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Introduction: Indian Design and Design Education

India in 2005, eight years beyond celebrating its half-century of independence, stands as the world's largest democracy (one billion citizens and counting). India is in a strategic geo-political position, with thousands of its citizens populating the high-tech corridors of the West and importing "Bollywood" movies to our neighborhood theaters, and other thousands boning up on baseball and football (soccer) to provide "authentic" English-speaking technical support from the Asian sub-continent to Western corporations. This is in addition to the thousands of Indians developing software while, in a cliché of juxtaposition that still is true, millions of their fellow citizens live without even basic sanitation and education. With cultures, languages, visual traditions, and craft traditions millennia old; with trade, commerce, and industrialization well-established; and with educational systems based on tradition, colonial-era models, and newer Western ones, India and her people work hard to develop and expand the rewards of democracy for all. Since 1947, Design has been part of the calculation, though some have argued that Gandhi employed the rhetoric of design much earlier.[1]

The papers in this special issue are the result of an open call; they have come from designers across India and elsewhere, at different stages of their design lives in practice and/or in teaching. Their papers present perspectives on the major issues of design and development in contemporary India, and provide historical and cultural context for the efforts of design schools and individuals. These authors reveal some answers to the questions involved in what India can and should be in the new century, and the role of design in that quest. Crafts, as early and continuing evidence of Indian ingenuity and skill, continue to play a part in Indian production—but what part and how large? Only implied in several articles is the use of computer technology. In some places, it has become a new craft skill, with better integration to come. Regrettably, there is no design voice from large-scale industry. The forces of globalization twist India in unique ways; the colonial language makes her an easy target and a useful partner for all manner of entrepreneurial schemes. Designers are faced with the need to develop strategies capable of responding to enormous audiences in a country in which culture provides familiar structure and shared values. One question that has been raised in this issue concerns what happens to cultural identity and social communities when the designers mix local practices and vernacular forms with elements imported from the increasingly pervasive culture of globalization.

1   See S. Balaram, "The Power of Representation, "*Design Issues* 5:2 (Spring 1989): 68–85.

Ashoke Chatterjee, an active participant in early design education, provides historical background for governmental and industrial planning in relation to design, and marks points of progress, before setting out the current problems for design development. An integral part of past economic and industrial planning was the establishment of design schools to train the designers for industry. The American designers Charles and Ray Eames were part of that effort, and their work often is referenced by other authors.[2] Singanapalli Balaram, a teacher at the first school established, the National Institute of Design (NID), describes the traditional practices, the influence of colonial education, how current design education was integrated with these two conditions, and how it seeks to address contemporary problems, including craft practice, with fieldwork in local communities as one method.

From an outsider's perspective, Sherry Blankenship, an American design educator, gives her impressions of living in Ahmedabad as she describes her experience teaching at the National Institute of Design, where she proposed a project bridging Indian and Western cultures. The design projects explored the possible adaptation of some quintessential Indian products to a Western market, while maintaining their identity through vernacular forms and materials. The students' working methods involved more handwork than computers. Her interests and teaching approach led to difficulties with the host department, and illustrate some of the drawbacks to visiting faculty mentioned by Balaram.

Mahendra C. Patel, another founding teacher at NID, is concerned that the changes around him erode national and regional identities. The work of his typography students, from a variety of backgrounds, explores identity and new communication needs through language and its material form in alphabets and typefaces. Their work in regional languages and English proposes new hybrid forms[3] to address the Indian Diaspora and the diversity at home.

Underlying all creative practice are the cultural values shared by a majority of Indians. Lalit Kumar Das provides the reader with a short course in the structure and content of these values and theories: the cycles of life and the roles of humans within them; behaviors and relationships described in the mythical literature; and how products, systems, services, and environments are the expressions of these belief systems, with specific contemporary examples. Concentrating on one expressive form and practical product, the Kanchipuram sari (traditional women's garment), Aarti Kawlra describes the tightest form of integration of belief and production. She explains the social and cultural context that produces and maintains the auspiciousness of the exacting choice of colors and weaving of the fabric, the buying and gifting conditions, and the wearing of this particular "brand" of sari.

2 See a reprint of *The India Report* by Charles and Ray Eames in *Design Issues* 7:2 (1958): 65–73.

3 For a practical discussion of cross-cultural forms, see Steiner, Henry, and Ken Haas, *Cross Cultural Design: Communicating in the Global Marketplace* (London: Thames and Hudson, 1995).

Several authors discuss the ongoing cultural strengths of craft communities and the problems of making and keeping these craftspeople economically viable. Poonam Bir Kasturi, an educator experienced in consultation to craft practices, disputes some of the myths associated with "contemporizing" craft, and addresses the future through example: collaborations that include broad creativity training (reflection, critical thinking, and experimentation); bringing student groups to talk and work with craftspeople (another form of the fieldwork mentioned by Balaram); careful choices of new markets to maintain makers' identity and to avoid the social destabilization of craft communities.

In the face of welcome Western influences and those that are more involuntary, Indian designers struggle with a sense of identity as the familiar and vernacular forms that described their identity are under attack by more powerful forces. Kasturi's article treats the topic more generally, while Gaurav Mathur focuses on signboards in public streets and shows how traditional forms, materials, and processes have been pushed aside by Western corporate demands, and how different makers have coped with the new visual landscape. He suggests that this industry's response may be a model for other craft practices under similar pressure.

In her discussion of a totally modern creative form—film animation (an art and a craft)—Nina Sabnani relates the skewed perceptions of animation's worth and scope due to early government didactic use, and sees its future potential for creative and economic development as barely recognized but possible with expanded educational opportunities that add design to software training. In animation, Indian technical ability could be combined with storytelling traditions and talents to create new educational and entertainment forms. Here, too, Western companies have used Indian talent only for skilled production rather than initial creativity.

The impetus for this special issue on Indian design and design education comes from my experiences teaching and traveling in India in 2001. My colleagues and students introduced me to new ways of design thinking. I began to understand how the country's designers and educators saw their place in the great project of modern India, and how they were preparing their students for their roles. I extend my thanks to them for their openness and hospitality, and to the authors and other participants in the preparation of this issue.

Martha Scotford
Guest Editor

Design in India:
The Experience of Transition
Ashoke Chatterjee

C G Road is Ahmedabad's pride: a new shopping boulevard that turns its back on the crowded bazaars of this medieval city. Steel and glass store fronts, coffee shops, Pizza Hut, the latest in home entertainment, sportswear, fashion and ethnic chic—international brand names from India and overseas, flashing in neon to attract Ahmedabad's affluent youth to a "happening place" that demonstrates the power of what is emerging as the largest consumer market in the world. It wasn't always this way. When I arrived in Ahmedabad in 1975, a "happening" meant sampling the street life of Manek Chowk, the heart of Ahmedabad's tradition as India's textile capital, around which revolved a rich pattern of community living and craft activity. It was in these lanes and marketplaces that Ahmedabad's craft and merchant guilds flourished for generations, giving the city a reputation that rivaled sixteenth century London. Seven bridges span the dry riverbed of the Sabarmati River, which separates Manek Chowk and old Ahmedabad from C G Road and the high-rise sprawl of the new city. The traffic hurling back and forth—handcarts and camel carts, and an occasional elephant, to compete with the city's passion for the newest in two-, three-, and four-wheeled speeders—is symbolic of India's passage to and from modernity, and its search for a confident identity that can link five-thousand years of history with a future in which change is the only certainty.

It is from this experience of transition that design in India takes its meaning. Mahatma Gandhi, arriving in India from South Africa almost a century ago, established his ashram retreat along the banks of the Sabarmati. His "experiments with truth" began in Ahmedabad, experiments intended to bring freedom to his subjugated people and to build a society that could "wipe every tear from every eye." Self-reliant systems of design and production were inherent in Gandhi's mission. They were directed at serving basic needs through a demonstration of social justice and a respect for nature's balance. Symbolic of this quest was Gandhi's campaign for the boycott of British textiles, and for the home production of handspun, handwoven "khadi," the livery of freedom which was to evolve into a handloom revolution that is in itself India's greatest achievement in contemporary design. A few kilometers down the riverside from Gandhi Ashram is the campus of the National Institute of Design. Established here some forty years ago, the NID

was one of several specialist institutions of contemporary knowledge created by free India to ensure that its youth were at the frontiers of knowledge; harnessing it for the developmental needs of a giant democracy mired in postcolonial poverty. The NID was the first attempt by any developing country to use the design disciplines inherited from the Bauhaus as a tool for national regeneration. The catalyst for its creation was an extraordinary one. Barely a decade after Independence, India invited Charles and Ray Eames of Los Angeles to suggest how design could assist the growth of Indian industry. Government officials were expecting a feasibility report. What they got was an extraordinary statement of design as a value system, as an attitude that could discern the strengths and limitations of both tradition and modernity, and as a profession that could use the wisdom of such insights to make wise decisions about India's future:

> In the face of the inevitable destruction of many cultural values—in the face of the immediate need of the nation to feed and shelter itself—a desire for quality takes on a real meaning. It is not a self-conscious effort to develop an aesthetic—it is a relentless search for quality that must be maintained if this new Republic is to survive."[1]

Four decades later, if one is to search for the impact of design on contemporary India, C G Road may offer an easier vantage point than Manek Chowk. Graduates of the NID, and of the other design schools that followed it, are part of the international look and the product excellence showcased in the shopping malls of every Indian city. Indian brands that Indian designers have helped build compete successfully at home and overseas, from machine tools, automobiles, and watches, to an astonishing range of textiles, garments, entertainment and media products, and crafts redesigned to meet contemporary needs. All this represents a major transformation from yesteryear. In the early years of the NID's founding, India's market was carefully protected to encourage local production and discourage competition from imports—a policy that reflected the urge for self-reliance that had marked the freedom struggle under Gandhi's leadership. Indian planners were attempting to blend Gandhian and Marxist principles with the nation's multicultural ethic, and to do this through centralized planning. A competitive market would be tolerated, but not allowed to reign supreme. Entrepreneurship and the profit motive (which the Indian Diaspora had taken across the globe) were discounted at home as something vaguely disreputable. Industry, public as well as private, had difficulty in comprehending the importance of design in an environment where consumer choice was deliberately limited. Designers struggled with the contradictions of advocating excellence in a marketplace that did not appear to need it, and in social sectors which needed convincing evidence

1   Charles and Ray Eames, *The India Report* (Ahmedabad: National Institute of Design, 1958).

(which only a competitive marketplace could provide) that investment in design was worthwhile. When India's first design graduates emerged in the mid-1970s, the business community regarded design as a postponable luxury, or as an option to be applied after a product was developed rather than integrated into the development process.

Not surprisingly, the first career opportunities appeared wherever competition existed: in export industries, in working with traditional crafts threatened by mass production, and in the advertising industry. Traditional crafts, conservation of cultural heritage, exhibitions to communicate the Indian experience at home and abroad, service to small- and medium-sized enterprises looking for new markets, programs for health and literacy—these were the demonstrations that won for India (and for the NID) the first international recognition of design for development. In 1979, this recognition brought the United Nations, through the United Nations Industrial Development Organization (UNIDO) in Vienna, to the NID campus in Ahmedabad for the first-ever UN conference on design. It was an effort to share the Indian experience with the global community, and its outcome was the Ahmedabad Declaration on Industrial Design for Development. The Declaration articulated a global mission for design: that "designers in every part of the world must work to evolve a new value system which dissolves the disastrous divisions between the worlds of waste and want, preserves the identity of peoples and attends to the priority areas of need for the vast majority of humankind."

The conference suggested actions essential to the achievement of the Declaration, and these were endorsed by UNIDO. Several national and international institutions used the opportunity to reinforce the thinking that had begun to emerge through Europe's "green movement," pointing out that the "world of waste" was being rejected by the very societies that spawned consumerism. The 1979 Declaration should have been a watershed event for design in India, inspired as it was by the Indian experience. Yet the Declaration in India remained largely a statement of intent, and less one of achievement. It came at the opening of a decade that was to reject the socialist paradigm, and what many regarded as its Gandhian baggage. Instead, national policy turned toward global and domestic competitiveness, and to measures that could stress international market success as a new hallmark of self-reliance. Design began to move into the center of corporate strategies, and a profound semantic shift accompanied that movement.

Sometime in the 1980s, the term "designer" changed from a noun to an adjective; and the image of a good Indian life from Gandhian austerity to one of "Just do it." The new consumer culture accelerated as part of a young Prime Minister's decision to open India's door to globalization. Rajiv Gandhi took the first steps of dismantling protectionism. With that, design awareness accelerated

at a speed that would have been impossible to even imagine at the time the Ahmedabad Declaration was signed. Designers who had been urging industry for years to acknowledge the centrality of their role now were being challenged to deliver design of a quality and at a speed entirely new to their experience.

India's own information technology (IT) revolution took off in the engineering campuses that had been created soon after Independence as India's technological frontiers. The computer began to impact every aspect of design training and service, opening vast new horizons of application. A gigantic media boom hit India, with a proliferation of products and channels that convincingly demonstrated design as the cutting edge for market survival. Soon, the fashion industry stormed in, challenging concepts of identity treasured by generations of Indians with its relentless promotion of an "international" (read European and North American) look, and an equally relentless demand for speed and quality. Media hype essential to a fashion culture quickly made it the most obvious expression of design in India, and design education soon was redefined in the public mind as a passport to glamour and wealth. Liberalization and globalization became the gospel of a new generation of international managers from India, leading an expanding middle class that was young and increasingly affluent. Their dreams of a "first-world" lifestyle soon would be fueled along the C G Roads of an India busily redefining itself in the language of global trade. Despite massive swings in the world economy, the market for design has expanded rapidly, and young professionals emerging from design schools are quickly absorbed by industry. Using design to build "Brand India" as a global presence is a job that Indian industry is doing well. Watching the shoppers rush by on C G Road, can one say that Indian design has arrived at last, and that the mission that began with the Eames's report is well on its way to fulfillment?

It often is said that whatever generalization applies to India, the opposite is equally true. Design is no exception: its success is in an organized marketplace that caters to a middle class as large as all of Europe, and to expanding prospects overseas. Its contribution will be essential to the role India now demands of being taken seriously as an economic power. Design capability is reflected in the improved competitiveness ratings accorded to India by the World Economic Forum's annual surveys, including its report for 2002–2003. The UNDP's human development reports tell another story. Here, India ranks among the lowest in the world. The reality is that the vast majority of India's one billion citizens live in rural settings and urban slums that remain well outside organized systems of commerce. For them, the quality of life remains abysmal, touched only at the farthest fringe by interventions from designers motivated by the early inspiration that defined a new Indian profession. For the visionaries who created the NID, the marketplace was an arena of interaction to be treated with great respect. It was here that qual-

ity had to be demonstrated, made practical, and given the power to change attitudes and behaviors. Thus market success was essential to demonstrate the value of design to the broader needs of a quality of life. Today, it often is seen as its only value.

The challenge is to innovate a client system that can harness design skills toward products and services that finally must deliver a freedom from want for all Indians. Such a system cannot reject market mechanisms. Instead, it must use them with the highest degree of managerial competence to build new sources of support for developmental priorities that can be sustained without total dependence on government programs. If this is to happen, Indian design must evolve strong partnerships and networks with institutions of civil society. Tomorrow, these institutions will be the prime clients of design for development.

In the years of centralized planning that followed India's Independence, government was the prime engine of social change in India. This is no longer the case, and recent years have seen a strong movement away from official controls and patronage to demands for decentralization, with decision-making and problem-solving at the local level. In the current period of transition that marks India's new fascination for market economics, government is withdrawing from the "commanding heights" it once occupied, leaving a social vacuum that private enterprise cannot be expected to fill. The case for design, carefully built over the years, had just begun to impact planners when major shifts in policy took place. Planners in New Delhi and the state capitals now are preoccupied with new priorities, and the case for design for development will have to be made elsewhere. The answer may be found in the newly empowered civil institutions. Building their understanding and support for design then can be used to restore real needs to the center of design education and training. If this is to be achieved, it is India's design schools that will need to assume the responsibility for forging the partnerships that can provide a client system responsive to issues of real need. This must be accepted as a marketing job; one that will require articulating the case for design with the highest level of professional skill. Support must come from "funders"—governments, international agencies, and industries—currently besieged with competing applications. Therefore, potential donors must be attracted by hardheaded proposals, carefully prepared with budgets, timelines, and benchmarks for monitoring progress. These are skills that the social sector often lacks, but without them no one will listen.

An immediate step might be to document key experiences in design for development from the past: documented to demonstrate the design process as a proven strategy for poverty alleviation. The case must be built to demonstrate economic and social impacts, cost benefits, extension and replication opportunities, the barriers and the opportunities for sustainability, as well as the possible cost to India of not involving designers in efforts for social change. Indian

designers have demonstrated the potential of design for development. This now could be used for advocacy: the regeneration of crafts, the protection of fragile ecosystems and environments, the conservation of scarce materials, aids for the less able (India has the largest population of such persons in the world), communication and media efforts that have impacted campaigns for health and for human rights (particularly those of women and children), the generation of new opportunities for sustainable livelihoods, educational materials that help enliven the bleakness of India's classrooms, and the application of ergonomics to the reduction of drudgery, fatigue, and occupational ill-health in India's workplaces and homes. Social scientists, particularly economists, and professional managers need to be recruited to help make the case for design credible and watertight.

Critical to the success of such an Indian effort will be to link it with global efforts toward sustainability. Perhaps the most important of these emerged from the Earth Summit at Rio in 1992 as Agenda 21, with its urgent demand for alternative patterns of consumption that are compatible with ecological sustainability. Despite all the disappointments of the past decade, the power of Agenda 21 has been demonstrated again at Johannesburg in 2002, and it remains the most important element in rethinking lifestyles and development patterns in India's industrialized North as well as developing South. Another key opportunity for integrating design has come through the United Nations Development Program (UNDP) in New York, and its new system of Human Development Reports. This system transforms the traditional understanding of living standards currently limited to measurements of gross national product and per capita income. Instead, the HDR approach defines development and progress in terms of a quality of life that can enlarge people's choices and their capacity to fulfill them. In 1998, the HDR investigated consumption from a human perspective—consumption *for* development—in what could be interpreted as a charter for design in the new millennium.

Other opportunities have emerged. These include movements for the empowerment of women and for consumer protection, the new respect for the knowledge and wisdom of indigenous traditions, the revival of crafts worldwide, the search for alternative patterns of income generation and employment to meet the needs of expanding populations, the growing respect for institutions and professions that have a capacity for interdisciplinary teamwork, and the search for values more enduring than brand names. All of these forces represent major opportunities for demonstrating the power of design. None of them was as strong or as clearly organized as they are today when the Ahmedabad Declaration on Industrial Design for Development was ratified in 1979. Each force suggests an opportunity to communicate the experience and contribution of designers around the world, brought together in a collective strength that can help take their efforts to scale. Charles and Ray Eames in their India Report spoke

of design as an ultimate expression of "dignity, service and love." Contemporary design in India began with that message. Almost half a century later, India can help to ensure that this message remains as the non-negotiable heart of design as a twenty-first century profession in India and in every other part of the world.

Design Pedagogy in India: A Perspective
Singanapalli Balaram

If defining design is an awesome task, any attempt to define Indian design would be even more difficult. This is because, in India, the word design has many meanings and past/present associations. It is not just the language, but the manifestation of design in more than one area of Indian living and production. Indian women make floral patterns as auspicious welcome signs, and traditionally this is called design. The intricate decorative border of a sari is considered design. A piece of jewelry is design. But the innovative new chair made by a carpenter, or an improved bedpan—which the modern world calls design—is not considered design by people in India. Even in this twenty-first century, modern Indian industry is familiar with engineering design, but gets quite confused when it comes to design. The reason for this is traditional association, as well as what its colonial rulers promoted as design through Indian arts and crafts schools. When modern design, as it is known today, was introduced in India, and when the first professional group of designers was founded, it was called the Society of Industrial Designers of India (SIDI). This was done to emphasize the relationship between design and industrial production, although the Society admitted all designers including graphic designers, exhibit designers, textile designers, and animators.

Roots of Indian Design

India's oral culture and its intense religious mysticism might give one the idea that there is an absence of rational thinking and scientific systems, but this is far from the truth. Historically, it is evident from the Mohenjadaro-Harappa excavations that, as early as 2500 BC, there was highly developed architecture, town planning, and technology in many places. India's traditional knowledge was highly organized and meticulously articulated. Even in the arts, there were extremely detailed canons and highly sophisticated structured treatises. Ancient India had *Shilpa Shastra* for sculpture, *Natya Shastra* for dance, *Sangeetha Ratnakara* for music, *Vishnu Dharmottara* for art, and *Vaastu Shastra* for architecture. Since Indian culture did not distinguish between applied art and fine art, there was no separate treatise on design. The Shastras are studied even today by the classical practitioners. This practice remains parallel to what is being taught at the new art schools, and modern design schools have not been able to integrate these classical treatises into their curriculums.

Systems of Education in India: *Gurukul and Craft Training*

To start, the complexity of Indian design education and design practice must be clearly and appropriately recognized. This complexity is not just unity in diversity, but also the simultaneous telescopic existence of the past traditions with the contemporary: the bullock cart beside the spacecraft, the *burkha*[1] beside Miss Universe, and illiteracy beside software supremacy. In the field of education, such a complexity requires design education of a different kind as well as of a different degree. India's ancient system, called the *Gurukul*[2] system, still is used with some changes in the learning of traditional performing arts such as classical music and dance. The pupils go to the *guru,* a practicing performer, who teaches all subjects from the very beginning over a period of five to seven years. The change is that the pupils learn the dance/music in addition to the basic education in a modern school, while in the past the *gurukul* provided comprehensive education. Another continuing learning tradition is in crafts, caste/community-based, on-the-job training. Through apprenticeship, the skills and knowledge are passed from generation to generation, almost always orally without any written texts.

While these two systems continue in the specific areas of learning, the most pervasive education system in all other fields, from primary schooling to college graduation, is the education system ascribed to Lord Macaulay introduced by the British during their colonial rule over India. Although this was an exploitative system meant to create a middle-level administrative staff to serve the needs of its British rulers, India has not been able to replace this system with a better alternative in more than half a century of independence.

Pre-Independence Period: Macaulay's Basic Education and British Art Schools

In the early nineteenth century during the colonial rule, Britain introduced art schools to India at Calcutta, Madras, and Bombay (in that order), that tried to include craft design in the curricula. But these art schools run by British principals were intended only to produce "copyists" to serve various colonial government agencies. They ruined local creativity and design talent. In the name of improving "native taste," such schools imposed Western techniques and visual idioms which caused lasting damage to the confidence of Indian craftsmen and craft learning. The Indian culture always considered ornament as essential to architecture, and made no discrimination among decorative arts, fine arts, and applied arts. The artificial separation taught at the colonial art schools violated the Indian tradition.

