in a discipline of study, a general conception of how a subject should be studied, including its appropriate theory and methodology. *ParadigmShifting*: the conscious attempt to flip a way of seeing of thinking onto a new plane, a way of challenging habitual perspectives.

See definitions and wide applications in Barry Buzan and Richard Little, *International Systems in World History: Remaking the Study of International Relations*. Oxford: Oxford University Press 2000, 441, and the story of how their own paradigm changed, 1-13 and 407-415; and Terence Brake, Danielle Medina Walker, and Thomas Walker, *Doing Business Internationally: The Guide to Cross-Cultural Success*. Singapore: McGraw-Hill 1995, 197, 183-216.

A paradigm change or shift is essentially a change in root metaphors. With a change in the root metaphors change, the imaginative architecture shifts, creating a new, or reconfigured reality along the lines of the metaphor's inner logic or way of seeing things.

² Thomas S. Kuhn, *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press 1962.

³ Betty Wallace and William Graves, *Poisoned Apple: The Bell Curve Crisis and How Our Schools Create Mediocrity and Failure*. New York: St. Martin's 1995. See Thom Wolf, "Most Honorable Betty Wallace: A Letter from Confucius." An unpublished paper. San Francisco: University Institute 2001

1. Alternative Metaphor selection

As the data in any certain-way-of-seeing-things increasingly fail to be fully accounted

BELL CURVE PARADIGM	STAIR CASE PARADIGM
BRIGHAM CONANT	BOY SCOUTS
Assumption <i>Intelligence innate</i>	Assumption <i>Intelligence achieved</i>
Grouping <i>By age/grade levels</i>	Grouping <i>By achievement levels</i>
Students <i>Each with different level of intelligence, fixed</i>	Students <i>Each at different level of achievement, fluid</i>
Human achievement <i>Bell Curve of intellectual ability</i>	Human achievement <i>Skewed curve of individual effort</i>
Emulation model <i>Current public schools A thermometer that records temperature</i>	Emulation model <i>Perennial performing arts/sports A thermostat that sets temperature</i>
Competitive learning <i>Judgment against other students</i>	Collaborative learning <i>Judgment against a standard</i>
Ability Group characteristics <i>Limited expectations Lockstep advancement Locus by assessed intelligence</i>	Achievement Group characteristics <i>Full expectations Flexible advancements Focus on standard of performance</i>

Source: Thom Wolf. See delineations in Betty Wallace and William Graves, *Poisoned Apple* 1995: 12-61, 89-95.

for by the old paradigm, someone, somewhere, conceptualizes a new way of seeing the issues in that field by choosing a different metaphor to work with in their mind. This person or group of persons is usually working at the margin, not the center, of the discipline. But this person at the edge is able to see things from a slightly different perspective: *a peripheral person with a penetrating insight*. Betty Wallace is such a person.



The Vance County district was operating from the Bell Curve paradigm of Brigham Conant. Wallace had a different picture in her head: the Stair Case model of the Boy Scouts.

Betty Wallace arrived in Vance County “with a missionary’s zeal”⁴—an alternative spiritual vision, and *an alternative metaphor*.⁵ (See the SIDEBAR.)

The experience of other persons could be profitably be revisited using this conceptual framework. See for example the South Asian study, Vishal Mangalwadi, *Legacy of William Carey: A Model for the Transformation of a Culture*. Wheaton: Crossway 1999.

For movements historically, Tariq Ali, *The Clash of Fundamentalisms: Crusades, Jihads and Modernity*. London: Verso, 2002. For an incisive but controversial thesis on the contemporary Arab predicament, David Pryce-Jones, *The Closed Circle: An Interpretation of the Arabs*. Chicago: Ivan R. Dee 2002; S. S. Gill, *Gandhi: The Sublime Failure*. New Delhi: Rupa 2001; and Rodney Stark, *The Rise of Christianity: A Sociologist Reconsiders History*. Princeton: Princeton University Press 1996.


