Failure? Isn't it Time to Slay the Design-Dragon?

by Dietmar R. Winkler

***Warden**, Road Prison 36:*

What we got here is . . .
failure to communicate.

You run one time,
you got yourself a set of chains.

You run twice
you got yourself two sets.

You ain't gonna need no third set,
'cause you gonna get
your mind right.

Some men you just can't reach.

So you get what we had here
last week, which is the way he
wants it. . . well, he gets it.

I don't like it any more
than you men.

You gonna get used to
wearin' them chains afer a while,
Luke. Don't you never stop
listenin' to them clinking.
'Cause they gonna remind you
of what I been saying: "For your
own good."

Luke:

Wish you'd stop
bein' so good to me, Cap'n.

From
Cool Hand Luke, Hollywood film,
1967

***Visible Language** Journal*

Special Issue
Communication Design Failures:
Function & interpretation
scrutinized
Corrected Draft (07/09/09)

Carr, prison floorwalker, to Luke:

Them clothes got laundry numbers on them. You remember your number and always wear the ones that has your number.

Any man forgets his number spends a night in the box.

Failure? **Isn't it Time to Slay the Design-Dragon?**

by Dietmar R. Winkler

Design's deadly insouciance

A group of graphic designers, all winners of a prestigious national award, claimed the following: Graphic designers are intimately engaged in the construction of language, both visual and verbal. And while our work often dissects, rearranges, rethinks, questions and plays with language, it is our fundamental belief, and a central tenet of good design, that words and images must be used responsibly, especially when the matters articulated are of vital importance to the life of our nation. - From a 2006 letter to the White House, signed by Michael Rock, Susan Sellers, Georgie Stout, Paula Scher and Stefan Sagmeister.

Does this mean that these designers are really qualified, steeped in and familiar with the work of linguistic relativists like Franz Boas, Edward Sapir or Benjamin Lee Whorf, whose research was challenged but not negated by formal linguists like Noam Chomsky, moving the discourse from anthropological filters to psychology, and back again to Steven Pinker's The Language Instinct? Did they have a deep or just a cursory look at the volume of expert research? On what portions of their own language research do they depend for supporting their claims: aesthetic, experimental, logical or philosophical linguistics, because any of these are necessary to claim responsible experimentation with logic, philosophy or language? How deep is the disciplinary knowledge-reservoir of the design profession to allow any designer so confidently dissect, rearrange, rethink, question and "play" with language? How can they seriously live up to the tenet of design? If these five can, can the rest of the 299,995 estimated members of the American design profession (US Department of Labor)?

> *I seem to be, to my surprise, a member of a large profession. There are some 300.000 designers in this country alone, nearly all of whom have become so in my adult life time. They are all prosperous. Most of them seem to be busily applying design to problems of life and personality. They seem to feel, many of them, that all we need to do is to consolidate our scientific gains. Their self-confidence astonishes me. For these gains seem to me puny, and design intelligence seems to me ill-founded. At any time the whole design applecart might be upset. Let them beware!*
> - J.J. Gibson, psychologist, critiquing his own discipline (Reed and Jones, 1982), here paraphrased by the author.

Design in times of discontinuity

Designers, if they like it or not, live in the mixed metaphor for a time-warped niche in the Gutenberg galaxy, namely at the edge of an unexplored and not verified problem universe. Their world appears

These here spoons . . .
you keep with you.

Any man loses his spoon
spends a night in the box.

sometimes greatly separated by dangerously deep waters and sometimes connected by safely linked lands, even if the ideal conditions could be thoughtfully established through a thorough investment in research. Problem resolutions are still according to individual whim, sentiment and feeling, rather than based on logical and critical communication analyses. Individual sentiment still guides designers' surrealist ways, in which they try to intuitively move away from any solid center of critical knowledge and continue to fish in an unexplored and unreasoned void. They have not yet accepted the tenant of responsibility for moving towards the gravitational core of a problem, for what Christopher Alexander already advocated fifty years ago, namely a "correct fit" between object/message, contents and context. He advocated trust in the carefully assembled and researched information to reveal a "fitting solution," rejecting reliance on predictable repetition of the prevailing conventional methods of matching conditions with preconceived and formerly successful solutions (Alexander, 1964).