The response to this violation came from Indian thinkers in the larger ideological framework of *swadeshi*[3] or indigenousness, a concept of deepest significance to the Indian psyche even today. *Swadeshi* was a part of India's struggle for independence, lasting

1 *Burkha* is a black cloak worn by Muslim women in public places.
2 The generic meaning of *guru* in Sanskrit is "very high." Presently, *guru* means venerable spiritual teacher, as Hinduism expects a true teacher to be. *Gurukul* is literally "the guru's family" because the pupils in this system used to stay with the guru like his family.
3 *Swadeshi* literally "belonging to one's own country," refers to a pre-independence nationalist movement, favoring home industries and boycotting foreign goods.

from 1857 until 1947. India's struggle was unique. Lead by the visionary Mohandas Karamchand Gandhi, the struggle was remarkable not only for its principle of nonviolence, but also for its inclusion of social and educational reforms in its goals. Economic self-reliance is a key component in *swadeshi* ideology. As caste-based craft learning began to suffer due to the onslaught of industrial production, Gandhi himself and other Indian intellectuals started experimental schools and innovative pedagogy. Gandhi called his education *Naya Taalim* (new training), and established his schools in a decentralized way in remote villages where people needed training most. Notable among others was Nobel laureate poet Rabindranath Tagore, who established in Bengal his Santiniketan, an experimental university for arts, crafts, and design. Starting well before the emergence of the Bauhaus, Santiniketan compares favorably with the renowned German school.

While similar to the Bauhaus but in an environment of feudal oppression and colonial exploitation, Santiniketan stood for the cultivation of arts and crafts in a concept of total education. Tagore believed that, "Man's energies running on two parallel lines of utility and self-expression tend to meet and mingle .... The building of man's true world—the living world of truth and beauty—is the function of art.[4] An integrated process of learning painting, sculpture, crafts, design, and decoration was followed at Santiniketan. Freedom of learning and freedom of expression were given emphasis not only in methods of learning, but also in the physical environment. Most classes took place in the open under a tree. Secular festivals were created as vehicles for religious reinterpretation and for new forms of expression. One such event was *Vasanta Utsav,* a spring festival in which students and faculty participated together. Tagore communicated with Walter Gropius, but realizing the Western dominance already in the art and artifacts of India, he later turned to Japan and China for inspiration.

The Bauhaus and Santiniketan were much alike in trying to synthesize the work of artists and craftsmen. Their difference lay in their application. While the Bauhaus evolved and taught a machine aesthetic oriented to mass production, Santiniketan considered the language of the hand more important in the Indian context, and oriented its teaching towards craft production. In India, craft is not a thing of the past, but a thing of the present as well as of the future. With nearly twenty-three million craftspersons still practicing, craft is as contemporary as mass production, showing a great promise in the globalized world of the future. For the student, craft is an education that makes men and women grow in wholeness by being brought in touch with materials. The discerning art critic Herbert Read called this "education through things," while India's "great soul" (*Mahatma*) Gandhi advocated this as the pedagogical principle of "learning by doing."

4   R. L. Bartholomew, ed., *Nandalal Bose: A Collection of Essays* (New Delhi: Lalit Kala Academy,1980), 53.

Post-Independence Period: Modern Design Education and Tech-nology-based Design

Based on Macaulay's foundations of basic education, higher education in India adapted the Western models. Design education was the latest to arrive in India. After Independence in 1947, India focused on rapid scientific and technological development. India's largest dams, largest core industries, and scientific organizations started with help from the best foreign expertise available. Space research and nuclear research programs were established at premier technological institutions such as the Indian Institutes of Technology. The then Prime Minister, Pandit Jawharlal Nehru, had the vision to see the importance of modern design and architecture in the development of industry and the economy of the country. He invited Le Corbusier to design the whole city of Chandigarh as a model of city planning and architecture, and Charles and Ray Eames to recommend a program of training in the area of design as a model of design education. This program particularly would aid smaller industries, and show what India could do to resist the rapid deterioration of consumer goods within the country.

Viewing design as an activity that improves the quality of life, in their 1958 "India Report," the Eameses recommended a sober investigation into those values and qualities that Indians consider important to a good life, and "to follow it with a restudy of the problems of environment and shelter; to look upon the detailed problems of services and objects as though they were being attacked for the first time; to restate solutions to these problems in theory and in actual prototype; to explore the evolving symbols of India." Drawing a distinction clearly between "America, which was a fertile tradition-less field," and "India, a tradition-oriented society where the decisions are apt to be unconscious decisions—in that each situation or action automatically calls for a specified (preset) reaction," they wrote that "all decisions must be conscious decisions evaluating changing factors. In order even to approach the quality and values of a traditional society, a conscious effort must be made to relate every factor that might possibly have an effect. Security here lies in change and conscious selection and correction in relation to evolving needs." Traditionally, in India, design is an evolutionary and not a revolutionary activity. The Eameses not only recognized, but also greatly admired, the process of evolutionary design of India. They stated: "Of all the objects we have seen and admired during our visit to India, the Lota, that simple vessel of everyday use [to carry water], stands out as perhaps the greatest, the most beautiful" and hoped "that an attitude be generated that will appraise and solve the problems of our coming times with the same tremendous service, dignity, and love that the Lota served its time."[5]

5   Charles and Ray Eames, *The India Report* (Ahmedabad: National Institute of Design, 1958), 1–18.

The first major, full-fledged industrial design institution to be established in India on the basis of the India Report's recommendations was the National Institute of Design at Ahmedabad in 1961. This is not to say that there was no design education in India earlier. Many educational institutions in India offered courses in various fields of design, such as commercial art, architecture, craft design, and engineering design. NID is a landmark in molding itself as a center for excellence in design education in the most contemporary sense, providing learning in all the disciplines of design under one roof. The pioneering educational philosophy established during the 1960s at the National Institute of Design is so successful that all design schools of note in India have adopted it as their founding principle. Thus, it is not altogether wrong to assume that what I am describing here is not the pedagogy of one design school, but of design education in general in India, with localized variations to fit the structures of individual institutions.

The design education system established through NID four decades ago did not remain static. It was reviewed and changes were made from time to time, internally as well as with the help of foreign experts such as Charles and Ray Eames, Herbert Lindinger, Gui Bonsiepe, John Reid, and Carl Aubock. One of the major reviews of NID was done by the Kamla Chaudhary Review Committee in 1989.[6] Another thorough review was made by an educational review group led by the author in 1993.[7] Following this group's recommendations, a new system was put into practice at the NID which still is in use today.

The Question of Influence
There is an erroneous notion, largely prevailing in the West, that art education in India was a gift of the British colonial rulers, and that modern design education in India was greatly influenced by the Bauhaus. Even my comments in my book *Thinking Design* (1998) were misread by some critics to support this. Art education, a precursor of design education in India, perhaps can be called a curse rather than a gift because it was an imposition by authorities who misunderstood the culture of art learning in India. This was opposed by Indian leaders as well as sympathetic British artists and art critics at the time.

As far as modern design is concerned, the National Institute of Design (originally called the National Design Institute) which pioneered design education in India may reflect some of the best aspects of design pedagogy from many parts of the world, but was not exclusively influenced by any particular foreign school. It is true that the early Indian founder educators had been trained in the West and, in some cases, used some curricula in association with a visiting foreign expert. But they were conscious of the difference in the Western and Indian realities right from the beginning. They examined the curricula and outcomes of the great design schools

6   Kamla Choudhry, *Report of the Review Committee on Future Directions and Forward Planning for the National Institute of Design* (Ahmedabad: National Institute of Design,1989).
7   S. Balaram, ed., *New Curriculum* (Ahmedabad: National Institute of Design, 1993).

in order to learn more what not to do than what to do. This is not a categorical denial of all influences. There are a great many influences from many sources, and they always have been mutual. India in its characteristic way particularly assimilated the *Vorkurs* or preliminary course of the Bauhaus.

India followed Mahatma Gandhi's remark: "I want cultures of all lands flown about my house as freely as possible, but I refuse to be blown off my feet by any."[8] Notable among the design schools which have had a strong association with India were the Bauhaus in Weimar, the Hochschule fur Gestaltung in Ulm, the Kunst Gewerbeschule in Basel, the Royal College of Art in London, and the Cranbrook Academy of Art in Michigan. Some of the world's best designers and design thinkers were invited to visit India to teach at the newly established design schools or to work on an Indian design project of longer duration with Indian design teachers, and freely exchanged ideas. This model worked extremely well, particularly in the beginning years. There is a superficial Western cultural influence on modern India. In the end, demand for Indian realities prevails. The bullock cart which is the second most important transportation means; the pressure cooker for cooking rice, the wet grinder to make *idlis*,[9] the Devanagari script to suit modern printing processes, the unstitched sari, the supercomputer for farmers' needs—these all are modern, authentic Indian realities from which there is no escape for Indian designers, and their education should reflect this.

The Students before Entry
Before formulating design pedagogy, it is necessary to consider the education system preceding it. The higher secondary education system (Macaulay's) in India is an overstructured, didactic "rote, routine, restriction" type, and a switch to a totally different system is not easy for the students. Analysis and lateral thinking are the lifeblood of design education, and conventional rote learning kills both. The design education offered at the undergraduate level has to cope with this prevailing situation. But when education is offered at advanced or postgraduate levels, it has to cope with students entering after craft training, after art school training, or after graduation in engineering or architecture. All these streams follow different learning systems, so the first task of the Indian design school is to nullify the pedagogical shock by making the student unlearn old things and old ways before he or she learns new things and new ways.

Educational Philosophy
The early visionaries of Indian design education, notably Gautam Sarabhai (textile industrialist and Le Corbusier client), adopted through NID, where he was chairman, the approach of creating within the student a concern for the quality of his or her physical environment and for its relevance to human needs. After a series

8   M. K. Gandhi, *Young India Journal* (Ahmedabad: publisher unknown, 1921).

9   *Idli* is a popular south Indian snack prepared from fermented rice paste.

of discussions among Indian thinkers, Sarabhai aptly modified the earlier pedagogical principle of "learning by doing" to "learning to know and learning to do," which soon became the credo of design education in India. He firmly established the principles of action for this approach. The first and foremost principle is the "focus." The focus of learning for the student is not on acquiring knowledge about a specific design discipline or subdiscipline, but on having adequate opportunities (a) to think for himself or herself, (b) to have his/her ideas questioned, and (c) to be able to intelligently question the ideas of others.

The second principle concerns the "scale." Avoidance of massive size was advised because Sarabhai believed that large institutions have to pay a heavy price in terms of alienation of both faculty and students, as well as in bottlenecks in decision-making and of unmanageable complexities that hinder the opportunities for growth and maturation of the students. If the classes are large, "the instructional system gets swamped with students, many of whom are so immature and unwilling that they can reduce the best of teachers to frustrative incompetence."

The third principle regards "discipline." He proposed the provision of opportunities for growth and maturation rather than the continued dominance of disciplinarian teaching. Growth and maturation in students was described as the ability to discover for themselves to what use they could put the knowledge they gained, and to accept responsibility for such use. Many of the disciplinary measures usually prevailing at Indian educational institutions are contrary to this principle. Enforcing measures such as compulsory attendance in classes, excessive testing, and grading "... are attempts to reinforce an authority lest because of its failure to accept responsibility either for intellectual training or for the provision of opportunities for growth and maturation."[10]

Project-based Learning
Indian design education also realized that it is more important "to make one learn" than to teach one. Within this broad principle, teaching methods vary greatly around the country. The most prevailing ones are studio work, and individual guidance and group discussion. Lecturing and textbook reading are kept to a minimum.

Much of the design education in India is project-based; students are encouraged to take an empirical, intuitive approach to design problems and to experiment freely with new forms, new materials and processes, and to develop original, creative thinking. Workshops thus are given prominence at NID and other Indian design schools. But Indian industry complains that the graduates do not fit into their corporate culture, which is rigidly structured and hierarchical. After all the "unlearning" the student had to undergo at design school following his rigid, overstructured school or college

10   Gautam Sarabhai, *NID: An Educational Philosophy* (Ahmedabad: National Institute of Design, 1972), 2–3.

education, the young designer again is faced with another rigid, overstructured production system. Thus most young designers in India opt to become freelance design consultants or design entrepreneurs, rather than join the industry as in-house designers.

Making of the Professional
Design educators consider the essential characteristics of a profession to be the practice as required by its society, and maintaining very high professional quality in work and conduct. Professional education in design involves both the teaching of design-related knowledge and skills, as well as practice under supervision. The teachers who impart such education thus are required to be practicing professionals. Practice keeps the teacher continually in touch with the contemporary needs and concerns of the Indian industry and markets. What he or she teaches is thus never out of date, constantly made relevant, and it enriches the teaching significantly. More important, such practice earns the respect of the student; the teacher and his/her work become a role model, and the relationship between the teacher and the student is powerfully reinforced. However, the teacher must be aware of and avoid the risk of inhibiting innovation and of curbing originality in the student, who might simply try to imitate the teacher.

The founders recommended professional practice either individually or collectively by teachers throughout the institution in order to unite theory and practice as complementary parts of one integral educational process. Institutionalized practice would be less financially rewarding to teachers, but easier compared to outside individual practice because the institute's reputation, national character, and infrastructure would attract projects. Currently, while agreeing in principle to teacher-practitioners, different design institutions and centers have varying systems for institutional practice and private practice.

Ideally, students' participation in professional practice along with teachers appears to be an excellent concept. But there are serious problems in implementation: nonmatching of client and curriculum time schedules; disparity between student skill levels and the skills demanded by a specific project; and problems of incompatibility between curricular requirements and professional project opportunities. An alternative to student participation in institutional projects is sponsored projects. These projects from clients could be undertaken in a class where the project would be appropriate to the curricular requirements.

Design as an Approach: Emphasis on Generality and Holism
In India, production takes place at four levels: large-scale, small-scale, craft, and cottage- or home-based. These all are sectors too large to be ignored by Indian design. The design requirements of each sector are vastly different. The last two sectors are unorganized

and labor-oriented. Therefore, separate design education for each sector is hardly practical. Experience shows that the appropriate way for design education to address this production complexity is to teach design as an approach—a creative process that enables the student to find solutions in any given situation. The same design approach should work for any production level, even though the tools employed may be different.

As more knowledge areas emerged in the world, more specializations formed which led to fragmentation. This phenomenon is evident in the practice of allopathic medicine. In the traditional Indian system of *Ayurveda,* a holistic system that aims at strengthening the whole body to overcome the disease rather than offering a local cure, the physician, rather than offering medicine, prescribes a certain plan for diet, for rest, and for conduct during a specific period of time. A similar integrative total approach is perhaps suitable for Indian design education. Although specialization is valued more in the world than generalization, it would mean unmanageable multiplicity for India which has an enormous diversity of cultures, languages, and religions. Design is an act of synthesis. Indian educators firmly believe that, if we need to choose between breadth and depth of design knowledge, breadth should be our priority. Generalization in design education is particularly recommended for the undergraduate level. Specialization can be taken up in advanced studies. Indian design schools prefer crossing borders between design faculties to compartmentalization.

Course Structure

The courses in most Indian design schools are structured as shown below:

Foundation Course	Field Work Documentation	Projects Courses	Production Experience	Final Project or Thesis

Figure 1
A basic design course exercise by the author as an industrial design student, following a logical method of transitions between two end forms and a point located in space.

Although generalization is difficult, the typical program starts with skill learning as the basic design course, and proceeds to application in projects, which progressively grow in their complexity and include technical as well as conceptual integration (Figure 1). The documentation of fieldwork is considered important in the students' acquisition of indigenous knowledge, as well as in establishing rapport with rural people. In their final year, the students undergo production experience or internships at an industry, craft center, or a design studio. Only after this are the students allowed to proceed to the final project/thesis, where they are expected to demonstrate an acceptable level of professional competence. The curriculum emphasizes project learning, in which the production situation and professional practice situation are considered tools of learning.

At this point, Indian pedagogy has developed some innovative design courses. Notable among them are the craft or traditional process documentation, the environmental perception course, and the space-form-structure. In terms of motivating the student, the prediploma presentation required at the NID is quite significant.[11]

Indian design educators currently are trying to cope with the perceived inadequacies brought by changing times, such as the lack of a theoretical knowledge base in design, environmental concerns, developmental issues, appropriate inputs in design management, computer applications, and interface design.

The varied levels of Indian production require varied types of designers: some with a strong technological base; some with a strong aesthetic base; and others with a strong creative, conceptual base. These are evident at the different Indian design schools. At the design schools that are part of large technical universities such as Indian Institutes of Technology, the accent is on strong technical input; while at autonomous institutions such as the NID, the accent is on creative conceptualization. Accordingly, the entry qualifications, years of learning required, and the degrees awarded at each institution are different.

Documentation of Traditional Practices and Research

Indian design education's true challenge lies in addressing the diverse needs of an enormous, developing country. One of the most pressing needs is helping people with design. This requires educating students to give design training to people who are illiterate. Back in the 1970s, the author first proposed the "barefoot designer" concept as a solution to impact such a vast population with design.[12] This required policy-level changes which have not been made in India until now. Although there are several design schools in the country now, all of them are located in urban centers, leaving the remaining eighty percent of the population in villages untouched.

One of India's major strengths is its enormously rich tradition. A wealth of knowledge, distilled through generations of evolution, exists but is not apparent because of the oral nature of Indian society in which written records are not kept. Traditions simply were passed on by word of mouth, from generation to generation, and this practice continues to this day. The "Lota" admired by the Eameses is only one mundane object on the Indian scene, and a vast number of such design-rich objects and communications are there for the designer to research and learn from. Documentation is the preliminary step in researching a product or a process, helping Indian society by recording such knowledge in tangible form so that it can be shared globally for the benefit of all and for posterity.

Conventional research is viewed as rediscovering a new aspect in a hidden past or taking the frontiers of existing knowledge further. Because most Indian traditions are living, what needs to

11 Forthcoming articles on these innovations. Interested readers may consult S. Balaram, ed., *New Curriculum* (Ahmedabad: National Institute of Design, 1993), 14, 26, and 57; and S. Balaram and N. N. Patel, *Adalaj Village: Environmental Perception Course Documentation* (Ahmedabad: National Institute of Design,1992), 26.

12 S. Balaram, "A Different Design Movement: A Call" (Paper presented at the Asian Design Forum, Nagoya 1986): 72. It was published later in S. Balaram, *Thinking Design* (Ahmedabad: National Institute of Design, 1998), 77.
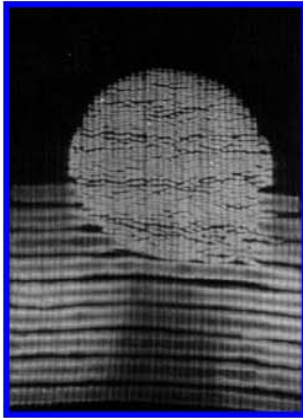
Figure 2
A natural indigo-dyed textile painting by Padmini Tolat Balaram, an NID graduate.

follow the documentation is the application of traditional knowledge to contemporary or future design situations in new ways for new effects in a creative fashion. It also means leaping from past traditions to future aspirations; connecting traditional materials, forms, techniques, and wisdom to the world's future materials, techniques, forms, and needs.

The research challenge to Indian institutions is both to be relevant to industry's present needs, as well as innovative with local materials and processes. Take the case of using natural indigo to create contemporary textiles and abstract paintings (Figure 2); or another example, a blend of technical innovation and design developing fine-count yarn out of usually coarse coir fiber (from coconut palms) to design coir dresses. Similar experiments continue at India's design institutions with materials such as palm leaf, jute fiber, and bamboo; all abundant in India. Thus, an important part of the curriculum is to enable the student to find new and unique design applications for older materials.

Cross Cultural Interaction

It enriches the quality of design education in India to have Indian teachers work with foreign teachers, and Indian students to work with foreign students. The best of cross-fertilization occurs when students work together as a team at an equal level towards achieving a common objective. This aspect of design education is particularly important for India, where life is deeply rooted in culture. Some very fruitful outcomes of collaboration have been the design of GADI (Ground-level Assistive Design for India), produced jointly with Canadian students and teachers; and a future car for India designed jointly with Japanese students and teachers (Figure 3). In the networked society of today, such sharing offers great promise.

Figure 3
The "Palki 2010," a future car for India. This was a collaborative project between the students of the National Institute of Design, Ahmedabad; the Indian Institute of Technology, Mumbai; and Tokyo Zokei Daigaku.

On the other hand, short teaching inputs by visiting foreign faculty usually are nothing more than a brief exposure. Since foreign faculty take time in grasping the Indian ethos, such teaching inputs work well only if they are long or repetitive, and coordinated by an Indian educator.

Conclusion

It is no exaggeration to say that Indian institutions stand on a par with the best design schools in the world, and have excellent design teachers. Yet the number of design schools and the number of trained designers is dismal in proportion to the country's needs. Ironically, the reason is that neither the policy makers nor industry believes the Indian designer to be crucial to the acceleration of the country's development. Indian industry commissions foreign designers to design for them, or produces things totally designed abroad. Here is a good example of how even the best design can fail in the Indian context: the most expensive car in India, the Mercedes, sells for approximately ten times more than any other competitive brand from Korea or Japan available in India. The Mercedes has more space in the front area and less in the back (passenger) area. In India, almost all cars are driven by hired drivers, and the owner sits in the back. The owner thus has to suffer less legroom, leaving the best part of the car to his driver.

Until there is more awareness at the parliamentary level, and effective policies are made and implemented, this situation will continue and design institutions will be forced to provide education to overseas students because Indian education costs the least in the global market today and its medium of instruction is English. The damage in the long run will be to India, because such education will not focus on Indian needs.

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Flying a Kite:
NID Report from an American Visitor
Sherry Blankenship

On my first trip to the National Institute of Design (NID) in Ahmedabad, India in 1994, I stayed only a few days to give two lectures: one that explained and illustrated the work of a signage project completed by students in my class in New Zealand, and another that explored some notions of authorship in design and the value of theory in design education. Despite the differences in these topics, the lectures were well-attended by students across the design disciplines taught at the school. The students and faculty were interested and eager to hear from the design community outside of their own country. Each of the lectures was followed by a lively discussion that involved both the teachers and students. This general design awareness and enthusiasm permeated the school despite its limited resources.

The following year, I approached the school with a proposal to teach one of the block courses they offered between semesters. These courses were interdisciplinary and open to students of any level, offering me an exceptional opportunity to work across levels and disciplines. I proposed several possible courses to the school. After assessing their needs and my interests, we decided upon the title, "Promoting India to the West." This was to be a graphic design course that helped students to discover and apply Indian aesthetics / design traditions appropriate to Western tastes. The concept was to increase student awareness of the value of their unique art and design heritage, and to foster pride in their differences rather than simply to imitate Western trends and styles in design.