See the global study of evangelical Christianity by UK sociologist David Martin, *Forbidden Revolutions: Pentecostalism in Latin America, Catholicism in Eastern Europe*. London: SPCK 1996; anthropologist David Stoll, *Is Latin America Turning Protestant? The Politics of Evangelical Growth*. Berkeley: University of California Press 1990. Stoll is significant not only for the good research, but because the evidence compelled him to changed some of his own prejudgments.; and Philip Jenkins, *The Next Christendom: The Coming of Global Christianity*. Oxford: Oxford University Press 2002.

For an early predictor of the significant of five contemporary movements, including radical Islam in the early 21st century, see Thom Wolf, ‘Future Trends: God’s Sovereign Agenda’ *INTENT A Quarterly Resource of Networking Professionals for Global Impact* Fall 1995:2-3.

⁴ Wallace, *Poisoned Apple* 1995, 167, 133, 120, 11-15. On cross-over motivations, see the classical study of revolution, Lyford P. Edwards, *The Natural History of Revolution*. Chicago: University of Chicago Press 1927[1970], 90-91; and Piotr Sztompka, *The Sociology of Social Change*. Oxford: Blackwell 1994, 191-201, 269-273, 306-308.

⁵ Wallace, 25-61.

2. Exemplar Model production

An individual or small group, working from the insight and inspiration of a new alternative metaphor, begins to create a new model, an exemplar model, birthed out of and based on, the new metaphor. 

Betty Wallace arrived in Vance County as the sixth public school superintendent in twelve years. In 1991 the school district enrolled about 7,000 students, with 58% poor enough to qualify for free and reduced-price meals. Their test scores were among the lowest in the state, and their dropout rates among the highest. Vance high school seniors posted among the lowest college entrance exam scores in the state. The school district was paralyzed at the top by corruption, racial division, and politics.

Within three years, there were dramatic improvements in student performance and drop-out rates. In the first year, Vance County met 68% of state standards, compared to only 40% the year before. The first state test scores after Wallace's plan was initiated showed a reverse of a decade-long downward trend. Students showed gains in 6 of 9 categories. In two more years, Vance students posted scores near the state average on state tests in reading and mathematics for the first time in more than a decade.⁶

The *Annual Children's Index* rated Vance County among the 10 worst counties in the State for children. Vance ranked 94th worst of 100 counties by such criteria as infant mortality, low birth weight, births to single teens, graduation rates, juvenile arrests, child abuse and neglect, welfare payments, and foster care.

How did she do it? Betty had a different vision of the way things should be. And she began with a group of teachers-willing-to-venture, to put it in place.

Her plan was a loose-tight organization. The tight part was the framework: performance standards (benchmarks for achievement) and the elimination of grades and grade levels. The loose part was the removal of any obstacles that kept students from advancing toward the benchmarks. Empowered teachers were committed to carrying out change. And students became free to advance in school as fast as they could learn.

Vance County educators summarized their plan in one mission statement and nine goals that could be easily conveyed and sold to students, teachers, and parents in the community. The one mission statement was as simple as it is striking.

To poor parents and poor-performing students, in the Number 94-out-of-100 Worst County, it said: "Vance County School System is committed to educating all children for productive global citizenship in the twenty-first century."

To fulfill that mission, the system would adopt learning goals, embrace guided learning, abandon grades and grade levels, designate student advocates, and set high expectations for attendance and student achievement in core courses. Each local school was encouraged to enlist the help of parents and students in organizing as it

⁶ Wallace, 5-6, 293-99.

saw fit. Wallace was converting a system based on the old factory model of production into a system based on principles of the modern high-performance workplace: just-in-time delivery, instant flexibility, and zero defects.⁷

Betty Wallace found her own exemplar model in the Boy Scouts of America,⁸ and she set about to create a stair-case educational structure with a defined series of ranks of steps, clear benchmarked outcomes and objectives, with progress according to the scout/student's own way and pace, and the badge of honor being the high school diploma.

Thus did she create her own educational *exemplar model*, an undisputable showcase in a public school setting.