Design has failed or if that is perceived as too tough a statement, it has definitely stagnated. The great promise, after having moved from the Bauhaus, a technical school facilitating guild and craft attitudes, into the American academy, that it would evolve from an unselfconscious (intuitive) to self-conscious (critically and intellectually meditated) design methodologies, did not materialize. The possible growth has been severely stunted due to the poor examples set by homeostatic universities and notable but apathetic design schools, naïve professional organizations, a more than ridiculous accreditation system for design education, and a vast majority of practitioners holding 19th century craft-guild skills scrambling now to match them with digital technologies.

The true failure of design, not living up to responsibilities of engaging audiences in vital communication, lies in not recognizing the clear functional delineations that separate divisions of communication labors. Living in the new problem universe of a "knowledge society" requires a commitment to accelerated intellectual competence, in order to function as "professionals" designers must step beyond the now insignificant traditions of intuition-fed visual entertainment. The public deserves, especially during dangerous times like these, to be empowered by useful and reliable information that is easily observed, compared and synthesized for reaching critical survival decisions. Their needs should not be distorted or filtered through somebody's individual sense of expression. Design has to become more educated, informed, intelligent and above all smarter than the typical four-year education of citizens.

Christopher Alexander, in comparing unself-conscious and self-conscious cultures, uses the Eskimo as analogous to the traditional intuitive designer, and the critically thinking designer as analogous to the contemporary designer (for example, standing in for the highly educated designer of artificial limbs, who must combine knowledge of various disciplines to evolve maximal operational prostheses by being intellectually engaged with social and behavioral psychology, anatomy (translated into mechanical, electric and computer engineering and material and medical sciences, pharmacology, etc.).

The Eskimo (traditional designer), to cool the temperature and stop water dripping from the igloo ceiling, pushes through the snow or ice wall to let the frigid air in with the aim to hasten the refreezing

There's no playing grab-ass or fighting in the building. You got a grudge against another man, you fight him Saturday afternoon.

Any man playing grab-ass or fighting in the building spends a night in the box.

of water, and then when the right temperature has been reached, takes several handfuls of snow slush to close the opening again. In contrast stands the well-educated architect who must anticipate all possible operational failures encountered by modern high-rise dwellers, which are far removed from understanding the problem logistics and will call the building superintendent to fix the leak and adjust the temperature. If the superintendent can't cope, a specialist is summoned.

Design homeostasis is mirrored by all traditional cultures. The perception of need for change is slow. There is little acceleration over generations. Like with indigenous people, design reality is tied to the moment, framed by the issues of immediacy, and the procedures and methodologies, copied and duplicated provided the common perception that most failures have been reduced to a minimum over epochs. New impositions are not foreshadowed. Things grow gradually. Individuals solve problems directly by existing example: "in our tradition," "how things are done here." There are innovations but they are small. The individual defines a problem for himself in relationship to personal education, experience and tradition, totally outside of the aggressively dynamic multi-disciplinary world.

In the self-conscious society, which measures its benchmarked success abstractly against rules of efficiency, time and money, the citizen has been forced to give up solving problems to the hands of the supposedly well-educated specialists, namely the design practitioners. The self-conscious culture tries to externalize and streamline methods, processes, and procedures but increases the intellectual distance between end-user and so-called expert. Even when great progress has been made in recognizing diversity and needs for customization, unless great care is invested, the majority of solutions become less individual and more general for users because of the corporate aim at an intended larger aggregated consumer mass. Objects, messages and methods become generic and frequently are ill-suited for a large portion of users.

The rather young design culture, not snatching failure from the jaws of success, must first recognize that times have changed. Their expertise has shifted from unself-conscious forms of visual expression to those needed in coping with the dynamic issues of a fast growing, self-conscious "knowledge society." If design continues to rely primarily on approaches fostered by guild traditions, then it will reach but a fraction of the total populace, namely those who have innate abilities to adjust easily to any twist and turn in the road. The communication needs of the much larger group, including the language handicapped group of immigrants and especially the between 8.7% and 18.1% at the extreme end of the spectrum, a group of about 55 million Americans diagnosed with phobias of all kinds, will not be served well at all, because designers are short-changed by their narrow education (Lenzenweger et al, 2007).