I had forgotten the rubble, decay, mud, dust, filth.
The shops are amazing little networks with actually little to sell in most cases.
No sense of maintenance.
One shopkeeper washes the walk, while another has animals
and refuse scattered all around.

The course attracted twelve students, many from graphic design, some from animation, and a few from industrial design. They came from widely diverse geographical areas of India that ranged from the Tibetan border in the north to Kerala in the south and Bengal in the east. Therefore, the languages, religions, values, politics, and cultures represented were diverse.

These students came predominantly from the elite of Indian society. Given the sheer size of the population of the country and the scarcity of design education, they had to have talent, skills, and finances that permitted them this educational opportunity. Two of the students in the class came from tribal groups within the country, and were there on special government scholarships, while a few of the others came from middle-class families who had made financial sacrifices for their children's education. The class was a mixture of men and women, and that added yet another layer of diversity and intention. Surprisingly, a few of the women admitted that they would not be practicing design upon graduation, but were awaiting the arrangement of their marriages by their families. They felt that their families would want what was best for them, so they trusted this tradition. They did not feel that the Western system had been very successful in its methods of finding husbands.

The students were quite knowledgeable about the West. They spoke English very well—even frequently using American slang— dressed in designer T-shirts, keenly imitated Western life-styles, and adopted many Western values. They told me that, at home, their parents tended to be more traditional, with their mothers wearing saris and remaining at home to cook and raise children. One showed me photos of his house with its Western-style furniture, while another lived in a nearby village with traditional furnishings, food, and music.

The content of the course allowed me to learn a great deal about them personally as they began to explore the identity of India. Because of their diverse backgrounds and unique perspectives, their topics, visuals, and explorations also varied. This led to many intriguing discussions in which they very openly talked about their families and home lives with great pride and affection.

As I crossed the bridge,
I saw great baskets of flower petals (used for religious purposes)
separated by color:
great heaps of crimson, saffron, and white.

Ahmedabad is an industrial city in northwest India. It is known for its cotton mills, calico, and block printing. Life moves through the streets day and night. The streets of Ahmedabad, like the streets in most of India, resound with a cacophony of sounds and images that reflect the mixture of past and present. One has to watch every step to avoid potholes and "cow pies" while navigating past donkeys, trucks, cows, carts, cars, bikes, taxis, scooters, and motor-cycles. Along the dusty shoulders, with many currents of beasts and humanity, men are winding and dusting string with a pink powder. The whole process seemed quite mysterious to me: what were they doing and why were they doing it in the heat and noise and dust? And these men (always men) remain working at their monotonous task at all hours.

In many of the towns and cities throughout northern India, large numbers of kites float effortlessly in the sky even without a breeze. They seem to float up into the atmosphere and stay there of their own accord. These kites, small triangles of light paper on wooden frames, are held by children of all ages.

It all seemed quite charming, an inexpensive toy that even the poorest child could make and maintain. But then I learned that flying kites in India is not just a pastime for children, nor is it a gentle hobby. It is a highly competitive sport. Those men on the roadsides with the pink powder were coating kite strings with a powdered glass/fiberglass mixture so that the strings would cut the kite strings of others during competitions. The men spent months preparing for *Uttarayan,* the yearly kite festival of color and fun held in Ahmedabad, where it attracts enthusiasts from around the world.

This rather aggressive tactic realized by a seemingly irrelevant roadside activity harbored the contradiction that I was to find throughout my experiences in India and particularly at the NID. The pink powder that looked soft and feminine really was intended as a weapon of sorts. The general ambience of acceptance and tolerance that permeates Indian life sometimes masks very rigid traditions and beliefs. This can be seen at the NID which now serves as the Indian design education standard. India is a society moving from the mechanical to the technical, with an incipient understanding of the role of the design within this transition. It is a country that longs to compete in the Western world, while also working to improve the standard of living of millions of its citizens.

Modern buildings in need of repair. Dusty despite relentless sweeping.
A sense of inside/outside harmony though studios are dark.
Trying to maintain a foreign aesthetic must be nearly impossible; air-conditioning is worthless,
screens sporadic, and bamboo shades too short.
All just a little bit off.

The campus, surrounded by fences and barbed wire, floats like an island within the city of Ahmedabad. The buildings are predominantly brick and concrete, designed in a modernist vocabulary. Most buildings have balconies, open roofs, and terraces that give access to outdoor spaces and provide shade. Each morning and afternoon, the faculty gathered for tea or coffee in the courtyard that overlooked a lawn with large, shade trees and vine-covered sculptures. The entire campus was cool and green as opposed to the dust and heat and noise that hovered outside the gates. It is separated from the real India like the curriculum that comes fully developed from the West with little regard for the needs, strengths, and traditions of the country's cultures. (Note: The school was beginning to realize this deficit and currently requires students of all design disciplines to engage local and regional needs. Students are working with communities to record and learn indigenous crafts such as bamboo

structures, traditional weaving, and textiles; as well as to develop appropriate, inexpensive, locally produced products; and to assist in visual communication about relevant issues.)

The fence is not a means of keeping the students and staff inside, but a precaution for keeping the general population outside. The street, just outside the rear gate, opens onto a residential area of the city with large, well-to-do houses, also protected by walls. Along the walls of the school and side of the streets lived a group of people in makeshift shacks. Here were people who lived and slept and cooked and washed with no amenities right in the shadow of their grander neighbors. The students, staff, faculty, and visitors, because of the constant passing, had developed a rather affectionate relationship with these families.

Men show great affection to their children.
Overall kindness to everyone and a rather gentleness of nature.

In addition to class time, the students spent time with me socially which allowed me to know and understand them and their culture more thoroughly. One Friday night, they wanted to take me out with them. I didn't quite know what to expect, since alcohol is not permitted in Gujarat and I had not seen any nightlife. Their weekly ritual was to go to a nearby roadside vendor for coconut juice. They included me this week. We walked a short distance from the school to a stand where we each selected a coconut that then was handed to a man with a machete. He chopped off the top and handed us straws. We took our coconuts to the small stumps of wood along the road to sit and talk and drink the coconut milk. This was the end of the school week.

In contrast, though the other members of the faculty were hospitable to me, they were formal and reserved—a bit of the East and the West. I was never asked to socialize in any way, except to participate in an obligatory meal as a visiting teacher.

Late this evening, the students took me to Chills and Thrills and Frills for ice cream and lattés.

Often students would join me at meal times in the school dining hall. For me, the Indian food served was wonderful: always a curry of vegetables, rice, freshly baked chapati, yogurt, and frequently a sweet. On each table, communal pitchers of water were passed around and drunk by pouring the water directly into the mouth without touching the rim. Most of the food was eaten with the hands. Large sinks along the entrance/exit wall permitted diners to wash before and after each meal.

The Indian students, like students everywhere, disliked the food and wanted me to experience good Indian food. Therefore, they took me to a few nice restaurants in various parts of the city so that I had a sampling of what they considered authentic cuisine. As usual

in teaching, it is often these interactions which are at least as important, if not more important, than the classwork. These were times of sharing and harmony, while the classroom had a competitive edge; a tension that became part of the atmosphere. Some of this may have been due to the differences in ages and levels within the group, or the differences in disciplines or the differences in backgrounds and gender.

Too many students are using handwriting!

The class was held all day, everyday, for two weeks. This worked well for those students who had strong concepts and commitment, but also meant that some students began to drift away once they had the initial idea and were unwilling to spend additional time in development and refinement. They were used to more structured and repetitive learning, so self-initiated, independent work was difficult to undertake.

I began the course with a short, slide-illustrated lecture which illustrated work from countries around the world such as the U.S., Britain, Japan, and New Zealand; to look for and identify aspects of the design that might suggest particular visual languages which we recognize as local, national, or regional visual identities. Since most of the publications used in design schools come from the U.S. or Europe, we looked at a few of these to see what were the characteristics that so often are envied, adopted, or imitated by designers in developing countries.

This led to looking at India itself, its size and its diversity, to see what might be considered fundamentally "Indian." I assigned some readings to the students. A particularly helpful one for them by Claude Levi-Strauss explained how a pair of jeans represented core beliefs—freedom, hard work, young life style—of the American system despite the variety of its peoples and differences in many another aspects of their lives. Through this, they then began to develop a list of values and beliefs that were "Indian," such as tolerance, strength of family, tradition, etc.

I asked the students to bring to class one item that meant India for them. I did not place any limitations on what they could bring. They came to class with a range of items that we discussed, shared, and critiqued. They began to see what was meaningful to them, and what it represented in their lives, especially since all of them now were living away from home. The items ranged from a jar of homemade pickled fish to a plant, to coconut oil for hair to a home remedy, to ankle bells. The students explained why they had brought these items to class and what each represented to them. Although we found nothing that was universally Indian, there was something in these objects that held Indian characteristics.

In parallel with this part of the course, we looked at Indian design and Western design, and compared them. Typography was

a large issue since there are fifteen or more Indian languages with separate scripts. The relationship of these scripts to the available Latin fonts led to working with some expressive typographic exercises.

Most worked by hand, without even considering using a computer. A few who worked on logos or typography did use the computer lab. They kept this to a minimum, since they had to pay for each printout. Their hand skills were well-developed. They had a freedom and grace in their drawings and sketches, using a minimum of tools including a remarkable booklet of colored papers that, when wet with a brush, made watercolors. Many had developed good printing and calligraphy skills as well. So with ink, watercolors, and a selection of handmade papers, they executed most of their designs by hand unless the computer was absolutely needed. This approach gave their work a very tactile, personal result that was in keeping with their intentions, since each had worked toward developing a way to express his/her own voice of India.

Each student then expanded upon the meaning of their object as well as the formal characteristics, the historical development, and a possible application that would be appropriate to a Western audience. For instance, the jar of pickled fish evolved into an Indian cookbook/storybook. The student used his father's recipe for pickled fish, and then told about how the fishmonger rode through the neighborhood selling from a bicycle. Each of the other recipes was augmented with a related story. Both the recipes and stories of Indian life were illustrated in watercolor on heavy paper. (A publisher is interested in printing the book.) (Figure 1)

The student who brought the coconut hair oil researched the role of Indian women, and eventually focused on several of the stars of "Bollywood" through an identity system for a cafe. She used oil pastel illustration for menus, matchbox covers, signage, etc. (Figure 2).

One of the students brought handmade wooden beads to class that were made during the long winter months in the north of the country where his uncle had a repertory theater for traditional Indian drama. He developed a logo and logotype, and eventually refined it with the computer for implementation by the theater (Figure 3).

The student who brought in some traditional medicine had a difficult time translating her ideas into packaging for the West. She wanted to use some traditional cloths and papers on the package, but they conflicted with Western expectations of cleanliness and sterility in connection with health remedies, even for alternative medicines.

The student who brought in the plant created small packages for seeds with tribal designs for indigenous native plants, along with some educational materials aimed at children so they would learn about the Indian environment and climate (Figure 4).
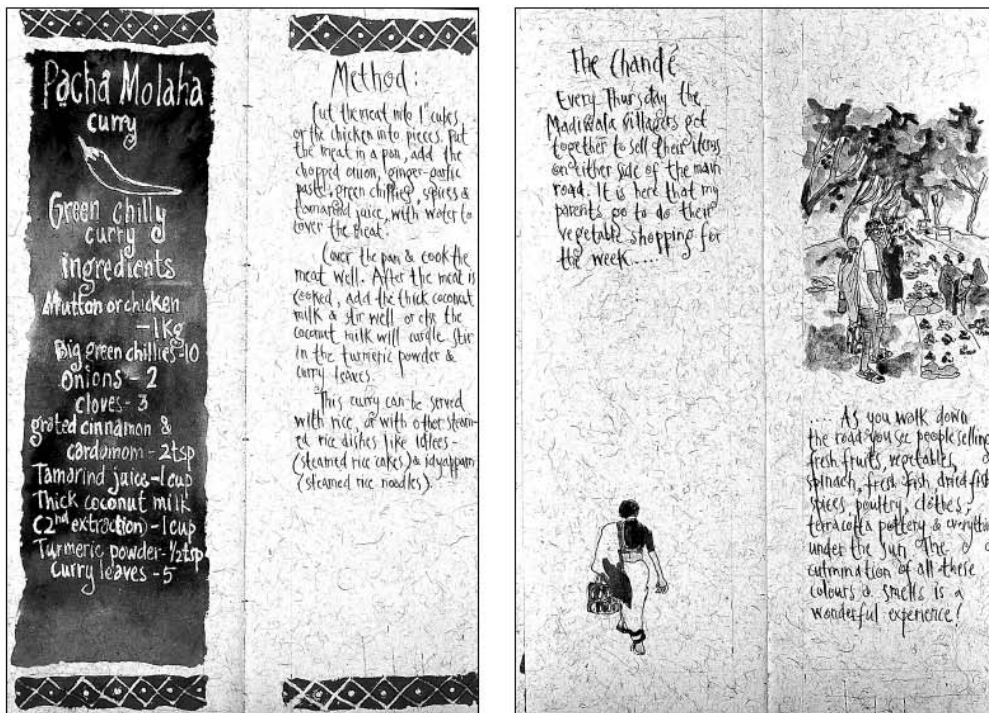
Figures 1A and B (above)
Spread and illustration from a cookbook of Kerala recipes and related stories.

Figure 2 (right)
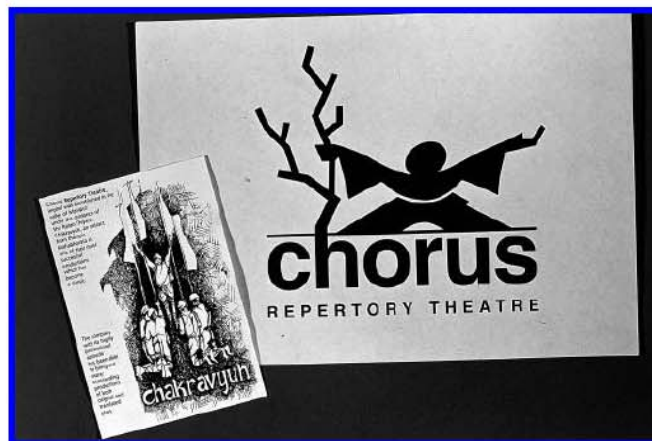Parts of an identity for a repertory theater company.

Figure 3 (below)
Matchbox covers illustrating some Bollywood female stars as part of a complete identity for a cafe.

I had used a very homey, personal approach that directed the students to think about expressing an individual design sensibility, which did not fulfill the administration's concern to align itself with big business. This was a source of some distress on both sides that I did not realize immediately. My analysis of their design needs to recognize and utilize their heritage did not encompass their need for acceptance and recognition by Western institutions. This left us both with a sense of disappointment and dissatisfaction.

I am getting used to seeing parrots and canaries and peacocks.
As I came in the gate tonight to pick up my key, I spotted a peacock standing on the seat
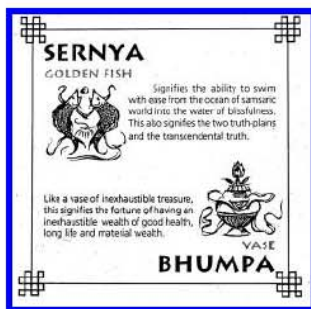*of a motorcycle.*

Figure 5
Part of the packaging for Darjeeling region
tea.

As part of the evaluation process for the block courses, the students were required to make oral presentations on the final day. This gave everyone at the school a chance to discuss and critique the work. The students made some very strong presentations. They clearly articulated their concepts, processes, and objectives. They obviously had had a lot of practice with this in other situations. They also were good listeners, and gave everyone their full attention. The acceptance and tolerance of the differences among them added to the diversity and spirit of the work and discussions, but added some negative undercurrents that occasionally flared up. The disagreements tended to reflect deeply-rooted political differences. One student who had created an identity for a tea company in the Darjeeling area used elements from the architecture there. Many students took exception to this because they saw it as Tibetan rather than Indian. Old rivalries easily escalated, and although potentially threatening, served as an exciting way to discuss differences of region, religion, values, and cultures. The students took great care not to be offensive since they all are part of this community, so their exchanges over their years together tend to develop more cooperation than competition. In this particular case, friends of one student from another class or major became heatedly involved in expressing their opposing viewpoints, but controlled themselves. (Figure 5).

It is so hard to sleep in the morning with the blaring of the Islamic call to prayers
very close to the campus.

As is often the case in these situations, problems and options that might have been explored are brought out just a bit too late. One of the more serious blunders was that of the student who researched the female stars of Bollywood. A few members of the faculty took exception to the use of Indian women in a humorous application. Though we had discussed the role of women in Indian society, the class had not found the final result offensive. This particular project, in addition to my more personal/boutique approach for the course, attracted severe criticism.

Outside the walls of the school, I hear the beeps and honks of cars, bikes, buses,
and trucks on the road that crosses the river.
In here are the chirps of birds and the breeze rustling the branches

Although the school did not establish any guidelines or limitations, the graphic design faculty did mention during the last day that the whole issue of corporate identity had not been addressed in the course. The course and the critique ended on a rather negative note. The department obviously was expecting that a large part of promoting India would be done on a corporate scale, while I was more concerned with the students developing and/or expanding their thinking about their culture, their identity, and their country's identity.

The results of the course could have been extended into the development of corporate work even though I had not emphasized this aspect. The premise of the course was to investigate the visual traditions of India in order to understand their potential in contemporary design, especially at a personal level, to stimulate each student to consider his/her cultural heritage. Perhaps had I had time to discuss the relationship of the course to their curriculum, I could have resolved some of the department's misperceptions. Unfortunately, the formality of our relationships as well as the shortness of the course did not allow for an open discussion of our differences.

Ashram Road continues for many kilometers
beyond Gandhi's settlement,
leaving the congestion for scattered concrete, project-like buildings.
Dreary.
Hopelessly isolated.

This gives way to an electronic industries commercial area.

Finally,
fields so lush and green
that it is hard to believe the city sprang
from such soil.

Search for Vernacular Identity

Mahendra C. Patel

I am a Gujarati, an Indian, and what is it to have this feeling and identity? With urbanization, and national and global networking, are we losing it? Are we moving towards no, new, or multiple identities? Do we need an identity? Is it good to have one?

I am Gujarati because I was born, raised, and nurtured in a homogeneous Gujarati society, with typical regional foods, and a living language environment. I also am Gujarati because I live and work for the people and industries of Gujarat.

Gujarat is one of the states of India; and I am concerned, guided, dependent, affected, and governed by many elements in life that come collectively from the Indian (central) government that make me Indian. I am an Indian in that spirit and sense.

Today, with greater exposure to the people and cultures of other Indian states and other countries through work, contact, print, and satellite, I am more concerned about vernacularism and the emerging trends.

Is it the language we speak, read, write, and communicate in?

Is it the lifestyle of the foods we eat, the clothes we wear, the household appliances we use, and the houses we live?

Is it the values we subscribe to in terms of religious beliefs and rituals; or is it our commitment to a tribe or a place?

Is it our birthplace, parents, or the society to which we belong?

I am perplexed and anxious, and I wonder as a human being—and as a teacher as well as a professional—about this need or value called "vernacular identity."

Over the years, I have had good opportunities to teach and explore letter forms, searching for "vernacularism" with my graphic design students. Here are some student profiles to accompany examples of their work:
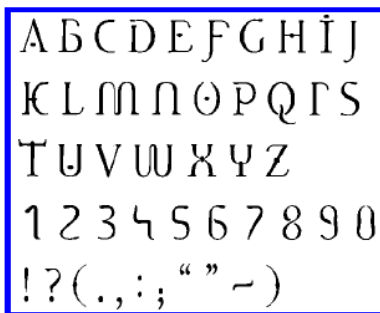
1   English in Tantric Forms for Indians.

Anand, a student at the National Institute of Design (NID) in 1998, comes from northern India. He felt the need for an Indian-looking English typeface which did not look like Devanagari or any other Indian script, but which could depict popular forms and symbols of Indian culture. He explored and studied the spiritual Tantric art symbols and graphics, and has developed a unique typeface called "Tantra."
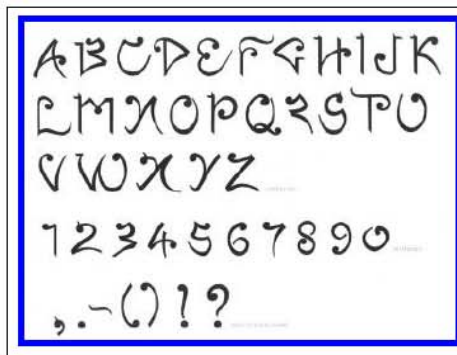
2   English with a Bengali Flavor for Bengalis Abroad.

Kritika, another NID student, was brought up in Kolkota (Calcutta) in a family that came to Bengal from the Punjab after Indian Independence in 1947. The family speaks English, Hindi, and Punjabi. She can reasonably speak, read, and write in Bengali. Inspired by the popular existing Bengali fonts in print, she ventured to create an English typeface with a Bengali flavor, and named it "Prokash"—meaning "the light" in Bengali.

Vowelizations of the letter "da."

da	daa	daa	di	di
dee	du	du	doo	de
de`	di	doe	doe`	dow
	dum	dum	da`m	
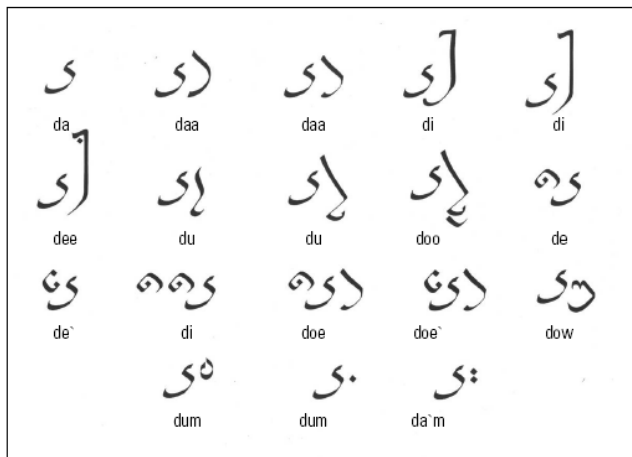
Sentence in Nitskar—
"an incident at Cherandattor."
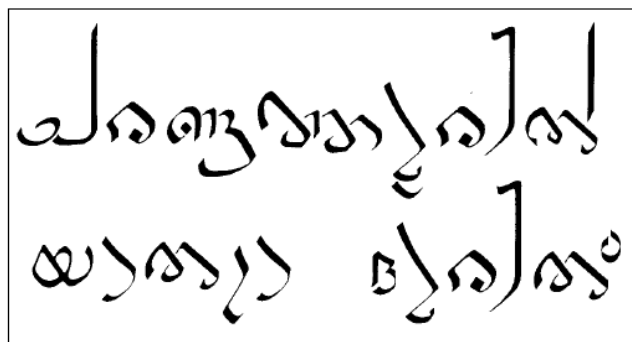
3 Malayalam in Arabic Style for Keralians in the Middle East.