3. *Necessary Period of Social Tension historically*

In a field ready to change, established, older leaders of the reigning paradigm tend to oppose the new paradigm. But along side the opposition of the reigning majority is the rare but vital individual or cluster of persons who come to agree and support the new thinking. Eventually, personal, emotional, and social tension wells up between the oppressors and the innovators. This period of social tension is often extended across a period of time and is almost always excruciating psychologically and interpersonally.

This *necessary period of social tension* was certainly excruciating for Wallace. But it was also clearly marked by Wallace and her troops of administrators, teachers, parents, students, and community leaders, visible and invisible.⁹ And, it should be noted, Vance County was no idealistic setting. Wallace wrestled with administrative boards, opposition community leaders, and side meetings in a rough back-county where “folks talked plenty, about cotton, cows, ‘coon hunting, football, and schools.”¹⁰

In rural Macon County, Georgia—where, by her own account, her father spent most of his time at Stamey's Grocery—all the fox hunters and farmers would hang out and “discuss things.” And it was that very home-spun philosophy in her Daddy's words that got her through Kuhn's period of necessary tension. “Remember,” her Father used to say, “when you're dealing with son-of-a-bitches, you just hafta figure out some way to out-son-of-a-bitch ‘em.”¹¹ She did.

But even so, Bill Mueller, Vance County testing director, expressed what almost all who weather this tunnel of ferocity would conclude: “We were enormously naïve

⁷ Wallace, 117-21.

⁸ Wallace, 91-95.

⁹ The battle story is laid out in ‘Launching Change in Vance County’, 125-155, and ‘Politics of Change’, 157-179, in Wallace, *Poisoned Apple* 1995.

¹⁰ Wallace and Graves, 170.

¹¹ Wallace and Graves, 170, 174.


about how difficult it would be.”¹² Along the way there were not only victories that included a \$1.65 million grant from the State Board of Education, but also intrigues to “bring down” Wallace, lawsuits, and much more.

Those who want the change without the crucible of necessary social tension, merely *wish* for change. They do not *create* change.

Tears, not theories, are the historical womb of wonders. Real change is never caesarian. There is always a necessary period of social tension. There is always the necessary period of terror-laced psychological screams—the mandatory birthing pains for new infant realities.


Only where you smell sweat, hear gurgled groans, and flinch from delirious cries, languished resignations, and blood-scratched grips, do you see real change birthed.


4. *Collapse/Conquest Point institutionally*

Either the old prevails, and crushes the new paradigm, or else the new paradigm triumphs over the old patterned way of thinking and acting. 

Betty Wallace’s new paradigm conquered in the “turning point” November vote of the School Board (5-to-2).¹³ Other battles were to be fought. But the war tide had turned. The vote was the victory. Institutional alignments would follow.

For genuine, lasting, life-changing shifts to occur, the four historical dimensions of a paradigm shift must come all to pass. There must be

1. an alternative metaphor selection
2. an exemplar model production 
3. a necessary period of social tension historically, and
4. a collapse-or-conquest point institutionally.

A paradigm may be a model. But a paradigm *shift* is a maturation—a point only reached after the blade, the stalk, the full head of grain. A paradigm happens in your head. But a paradigm shift happens only in hard history. 

And yet, there is a strange comfort in knowing the real, even if it is difficult or painful. Personally, I have found it most illuminating, even emotionally encouraging to myself and to others advocating change, to grasp all four of the essential elements for a paradigm shift.

¹² Wallace and Graves, 177.

¹³ See Wallace, *ibid.*, 171. Since her experience, many have become familiar with the “tipping point” phenomenon. Malcolm Gladwell, *The Tipping Point: How Little Things Can Make a Big Difference*. Boston: Little, Brown, and Company 2000. See also the more practical, Emanuel Rosen, *The Anatomy of Buzz: How to Create Word-of-Mouth Marketing*. New York: Currency Doubleday 2000.

Without all four, you have only theory, good notions. But when all four survive into reality, you have live birth, a new future.