One would think that design understands that a society that considers "knowledge" as its primary currency and product requires investment in intelligence, innovation and invention from all its segments. But communication design continues to vacillate between two worlds, one that still rejects cognitive, cerebral and systemic communication research, and the other, which still is enamored by art and adores self-expression.

First bell's
at five minutes of eight
when you will get in your bunk.
Last bell is at eight.

Any man not in his bunk at eight
spends the night in the box.

Disorientation and feelings of loss

The conventional view is that learning works best by applying well-used methodologies that reinforce the paths that have a success-history of secure footsteps and promise. When applied to new problems, they are perceived to step-up to solutions with greater probability of success. However, they do not eliminate emerging obstructions and chances for failure. In the evolution from the unself-conscious stage (individual approaches, few conventions) to self-conscious stage beyond the craft-guilds, which pride themselves in establishing and reinforcing conventions, the next evolutionary stage will require intellectual agility beyond the present-day conventions.

Presently, design lives in an environment of very rigid conventions, mirrored in a bottom-line barter system, in which budgets are translated into and measured against concepts of adequacy, time efficiency and expediency and expectations of what the market will bear, not maximal fidelity. This does not encourage additional search for highest standards or potentials. It can be argued that reinforcement of conventions easily satisfies and can lead to intellectual rigidity, making it more difficult to adjust to much more dynamic situations and times. Also one forgets that the environment of rigid conventions creates serious dependencies. In the case of the design profession, if design practice does not demand greater sophistication and intelligence from the institutions that train and supply the major design workforce, then design can't grow, and visa versa, if design educators cannot model the benefits of intellect over craft, then design practice will be delegated to a support and not a leadership position.

Marvin Minsky (2006) probing the new and unprecedented, suggests that entering an unfamiliar terrain or trial for understanding new paradigms and difficult subjects, will lead most likely to discomfort and stress, confusion and disorientation, because most of everyday learning involves only minor adjustments to skills that are already known and tested by trial and error, allowing for small changes. This seems to bear out the professional design organizations' approach, which, by awarding minor improved performance will elevate minor changes to become permanently enshrined. However, Minsky believes that this strategy won't work well in unfamiliar cases that may require older techniques to be abandoned totally even though they may have served well previously. When substantially new methodologies need to be learned, new strenuous work is created with new forms of stress and less frequent rewards.

Holding on for dear life

A critical look at communication design, education and practice, its beginnings and traditions, requires getting away from the substantial innovation levels and potentials of digital technologies and the concern for the variety of graphic expressive visual formatting and typographic styling. Instead it should be reviewing specifically the rate of growth of intellectual and conceptual components that relate to understanding communication in social, cultural and economic contexts; one has to realize the nearly stagnant or at least homeostatic condition of the field, with little change over a century. Appropriate contents and solutions can only evolve from an intense inquiry into human factors that facili-

There is no smoking in the prone position in bed. To smoke you must have both legs over the side of your bunk.

Any man caught smoking in the prone position in bed . . . spends a night in the box.

tate or hinder communication.

The "professional" rhetoric, touted by journals, organizations and schools, suggests having moved three feet forward. But the reality looks more like having moved backward by two feet with the result of a gain of one foot only, just ahead of stagnation. That one measly foot of progress is not driven by significant intelligence or innovation, but by adaptation, namely the process that pedagogues and practitioners use when perceiving an advantage in the knowledge and skills held by a competitor and then copying it. This is an ingrained design tradition. It dates back to the Buchdruck Zunft (German printers guild) related to goldsmith skills for letter production, paper-making and printing, and other Central-European guild systems (Hobsbawm, 1965; Braudel, 1982), from which many conventions of graphic design originate. This is exemplified by the rapid spread of printing techniques throughout Europe, starting 1452 in Mainz, spreading from there through Germany to Vienna in 1462, then to Basel by 1464, to Venice by 1469 and Spain and England by 1473. Those who aspired to become masters in their field were required to leave their countries for a number of "Wanderjahre" (years of journeymen travel) and then to, as quasi-industrial spies, bring back the accumulated knowledge of processes, methods and materials directly experienced in other cultures. That maybe the reason why craft skills when transferred from one culture to another rarely retain the original culture's philosophical framework. What transfers, is mostly style and rudimentary methods, not contents or context.