Angela, also a NID student, was born and raised in a Christian family in Kerala. She has studied at an English medium school, but is quite at home with Malayalam, a regional script and language. She has several relations, friends, and people from her region who have settled in the Middle East, some of them have been there for more than a generation. She recognized the need for a font in Malayalam for them, in the more familiar style they were brought up with, but no longer see.

4   English in Arabic Style for Muslims in Malaysia.

Cheah Wei, a Chinese student from Malaysia studying at a graphic design school in New Zealand, wanted his last project to relate to establishing himself as a creative designer in Malaysia. He studied the Arabic script and created a new English typeface based on Arabic calligraphic forms, calling it "Arjad." He won the Best Young Designer of 1992 award in Malaysia for his work.

Typography — Roman   ಪ್ರಿಯಂಕಾ — Kannada Roman

Typography — Sans Serif   ಪ್ರಿಯಂಕಾ — Kannada Sans Serif

Typography — Miscellaneous   ಪ್ರಿಯಂಕಾ — Kannada Miscellaneous

Typography — Script   ಪ್ರಿಯಂಕಾ — Kannada Script

Typography — Egyptian   ಪ್ರಿಯಂಕಾ — Kannada Egyptian

5   **Kannada in Major English Typestyles.**
Priyanka, a student at the Srishti School of Art, Design and Technology in Bangalore, has a mother from Assam and a father from Kerala. They have settled now in Chennai (Madras). She has been a visiting student educated in Assam, Maharastra, Tamil Nadu, Sri Lanka, and now is studying design in Karnataka. She chose to write her name in Kannada letters, matching their forms to various English typeface categories.

ક્ષોકુલી વાહ ખૌર: લા બિલકૃબે આરા
હૈ વૂહી રાહ ચલીર ક્ષોબૂ હોલાર ચલીર
ક્ષોકુલી વાહ ખૌર: લા બિલકૃબે આરા

ચૈતાલી
gujrati

ચૈતાલી
malyalam

ચૈતાલી
kanada

ચૈતાલી
bengali

ચૈતાલી
punjabi

ચૈતાલી
urdu
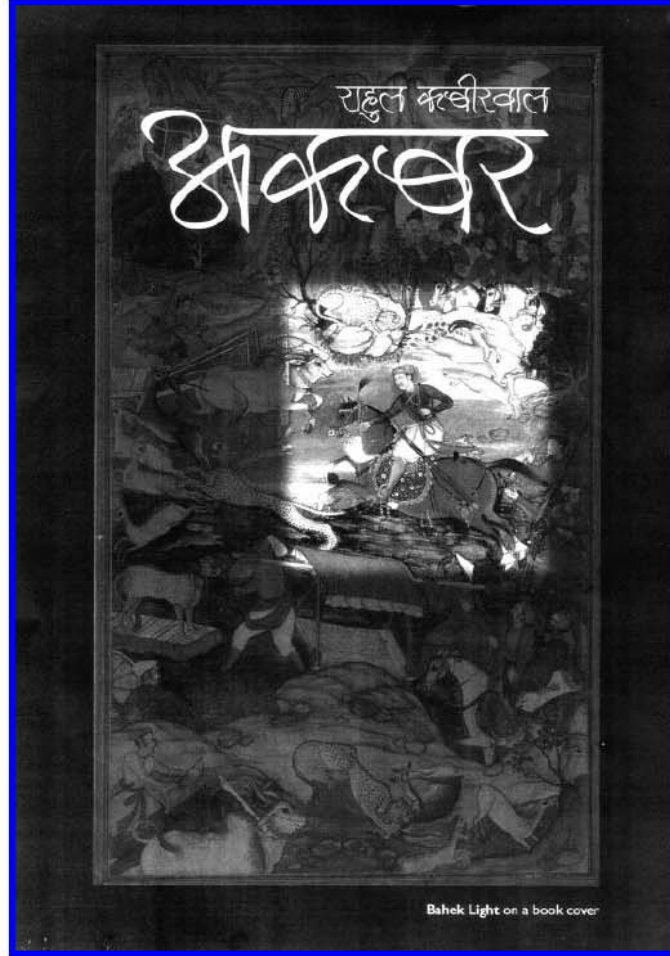
Bahek Light on a book cover

6   Gujarati in Mimicry of some Indian Scripts.
Chaitali, a classmate of Priyanka, was educated in an English
medium school in Mumbai (Bombay). Raised by Gujarati parents,
she learned Gujarati as a second language, and is quite comfortable
with it. She decided to write her name in Gujarati mimicking the
unfamiliar scripts of other Indian languages: Malayalam, Bengali,
Gurumukhi, and Urdu.

7   **Devanagari in Personalized Writing Style.**
Misha, an NID student from northern India with a fluent writing skill in Devanagari, created a Devanagari typeface called "Bahek," based on cursive handwriting with a reed pen form in three different weight.
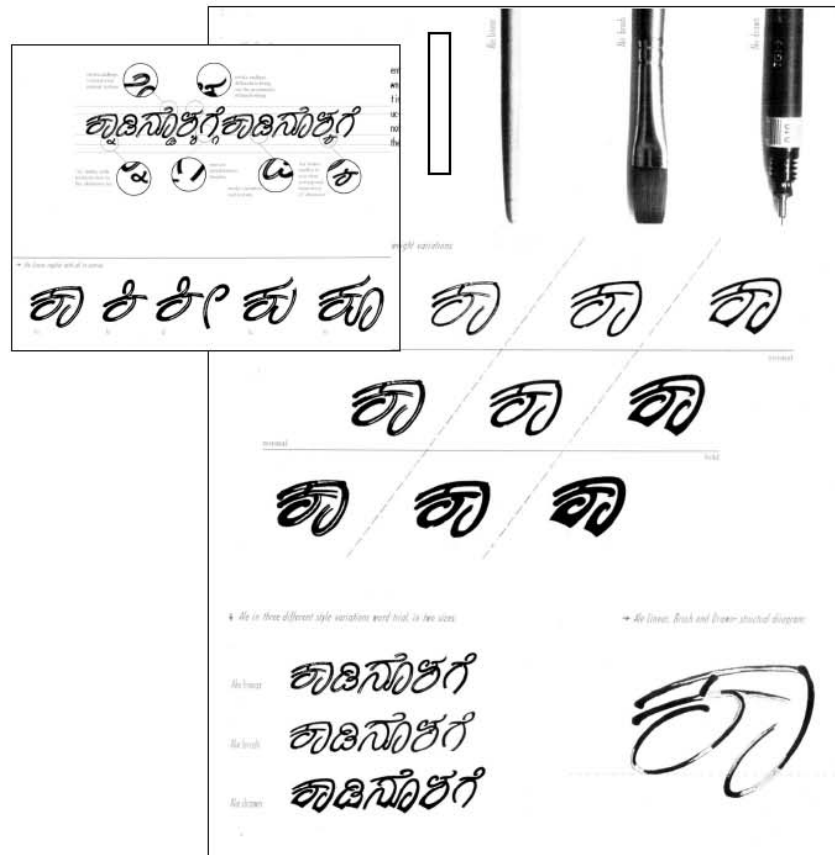
8   **Oriya in an Elegant, One-stroke Form.**
Rachita, another NID student from Orissa, created a perfect and elegant typeface in Oriya based on handwritten, casual, and continuous stokes.

9   Kannada Typeface Family in a Fancy Style.

Aparna, an NID student from Bangalore, knows Kannada by heart and was excited by the popular letterforms in Kannada on billboards. She studied the popular trends, and proposed the typeface family "Ale" based on three different tools and in three weights each.

Uniform thickness
with curved ending

Flaat pen concept (90∂)

Quill pen concept
(45∂ right tilt)

Reen pen concept
(45∂ left tilt)

10   Tamil Typeface in Reed Pen Forms.

Supriya, who came to the NID from Tamil Nadu, explored all possible styles in lineal, reed, and quill pens; and then proposed a text typeface called "Supriya" based on reed pen forms.

Vernacular/regional needs are quite different, complex, and troublesome but challenging. For example:

The signage design for Tirumala, the most popular and crowded pilgrimage place in the south near Chennai in Andhra Pradesh, needs information in five different languages. This has been partly addressed through the use of symbols, although the text still needs five languages in five different scripts.

The capital city of Andhra Pradesh needs tourism signage in English, Telugu, and Urdu. All three have their own script, and Urdu is written from right to left.

The State Bank of India needs a logotype in three languages for each location: Hindi (national), English (international), and vernacular (regional). The solution involved designing the logotype in thirteen languages and eleven different scripts.

Today, there is a need for unity in diversity. The trend in the business and academic communities is to accept and use English as a working language, so English is becoming the only language and script one can use all over India. Otherwise, one is required to learn both the various languages and their scripts. I am stranded between being Indian at heart, but handicapped by the widely varied languages and scripts, and yet trying to be with the people of India.

Culture as the Designer
Lalit Kumar Das

An inherent biological instability and the consequent feeling of insecurity motivate man to structure an environment of beliefs, knowledge, and theoretical structures, objects, and practices. Man also has a tendency to create consistency and compatibility among these different levels of human creation. Peter L. Berger and Thomas Luckman provide a theoretical framework for the study of human culture as an ongoing human activity.[1] In a later work, Berger states:

> The fundamental dialectic process of society consists of three moments or steps. These are externalization, objectivization, and internalization. Only if these three moments are understood together can an empirically adequate view of society be maintained. Externalization is the ongoing outpouring of the human being into the world, both in the physical and the mental activity of men. Objectivization is the attainment by the product of this activity (again both physical and mental) that confronts the original producers (and other participants) as a facticity external to and other than themselves. Internalization is the reappropriation by men of the same reality, transforming it once again from structures of the objective world into structures of the subjective consciousness. It is through objectivization that society becomes a reality *sui generis.* It is through internalization that a man is a product of society.[2]

Meta-theoretic Consideration in Indian Culture
The Indian culture is unique in its capability to create an environment that recognizes the insecurity and instability in man. It strives to create a culture that provides social stability to children, and then prods them to reflect, as they grow older, on the illusory nature of physical and mental reality. The focus is on the unchanging, all-encompassing, all-knowing nature of the consciousness, which also is the basis of everything in the universe. This is where the concept of Brahman and Maya, at a meta-theoretical level, play a foundational role in Indian culture. Brahman is the all-pervading creative energy which, through Maya, is playing all of the parts and wearing all of the masks. Therefore, nothing should be taken seriously because it is all just a play, a drama put on by Brahman. This is a cycle that goes on and on, never ending. Man can only comprehend the drama by not unleashing his own drama, but by understanding the law of karma and becoming one with the Brahman—the true nature of self.

The Brahman, at a lower level represented by the Hindu Trinity, also is called Trimurti (meaning three forms). This is the representation of the Supreme Reality as Brahma, Vishnu, and Shiva. Each of these manifestations is associated with a specific cosmic function. Brahma symbolizes creation, Vishnu preservation and renewal, and Shiva dissolution or the destruction necessary for recreation. The members of the Hindu Trinity are not three different and independent gods, but three aspects of one Supreme Reality, called Brahman.

The second important belief is in the karmic theory. Hindus, Buddhists, and Jains share this. So is the concept of the true nature of self—*atama* or soul.[3]

The third important belief is the existence of regenerative and degenerative cycles as normal to society and that, at times, it requires enlightened divine intervention to facilitate order. Maya creates the cycle of time, called Kalchakra, in order to create divisions and movements of life and to sustain the worlds in periodic time frames. These have been referred to variously by different religions. Hindus believe the process of creation moves in cycles, and that each cycle has four great epochs of time: Satya Yug, Treta Yug, Dwapar Yug, and Kali Yug. And because the process of creation is cyclical and never-ending, it "begins to end and ends to begin."

The Building Blocks
Dissatisfaction with the frail, unjust, and illogical patterns in society is seen as movement within an intelligent and evolved mind. Such a person is encouraged to become a *sadhu,* or monk. Through an attitude of renunciation, this person moves away from an involved existence in society, and seeks to empirically discover the true nature of self, that is all-knowing, infinite, everlasting, and the support and nature of all that was, that is, and will be.

A sadhu is held in such great veneration that, when society ill-treats a sadhu, even Vishnu has to reincarnate on earth to restore order. A sadhu is a social rebel in the sense that he has rejected society. He strives to free himself from social conditioning, lives on natural resources and alms provided by families, and spends most of his time in meditation, understanding the true nature of self. Sadhus come in innumerable forms, but always are worthy of veneration. Arnold Toynbee calls them the social rebels who ultimately emerge as creative leaders to rejuvenate society. It is these sadhus who provide an ascetic underlying thread to the design of the Indian man-made environment.

The sadhu's belongings are very, very few; in many cases limited only to a begging bowl. They may not wear any clothes; the directions of space are the only clothes. Yet they are alert, watchful, content, restrained, and pleasant. They have love, understanding, and wisdom. It would be an honor to have a sadhu as a friend, philosopher, and guide. They are interpreters and articulators of

the workings of the Brahman, Maya, laws of Karma, mythologies, scriptures, and Indian society in general.

The second important building block consists of the epics. Foremost, *Mahabharata* and *Ramayana* provided the theoretical structure for the Indian culture: a popular, captivating, allegorical, analogical basis for understanding behavior and relationships. In both of these epics, the characters are of metaphysical origin with highly articulated personalities. Events happen in which interests conflict. Pluralities of viewpoints are presented. In *Ramayana,* respect for elders, and sacrifices for the feelings and well-wishes of elders are given primacy. Order is seen to be achieved through love, respect, and sacrifice. In *Mahabharata,* the dialectic of revenge and reconciliation is explored, and the primacy of reconciliation over revenge is finally established. Ram is the prime character of *Ramayana,* and Krishna is the prime character in *Mahabharta.* Both are the reincarnation of Vishnu, who is charged with preservation and renewal. The informal, decentralized institution of sadhus is preserved, and the values within society renewed.

The third building block is the pragmatic or physical level of Indian culture. It is meant to resonate with the vision at the meta-theoretical and theoretical levels. It also strives to establish a cascading connectivity between space, sound, music, dance, sculpture, architecture, astrology, and social events. It is here that the artists, artisans, and social engineers working in unison find expression. Similarly, the product, system, services, and environment of the Indian milieu reflect the belief structures at the meta-theoretical and theoretical levels. The media and message both reinforce the same concepts within the culture.

The Theoretical Foundation

Thirty-two primary fields of knowledge, the concern of the learned within Indian society, provided the framework for the theoretical foundation of knowledge.[4] The thirty-two vidyas (fields of knowledge), except for the four vedas, were available to everybody to study and learn under a guru. The sixty-four kalas (arts) were derivatives of the thirty-two vidyas, and constituted the level of popular practice. These were the substances of the day-to-day culture. Sixty-four kalas also were important requirements for any cultured citizen whose interest is evident in any household.[5] All children are encouraged to cultivate interest in these sixty-four kalas. Thus, there was a symbiotic relationship between the learned minority and the appreciative majority. The traditional Indian design paradigm exists and thrives in this framework.

The purpose of society and the physical environment in Indian culture, in the first instance, is to provide a secure and stable environment to everyone. But, in itself, this is not enough. The environment must direct the individual's growth towards the potential to realize the true nature of self, the Brahman: the all-encompassing

consciousness that is intelligence and creativity par excellence, and love all-embracing. To achieve this, society and the physical environment have to be constructed in a manner that it is symmetric with the cosmic levels of phenomena. In our case, we may say that it reflects the nature of Brahman, Kala, and Maya, and the laws of Karma.

The Message and the Medium
It is apparent that certain concepts and systems must become the underlying basis for day-to-day design synthesis. Let us try to delineate these at the level of philosophical assumptions, social system needs, and the requirements of the physical system.

Philosophical Assumptions:
> A. Stability through patience, and tolerance of plurality and opposites.
> B. Continuity and change.
> C. Incarnation and reincarnation.
> D. Faith in the existence of all-pervading all-encompassing intelligence, creativity, and love.
> E. Faith in a human's capability to realize his/her true self; that is, all-encompassing intelligence, creativity, and love.
> F. Faith in karmic theory.
> G. Faith in the divine boon that whatsoever man desires and strives for will be achieved.
> H. Everything evolves towards its essential potential.

Social System Needs:
> A. A social system that discourages hedonistic expression of ego, selfishness, anger, hate, lust, envy, greed, vengeance and retaliation, attachment, aversion, killing, stealing, etc.
> B. A social system that looks down upon karmic defilement such as ego, selfishness, anger, hate, lust, envy, greed, vengeance and retaliation, attachment, aversion, killing, stealing, etc.—especially among family members—and thereby prevents this from becoming deeply rooted during youth.
> C. A social system that channels people towards creating a physical environment that reminds them of the potential for development.
> D. A social system that respects natural events and calamity, and respects life, other viewpoints, and one's elders.
> E. A social system that encourages love and care among siblings and one's peer group, sharing, group activity, and group participation.
> F. A social system that celebrates human development and enfoldment.
> G. A social system that celebrates, respects, and worships environmental good fortune.

H. A social system that has a cordial, symbiotic relationship with the ascetic sadhus and even the well-to-do and influential members of society including its rulers. Also an environment that allows everybody to joyfully experience, even in small measures, an ascetic life if need be. Poverty cannot and should not be looked down upon. Man has to be appreciated for the qualities of the mind and, above all, the qualities of heart.

I. A social environment that has plurality, and a joyful acceptance of that plurality.

J. Hardship lived with magnanimity and equanimity leads to evolution.

K. Evolution can take many lives and, given many lives, things will evolve.

Physical System Requirements:

A. A physical environment of form and ritual that recognizes kundalini energy, right-left, clockwise-anticlockwise complementary symmetry.

B. A physical environment that maximizes the use of human/ user participation, while allocating functions between man and machine.

C. A physical environment that minimizes the number of products needed for existence and evolution.

D. A physical environment built of products with a plurality of uses.

E. A physical environment that allows the exploration of alternative uses of existing things, giving to others, sharing, and recycling.

F. A physical environment that is built of natural agricultural and forest-based natural materials.

G. A physical environment in which form is transient and fleeting, and content manifests itself in different forms and can be reincarnated in different forms. Content also undergoes changes and evolves.

H. A physical environment that is commensurable with emotions and purpose.

I. A physical environment that treats hedonistic extravagance as merely an illusion.

J. A physical environment that is evolution- and human-centered.

Human Resource Infrastructure

The knowledge and practice base of the designer was constructed at various levels such as learned assemblies, ashrams, schools, guilds, an apprentice system, and a hereditary system. The first two provided essentially the meta-theoretical and theoretical foundation, and the last three the pragmatic, experiential propositions.

Learned assemblies were an important source of consensus literature. Even today, Maha Kumb Mela is an important get-together of the sadhus and rishis. Rig Veda talks of Brahma Sanghas, the gathering of the learned. These assemblies were intended to facilitate a consensus of wisdom, the advancement of knowledge, and a diffusion of learning through discussion. It is through such assemblies that important manuals or *shastras* were formalized for wider distribution.

Ashrams of rishis or preceptors served as useful venues for imparting education in various disciplines, including technical education. The system gained much importance during the Epic Period (about 500 BC to 200 AD), so this period is called the "Age of Ashrams." Every rishi of attainment would strive to set up huge ashrams, a tendency that continues today.

Schools imparting education in technical disciplines developed mostly in Buddhist times. Notable among these was Taxila (400 BC to 200 AD) and Nalanda University (400 to 1200 AD). Within these were schools for specialized education such as sculpture, archery, and medicine. The teaching began with theoretical instructions followed by practical work.

Guilds were organizations of craftsmen or artisans formed to safeguard the collective interests of an industry or craft. The chiefs of guilds had a special relationship with kings, who were the main source of contracts for implementation by the guilds. These also were centers for learning new styles of working. An apprentice system allowed master craftsmen to admit a few students, who would stay with their teacher until their education was completed. At the end of their training, the apprentices could leave, but the teacher had the first right to hire him/her.

In the hereditary system, the father taught his child, beginning at a very young age. The child would imbibe the spirit of craftsmanship he was learning, and was morally bound to pursue the craft of his forefathers.

The six-tier system for the development of craft and technical education described above produced high-quality manpower, well-versed in both the practical and theoretical foundations of design. They were the designers of Indian culture.

The Cultural Approach to Design
Two kinds of materials are available in the world: one is Prakrit (natural), and the other is Sanskrit (cultured). Things received from nature, as it is, may not be usable by human beings. They have to be cultured. The impurities should be removed, and some properties added, to make natural things useful. This is a three-stage process: removal of impurities, addition of properties, and completion of absent parts.

To achieve these three aims, we treat everything in different ways. For example, gold taken from a mine passes through each of these treatments. Raw ore is smelted into gold, the gold is turned into ornaments by shaping symbols into it, polishing it, affixing jewels, making the ornaments easy to wear, etc. Similarly, the act of conception and the subsequent stages of development of a human being requires the removal of impurities, the addition of new properties, and providing new and/or replacing absent parts.

Consecrations or Sanskara ceremonies serve the same purpose. This literally means "making perfect, purification, cleansing," which is derived from the Sanskrit word "sanskr," meaning "to form well, to put together." Sanskara refers to a ceremony which is performed as a purification rite for an individual or family. According to Hindu belief, ceremonies are performed at two levels: shrauta and grihya. Shrauta ceremonies are performed on a grand scale, with more than one priest and a large number of people in attendance. Grihya ceremonies are small and private, performed at home with or without a priest.[6] The purpose is to prepare a person to enter a new phase of life. Evoking everyone's goodwill, directing attention, and providing information, knowledge, and insight are important aspects of these ceremonies, which are focused and intensified through rituals. This helps instill faith and confidence in facing the future. It enhances motivation to perform the transition. It helps leave behind the debilitating burden of the past, and provides the strength, motivation, and purpose for a new transition.

These sanskars are tied to the system of craftsmen. Each sanskar ceremony requires many objects for performing the rituals. Thus, craftsmanship is intrinsically tied with not only the caste categories, but also with the system of sanskara. Every Indian performs at least four if not all sixteen sanskara. The craftsmen of different trades, along with senior relatives and the pundits, are not only involved in performing these rituals, but also in creating artifacts, ritual objects, and other items required for all of these ceremonies. Sanskar ceremonies formalize the transition to the next phase of growth and responsibility, and provide the tenor of the Indian design ethos in which human-centric evolution and emancipation are the basic optimization criteria and purpose of civilization.