So then, no matter how trying, even distressing, might be the living out of paradigm shifts in the real world of relationships and personal life and heart dramas,¹⁴ knowing the whole picture, knowing the truth more holistically, seems to have a profoundly liberating effect.

Thus, the truth—the truth, for example, about the necessary period of social tension, and the truth about the conquest, or even possible the collapse, of the new paradigm—the whole truth of what it takes to effect a life-changing shift, does in fact, set us free. Free to struggle. Free to persist. Free to endure. And, even freer to fail, should that be our historical lot.

Some futures must wait. Some futures will never be. And some futures? Some futures will still eventually win out, in spite of all contrary contemporary appearances.¹⁵ ■

¹⁴ So significant is this element of “social tension” in the real-world for playing out the historical experience of paradigm shifts, that Kuhn wrote another book, equally important, but not as well known as *Scientific Revolutions*. See Thomas S. Kuhn, *The Essential Tension: Selected studies in scientific tradition and change*. Chicago: University of Chicago Press 1977. *The Essential Tension* fills out the fourfold schemata in the historical processes that compliment the cognitive framework of *Scientific Revolutions*.

Others have also addressed aspects of this same connection concerning Kuhn is made independently by others. Piotr Sztompka, *The Sociology of Social Change*. Oxford: Blackwell 1993, 30-33, 155-177, 250-273. Daniel Chirot, *Social Change in the Modern Era*. San Diego: Harcourt Brace Jovanovich 1986, 49-55 is less clear.

In a discussion of the ‘absurd’ Jacques Barzun compares three persons not usually associated—Levi-Strauss, McLuhan, Kuhn—in what he sees as parallel systems with common characteristics, *From Dawn to Decadence: 1500 to the Present*. New York: HarperCollins 2000, 754-760. Stanley J. Grenz, *A Primer on Postmodernism*. Grand Rapids: Eerdmans 1996, 39-56, gives a specific application of Kuhn’s thinking in the shift from the modern to the postmodern.

¹⁵ In worldview comparisons, an all-encompassing and transforming paradigm shift for life on this planet, in spite of all contrary appearances, is what to expect, according to Jesus. See John Balchin, *What Christians Believe*. Oxford: Lion 1994.

From a different perspective, there is Gordon Graham, *The Shape of the Past: A Philosophical Approach to History*. Oxford: Oxford University Press 1997. This philosopher at St. Andrews University, Scotland examines the five basic ways of viewing history. Graham is aware of Kuhn (33, 127), and contends that though the providential view of history has been odd-man out for the last 200 years, it merits a long overdue reconsideration. His book has all the earmarks of a person working with a new (in this case a ‘renewed’) metaphor to create an exemplar model (9-13) in the contest of ideas.

Then, the brief overview by James Stewart is interesting. Jesus was a peripheral person with penetrating insight. Read with Thomas Kuhn’s model in mind, and considering that he wrote this while at the University of Edinburgh almost a century ago, Stewart shows why Jesus’ proposal for how to live life continues to quietly and insightfully surprise us even today. James S. Stewart, *The Life and Teachings of Jesus Christ*. Nashville: Abingdon 1998.

To think further about possible and different futures, I have often found I need help just to get beyond my everyday thinking. For three provocative educational metaphors as alternatives to those currently dominant in most places, see Vanderbilt University philosopher Peter Hodgson, and University of California Berkeley historian William J. Bouwsma, as well as the rather radical educational implications of the research of urban planners Manuel Castells and Peter Hall in the documentation of a new way of doing university and business in the intellectual-technological interface that started with Stanford University and what became Silicon Valley.

Peter C. Hodgson, *God’s Wisdom: Toward a Theology of Education*. Louisville: John Knox 1999; William J. Bouwsma, *A Usable Past: Essays in Cultural History*. Berkeley: University of California Press 1990, 369-417; Manuel Castells and Peter Hall, *Technopoles of the World: The Making of 21st Century Industrial Complexes*. London: Routledge 1994. See their interdisciplinary influence in Thom

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