Lissitzky's Suprematism, John Heartfield's approach to photographic political comment, Jan Tschichold's Constructivist arrangements in typography were all adapted and are now part of the design canon as any design exhibition will verify; so was the Müller-Brockmann and Karl Gerstner launched "Swiss Design." It was adapted, for example, by Container Corporation of America to its operations, and then promoted through Unimark across the world, and it finally infiltrated most of American industry, educational institutions, commerce and federal agencies. For a while the use of Armin Hofmann's Basel-approach to styling and Wolfgang Weingart's "new" typography became pedagogical credos, adapted by most American academic design institutions. Adaptation is never an innovative process, even if what is adapted seems to be new and unknown to those hankering to adapt to it.

The homeostatic characteristics of the design discipline

In all disciplines, for example, the physical and biological sciences, it is the level of intellectual achievement, honed by research and critical discourse, that establishes the professional hierarchy; not so in communication design, where opinionated, self-appointed and self-selected ideologues dominate a homeostatic design institution and its field of practice. They establish a fictitious but authoritative hierarchy, sanctioned later by academic certification, highly ranked academic pedigrees and middle-management and middle-class social standing. They, as figureheads become gatekeepers involved in protecting their territories, and with significant public prestige, PR notoriety and money at stake, they have little use for refining or updating their information reservoirs. They disseminate only selected portions or withhold vital information all together. Then the homeostatic superstructures they select to represent,

You get two sheets.
Every Saturday, you put
the clean sheet on the top . . .
the top sheet on the bottom . . .
and the bottom sheet
you turn in to the laundry boy.

Any man turns in the wrong sheet
spends a night in the box.

create hierarchical class structures in which some participants are more equal than others: insider/outsider; tenure/tenure-lined/untenured; part-time/full-time and other separations.

There is a great reliance on bureaucratic authority and control (authority embedded in frozen policies and procedures; personnel and "how-to-do" manuals; deviance of opinion and behavior is seen as threat to homeostasis). Interactions with outside experts exist only with those that do not threaten the existing ideology. (In education, it is the process of bringing alumni in as authoritative lecturers or experts to reaffirm the institutional success and to legitimatize the educational process to new generations.) Homeostatic organizations always try to obscure the level of their competence. There is an avoidance and outright rejection of any critique coming from the outside, and the resident critic or whistle-blower is soon eliminated. Failure is not allowed but obscured and seriously experimentation is restricted. Experimentation is reserved only to acceptable areas of the canon.

In homeostatic systems, there is usually little future planning, after all the singular approach, concept or ideology, has been found and refined. Instead there is a keen pursuit of minutia and a multitude of insignificant short-range goals. Critical discussions are often postponed on the grounds that the dialogue is too important and must be tabled for more "appropriate times." But there are never appropriate times; therefore the discussion never takes place. The use of tried, self-grown, even misunderstood methods adopted from others, is encouraged for the continuation of systems that have run their course with few alterations or critical analyses. Members of homeostatic organizations use old, authoritative rhetoric (better, best, first, only, unique, oldest, etc.), relying on reputation, which may have been legitimately earned decades earlier but is out of proportion with present-day reality. Standing a head above a crowd of intellectual mediocrity is still just a little ahead of mediocrity. Design schools will, like the auto-industry, not change through their own incentives, but only when the markets demand it.
The questions are, can homeostatic entities survive during times of uncertainty? Can they continue to maintain their stability for the next decade based on mythology when the real public needs lie somewhere else? It is fact right now, nearly all design education programs are preparing students without responding to the reality of public and global need. Design for print has evaporated all together and graduates are saddled with skills for times, long gone. When information shifts, changes and accumulates at high speeds and volumes, the traditional skills are too cumbersome, slow and inefficient for life in dynamic change environments.

The needs for real change

Gerald J. Skibbins (1974) described the characteristics of "real change" as those resembling biological metamorphosis, when caterpillars change into chrysalises and then to butterflies, or eggs into tadpoles and later into frogs, in which each progressive evolutionary stage does not look at all like the stage left behind. Real change is not just looking for how to move from A to B, but how to move beyond B and plan for future stages. That takes knowledge, contemplation and imagination. He also claimed that there is too little "planned metamorphosis" and decries the great abundance of "inadvertent change,"

No one'll sit in the bunks with dirty pants on.

Any man with dirty pants on sitting on the bunks spends a night in the box.

because institutions do react to adversity in fire drills only. When the emerging dynamics demand answers for society and culture, homeostatic institutions have to be dragged to the table.