There are many annual festivals linked to the changing seasons or historical/mythological events celebrated by different religious sects. And with each festival, there are various private and public functions. These festivals again provide a ready market for artisan craftsmen, who try to come up with new designs every year, but always within the tradition.

Indian world-view holds the cosmos to be holonomic[7] and symmetric, but within that symmetry the existence of two opposite and complementary principles are the fundamental constituents of the cosmic phenomena. The Purusha-Prakriti and Shiva-Shakti pairs of Indian thought also represent passive and active, matter

and energy, gross and subtle, and the right and the left. The Right is Dakshina: straightforward, honest, impartial, amiable, compliant, and submissive. The Left is Vama: crooked, reverse, contrary, and opposite; yet lovely, beautiful, and charming. Breathing through the right and left nostril also is linked to the functioning of the left and right hemispheres of the human brain, respectively. Both have a place in life, and should be successfully synthesized.

The Indian system of creativity assumes the existence of a dormant energy called *kundali,* residing at the base of the spine. Arousal of the same is the purpose of yoga. Yoga is a system of knowledge, physical movements, breathing, and directing attention. It unifies body, mind, emotions, and spirit so that they work together very well. A yogi endeavors to discover the higher consciousness and how the body, mind, and emotional nature can be truly fulfilled through unifying their purposes, rather than living in constant interior civil war. Yoga is a part of Indian life that Indians can comfortably adapt to—a floor culture for sitting and sleeping.

The Hindu pantheon has a large portfolio of god/goddess images incorporated from different streams of faith and thought. These have been knitted together through mythological stories into a unified whole. Variations in the images of the same god are encouraged, while retaining the semantics. Design exploration with materials and processes further amplifies the message. The images of gods in the Hindu pantheon are loaded with meaning. It is this meaning that has to be seen in a flash *darshan* (direct experience). The images of different gods also are seen collectively because that way they represent a more easily comprehensible whole. The most important message is the complementary symmetry of the opposites—the right and the left, the top and the bottom. Ultimately, all opposites have to peacefully coexistence at the feet of Lord Vishnu, the great preserver. It is believed that such is the design of Brahma, the god of creation.

Vastupursha, inscribed in a square grid structure with its head pointing northeast, is the basis for the design of houses in villages, urban havelis, and temples. The square grid structure also is the basis of rangoli designs that every woman steeped in tradition draws [with rice powder] outside her home every morning to welcome divine spirits. Perhaps it also is a balancing of the right and left brain—a symmetry of systems at different levels—that ensures the easy experience of the physical environment, whether it is in the settlement, home, or the temple.

From Systems to Services and Products
Pilgrims to Haridwar are obliged to make offerings to deceased ancestors, especially paternal, as well as to make offerings to Mother Ganga, and ritually bathe in the holy river, assisted by the Pandas or priests in Haridwar. They are a clan of Brahmins who also record the lineage. Using an index of villages and castes, they can instantly find

the page detailing the lineage of the pilgrim, and update the record. Apart from being a historical document, this document is considered authoritative by courts of law and is referred to in matters of distribution of property in Hindu families. Each Panda is in charge of certain regions, and has records as old as four hundred years, but carries registers of just one century. Older records are preserved at home, and these can be easily examined upon the request of the pilgrim. The careful recordkeeping and the quick recall of information are breathtaking.

Angadia is the traditional door-to-door courier business, prevalent mostly in Gujarat and Maharastra since time immemorial. Earlier angadias transported goods from one place to another using horses and bullock carts. The angadias mostly deal in bulky items and not in documents and letters, unlike the modern courier services. Diamond merchants in Guajrat routinely send valuable caches of diamonds through angadias, ferrying an estimated four million dollars worth of diamonds daily from Mumbai, where the gems arrive from abroad, to cutting and polishing centers in neighboring Gujarat through a service run without receipts or records of transfer. Angadias also deliver clothing, machinery, and jewelry more reliably than anyone else. The couriers are nondescript persons. Trust and faith are values held in great esteem in India, and this kind of system easily takes root in such an environment.

The *dabbawallahs* are unique to Mumbai, and their delivery service has been in existence for the better part of a century. Around five-thousand *wallahs* deliver approximately 175,000 *dabbas* (lunches) in *tiffins* (segmented tin boxes) from suburban households to schools, colleges, mills, and offices spread across the entire city and its environs. Their customers are middle-class citizens who, for reasons of economy, hygiene, caste, and dietary restrictions—or simply because they prefer wholesome food from their own kitchens—rely on the *dabbawallahs* to deliver a home-cooked midday meal. Each *tiffin*-carrier lid carries a complex coding system: colors identify each suburb and individual sectors of the downtown core. Dashes, crosses, and dots pinpoint the street, the building, and even the floor to which the *dabba* will be delivered, and eventually returned to its source. The system is an excellent synthesis between the capability of the carrier and the end user. One *tiffinwallah* will pick only ten to twenty *tiffins,* which he can easily recognize and sort at the originating station, and deliver to the owner. Also, within a particular building, the *tiffinwallah* knows to which floor to make the delivery. Individual owners on the floor can readily recognize their own *tiffins* On average, the *wallahs* make only one mistake in two months, meaning there is roughly only one error for every sixteen million transactions. Thus, this is a "6 Sigma" performance according to *Forbes Global,* the international business magazine. It is yet another example of how an efficient, yet low-cost, system can work given the supporting value structure.

The *kabadiwallas* in India run the most efficient, low-key recycling system in the world. These waste merchants are willing to buy anything including old newspapers, school papers, books, bottles, old clothes, and old utensils. These are reused, recycled, or converted into new products. Like a virus, plastics have infiltrated every sector of the economy from agriculture and telecommunications to consumer goods. According to one estimate, the recycling industry in India is a half-billion-dollar economy based on a network of ragpickers and waste collectors. Europe recycles seven per cent of its plastic waste, China ten percent, and Japan twelve percent, but India recycles sixty percent of its plastic waste. Indians are masters of junk—Nek Chand in Chandigarh created a sculpture garden out of city junk. Old clothes are converted into marvelous rugs. This is not merely because of poverty, and has a lot to do with the Indian psyche with its foundation in the Indian belief structure.

Here is an example of a product system. *Pandals* are temporary environments created for festive occasions such as marriages and Durga Puja twenty-four to seventy-two hours before the event. These are structures built essentially of tubular frame structures and cloth panels. They consist of ceilings, walls, carpet floorings, gates in colorful patterns, light fittings, floral decorations, and tea, dinner, and ceremonial arrangements. Pandals are laid out to create the basic space and to channel the flow and gathering of visitors. The end effect is simply a dreamlike, highly elevating, evocative experience. The environment is created with components that are used again and again in different places and at different times, making the effect entirely different each time based on the client's preferences. The system of designing and construction is indigenous, conceived in the philosophical framework of India. It also is an affordable dream world, ranging from a few hundred dollars to many thousand of dollars.[8]

Consider an example of a commonplace Indian product. In a tradition more than five-thousand years old, the sari is the garment worn by most married women in India.[9] The sari has a unique structure of unstitched clothing, and fulfils a variety of needs during the lifetime of its wearer. The sari embodies the essence of Shakti, the female creative principle. It consists of six square meters or more of cloth, often with intricate woven or printed patterns, and exemplifies the essential aspect of creativity (the body) as the manifestation of life. This dress highlights the navel; the intake of nourishment of a child which acquires a deeper meaning for women. It also highlights the breasts. It is versatile because it can be worn as shorts, trousers, a flowing gown or convenient skirt—all without a single stitch! A woman may express her emotions in different settings extremely effectively by the use of the *paluu,* which is the free end or the throw of the sari. It is a garment that brings out the feminine principle in women, and adds tremendous grace. Even when a village woman has to urinate in the fields, it provides a tent tied around the waist

with which she can cover her legs. It also is used by women to receive gifts. Old saris are recycled very effectively for making lovely quilts, furniture coverings, and curtains. Very old cotton saris are sold as polishing and cleaning cloths. It is a dress that makes the wearer the designer, and establishes the connectivity of the body, the female principle, and the universe.

Similarly, one finds many other familiar products in India such as cotton rugs, mats, low wooden seats, cooking vessels, transport vehicles, bullock carts, and maruta—the list can be long.[10] The emphasis always is on improvisation, extending the human being rather than the machine, doing with less material, extending the product life, and finding new uses for the product. It is a different way of looking at products that characterizes the Indian approach to design. It ranges from "jugaad"(meaning crafty improvisation) to extremely subtle synthesis.[11] It is an approach not very amenable to a design environment in which the designer is set on a spotlighted pedestal in the hope that society will hold him in awe and internalize the design into the culture. The designer in traditional India is not treated as a demigod; he is only one element of a cultural team. Innovation per se has little meaning. It must contribute to the human development of ever-larger numbers. The overuse of products (or overcrowding) is not the issue. Just keeping the wheels rolling is the essence of living. When everything is moving smoothly, one is constantly reminded that there is more to life. There is a need to reach out. There is a compassion that must enfold. There is the Brahman to be realized.

Design in all cultures is built upon meta-theoretic constructs subscribed to by that culture. It is on these that the theoretic postulates and pragmatic experiential design propositions are based. The sustainability of design and culture is determined by the symbiotic relationships between the future of humans and the future of the environment. It is important to understand this framework. There a need for a balance between the hedonistic-ascetic continuum on the one hand and the technical-emotional continuum on the other hand.[12] Indulgence in any of these extremes is bound to be catastrophic both at an individual level and at the cultural level. Every culture's solutions to human needs can be mapped in such a space where the importance of the middle path is shown.

References

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1   P.L. Berger and T. Luckman, *The Social Construction of Reality* (Garden City, NY: Doubleday, 1966).

2   P.L. Berger, *The Social Reality of Religion* (London: Faber, 1969)

3   The Website Karmic Menu has many articles discussing the same, and the reader may refer to: www.theosophy-nw.org/theosnw/karma/ka-selec.htm.

4   The thirty-two primary vidyas are not separate books, but they are the thirty-two disciplines of knowledge. All of the books described on this page from beginning to end are categorized into one of the vidyas, depending on their discipline. They are:
1. Rig Veda (hymns of praise)
2. Yajur Veda (procedures of worship)
3. Sama Veda (hymns for peace)
4. Atharva Veda (magical spells)
5. Ayurveda (medicine)
6. Dhanurveda (warcraft)
7. Gandharvaveda (dance and music)
8. Tantra (connecting form with spirit, hedonism with spirituality. sex with spirituality)
9. Siksha (vedic phonetics)
10. Vyakarna (grammar)
11. Kalpa (modalities for vedic action)
12. Nirukta (etymology)
13. Jyotisha (astrology)
14. Chandas (metric composition)
15. Mimamsa (inquiry into chants)
16. Tarka (logic)
17. Sankhya (a Hindu philosophical system that recognizes the existence of matter and the spirit and its interplay)
18. Vedanta (essence of Hindu scriptures ascertaining the oneness of existence)
19. Yoga (breathing, postural and meditation techniques for preparing the body and mind for self realization.)
20. Itihasa (mythological history 'Thus verily happened')
21. Purana (Hindu sacred literature dealing with primary creation of the universe, secondary creation after periodical annihilation, genealogy of gods and saints, grand epochs, and history of the Suryavanshi and Chandravanshi kings)
22. Smriti (code of law) Hindu books giving detailed instructions regarding religious cum moral behavior of a man
23. Nastikamata (agnosticism)
24. Arthashastra (knowledge of wealth and finances, later a treatise on government and governance written by Kautilya 4th century B.C.)
25. Kamasutra (eroticism)
26. Shilpashastra (architecture)
27. Alankriti (aesthetics)
28. Kavya (poetry)
29. Deshabhasha (linguistics)`
30. Avasarokti (repartee)
31. Yavanamata (the mindset of the non vedic, foreigner)
32. Deshadidharma (duty)

5   The sixty-four Kalas or Arts as gleaned from notes on SRIMAD VALMIKI RAMAYANA 14.
See also: www.svbf.org/sringeri/journal/vol1no1/scriptures.html

1. Histrionic talents, drama, storytelling techniques, mnemonics, etc.
2. Making musical instruments, simple mechanical devices, etc.
3. Playing musical instruments (e.g., instrumental music including jalatarangam—creating music with water, percussion, and string instruments)
4. Decorating, dressmaking, costume making, artful dressing, and personal grooming
5. Ornaments and head adornments
6. Singing and dancing; practicing fine arts
7. Making beds and bedroom decorations
8. Garland making, flower arranging, and making designs with grains on the floor such as *rangoli*
9. Playing games such as dice
10. Mastering eroticism as per Vatsyayana, erotic devices, and sexual arts
11. Making honey, liquor, beverages, and desserts
12. Plucking out arrows and healing
13. Cooking, eating, and drinking skills
14. Horticulture, forestry
15. Breaking and pulverizing hard rock; mining
16. Making medicines from herbs
17. Sorting, mixing, isolating ingredients
18. Making and using *astras* and *sustras*
19. Wrestling, boxing, gymnastics, physical culture, bodybuilding, etc.
20. Making ICBMs
21. Parades, army bands and dharmic warfare
22. Ratha, Gaja, Turaga wars (chariot, elephantry, and cavalry)
23. Asanas, postures, and mudras
24. Training elephants, horses, birds
25. Making vessels of clay, wood, or bronze
26. Drawing
27. Making paints and painting
28. Architecture, sculpture, house and temple construction, mosaic tiling
29. Mixing air, water, etc. (air products and water products)
30. Boats, ships, chariots, etc.

31. Making threads, ropes, etc.
32. Weaving and spinning
33. Diamond, precious stones, and gems—distinguishing them from ordinary ones
34. Alchemy, chemistry, and preparing ointments and unguents for charm and virility
35. Jewelry making including artificial jewelry
36. Gold plating; metallurgy
37. Skinning and preserving bodies
38. Leather technology
39. Dairy farming
40. Tailoring, sartorial skills, and embroidery
41. Swimming and water sports
42. Cleaning houses and vessels
43. Laundering and washing
44. Hairdressing and shaving
45. Managing oil resources
46. Having control over others' minds; spells, charms, and omens
47. Tilling and agriculture
48. Handicrafts including carpentry, furniture making, and furnishing
49. Making vessels of glass, ceramic and pottery
50. Drawing water and resources
51. Gardening and fence building
52. Caparisoning, dressing, decorating elephants, etc.
53. Child rearing and pediatrics, including doll making and toymaking for kids
54. Punishing guilty appropriately through law and order
55. Learning languages/dialects (both native and foreign), literary excellence, semantics
56. Preparing "tambool," etc.
57. Composing impromptu poetry
58. Preparing perfumes and cosmetics; playing poetry games; and oratory, elocution, prosody, and rhetoric
59. Sorcery, conjuring, sleight of hand, magic, illusions, impersonation
60. Composing riddles, rhymes, verses, puzzles, tongue twisters, and involved recitations
61. Making swords and staffs; archery
62. Training fighting partridges and rams, cockfighting, bullfighting, etc.
63. Teaching parrots and mynas to talk; training animals; veterinary science
64. Writing in cipher codes and languages; secret mantras; coding and decoding.

6   There are sixteen sanskara described on the Website www.urday.com/sanskar.htm.

7   The Holonomic worldview assumes a relationship between the part and the whole. The part has information and perception of the whole. Besides the part is created in the image of the whole. The Holonomic worldview also implies there is coherence from the moment of creation (the big bang) and now the present moment. The moment of creation can be experienced now.

8   Readers may remember the trials related to the pandal in the recent movie *Monsoon Wedding.*

9   A detailed study has been made by Chantal Boulanger (see www.devi.net/saribook.html). She has recorded more than one-hundred different styles of draping.

10   Known alternately as a "jugaad," a "maruta," or a "boogi," the vehicle offers barebones transportation for Indian farmers at a low cost. For more details, see: www.j-bradford-delong.net/movable-type/ archives/000327.html.

11   Readers may refer to Google's cache of <http://straitstimes.asail.com.sg/analysis/story/ 0,1870,145975-1033336740,00.html> and to Steven Rudolph's musings on development in India. <<October...posted by Steve at 07:31proJogaad at <jiva.emegic.org/archives/2002/10/06/>

12   Lalit K. Das, "Towards a Non-parochial, Non-partisan Framework for the Study of Design History" (Paper presented at the 3rd International Conference on Design History and Design Studies, Istanbul, Turkey, 9–12 July 2002.

Kanchipuram Sari:
Design for Auspiciousness
Aarti Kawlra

This paper examines the design and technique of the Kanchipuram sari in order to demonstrate the unity in cultural practice and technical design (hitherto disassociated) as found among the Padma Saliyar community of weavers in Tamil Nadu.[1] Its goal is to locate design integrally into the discourse of culture by showing how the silk wedding sari, when worn or gifted, is related to the auspiciousness of events and persons, not merely on the surface, but in its very design concept. In other words, the present study will show that the cultural value of auspiciousness is intrinsically related, both to an instrumental activity, weaving, and to a seemingly rational sphere, the *korvai* design technique of the Kanchipuram saris, handwoven in a special manner that distinguishes them as unstitched garments. Unlike fabric produced as continuous yardage, each sari is woven as a complete garment unit with an inner and outer surface, top and bottom, front and back, which are in a determinate relationship to one another. I will show how the "design," viewed as the unity of opposed elements, of the Kanchipuram sari emerges in the *korvai* technique of weaving the sari. The etymology of the Tamil term *korvai* reveals that the technique is characterized by a "unity" *and* "opposition" of elements.

The *korvai* design of opposed borders "joined" to the main body of the sari, it will be seen, mirrors the cultural value expressed in the Tamil term for auspiciousness, *raasi*, also viewed as involving the conjunction of opposed elements. Even the practice of weaving will be seen to enhance the auspiciousness of the sari when it is woven by weavers specializing in the same. Using the case of the Kanchipuram sari, this paper will highlight the crucial link between design and the pursuit of auspiciousness (as an individual and/or collective goal of life) in artisanal praxis[2] anywhere.

Design: Unity and Separation
In regular weaving, particularly in fly-shuttle and power-loom weaving, the weft (width-wise set of threads) yarn forms the unbroken single thread passing from edge to edge at right angles to the warp (length-wise set of threads). The *korvai* technique, on the other hand, entails the use of two or more shuttles, carrying two or more separate weft yarns, to constitute a single weft passage. The resulting effect is a border(s) "joined" to the main body of the sari.

1   The Padma Saliyars originally belong to what is now Andhra Pradesh. It is said that a section of the community migrated south into present-day Tamil Nadu sometime during the Chola period, ca. 900–1300 AD. They maintain marriage links there even today. Although there are other silk- weaving communities in Tamil Nadu, the Telugu language and worship of their caste deity, Bhavana Rishi, clearly distinguishes the Padma Saliyars from other groups in the State.

2   Praxis refers to the unity in human activity between the strictly rational (instrumental) and the symbolic (expressive).

border   border

inner
end
piece

middle
segment

outer
end piece
(pallav)

warp axis

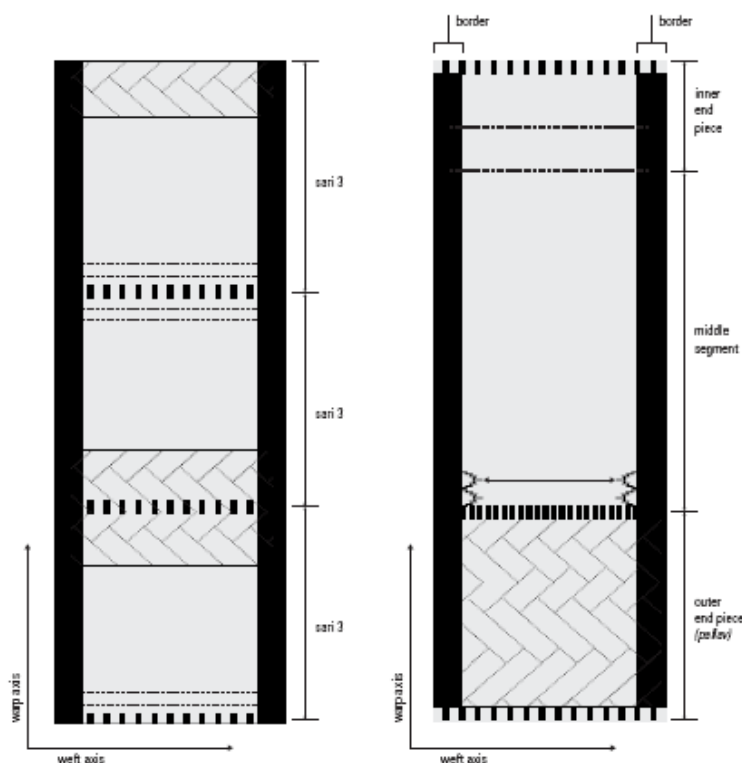weft axis

sari 3

sari 3

sari 3

warp axis

weft axis

Figure 1 (left)
A warp demarcated as three separate, yet united, saris.

Figure 2 (right)
Three constituent parts of a *korvai* sari.

3   The average length of a sari is 5.5 m, and its width is approximately 1.5 m. The borders are anywhere between 8 cm and 24 cm, and the outer end-piece is between 65 cm and 75 cm, while the inner end-piece ranges from 40 cm to 55 cm. Often, a blouse piece of about 50 cm–75 cm may be woven next to the inner piece, which easily can be cut and separated from the sari without changing the proportions of the three constituent parts.

In Tamil Nadu, *korvai* refers to this "joining" of supplementary warp threads (in a contrasting color) at certain fixed points along the length of the warp. The product of a single warp is not a homogenous fabric length (*gaada*), nor even a single sari. Rather, it is a *group* of saris, each of which is cut from the warp as it is completed, and weaving of the next sari begun on the same warp. The length of the warp is determined by the number of saris to be woven, and is marked at regular intervals accordingly (Figure 1).

The warp of each sari is further segmented according to a set proportion, so that each sari has two well-defined borders, a middle portion and two extremes, the front and the rear (Figure 2). The division of the sari into its three constituent parts:[3] the edges or border(s), the middle or ground, and the two end-pieces is achieved in *korvai* through three formal elements of design: (1) opposition or contrast; (2) balance, symmetrical or asymmetrical, inverted or reflective; and (3) rhythm or repetition and alternation. These now will be examined in more detail.

On the horizontal axis, the *korvai* technique involves the joining of supplementary threads on the sides of the main warp. These constitute sari borders on the lateral edges of the warp, and are contrasted in each sari from its respective middle and extreme ends:

1. The width of the additional warp always is less than, and never more than, the total width of the main warp.[4]

2. Its length is equal to, and not greater or less than, the total length of the entire warp.

3. The opposing borders never meet throughout the length of the sari and, in that sense, establish the laterality of the sari.

4. The borders are either symmetrically balanced, in that they are of the same size, or asymmetrically balanced so that either one border is entirely absent or of a different size, color, texture, and ornamentation.

5. The joining of the borders also follows an overall balance. The interlocking motifs at the junction between the borders and the middle part of the sari are executed in a pointed zigzag fashion[5] in smooth or serrated lines, and in motifs that repeat and alternate regularly. Regardless of their permutations and combinations, the motifs must be in an inverse relation so that the apex of a peak on one border matches that of the opposite border (refer to Figure 2 above).

On the vertical axis, the warp also is divided into three, discrete parts:

1. There are two asymmetrically balanced segments that constitute the two end-pieces; the frontispiece is broader and more elaborate than the inner end-piece, that is simple in comparison.

2. The segments are opposed to one another and must always be at either end of the length of each sari, thereby establishing (and uniting with) the middle segment.

3. They are perpendicularly opposed to the borders, and are together united with the borders (in color, texture, and ornamentation) in opposition with the middle of the sari. Crucially, they fall within the border segments and do not alter the existing borders.

4. Only the frontispiece warp threads are "joined" (and separated) to the main warp by passing them through the reed in a technique that is different from *korvai*. For our purposes, however, it is sufficient to note that both of the end-pieces, too, like the borders, are differentiated from the middle segment.

Color

In Tamil Nadu, the *korvai* technique is employed to highlight the distinctiveness of the border and end-pieces from the middle portion of the sari by creating color oppositions. Supplementary threads are placed on either sides of the length of the warp, such that they are together opposed in color to that of the principal warp. The distinctiveness of the *korvai* technique lies in the creation of a solid rather than shot bordered sari (see Figure 3a). A three-color opposition also may be created in *korvai* weaving by using three different colors in

4   In double-side border weaving, when the supplementary warps on either ends are equal in width to each other and to the width of the main warp, the entire warp is divided into three equal parts. This is done for weaving the *munbaagham*, literally "tri-partite," sari comprising two large borders equal in width to the middle segment of the sari.

5   Sometimes the "joining" is done without introducing an element of design, and therefore shows as a plain line of stitch-like interlocking.
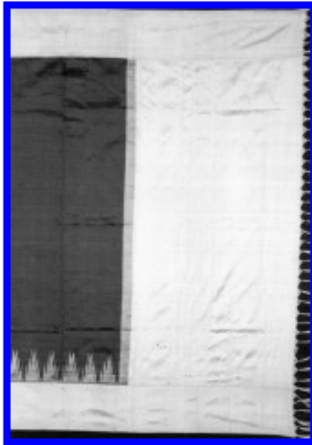
Figure 3a
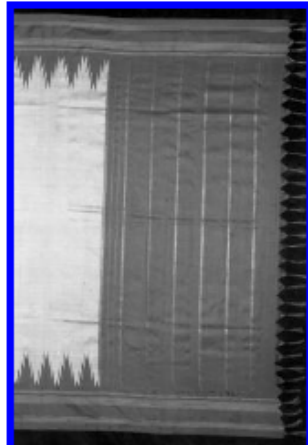A two-color opposition in a *korvai* sari.
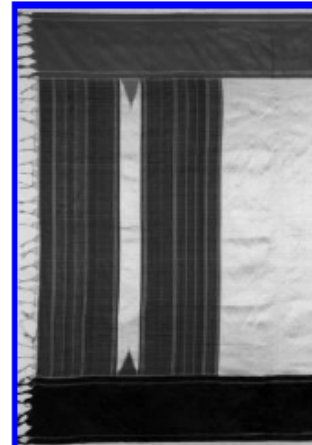
Figure 3b
A three-color sari.

Figure 3c
A *korvai* sari with a shot body.

the warp, as well as in the three respective shuttles. Saris woven in three colors are referred to as morning-evening (*kaalai-maalai*), or Ganga-Jamuna, highlighting the alternation between light and dark in the borders of the sari, united by a third color in the middle portion (see Figure 3b).

Sometimes, the same effect of a solid border is created differently by interlacing the warp with the separate shuttles. Then only the colors of the shuttles are reversed—the two border shuttles are in the same color as the warp, and the shuttle working the middle portion of the warp is in a contrasting color. This results in the middle portion of the sari being woven in a shot rather than a solid color (see Figure 3c). In either case (i.e., whether in differentiating the color of the warp at the time of laying it or at the time of interlacing it with the shuttles), a color opposition is created. Below is a table showing the preferred contrastive color combinations in a *korvai* sari.

Table 1
Border-body combinations indicating preference for contrasts.

BORDER COLOR	BODY COLOR	
	Preferred	Restricted
Vermillion (red)	Green, Turmeric	Purple, Brown
Turmeric (golden yellow)	Green, Vermillion	Cream, Orange
Dark Green/Blue	Turmeric, Vermillion	Shades of Black

The treatment of the end-pieces in *korvai* saris also follows this relation of unity and opposition. The frontispiece is wider and more elaborate than the other, and is always a solid color as compared to the smaller end-piece which is a narrow band woven in a shot color created by the admixture of the warp color with a contrasting weft color. The extreme ends of the sari are necessarily contrasted from its middle section through the use of opposing colors, but at the same time united with the borders which must, crucially, be of the same color. Thus, if red is used in a sari for its borders, then the color invariably will be repeated at the end-pieces.

Texture

Weaving involves the creation of a surface that not only has a length and a breadth, but also a certain density and coherence, referred to as the *raham* of the sari. The crossing at right angles of the warp threads with the corresponding weft threads at the site of the warp shed results in an intermeshing, whose permeability depends on how tightly the pick (weft thread) has been packed or beaten-in. A loose construction therefore will have fewer threads per inch of cloth woven,[6] as compared to a cloth of a closer, much tighter weave.

Textural combinations (i.e., dense and compact versus sparse and loose), are accomplished by altering the nature, amount, and quality of thread used. In addition, varying weights and twists of silk thread may be used. Weavers may create a distinct border and end-piece in a sari by contrasting the two with a different raw material for the main warp that constitutes the middle segment of a sari. For instance, cotton is used for the main warp and silk for the borders and end-pieces in saris woven in Gadwal, Andhra Pradesh. The effect is that of disparate borders and end-pieces, "joined" to the main warp in a sari.

Textural variations also are created by varying the relative densities of the threads (the thread count) in the warp to create different effects at the selvedges, borders, and middle segment. The selvedge borders and middle segments also are opposed in texture to the loose junction between two saris where they are cut off and separated from each other. A further textural opposition is provided by the unwoven warp threads at either ends of a sari which are braided into tassels at equal intervals, one end inversely related to its opposite end to prevent unraveling.

Ornamentation

Ornamentation is a third mode whereby the unity and opposition of the three parts is accentuated in a *korvai* sari. It is created by using supplementary yarn in a variety of colors and materials (silk, cotton and gold and silver wire thread) over and above the ground weave, resulting in a raised effect or brocade. The brocading patterns are encoded in lifting devices that are attached separately for the borders and for the end-pieces. Not only are the two contrasted in technique,

6   Generally, the weft yarn is never of the same thickness as the warp yarn. Therefore, the picks per inch will never be equal to the ends per inch.

in that borders are warp-patterned whereas the frontispiece is weft-patterned, they also are perpendicular to one another. The brocading on the frontispiece forms a weft-wise cross band, and that on the borders is a warp-wise strip running along the sari length. The ornamentation consists of ornamental and interlocking geometric and figurative motifs (Figure 4a and b) that repeat and alternate at regular intervals. The overall pattern of the main end-piece is in a relation of asymmetric balance with the opposite end-piece that is a simple band, usually with a few gold brocade stripes. In its ornamentation, the frontispiece is in a relation of unity and opposition with the borders. If the adornment at the borders is a row of swans amidst foliage, then the composition is repeated in the frontispiece, only it is more elaborate and sometimes even larger in size, as compared to the borders.

The border and end-pieces together are united in contraposition to the middle of the sari that is either plain, with uniform checks or stripes, and/or embellished with sequestered extra-weft motifs evenly distributed throughout the segment. It is crucial that the ornamentation of the middle part does not interfere with that in

Figure 4a (below)
Ornamental Motifs

| rudraksha |
| vanki |
| thuthiripu |
| neli |
| rattai neli |
| pogidi |
| arai pogidi |
| mayil kannu |
| benaras |

| paimadi |
| muthukattam |
| sittai pencil |
| sittai pencil |
| kommai |

| pakshi |
| manga butu |
| pannir shombu |
| salangai |
| muthu sir |
| diamond |
| kuyil kannu |

| arai madam |
| malli moggu |
| yaanai |
| kammalam |
| thazhumpu muggu |
| pillaiyar muggu |
| mullai muggu |

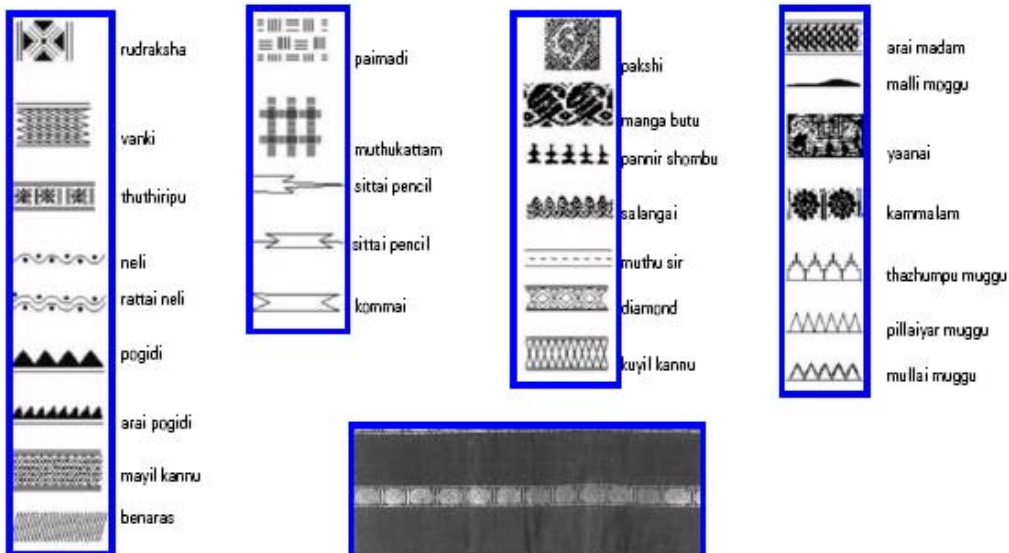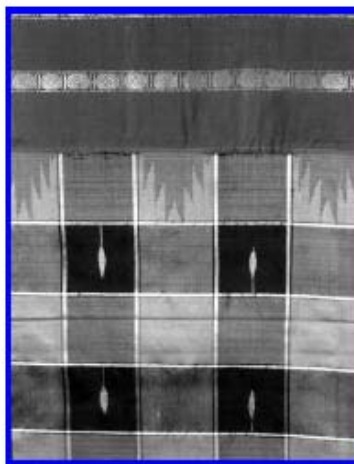Figure 4 (right)
A black and mustard check korvai sari with vermillion red border. Note the placement of the rudraksha motif in the borders and the malli moggu motif in the middle segment.

the borders and end-pieces. Thus, the middle motifs invariably are neutral in their spatial orientation, without clear orientation. Those at the borders and end-pieces, if spatially specific, are always aligned such that their tops direct inward toward the middle segment. This establishes a relation of unity through rotation, between the three constituent parts of a sari (see Figure 2).

The *korvai* technique thus highlights the "design" of the sari as a complete garment by differentiating its three parts from each other and together uniting them as a bounded whole from the homogenous warp. Indeed, in Tamil Nadu, a sari without a border and a frontispiece, ceases to be a sari and instead is considered as plain yardage.

This "design" of the silk *korvai* sari is implicated in the technical and cultural perception of the sari as a "cloth-body" (as opposed to a mere covering for the body or body-cloth) in Tamil Nadu.

The "Cloth-body"

The correlations between the borders, the two end-pieces, and the middle of the sari form a set structure that corresponds to an abstract body. The tassels made from the unwoven threads separating two saris in a warp are deemed like hair whose strands are cut and braided. The narrow and compactly woven selvedge protects the sari from wear and tear as do nails in a body. The borders on either side help maintain balance and establish the laterality of the sari, like hands and feet. Joined, yet opposed, to the limbs is the torso which is the middle segment of the sari. The distinctive face belonging to this abstract body is the ornate frontispiece and even is referred to as "self." The embellishments on the frontispiece and borders in gold and variegated silk thread are like the flowers and jewels that beautify the face and limbs. The ground weave and texture of the sari gives it a skin surface with pores, but which is impervious nevertheless. The motifs and colors that repeat and alternate give the sari its mobility as a body in motion, while the differentially textured and weighted borders and end-pieces give it its characteristic carriage or posture.[7] Weaving therefore can be seen as entailing the genesis of a breathing, eating, growing body. It is a cloth-body whose structure is prescribed and set, not by the individual body of the wearer, but by abstract body principles with an identity of its own.

Indeed, in Tamil Nadu, the three essential parts of a *korvai* sari are even named as body parts: the frontispiece is termed *mundaani* or "cloth woven in front." It also is referred to as the *talaippu*, literally the "head" of a sari. The middle segment of the sari is called the *vodal* or the "body" of the sari. And finally, the borders are *karai*, meaning "boundary" or "river bank," and are suggestive of the hands and feet as dividing the body laterally.[8] Conceived as a cloth-body, the sari is even worn or draped in accordance to a real body: the borders fall at the feet and around the arms, the ornate end-piece covers the torso, and the plain end-piece covers the loins (Figure 5).

7   The density of the middle segment of the sari is necessarily less than that of its borders, and certainly not greater than that of the selvedge. Otherwise, the sari would become imbalanced—the torso heavier than the limbs, and limp compared to the weight required to stand.

8   Even the Tamil word *pudavai* used for the sari echoes an abstract body reference. Thus, *pudai* means "bulge," "site," or "location"; and *vai* is "to keep" or "place" implying body contours and cloth drape.

Figure 5
At a festive gathering in Tamil Nadu, note the frontal placement of the ornamental end-piece of the saris worn by all three women.

Auspiciousness: Conjunction and Opposition, and the Concept of *Raasi*

The unity of cultural practice and technical design achieved in the weaving of the *korvai* sari brings craft praxis into the discourse of auspiciousness (and inauspiciousness). Thus far, this has been explored in Indian social anthropology mainly to highlight its analytical distinctiveness from Hindu notions of purity and pollution, and in terms of its significance in questions pertaining to social structure. In both cases, auspiciousness has been examined only with reference to ritual contexts.[9]

Thus in south India, Beck informs us that color (and heat) must be encompassed, so that in the Tamil ritual context, "... coolness both precedes and follows a brief interlude of heat."[10] In ritual, Beck notes once again that colors are found as forming a "continuum," wherein each color is in a relation of association and contrast with other colors, and together point to a transformation of states. Daniel[11] uses the terms "compatible," "appropriate," "equilibrium," and "conjunction" to describe the intersections of planets which are harbingers of "well-being." Although not immediately concerned with auspiciousness, Christian, in her description of the festival calendar in a Telugu village, nevertheless notes that: "Auspiciousness derives from the uniting-reuniting or the celebration of that union-reunion of diverse elements."[12] Despite the tremendous value of this literature, nowhere has auspiciousness been examined as an outcome of mundane or practical activity in this world. The present analysis examines auspiciousness, defined as having to do with intersections and conjunctions of opposed elements and their transformations, in the context of weaving the *korvai* sari. Here the technical (instrumental) and cultural (expressive) truth of the body are simultaneously

9 See, for instance, Srinivas (1952), Das (1982), Carman and Marglin (1985), Marglin (1985), Madan (1987), and Raheja (1989).

10 Brenda E. F. Beck, "Colour and Heat in South Indian Ritual," *Man* 4:4 (1969): 566.

11 E. Valentine Daniel, *Fluid Signs: Being a Person the Tamil Way* (Berkeley, CA: University of California Press, 1984).

12 Jane M. Christian, "The End Is the Beginning: A Festival Chain in Andhra Pradesh" in *Religious Festivals in South India and Sri Lanka*, G.R. Welbon and G. E. Yocum, eds. (New Delhi: Manohar, 1982), 261.

13 M. Winslow, et. al., *Winslow's English-Tamil Dictionary* (1989), 3rd edition revised, enlarged, and Romanized by C. Appaswamy Pillai (reprinted New Delhi: Asian Educational Service, 1989), 1223, 1510, and 254.

14 Madras University *Tamil Lexicon*, 6 vols. (Madras: Macmillan, 1982), 3423.

15 See, for instance, Obeyesekere (1976), Kemper (1978), Zimmerman (1979), and Egnor (1983).

16 Frederique A. Marglin, *Wives of the God-King: The Rituals of the Devadasis of Puri* (Delhi and Oxford: Oxford University Press, 1985), 302.

17 See, for instance, Beck (1973), Reynolds (1980), McGilvray (1982), Marglin (1985), Good (1991), Hiltebeitel (1991), Tarlo (1996), and Visveswaran (1996). In Tamil Nadu, a girl child is made to wear a long skirt and blouse, usually made from her mother's old sari. At the first signs of maturity, she begins to wear a half-sari that covers her torso and bosom, and is worn over the full-length skirt. It is only after attaining puberty that an adolescent girl in south India begins to wear a full sari.

18 Brenda E. F. Beck, "The Right-Left Division of South Indian Society" in *Right and Left: Essays on Dual Symbolic Classification*, Rodney Needham, ed. (Chicago: University of Chicago Press, 1973), 411.

19 "Turmeric often is rubbed on a young woman's body before her bath to cool her and to remove pollution ... A piece of turmeric may be used in place of a wedding necklace. This spice has a very strong association with fertility and prosperity. It is so auspicious that widows are not allowed to use it." (Beck 1969: 559).

realized at the level of design. It is this which renders the product of this activity significant for human identity and exchange. The cloth-body—the *korvai* sari—when worn or gifted is intrinsically related to the auspiciousness of events and persons.

In its literal application, "auspicious" refers to a "sign" of the zodiac to denote an individual's planetary constellation.[13] According to the *Tamil Lexicon*, it is a word borrowed from Sanskrit and means "collection," "disposition," "harmony," and "luck."[14] In Tamil, the term *raasi's* usage is based upon the assumption common to South Asian systems of healing and astrology that the individual body must be viewed in relation to the environment, which is ever-changing with respect to both time and place.[15]

According to this schema, any individual, regardless of his caste status,[16] is prone to both "auspicious" (*nalla raasi*) and "inauspicious" (*ketta raasi*) influences. In Tamil Nadu, it is not unusual for individuals to consult astrologers and the almanac regarding auspicious time periods before embarking on important tasks. In every weaving household, often pasted or hung by the side of the loom, is a daily or yearly chart indicating auspicious and inauspicious periods. Indeed, even the loom space is constructed appropriately (i.e., in accordance with the weaver's own planetary configuration) so that the pit itself is *raasi* for the weaver. No wonder then the effect of a "conjunction" or "joining" of contrasting colors in the *korvai* technique points to the movement and transformation of the person to another state, whether of well-being and misfortune, life-affirmation or its negation.

My research draws attention to auspiciousness as a cultural value created in the daily practice of a craft which relates the individual and the community to the cosmos. For the Padma Saliyars, the pursuit of auspiciousness is apparent in their adherence to certain weaving techniques particularly intended for the augmentation of this "well-being" and the mitigation of misfortune for the users of their products. This is achieved not only in the weaving, but also in the wearing and exchange of *korvai* saris.

Saris in India are seen to be indicative of a particular stage in a woman's life-cycle.[17] Indeed, in Tamil Nadu, the silk *korvai* sari, distinguished by its contrasting borders, is a conspicuous "marker" of a woman's *sumangali* (literally woman with *mangalam* or "auspiciousness") or married status. Thus, a *sumangali's* sari always must be bordered, whereas a widow's sari is virtually plain and undifferentiated.[18] The sari worn by the married woman is metonymically related to other "markers" of a *sumangali*: the wedding necklace; gold ornaments; flowers for the hair; yellow hue apparent on the face, hands, and feet from the use of turmeric during ablutions; and the round vermillion mark on the forehead. Significantly, in the Tamil context, widowhood is marked by the divestiture of these very markers of auspiciousness.

Colors such as vermillion red and turmeric yellow, which already are part of an auspicious married woman's toilet,[19] are preferred in the wedding sari. For a sari to be auspicious, it must be bordered, and in color combinations considered more contrastive than others. For example, the color white, seen as renunciatory and life-abnegating in its properties as a cooling color[20] when woven along with red, becomes associated with fertility and life affirmation. Among many non-Brahmin communities in Tamil Nadu, a red-and-white check cotton sari is the traditional wedding sari. White often is the color worn by widows, but its union with turmeric yellow, the color of "human auspicious increase,"[21] transforms it completely. The Padma Saliyars's wedding sari is a white sari dyed in turmeric, and signifies life-giving fertility and prosperity.

The undifferentiated color black is similarly correlated. Most Padma Saliyars hesitate to weave a black sari, for it is considered ominous for the weaver and his family and will cause misfortune to befall them. Saris exchanged and worn during the *sumangali praar-thana* ritual for auspicious married women are enjoined to be woven without black thread[22] Interestingly, even a widow is proscribed from wearing all black because it heightens her pollution. Yet the use of an otherwise malevolent and life-threatening color such as black in combination with other colors, however minimally, is seen as a protection against evil and destruction.[23]

In Tamil culture, the search for "well-being" (equally the evasion of adversity and misfortune) through work and worship is the quest not only of material well-being, but also a moral enhancement. Auspiciousness thus is really the optimal fulfillment of one's life-aims. Given life's sorrows and joys, failures and fortunes, vices and virtues, auspicious procedures—whether weaving a particular sari or referring to the almanac—tend to keep the balance more towards the latter than the former states. Quite clearly, a coherence and consistency between different levels of one's life and work—pragmatic, erotic, spiritual—will tend to enhance this elusive bargain in one's favor. Viewed in this light, the *sringaara rasa* of Indian art and aesthetic theory[24] begins to approach the *raasi* of life and work activity. If then the *korvai* sari is both good and beautiful *and* true, it is a measure, surely, of similar qualities in the weaver.

Padma Saliyars: Specialists in Auspiciousness

The Padma Saliyars are known, not only as a traditional silk weaving community, but also as providers of a very specialized product—silk saris for auspicious occasions. Their saris are valued for their characteristic weight, durability, luster, and bright, contrasting color combinations. The phenomenal sales of such saris during festival and marriage seasons every year is testimony to their popularity even when compared with saris from Benaras, the traditional silk center in the north.

20 Prema Srinivasan, "The Sari Unwinds: South Indian Traditions, 1850–1983" in *Pudu Pavu*, Exhibition Catalogue (Madras: Co-optex, 1983), 559–560.