Adaptation creates some liberation from homeostasis, but it is limited, because when institutions and corporations adapt from others, they usually select things out of context. They rarely understand the full extent of context within which these methods and processes became successful. They commit themselves only to the most immediate organizational demands without investing extra energy, time and effort.

A metamorphic change system, most likely, would want to replace itself, not just reshape the exterior shell. A nomenclature changes from graphic design to "communication design," "new media design," "digital imaging" and other quite meaningless titles, in fact, this just covers up that the technology has changed but not the contents or ideology. "Emotional design" covers the same territory that "design based on human factors" (physical, psychological, social and cultural) did, but one-generational minds perceive the same activities as new. Does the new nomenclature expand the territory, when after Venturi's "Learning from Las Vegas," schools proudly proclaimed "to 'do' vernacular design?" Outside temporary PR sound-bytes, what did that really mean? What was contributed to better communication?

In a metamorphic change system a lot of independent thinking is required for developing brand new goals to the fullest extent; aims that are not short-lived but are to endure to reach other future stages through trial and error. A metamorphic change system would require administrative mechanisms to recognize innovation, provide incentives for formal/informal self-education, insist on advice, critique and input of all adjacent disciplines to broaden the understanding of the complexities and potentials of visual and verbal communication, and also that participants overcome their fear of crossing borders in open-ended search and intercollegiate dialogue. Most of all, it must encourage homeostatic staffs to see intellectual innovation not as a "gamble," but the only life-blood leading to all kinds of possible futures.

Designers of ephemera are not Futurists

Communication design is not thought of or taught as an intellectual adventure, comprised of risky, dangerous uncertainties, but the directly opposite, namely through definitive power-examples of success, which define fidelity as universal, safe, efficient and expedient, with the intent to reduce the aspects of failure to a minimum. In the field of practice, the succession of problem-resolution approaches resembles more the cautious linkage to and repetition of earlier successes than aggressive steps towards continuous change. It is design practice according to the passive traditional Yankee motto: if it isn't broke' don't fix it. "Don't worry about something until it happens."

Any man don't bring back his empty pop bottle spends a night in the box.

Most communication designers are developers of short-lived ephemera. That is why their major contributions lie in aesthetic styling and formatting, and not in content-development or strategies for better communication or decision-making. Their contributions become only valuable and permanent when attached to the intelligence of other disciplines.

Seen from a critical angle, designers seem to deliberately build obsolescence into each project-solution, because visual styles rarely last longer than a moment. Since most professional design journals refrain from serious forensic post-mortem design critiques, the debugging of defects are left up to the individual who is usually too close to process the full array of interactions between faulty project irritants. There is a good reason why authors turn their material over to contents-experts with significant subject-matter knowledge and only then to skilled wordsmiths and proofreaders. Designers could learn from that process. In addition, if it is to their liking or not, authors have to submit their work to an unpredictable and unlimited reservoir of critical journalistic and academic reviews. Designers do not.

Although schools teach through successful case studies, the examples seem to encourage duplication and plagiarism. One actually learns little from the success of another designer. In moving success methodologies over to another problem, one finds that conditions, circumstances or contexts usually don't match, and what is good somewhere, becomes mediocre somewhere else. Because the relationships between components of the amalgam that are facilitating success are so complex, it is never clear to what proportional extent positive or negative dynamic forces were summoned to interact. The same successful plan applied to another project has the great chance of providing a mediocre solution or becoming a complete failure.

Failure teaches much more aggressively through retrospection. Failure could be part of a single malfunctioning component, lack of fidelity in concept development or of faulty fabrication/implementation. It could be due to one or several of the dynamically interactive "ecological, environmental" conditions that either facilitate or interfere with the succession of a project steps (because of intellectual, cultural, social and political conditions or well or ill chosen metaphors and semantics. The environment behaves like the weather in which everything impacts, like proper translation into media, awareness of signals, timing, place, season, overload and competition, and much more.