21 Ibid., 559.

22 Rathi Vinay Jha, "Kanchivani: The Saris of Kanchipuram," *Marg* XLVI:3 (1995); 87.

23 Susan Hanchett, *Coloured Rice: Symbolic Structure in Hindu Family Festivals* (Delhi: Hindustan Publishing Corporation, 1988), 289.

24 Amrit Srinivasan, "Art as Vocation: Issues Arising from Bharata's Natayasastra" in *Proceedings: Seminar on Natyasastra: Text and Context?* (New Delhi: Sangeet Natak Academy, 1992).

For the Padma Saliyars, weaving saris meant for auspicious occasions is more than just the production of a commodity for exchange in the market. Indeed, it is the "work ethic" of the Padma Saliyars to adhere to appropriate procedures—from laying out the warp on the loom to the final weaving and selling of the cloth—to ensure the overall propitiousness of their work and its products.

There is an explicit "moral" correlation between the producer and the product.[25] In her account of the theory and practice of the craft of the Vishvakarmas, Sashikala Ananth emphasizes that: "The sculptor learns to represent on stone, wood, metal, or earth the essence of his inner understanding....The *shilpi* creates the *shilpa* out of himself as it were, and all his feelings are reflected in the manifested form."[26]

For the Padma Saliyars, to conduct one's life and work in accordance with certain "good practices" is to automatically heighten auspiciousness. These good practices are believed to become infused into the very cloth they weave and sell. Weavers of *raasi* saris are known for their strict adherence to various prescriptions during the preparatory and weaving processes. It is believed that auspiciousness will accrue if the star or lunar asterism and the solar planetary conjunction of the weaver "matches" that of the merchant's on the day weaving is begun. In fact, the merchant's profit depends on this practice. Even Lord Vishnu, the Padma Saliyars believe, is said to have given out the lotus stem yarn only after having selected an "appropriate" time to commence weaving. During life-cycle rituals, and certain calendrical times and days, the loom is the object of ritual avoidance. Failure to follow these prescriptions if greedy for more income may prove inauspicious and even harmful to the cloth, the weaver, the merchant, and even to the wearer.

Once taken off the loom, the sari is susceptible to pollution unless it is sold within a certain acceptable time period. The sellers of "new" cloth perceive themselves as selling auspiciousness. Once sold to a potential user, it becomes "old" even if it has not been actually used. It is thought to have lost its auspiciousness. Sari retailers seldom take back saris once sold because they believe that the sari is no longer fit for use. It is the responsibility of the retailer, whom his customer trusts, not to sell her inauspicious, impure, soiled cloth; which may have been imbued with the unknown and harmful qualities of the body that first donned it. When customers insist on returning or exchanging saris, the latter are kept aside for discount sales in which there is no guarantee of the auspicious status of the cloth. In fact, the month of Adi, otherwise an inauspicious month for marriages and other ceremonies, is a month when Radha Silks holds their largest discount sale. Saris bought and sold during this period come with the clear understanding that they are with some flaw, and hence the lowered price. Saris that have been on the shelf for longer than sixty to ninety days also eventually find their place in discount sales since they are of "old" stock.

25 Marcel Mauss has explicated the relationship between a person and a material object in the context of his analysis of the "gift" which, according to him, "... is a person or pertains to a person. Hence, it follows that to give something is to give a part of oneself .... In this system of ideas, one gives away what is, in reality, a part of one's nature and substance, while to receive something is to receive a part of someone's spiritual essence." *The Gift: Forms and Functions of Exchange in Archaic Societies*, translated by Ian Cunnison (New York: The Norton Library, 1967), 10.

26 Sashikala Ananth, "The Institutions of the Vishwakarma," *Architecture + Design* (Sept.–Oct. 1991): 79.

Wedding saris therefore are never purchased at discount sales. Ideally, wedding saris are custom-made to the specified orders placed by the client, either with the retailer or directly with a weaver. When this is not possible, then it is the responsibility of the trusted retailer to provide saris that are "fresh from the weaver's loom," and auspicious in every respect. It is not enough that a sari be "auspicious" at the time of purchase. In fact, the selection of a wedding sari and even the first stepping into a sari emporium after a marriage is finalized, is done only on auspicious days,[27] that together "match" with the individual horoscope of the bride and groom.

Moreover, people are known to buy the bridal sari only from the particular shop they believe to be *raasi* for their family. A silk sari shop often may even acquire the reputation for providing such a service, and come to be known as an "auspicious shop." The Padma Saliyar-owned concerns, Nalli Chinnasamy Chetti and Radha Silk Emporium, have their respective clientele who believe that buying the first sari from them soon after a marriage is fixed will bring "good luck" to the newlyweds. "Nallis brings good fortune" is a common phrase employed by families who have been purchasing their wedding saris from Nalli. The Radha Silk Emporium, in fact, also is known as "Rasi," from the letters Ra and Si in their name but, as they insist, it is also the word *raasi*, to stand for "auspicious." Writing about the jewelry, sari, and utensils shops in the vicinity of the Kapaalishvara temple in Mylapore, where the Radha Silk Emporium also is located, Michell notes, "Women do not come to Mylapore to buy just any sari, but the most important wedding sari at famous shops whose dazzling brocades are fit for a goddess or for a beautiful bride."[28] So inextricable is the Padma Saliyars's identity with auspicious occasions that traditionally in their community the groom was made to weave his bride's wedding sari, which was not only a symbol of a fruitful marriage but, in many instances, constituted the auspicious act of marriage itself. By giving a sari to a woman, a man stated his intentions very clearly.

That the Padma Saliyars truly believe that they are not just sellers of textiles, but providers of auspicious cloths, is apparent from the way they transact business with their customers, especially those who come to purchase saris expressly for weddings. Once selected, the actual wedding sari and the groom's *veshti* (the lower unstitched garment worn by men) are ritually exchanged, not across the counter, but in the presence of the shop deity appropriately wrapped in a "pure" white cloth with auspicious vermillion and turmeric marks. Every day, a piece of cloth, usually a blouse piece, is ritually offered at the Radha Silk Emporium to the last marriage party that enters the showroom.

I have sought to demonstrate the strain towards holism, identity, and difference in craft through an examination of a particular product of weaving, the *korvai* sari. I have focused on the technical and cultural aspects of craft work, as embodied in the Padma Saliyar

27 Tuesdays and Saturdays usually are not considered auspicious days for making purchases according to most almanacs. Silk shops expect little business on these days of the week.

28 George Michell, ed. *Temple Towns of Tamilnadu* (Bombay: Marg Publications, 1993), 120.

community, in order to demonstrate: (1) its auspiciousness; (2) identified in the coming together and setting apart of opposed elements (i.e., a "conjunction"); and (3) constituted in the weaving process through the *korvai* technique of "joining" a contrasting border to the main body of the sari. The Padma Saliyars thus are engaged in the task of creating auspiciousness in the very *design* of the saris they weave.

This paper has endeavored to interpret artisanal design and technique—embodied in products such as the *korvai* sari—as combining worldly goals as well as those pertaining to the hereafter. Viewed thus, creativity and innovation become possible within, rather than without, formal parameters dictated by tradition. It is hoped that the "design" of traditional crafts have achieved a deeper significance when viewed as mirroring universal principles and cultural values.

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Designing Freedom
Poonam Bir Kasturi

> *"Craft is an antiquated way of producing goods,*
> *I don't see why Indians need to waste time preserving crafts*
> *when more important issues like poverty, corruption and educa-*
> *tion demand attention."*
>
> —A participant at a 2002 meeting on craft,
> design, and technology.[1]

The same participant believed that technology was the primary tool that could help solve the issue of craft in India. In his view, a romantic preoccupation with history as embedded in crafts would do nothing to help chart the nation's future direction. He postulated his defense with an aggressive proposition: "Ask any craftsperson if he wants his child to continue being a craftsperson." Another posed the efficiency argument: "What is the need to have primitive patterns of production in this day and age—why should cloth take so much effort to weave when we have easier, faster, cleaner ways of making it?" So, what to do? "I think the only thing we can do is turn [crafts] into a tourist attraction—make some money by 'branding' craft, culture, and local wisdom." And as a parting shot, "I do like beauty and admire the human endeavor of using hand skills to create. But give me a break; most of the stuff in the emporia is kitsch. As a discerning Indian, I have to either go to a fancy designer shop or abroad to buy a great craft product."

There were, however, also those with positive voices. Even though they sounded tentative in the face of such strong opposition, they were heard. One NGO working in the sector of income generation through craft stated emphatically: "Craft is a viable livelihood option—it is dignified and fulfilling, and it needs support." Other views ranged from "The craftsperson is a respected member of any community and fulfils basic needs—especially in the rural pockets" to "Gandhi got it right, we need the village economies to be robust if our nation needs to grow."

In spite of a healthy debate, there was no resolution on how one could address the complex nature of the issues raised by the dissenting side. To summarize the points made against craft:

1 Craft is an old, inefficient way of production.
2 Craft is not, and should not, be an important item on the national agenda.
3 Technology is the most important tool we have to "solve" our problems; not craft.

1   "Aagaman—Listening to Craft" was a workshop held in Bangalore, India 9–13 May 2002.

4 Craftsmen don't have a great image of their own work (and perhaps of themselves, too?). They wouldn't want their children to work as they do.

5 The best thing to do is to turn it into a tourist attraction—nothing more.

6 Current Indian craft is mostly kitsch, nonutilitarian.

This list highlights a perception shared by a large group of people as well as the policymakers; it seems to be the current construct in India surrounding craft. The trend is for the government and NGOs to involve designers and design firms to "spruce up" the craft sector; and to move from "traditional" products to "contemporary" products, packaging, and so on. The implication—the "old" will not hold. Design is used to apply ideas such as "brand" to this sector. This has spawned the "designer" product that is said to be successful in urban markets at home and abroad. A good example is Khadi.[2]

> An impressive exhibition of Khadi garments entitled *Khadi: The Fabric of Freedom* has just concluded at the National Gallery of Modern Art, Mumbai. The exhibition will now go to other metropolitan cities including Kolkata and Bangalore. This exhibition, sponsored by the Volkart Foundation of Switzerland, features ensembles by the seven leading fashion designers including Ritu Kumar, Abu Jani and Sandeep Khosla, Manish Arora, Asha Sarabhai, and Raghavendra Rao. It is the first one to be held on such a large scale. *Khadi: The Fabric of Freedom* has culminated after two years of extensive research by Rahul Jain, a well-qualified textile technologist from India. More than a hundred different varieties of both refined and coarse Khadi from Andhra Pradesh, West Bengal, Karnataka, UP, and Bihar are showcased in this exhibition.[3]

Better packaging, the incorporation of new technology, and product design all constitute this current approach to craft—an approach aligned with the thinking of our dissenting participant. Yet, nowhere is the craftsperson mentioned. Ironically, *Khadi: The Fabric of Freedom* seems to do little to create "freedoms" for the people who make it. The development and design of this product seems to exclude real participation of some stakeholders; whereas, as Amartya Sen maintains, we need to include them: "An adequate approach of development cannot really be so centered only on those in power. The reach has to be broader, and the need for popular participation is not just sanctimonious rubbish. Indeed, the idea of development cannot be dissociated from it."[4]

I have been there and done that myself. As a designer, I have worked with precisely this approach in the past—"contemporizing" craft—thinking that it held promise for the sector. The assumption of this approach is: "Good design is good business." And one assumes

2 Khadi is the local hand-spun and hand-woven fabric whose manufacture and use Gandhi said should free India from imports.

3 Apunkachoice.com, *Khadi Is Back in Vogue,* (1 May, 2002), www.apunkachoice.com/scoop/fashion/20020501-0.html.

4 Amartya Sen, *Development as Freedom* (New Delhi: Oxford University Press, 1999).

that good business translates to better living standards. However, such a generalization does not allow a real examination of the issue of craft and its development. This assumption needs to be questioned. Larry Keeley writes:

> The idea that good design is good business is a ridiculous statement, most often trotted out by designers who are trying to prove that whatever they do—which they frequently have difficulty articulating—must be really central to business because somebody said this a really long time ago, and it sounded so pithy at that time. This is delusional. I'm convinced that, when it happens, good design rises above, surrounds, and is vastly more important than trivial things like commerce. That's why it's really crazy for designers to have concerns about articulating the relationship between design and business.[5]

I started asking questions such as: "Is there a different way for design to engage with craft?" and "What can design contribute to craft—apart from just 'packaged designs' for others to thoughtlessly reproduce?" I recall Chambers's caution:

> For learning, power is a disability: all who are powerful are, by definition, uppers, sometimes uppers many times over, others relate to them as lowers. In their daily lives, multiple uppers are vulnerable to acquiescence, deference, flattery, and placation. They are not easily contradicted or corrected: their word goes.[6]

A designer, a government official, a development professional, and a cultural academic all are "uppers." To explore what design can do for the craft sector, let us look at some popular myths. Remember, designers are as responsible as others in perpetuating these myths, and must understand their position of power.

Myth 1
Craftspeople can't be expected to design contemporary products; they need to join with someone who has exposure in the urban and international markets.
On the face of it, this seems a logical and reasonable stand. So the trader, the design house, and the merchandiser emerge apparently to support and help the crafts community. Then, slowly a lucrative market compels the industry to move to the next scale of manufacture; and without real freedom to become informed, to debate, or to choose, the crafts community is sucked into a social change the consequences of which are not foreseen and very often destabilizing. This is the real problem—the change uses inequitable processes and decisions which often don't include the craftsperson's point of view.

5 Larry Keeley, *Facts, Forces, Fog: Reckless Guesses in a Time of Change,* Keynote address at Aspen Design Conference, June 2001 (published subsequently in *Blueprint* 186 August 2001).
6 Robert Chambers, *Whose Reality Counts?* (London: Intermediate Technology Publications, 1997).

But, of late years, these handicraftsmen, for the sake of whose works the whole world has been ceaselessly pouring its bullion for 3,000 years into India, and who, for all the marvelous tissues and embroidery they have wrought, have polluted no rivers, deformed no pleasing prospects, nor poisoned any air; whose skill and individuality the training of countless generations has developed to the highest perfection; these hereditary handicraftsmen are being everywhere gathered from their democratic village communities in hundreds and thousand into the colossal mills of Bombay to drudge in gangs, for tempting wages, at manufacturing piece goods, in competition with Manchester in the production of which they are no more intellectually and morally concerned than the grinder of a barrel organ in the tunes turned out from it.[7]

Note the word "democratic" used to describe the way products were produced. Urban guilds and village community manufacture were governed by strict rules and laws that made sure there was a distribution of work and protection of the weaker members' interests. The societal framework allowed for what, nearly a hundred years later, Fisher says was an egalitarian framework:

In the co-operative, egalitarian society, there is fear of the independent self-reliant person, as well as of the "bossy" person. Strength and success are achieved by unity of approximate equals, who must be regarded as powerless alone, for if someone felt competent working by himself he might not cooperate with others when needed. Moreover, since directions for work are given on the whole as subtle suggestions rather than as firm commands, a strong trait of obedience and responsiveness to the wishes of others is highly valued and useful.[8]

The crafts community always has lived on the above premise of "approximate equals," but now in the face of globalization and free market economy thinking, this social structure has given way to fierce competition, loss of quality, and the firm establishment of the "upper." So the myth that the craftsperson cannot design is sustained.

Government policies and development projects reinforce this notion of "inequality." For example, in 1998, the Government of India commissioned me "… to develop new designs which should be easily marketable in the global market." This project involved a community of traditional lamp makers in southern India. Note the language—I was not asked to "facilitate a process of design." I was asked to "provide designs." The implied notion here is that the craftperson is a passive recipient, and cannot be a co-creator.

7   Sir G. Birdwood, *Industrial Arts of India* (London, 1880).

8   J. L. Fischer, "Art Styles as Cultural Cognitive Maps" in *The Sociology of Art and Literature: A Reader,* Milton C. Albrecht, James H. Barnett, and Mason Griff, eds. (London: Gerald Duckworth and Company, Ltd., 1970).

The Designer-as-Facilitator

Charles and Ray Eames, in their "India Report," hoped that designers leaving the new Institute of Design would:

> ... leave with a start towards a real education. They should be trained not only to solve problems—but what is more important—they should be trained to help others solve their own problems. One of the most valuable functions of a good industrial designer today is to ask the right questions of those concerned so that they become freshly involved and seek a solution themselves.[9]

Has Indian design, in fifty years of the country's independence, empowered the crafts community to become "freshly involved" and "seek solutions themselves" on how to resolve this problem of designing for new markets? Have designers asked the right questions of the crafts community to lead to such empowerment? Perhaps it is now time to do so. "With adequate social opportunities, individuals can effectively shape their own destiny and help each other. They need not be seen primarily as passive recipients of the benefits of cunning development programs."[10]

So the point is not that craftspeople don't need links with experts—it's about the quality of that link. Is the link exploitative or authentic in its equality? Design needs to be seen as a powerful tool that can create and nurture this equality—by the institutions, the policymakers, and the designers themselves.

Myth 2
Craftspeople need to be trained in skills and new technologies.

Again, this is a plausible and reasonable statement. Without a doubt, the pace and intensity of change requires inputs from new skills and technologies. This is such a universal need today that it seems ridiculous to state the obvious. Yet, is the training effective? Doing things right is "efficiency," but "effectiveness" is about doing the right thing.[11] Does the current method of training create an empowered craftsperson through new learning that integrates both the technical and the conceptual? Is design contributing to the effectiveness of craftspersons' training? Traditionally, the craftsperson learned through apprenticeship.

Learning still continues this way wherever hereditary craft is practiced. Added to this are numerous government-run training programs and NGOs, who train people to learn a craft to provide a livelihood. And yet creativity, the mainstay of this profession, is not addressed through this or any other process. Craftspeople cannot create strategies for innovation; competence is seen only as a mastery of one or other technical skills. The craft sector has no institution dedicated to the learning, training, and growth of the people involved in it. There is no broad and long-term focus, and a dearth of good trainers in this field amplifies the problem.

9   Charles and Ray Eames, "The India Report," (A report written for the Government of India, New Delhi, 1958).

10 Amartya Sen, *Development as Freedom.*

11 Peter Drucker, *Management: Tasks, Responsibilities, Practices* (New York: Harper & Row, 1974).

Most training programs for craft are dull, lifeless, and do not take learning styles or needs into account when being structured. In today's plural society, subjects such as design, semiotics, branding, history, politics, philosophy, and cultural studies all need to be made accessible to the craftsperson. To paraphrase Neil Postman, "Can a nation preserve its history, originality, and humanity by refusing craftsmen access to creativity, innovation, knowledge, and fun?"[12]

Training with a Difference
To demonstrate what design can do to change this, I created a training program for craftspeople that was not Balkanized along lines of material or skill set. I used design and art pedagogy to "teach" creativity, reflection, critical thinking, analysis, exploration, and experimentation. It also relied heavily on visual language, movement, and doing rather than talking and writing. I realized that, in facilitating knowledge creation in this sector, a designer has to tread very humbly. I knew all too well how easy it is to destroy the objective by being insensitive to method, language, myth, symbol, and style. This five-day residential workshop was called "Aagaman—Listening to Craft." The ideas and work generated in this workshop by craftspeople, engineers, students of design, government officials, and NGOs demonstrated the importance of creating invigorating and challenging learning environments to generate innovation through collaboration.

In another project, I transformed a group of fifteen students from different disciplines of design to a "craft cluster," utilizing a traditional government-funded training program. The students, the craftspeople, and I engaged with the notion of design and the design process through a collaborative approach. Students and crafts workers talked together of sustainability and ways of seeing, clarified the lexicon, participated in hands-on classes on urban markets with discussions on form, styles, movements, ergonomics, selling, and myths. At the end of the program, I was convinced that design schools can contribute significantly to the formulation and delivery of effective training in the crafts sector, resulting in win-win positions for all parties.

To quote Kamaladevi Chattopadhyaya, "... the pride the craftsperson derives from his creation and the delight in the perfection of his finished product sustain him. It is this knowledge that is enshrined in our faith in crafts."[13] Most craftspeople do have an inherent pride in their work, if their work is accorded the due credit, remuneration, and status it deserves. And if they have training opportunities to empower them to face the onslaught of our changing times, they would encourage their children to continue in the trade. Creation of this kind of opportunity also would open up employment options for other people. With a really "fun" place to learn, which then facilitates the earning of a livelihood, we can attract people to a career in crafts. Compared to the professionalism,

12 Neil Postman, *Technopoly* (New York: Alfred Knopf, 1992).

13 Shakuntala Ramani, *Sari: The Kalakshetra Tradition* (Chennai, India: Craft Education and Research Centre, Kalakshetra Foundation, 2002).

ambience, and culture in our corporate offices, a typical government craft center looks and feels depressing. This urgently needs to be changed.

So the solution to address failing performance in craft is not to "let craftspeople have training"—that is the mediocre, rote, and one-dimensional training primarily responsible for the kitsch that fills our emporia. We ought to be preparing them for the future by developing their capacity to cope with the pressures of ambiguity and change, and empower them with resilience and creativity. Yet, who will bell that cat?

Myth 3
We must gear up to increase export—it is the best market for Indian craft (look at our software industry).
Government policies during the last ten years tend to see globalization as an opportunity for economic growth. The buzzwords are "craft for export" or "income generation through craft export." We are urged to follow the examples of our neighbors further East—Bali, Thailand, and China. The Export Promotion Council of Handicraft extols the few "houses of craft" that have become supply houses to the retail chains of Europe and the U.S. They are held up as the models to emulate, models that can be applied across every situation. India had a 3.8 percent share of the world handicraft trade three years ago, and this year it hopes to corner ten percent. Das shows the link between this myth and earlier ones:

> There is an old idea in economics ... that if a rich and a poor country are linked by trade, their standard of living should converge in the long run. It makes intuitive sense, because the standard of living depends on productivity, and productivity, in turn, depends on technology. When a poor nation is connected, it merely adopts the technological innovations of the rich one without having to reinvent the wheel.[14]

While everyone is happy (I am too) that India clocks another one-hundred-million rupees in the export turnover of handicraft, we need to ask if it changes the relationship of the craftsperson to his craft? This question was raised at the Bangalore workshop during a panel discussion on the future of craft. Some interesting insights emerged. Prem Chandavarkar, an architect, said, "Craft objects originally were objects of use as well of contemplation. A coconut scraper is a coconut scraper, but it also is shaped in the form of a horse head. The thinking and making of an object always was interlinked." Today, when we talk about making new designs or responding to markets, we are slowly separating the thinking and the doing. In globalization, craft is viewed in noncontextual boundaries. A craftsman in a village may be producing for a consumer in Mumbai or New York, and hence the act of creating is grounded in "market perception," and not a particular worldview. Chandavarkar also added:

14 Gurcharan Das, *India Unbound* (New Delhi: Viking, 2000).

Craft really is a rooted tradition—it is a process by which a community reflects on its condition—this sort of reflection is actually a search for identity. The more we move craft towards "market" and "customers," the more we move it away from its greatest source of renewal. That is not to say customer requirements are not important; rather there is a need for dialogue with craftsmen about ways of dealing with these concerns.