The Guild's craft-seeds falling on stony ground

Walter Gropius made (Wingler, 1978), if one is concerned with the source of intellectual dearth in the design discipline, a historically fateful decision, when in 1914, having been asked to combine the Weimar Academy of Fine Art and the School of Arts and Crafts by the Grand Duke of Weimar, preferred to abandon the academy and its philosophical and intellectual research in favor of hand-skills and aesthetic studio investigations gleaned from the arts and crafts and the traditions of the guild system. This was not just a minor turn of events. In fact it has hindered the maturing of design practice into a professional discipline. It has seriously waylaid the intellectual preparation for the field. Frederick II,

Any man loud talking spends a night in the box.

1712-1786, King of Prussia, had restructured the Prussian academy as a seat of free search and independent thought, believing that Protestant intellectualism was able to compete and challenge the French Academy, which he considered dogmatic, subservient to and controlled by Vatican dogma. Frederick II also set up clear status divisions, hierarchical authority and specific territories between the intellectual academy and the technical schools. The academy was independent. The arts and crafts were groomed to support trade.

Gropius moved design into the arena of vocational technical schools, away from the academy. In a historical paradox, after the nineteen-thirties, the Bauhaus ironically finds a new home at American ivy-league campuses; Harvard, Princeton and Yale. A better fit would have been with MIT or IIT, two science and technology-focused institutions. (IIT appointed Moholy Nagy and Mies van der Rohe.) For the first time ivy-league schools supported programs not built on philosophical discernment but on the anti-intellectual traditions of guilds, which, as Gropius expressed it, perceived members of the academy as dilettantes (those that profess, namely those with vast intellectual resources; theorists that don't do but speak). This view still prevails today at most design schools, especially on undergraduate levels, where "doing" by example is still more important than "critical thinking." Both Mies van der Rohe and Moholy Nagy were not academy educated. For example, van der Rohe attended the Aachener Domschule attached to the bishop's domain, a catholic parochial school intended to prepare pupils for entry into the guilds, where he received his formal education for the last two years before he left, fifteen year of age, to enter a four-year apprenticeship as a draftsman of ornamental stucco. Nagy's education was also very mottled and self-directed. The negative end-result is a baccalaureate degree in design initially geared to prepare fifteen-year-old apprentices, not the independent thinkers that are needed today. The baccalaureate in design very much mirrors the four-year apprenticeship that used to lead to the level of "Geselle" (journeyman) and adaptation of the knowledge developed by others. There were never any intentions to grow mature master and doctoral programs. Unfortunately there still aren't, beyond doctoral programs at the Institute of Design of the Illinois Institute of Technology, Chicago, or North Carolina State University, Raleigh.

This anti-intellectual view has already been challenged, two decades earlier, by Peter Drucker's ideological framing (1994) of the "knowledge society," in which he perceived access can only be gained through deep, formal and continuous intellectual education. Drucker makes clear distinctions between those skills that one can accrue through apprenticeship and through on-the-job-coaching (traditional hand-skills and physical procedures, software programming knowledge and use of digital technologies, etc.) and those, which can be acquired only through formal university education, through research and testing. Manual and technological skills alone, no matter how advanced, will not propel anyone to leadership in their discipline in the "knowledge society," which is driven by intellect. The only measure will be the high intellectual levels that the design discipline reaches, how its intellectual integrity is perceived by other vital disciplines, and how it translates intelligence into public good.

You got questions, you come to me.
I'm Carr, the floorwalker.
I'm responsible for order in here.

Any man don't keep order spends a night in . . .

. . . the box.

Is there life outside of the "design box" . . . not yet, ever, not ever, never?

Thomas S. Kuhn (1962), historian, claims that in science, progress cannot be measured via a linear accumulation of new knowledge, because the discipline goes through major revolutionary shifts, which abruptly transform the nature of scientific inquiry within a particular field. If the intellectual community, he represents, has accepted this insight, then why does the same possibility not exist for communication design? Even though design paradigms lack common characteristics and qualities necessary for comparison, it is not possible to understand one paradigm through the conceptual framework and terminology of a competing paradigm. But it is clear that the traditional design paradigm shows now many anomalies from the norm, which should signal a time for change. Design can't afford waiting for the crisis to get even worse. It must act now.

If not, designers will continue to play in a very confining box, even if they seek credit for playing outside of it. A perfect analogy for describing communication design is provided by the game of chess. Scholars believe, it is very unlikely that "creativity" can be attributed to any single person (designer) or single culture (school) for the invention of the structure, rules and physical configuration (dogma, methodology, mythology and hierarchy) of the game of chess. Chess (communication) is an organic historical fusion of commonly experienced human factors, psychological, socially and cultural. This definition eliminates "creativity" and "invention." The players (designers) can only contribute to the elegance of the game by translating the rules into productive strategies and tactics. They can explore numerous potentials among the finite possibilities. There is some room for intellectual bravura and conceptual surprise, but the aesthetics lie in the development of operational strategies or tactics. Efforts of aesthetically styling or changing the form of any of the game-pieces will not make the game more intelligent. In chess like in communication design, useful intuition emerges only after a significant investment in intellectual trial and error, imagining and applying strategies and tactics, winning and losing. True creativity would mean to change the game, not just moving the figures around according to existing rules. There are millions of chess players, but there are very few chess geniuses. Still designers should try to emulate Archimedes who reserved the claim that if given the lever of an enough far-reaching concept or idea and a solid foundation for a pointed intellectual position on which to stand, he would lift the earth off its foundations. And possibly, designers could try to do the same thing. They should at least consider these efforts.

But to begin to do that, they have to escape the intellectual and behavioral imprinting of design educational institutions and design practice. Pavlov's learning theory of conditioning designers must be challenged to not associate concepts of excellence and competence with myths of award and adulation, not to begin salivating immediately at each announcement of a new award competition.

Fighting the design-dragon

Projects begin with a client's incomplete project brief that describes usually the tip of the problem-iceberg only, and unless designers ferret out the hidden information of the true context of the problem to understand to what extent their solutions create the right fit between contents, context and satisfaction of use, they potentially and with great probability will snatch failure from success, because it is impossible to design for unlimited or dynamic conditions. The more substantial the problem and corporate financial investment are, the more convoluted, longer and jittery the decision-making processes become. In dynamic times, even though businessmen understand the constant dynamic shifts in the world of stock, they are unaware that delays in decisions begin to offset the otherwise right and intended fit.

The various "you-are-so-marvelous" design confabulations make up the professional slight of mind in which the true reason for a continuously growing black hole in designers' knowledge to deal with larger important problems is hidden. The steady decline of status is covered up with self-deceiving rhetoric, which in time is believed to be true by the membership, even though lacking scrutiny or analysis, testing or critical evaluation. Small is not always beautiful. Design does not always sell or work. And a picture is not always worth a million words. Even Louis Sullivan's "form follows function" has been finally dragged down to "form follows precedent" and applied in subsequent instances.

Texts on animal breeding warn of problems for inbred. They point to the lack of resilience in the immune system, all kinds of genetic disorders, reduced fertility and vitality. They even point to early mortality rates. So why do schools and design studios behave not like astute stockbreeders but owners of puppy-mills, continuously graduating closely related pedigrees and attempt to create an intellectual monoculture?

In design, "tar baby schools" are trying to hold things together by shielding constituents from being thrown into the thorny intellectual briar patch, afraid of sticky situations that require serious investments of intelligence. In the quiet of their conscience, recognizing that their businesses have been in drastic decline, they honestly must admit that this is not due to any economic recession, but more to intellectual apathy. They must also realize, the longer they wait with redress, the worse it will get, especially if they continue to protect the status quo.

Since the development of graduate programs half a century ago, graduates from a handful institutions dominate the majority of faculty at US institutions. Someone has to give an answer to the critique that present day design education across this country is incapable of supporting the needs of a contemporary "knowledge society." Without a serious critique, the self-defeating, crippling cycle will continue, the design-dragon biting its own tale in perpetuity, supplying the next rung of educators and practitioners. Why is the hiring process used to minimize conflicts between disparate ideologies instead of stimulating vigorous debates? The tenure, contract renewal and employment processes make clear that it is safer to avoid ideological confrontations to not arouse anger in the homogenous beliefs of a group. Cognitive

diversity requires that persons from different educational and occupational backgrounds be brought to the table to help break design's major mind-jam.

Conformity has bred complacency and created a serious loss of cognitive diversity, which has not been addressed by heads of design departments and especially not by the academic leadership of deans and presidents. Any alert university administrator should recognize that design has the slowest upward moving knowledge-curve compared to all other disciplines. In fact, they should wonder, why the subject of design should be taught today at a university all together. It seems to fit much more into the vocational environment. General education distribution requirements continue to be the only glue to the promised university experience. This bare minimum of intellectual stimuli is incapable of supporting design as a professional discipline. Maybe, it has escaped the academic mind that it is supposed to lead, not be lead.

Bibliography

Alexander, Christopher. 1964. *Notes on the Synthesis of Form*, Harvard University Press, Cambridge, MA

Bierut, Michael. 2006. "Regrets Only", Design Observer, July 10, 2006

Braudel, Fernand. 1982. *The Wheels of Commerce*, Volume II, Civilization and Capitalism, Penguin Books, London, UK

De Jong, Cees W. 2008. *Jan Tschichold, Master Typographer: His Life, Work and Legacy,* Thames & Hudson, New York, NY

Drucker, Peter F. 1994. "The Age of Social Transformation", The Atlantic Monthly Company, November, 1994; Volume 274, No. 5, pages 53-80.

Drucker, Peter F. 1999. "Beyond the Information Revolution", The Atlantic Monthly; October 1999; Volume 284, pages 47-57

Gerstner, Karl. 1964. *Designing Programmes*, Hastings House, New York, NY

Gibson, J.J., in Reed, E. and R. Jones, editors. 1982. *Reasons for realism: selected essays of James J. Gibson*, Erlbaum, Hillsdale, NJ

Hobsbawm, Eric J. 1965. *Tramping Artisan*, in Labouring Men, Studies in the History of Labour. London, UK

Hofmann, Armin, Wolfgang Weingart, guest editors. 1985. "Formal Principles of Graphic Design at the Basle School of Design, Switzerland, 1968 to 1985," Design Quarterly, No. 130, Walker Art Center, Minneapolis, MN

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

McLean, Ruari. 1997. *Jan Tschichold: A Life in Typography*, Princeton Architectural Press, New York, NY

Lenzenweger, Mark F., Michael C. Lane, Armand W. Loranger, and Ronald C. Kessler. 2007. "DSM-IV Personality Disorders in the National Comorbidity Survey Replication," National Institute of Health, Bethesda, Maryland.

Minsky, Marvin. 2006. *The Emotion Machine: Commonsense Thinking, Artificial Intelligence, and the Future of the Human Mind*, Simon & Schuster, New York, NY

Müller-Brockmann, Josef . 1961. *Gestaltungsprobleme des Grafikers* – The Graphic Artist and His Design Problems, Hastings-House, New York, NY

Müller-Brockmann, Josef. 1971. *A History of Visual Communication,* Arthur Niggli (Teufen), Sulgen, Switzerland

Müller-Brockmann, Josef . 1971. *Geschichte des Plakates – Histoire de L'Affiche – History of the Poster*, Phaidon Press, New York, NY

Müller-Brockmann, Josef, and Shizuko-Müller-Brockmann. 2004. *History of the Poster,* Phaidon Press, London, UK

Pachnicke, P., K. Honnef and J. Heartfield. 1993, *John Heartfield*, Harry N. Abrams, New York, NY

Perloff, Nancy; Brian Reed, editors. 2003. "Situating El Lissitzky: Vitebsk, Berlin, Moscow" (Issues and Debates Series) Getty Publications, Oxford University Press, New York, NY

Skibbins. Gerald J. 1974. *Organizational Evolution: A program for managing radical change*, AMACOM, New York, NY

Tschichold, Jan, (Ruari McLean, translator) 1928. *The New Typography,* University of California Press, Berkeley, CA

Tschichold, Jan, (Ruari McLean, translator) 1967. *Asymmetric Typography,* Faber & Faber, London, UK

Purcell, Kerry William. 2006. *Josef Müller-Brockmann*, Phaidon Press, London, UK

Unite States Department of Labor. 2008. "Occupational Employment Statistics, Occupational Employment and Wages, May 2008, 27-1024 Graphic Designers"

Venturi, Robert, Denise Scott Brown, and Steven Izenour. 1977. *Learning from Las Vegas: The Forgotten Symbolism of Architectural Form*, MIT Press, Cambridge, MA

Willett, John. 1997. *Heartfield Versus Hitler*, Pocket Archives, F. Hazan Publishers, Vanves Cedex, France

Wingler, Hans. 1978, *Bauhaus: Weimar, Dessau, Berlin, Chicago*, The MIT Press, Cambridge, MA