Related to this, Sen says: "We come back to the perspective of capabilities: that different sections of the society (and not just the socially privileged) should be able to be active in the decisions regarding what to preserve and what to let go."[15]

If pushing export implies the basic relationship of craft to craftsman and society is put under pressure, it would be appropriate to seek solutions that counter such an effect. When designers provide the craftsman access to larger markets through design inputs, they also have the responsibility to provide the concomitant tools and strategies that allow him to relate to the context, and thus greater control.

Design as a Tool to Decision Making
So export means great markets, yet the sense of identity must be protected. Design can be used to help make decisions, both to articulate possibilities and futures as well as weigh costs. With the new opportunities, craftspeople also must be provided with the means of relating to the new contexts, and thus freed up to make the "right" decisions. In the words of Coomaraswamy, "The heart and the essence of the Indian experience is to be found in a constant intuition of the unity of all life, and the instinctive and ineradicable conviction that the recognition of this unity is the highest good and the uttermost freedom."[16]

I see design as the integrator; the crucible within which to create opportunities for dialogue between customers and craftspersons, between buyers and exporters, and between the markets and the villages. Design can empower the individual craftsperson to create balance between these forces, and thus make the "right" decisions.

Myth 4
Craft is antiquated—it needs to get in line with the twenty-first century.
If the attributes of a decent livelihood were to be drawn up, then income, work conditions, growth, and development opportunities would figure as the basic minimum. Craft scores on all counts, and therefore often is used by NGOs to create livelihood options.

15 Amartya Sen, *Development as Freedom.*
16 Ananda Kentish Coomaraswamy, *The Dance of Shiva: Fourteen Indian Essays* (London: Simpkin, Marshall, Hamilton, Kent and Co., 1924).

On my wanderings, I met Maruthi, who studies law at a small town called Channapatna in the southern Indian state of Karnataka. His father was a craftsperson who used a hand lathe to make turned wooden products—utilitarian, ritual, and decorative. Maruthi also turns wooden beads in the morning on the veranda of his village home, before he leaves to catch the bus to college. Asked if he would like to make craft his career, he thought a bit and said he saw no reason why he can't do both—law and craft.

Every time I talk to craftspeople who highlight this flexible aspect of their work, I contrast it with the struggle the corporate sector is having with this idea. Social scientists tell us that we are living in the age of "flexible economies." In this age of networked connectivity, corporations advertise their workspace as "flexible" to attract employees. Flexibility often is portrayed positively as a way of creating work that is more meaningful and holistic for individuals. But in actual practice, the transition of a capitalistic industrial society into a post-industrial flexible economy can create "work environments and social structures that are elitist and divisive; with autonomy, discretion, and more meaningful work being reserved for small technical elites; while the remaining workforce is relegated to work that is low-grade, part-time, temporary, un-pensioned, and assigned in erratic ways."[17]

Here in India, craft is practiced most often in "flexible" scenarios. The craftsperson follows work methods and processes that are not standardized, but are integrated into his life and the rhythms of the community. "Simultaneous," "nonlinear," and "networked" are ways of thinking that come naturally to this community. It is part of their inheritance. It is a way of life. They don't need to learn about "flexibility"—they live it. It is ironical that the very strength of this type of production is perceived as a weakness—both by themselves and the world they interact with. The government tells them to standardize, the designer tells them to upgrade, modernize, and change, and the market tells them to make things they never have made before. They don't know which is the appropriate way to respond.

> Fortunately for the Indian weaver, while he slept like Rip van Winkle, the world has come a full circle, and having soared the skies plucking fabrics out of thin air, has now returned to earth, and is seeking its roots in earth-borne products. Western cultures are slowly turning away from the glitz of synthetic fibers and wash-and-wear clothes, and are reaching out for natural fibers and dyes that do not pollute the earth. The devastation of nature has brought humankind to its senses, and there is growing realization that we are of the Earth and we destroy ourselves when we destroy nature.[18]

17   Andy Hargreaves, *Changing Teachers, Changing Times* (London: Continuum International Publishing Group, 1993).

18   Shakuntala Ramani, *Sari: The Kalakshetra Tradition*.

I can see design used as a tool to clarify these issues and create ways to strategize and leverage the situation for the benefit of craft. The time seems appropriate too—the world seems ready to value traditional materials and processes, not spurn them. Craft could teach the citizens of the twenty-first century a thing or two about life and living. We need to listen and encourage, not condemn and force-fit. Design could be the means of creating this bridge.

The Role of Design Schools

The design school in India is a relatively new entrant in historical terms. It is not like an engineering college or a management school. It is not like a fine arts school, either. It combines the right brain with the left in its approach to pedagogy, itself a novelty in a culture like ours. It is this space that can and must take on the task of building bridges between the traditional and the modern, and the technological and the mythical, in our culture.

1. First, because of the available resources of young, energetic designers-to-be. They are the ideal ambassadors of such a process. They do not carry sufficient authority to intimidate craftspeople, yet they still have the required training and thinking associated with design. If the school also teaches facilitation skills, then the design student could collaborate with all the stakeholders concerned to visualize solutions.

2. A design school can spend longer periods of time on projects, with a component of research and engagement that purely commercial setups have trouble doing. Craft needs that kind of time.

3. Also, a school is a space where multiple stakeholders can converge, and since its primary function is learning, the environment is right for experimenting, investigating, and making mistakes. It is the ideal platform for multidisciplinary teams to begin the job of designing the frameworks and materials that can solve the problems of the crafts sector's search for identity, freedom to make decisions, and ability to face globalization, change, and growth in the future.

In conventional terms, so far design has been seen only as a contributor to the economics of craft. This narrow and shallow engagement is one of the reasons why the dissenting voices seem reasonable and true. Design must redefine its boundaries to go beyond this rather limited and circumscribed role to be able to contribute to the development of this sector. Sen says, "In looking for a fuller understanding of the role of design, we have to take note of its direct relevance to the well-being and freedom of the craftsperson, its indirect role through influencing social change, and its indirect role through influencing economic production."[19] I believe that the design school is the right place for this process of "role realization" to begin.

19 Amartya Sen, *Development as Freedom.*

Signboards as Mirrors
of Cultural Change
Gaurav Mathur

Change is the process by which the future invades our lives,
and it is important to look at it closely, not merely
from the grand perspectives of history, but from the vantage point
of the living breathing individuals who experience it.
—Alvin Toffler[1]

The young designers of developing nations are faced with conflicts of diverse kinds. Like many other young designers graduated in the recent past from the meager number of design schools in India, I belong to this community and have experienced the conflicts of opposing design ideals. Why is it that the informally trained designers of today, the many street artists and local craftsmen, continue to produce culturally entrenched designs effortlessly, while the formally trained designers cannot produce culturally-rooted contemporary works? And yet they consider local crafts, traditions, and skills of visual depiction as "nondesign." A country with a glorious design history today is considered best only at craft products, many on the verge of extinction. Why do the formally trained designers consider the local designs and manifestations of vernacular culture as inferior and taboo? Why do all congregations of designers in the country vociferate about the lack of design appreciation and design illiteracy in the Indian population in spite of the existence and history of a diverse visual culture and languages?

Visual Culture and Design Sense in Indian Tradition
A rich tradition of design exists in India. The influence of different cultures and religions gave birth to rich styles of design in fields as diverse as architecture, textiles, earthenware, and metalware design. The performing arts as well as the visual arts were at penultimate growth levels. A unique visual language developed in India, traces of which still can be seen in its many surviving crafts. Today, there are two, distinct visual languages in Indian graphic design, products, and architecture. The vernacular designs by the informally trained designers can easily be distinguished from the global and modern designs by the formally trained designers. The global and modern designs often overpower the streetscape in major cities by their sheer size and visibility. The Indian streetscape has evolved in myriad styles, carrying examples of regional variations from both olden and modern times.

1   Alvin Toffler, *Future Shock* (New York: Bantam Books Inc., 1971).

Globalization Forces

Nike, Coke, Pepsi, Kellogg's, McDonald's, Kentucky Fried Chicken, and Gillette are familiar names in any urban Indian home. Indians are accustomed to these brands, and along with them have adopted and idealized a culture that comes packaged with the goods in their promotional campaigns. The streetscape and the various media carrying the promotional campaigns were the first to witness a "culture shock." All media that had the potential for reaching the masses (television, radio, and cinema) were transformed to portray the popular global culture—more appropriately the American culture.

A foreign language and monotonous uniformity are replacing variety at an unprecedented rate. The underlying formal "Western" design practices have become the guiding principle. The uniformity can be seen in terms of materials, colors, layouts, and architectural sameness. Today, most signage, banners, and billboards look similar. The rich visual and symbolic culture is moribund. The uniformity and alien imagery are a part of the globalization package, which has brought in technologies and design practices without a complete understanding of their uses and cultural implications.

Cultural Transformation

Does the change in the streetscape manifest a broader change in the culture? Are the planted and transferred technologies from advanced countries responsible for the change? In the recent past, India and many other developing nations of the world have witnessed tremendous changes in their culture, mostly due to economic, market, and political forces. The interchange of ideas among people from different cultures has long existed, and people always have been fascinated by the unique and unusual things in other cultures. However, while these interchanges were few in earlier times, globalization has expedited the process of interchanges among cultures. It has reached a stage where the expedited interchange not only has enabled the emergence of a global culture, but has started threatening the very existence of local cultures.

Transforming the Streetscape

The conflict in Indian culture can best be witnessed in contemporary streetscapes. The large-format, four-color, digitally printed advertisement of a multinational corporation looming over the shack of a tire repair shop with its tiny, yet effective, hand-painted sign clinging to the base of the huge billboard is a common sight. Similar contrasts are not difficult to find. India is a land where extremes coexist; age-old technologies coexist with the high-tech world, bullock carts share the roads with Fords, and shanties are as much a part of the cityscape as are the numerous skyscrapers.

The streetscapes share a particular history and relationship with the people who inhabit them. In such a visually diverse environment, Indians decipher numerous visual clues from their streetscapes, constantly coding and decoding messages, and understanding more about their environment. The character and arrangements of streets, buildings, hawkers, and other activities are a reflection of the socio-cultural milieu. "Street furniture, architecture, transport, billboards, posters, packaging, animals, and people are all used in the media of calculated design and spontaneous expression."[2] So, Suzanne Langer's capsule definition of architecture: "It is the total environment made visible"[3] does not hold true in the Indian context. In India, it's not just architecture that constitutes the whole environment, but also other elements of the streetscape such as billboards, signboards, film posters, and banners. Often, these elements take dominance over architecture. Although the streetscape always has reflected the changes in the local cultures, today it is transforming at such a rapid rate that the local cultures are not able to digest the changes.

Signs of Changing Times

As a part of the streetscape, signboards are on the center stage of the cultural transformation. Signboards and billboards differ in many ways. Often unique to a shop and a particular location, they can take the liberty of being culturally biased. Their main purpose is to inform, stimulate, motivate, convince, and lead viewers to a product or service, and to create in the mind of the viewer a positive attitude towards the message being propounded. Moreover, the most pertinent factor in deconstructing signboards is that they form a part of the "identity" that is deliberately created to project a desired personality. This fact suggests that signboards are culturally relevant, and reflect the aspirations of a group of people. Signboards fall neither into the domain of craft nor in the domain of art, they can be positioned somewhere in between the two. Following Alvin Toffler, we will attempt to describe the chronological changes that have occurred in the design and manufacturing of signboards from the point of view of people involved in this process. By analyzing the signboards, we hope to arrive at some generalizations that may be applicable to other crafts.

India in the pre-independence period and from the 1950s to the late-'70s, fresh from the freedom struggle and reciting the mantra of "self-reliance," saw a surge in hand-painted signboards. The tradition of carrying forth the ancestral profession by the new generation led to a new breed of signboard painters. These painters, as in many other craft traditions, learned their skills through apprenticeships (Figure 1).

2   Barry Dawson, *Street Graphics India* (London: Thames & Hudson, 2001).
3   Suzanne K. Langer, *Feeling and Form* (New York: Scribner Book Company, 1977).

Figure 1
Signboards dominate the streetscape
in most cities.

4   Further information on the legend-
    ary modern artist is available from:
    www.sholay.com/personalities/new/
    mfhussain.htm.

Visual Language Comes into Its Own

The relatively small and naïve Indian consumer products indus-
tries provided a platform for these painters to display their talents
by painting large advertisement billboards. Elections offered an
opportunity for the mass production of hand-painted posters and
billboards. The long compound walls of the railway tracks and other
public buildings often were used to support advertisements.

The boom in the local cinema industry, now known as
"Bollywood," also provided the painters with much work, and
gave them an opportunity to experiment and develop a unique
visual language. The posters and banners for new films were hand-
painted because printing was too expensive. The lack of new large-
format printing technology proved to be a blessing for the painters.
Large billboards depicting closeups of popular local and national
heroes and heroines were given larger-than-life character by these
"untrained" but skilled artists. The most notable example is inter-
nationally renowned modern artist M. F. Hussain, who started his
career by painting film billboards in front of cinema halls in the late-
1930s.[4] Hussain's graduation from billboard painting to the interna-
tional modern art arena is proof of the immense talent possessed by
many such signboard painters.

Figure 2
Hand-painted political billboard.

Figure 3
Hand-painted billboards for Hindi film *Ganga Jamuna*, 1961 (Source: Prashant Agarwal, IDC, IIT Bombay).

Large studios with as many as fifty artists mushroomed in most cities. The studios undertook projects that varied from seasonal political posters to film posters and billboards, to advertisements and shop signboards. The painter-artists had established themselves as versatile professionals capable of handling such large tasks as twenty by ten feet of canvas, plywood, or tin painted using oil paint[5] (Figure 2).

Influences on Signboard Designs

This concentration of tasks and control of media had two astonishing effects. First, a set of conventions regarding the layouts and colors developed. These were quite evident in the film posters where, for example, the villain of the movie used to be depicted in shades of purple or blue, and the hero was depicted in pink and light brown.[6] Similar conventions also were common in typography, such as three-dimensional effects and perspectives (Figure 3).

Second, the various elements of the streetscape including signboards, film billboards, and advertisements began to influence each other: symmetric layouts and the use of grids from advertising, 3-D lettering styles and special effects from film posters, and illustration styles from older popular calendar art. These painters

5   Personal conversation with signboard painter M. Nimbalkar.
6   Prashant Agarwal, "History of Hindi Film Posters" (Unpublished dissertation, IDC, 1984).

Figure 4
Café Hind signboard almost seventy years old at Mumbai.

idolized calendar art gurus such as Deenanath Upadhyay, and tried to mimic their styles. Posters featuring the gods and goddesses of India, painted by a prolific generation of poster artists between the 1930s and 1950s including Kartick Das, S. Murugakani, S. M. Pandit, Yogendra Rastogi, and T. S. Subbiah, among others, also influenced the works of signboard painters.[7]

A good example of their influence on typography may be found at the Café Hind in the Hindu Hotel near Victoria Terminus, Bombay (Figure 4). The hotel still bears a seventy-year-old, hand-painted signboard; a simple but effective example of early modern signboard design. What is most notable about this signboard is the fact that the height of the Hindi type is equal to that of the English text. This visual correction was made possible by the highly trained eyes of the signboard painter. This skill almost was lost with the new breed of designers who learned fonts and layouts on computers. The new digital signboards, with smaller regional language text as compared to English text, demonstrate this lost skill.

The signboard painters had the freedom of selecting display typefaces from existing examples in sample booklets. The painter also had the ability to modify alphabets to reflect calligraphy appropriate for the specific purpose of his client. These were early attempts at creating expressive typography, an opportunity for the signboard painters to spontaneously display their talent and creativity. There was a visual language evident in the choice of fat, cursive, or calligraphic letterforms and the selected informal characteristics used to communicate what is Indian (Figure 5).

New techniques for illuminating signboards also made their debut in India in the late seventies. Incandescent backlighting, neon, and fluorescent tubes started appearing in prime shopping areas. Although these technologies were extensively deployed in developed nations, they had relatively little impact on the Indian market due to their lofty price tag. Currently, the neon-embellished signboards remain exotic and premium products, deployed only by shops such as jewelers, superstores, and malls (Figure 6).

7   The Smith Poster Archive housed in Special Collections at Syracuse University contains some 3,500 design specimens of popular chromolithographs (a.k.a. "oleographs," "calendar art," "popular bazaar prints," and "god posters") widely disseminated in twentieth-century Indian homes, shrines, schools, public halls, and workplaces (www.maxwell.syr.edu/southasiacenter/SmithArc.htm).

Figure 5
Signboard painted directly on wall,
Meerut, U.P.

Figure 6
Neon lighting in shop signboards.

Innovative Use of Existing Materials in Signboards

The next major change in the field of signboard manufacturing came with the numerous materials used for cut letters. Wood and metal alloys were used in the form of engravings, danglers, and 3-D lettered signboards. Wood was used for making plaques and tablets. The embossed letters on a signboard gave it a new three-dimensional quality, the signboards gaining almost architecture-like personalities in the early 1980s. The advent of plastics changed the world of product design, and acrylic signboards made inroads into the Indian market during the same period (Figure 7). Acrylic sheet started replacing tin sheet. Signboard makers also used brass and other soft metals to produce letter signboards. The back-illuminated box signboards were put up in the early '90s (Figure 8).

New Entrants, New Tools of Trade

The change in materials had repercussions for the designs and the "designers" as well. Carpenter, electrician, metalsmith, and vinyl cutter were the new professions that contributed to signboard development. As with any new technology, acrylic cutting also initially came at a premium price. This price difference allowed hand-painted signboards to continue to flourish, and they found new markets in small shops with low budgets while large and image-conscious shops moved on to embrace the new technology. Since cut acrylic and neon signboards did not offer any real threat to the hand-painted signboards, many painters decided not to shift to the new technology. However, the new professionals such as carpenters and acrylic cutters with new tools of trade eventually dislodged the painters as the dominating professionals in the signboard market, and brought some novelty, variety, and richness to the medium (Figures 9, 10).

Signs of Globalization

At the end of the twentieth century, the neo-liberal economic stance and the postmodern geographic order created an obsession for a new form of identity—a global identity. Free trade, foreign direct investment, capitalism, and Western culture imports have all been agents of globalization. Popular American game shows or their adaptations are on television; advertisements developed in one particular culture are aired globally, and brands such as Nescafe, Nike, McDonald's, and Marks and Spencer are widely seen. "Indeed, we are connected, interchanged, exchanged, and, most important, denationalized."[8]

With the "coca colonization" of the Indian market in the late-'80s, the signboard industry received its first "culture shock." The cola companies relied on aggressive marketing tactics requiring methods of quick production. Since India lacked any ability for quickly manufacturing large signboards, many technologies were imported including large silk-screen printing, vinyl cutters, and large-format digital printers. These industrial technologies were relevant in the advanced countries due to reduced on-site labor costs and consistency in corporate identities. In India, they resulted in the design action shifting to the indoor and often extraneous design studios.

Along with the new technologies, multinational corporations imported a set of design guidelines for their use, and concentrated them in the hands of a few. The late-'80s saw the first vinyl cutter introduced in the market by the cola companies to expedite and expand their advertising coverage. The churning out of signboards increased at an unprecedented rate.

To blame the import of technologies for the Western influence definitely is not fair, at least in the signboard industry. Though the impact of vinyl cutters on signboard-making was, by far, the most widespread and noticeable, in time, the vinyl cutters made inroads into some other industries including vehicle graphics, glass etching, sticker-making, and *"bindi"* (women's forehead dots) manufacturing. Here, unlike the multinationals' approach, the technologies were applied by the locals to produce vernacular designs. These examples illustrate how identity can be retrieved with local initiatives and the use of modern and sophisticated technologies. Such initiatives did not happen in the signboard field. Was it a lost opportunity?

Design Conflict

Despite an increase in manufactured signboards, design did not show much evolution or variation. The prime reasons for this were the design templates issued by advertising agencies and the corporate multinationals. A strict adherence to these templates was required to maintain a global uniformity and standard in accordance with the corporate identity. The templates mostly were adopted

8   Willard Uncapher, "Between Local and Global: Placing the Mediascape in the Transnational Cultural Flow" (www.ctheory.com, 1994).

from those used in the Western world. There also was an aggressive marketing drive by most multinationals into unreachable areas to ensure maximum visibility for their products.

The signboards are facing a conflict because the introduction and dominance of particular technologies, on the one hand, have introduced variety by opening new avenues to be explored but, on the other hand, have reduced variety by imposing sameness in the output. This sameness is not limited to signboards, parallels can be found in television advertising, where the concept of a celebrity selling a popular detergent brand has been "Indianized," but only superficially. Other advertisements, originally filmed for another nation/culture, have had regional languages dubbed in to make them suitable for Indian audiences.

The cola and cigarette companies developed an innovative way to lure the shop owners to support and publicize their global designs. They offered the shopkeepers a free signboard if they allowed the corporate advertisement alongside (Figure 11). This strategy allowed the red- and blue-colored cola signboards or similarly colored cigarette signboards to penetrate every corner of the country. Even the local *paanwalahs* displayed sponsored cigarette signboards on their shops. Even though the traditional signboards still are made when a unique identity is sought, they compete with corporate-donated, free signboards that are standardized and mass produced. What chance does the older system have? As David Stairs rightly pointed out about the economic state of developing nations, "Dependence upon older, communal modes of economic participation—homemade, hand-painted signage, for instance, or printing presses shared by several owners—is more a matter of day-to-day exigency than of a conscious resistance to the West's dominant and domineering metaphor."[9]

9   David Stairs, "Okuwangaaala: The
     Persistent Vitality of the Vernacular,"
     Design Issues 8:2 (Summer 2002).

Impacts on Signboards and Professionals

The erosion of vernacular visual language from the signboard field probably is the most significant in recent times. The current state is the result of the disjointed shift from the traditional to the digital domains in design, relying on available fonts and symbols in a computer and over-bombardment of Western imagery. The mass production of signboards spelled doom for the skilled signboard painters, who relied on their talent to earn a living. There now were fewer jobs with ever-decreasing remuneration. The once growing business stood marginalized, and was patronized only by the informal sector[10] (Figure 12).

The painters who had worked for generations making signboards for shops, posters and billboards for cinemas and consumer goods industries, and occasionally painting number plates on vehicles or decorating trucks now faced extinction. People who can invest in the new tools of the trade such as computers, large-format printers, and vinyl cutters do a brisk business. Even those with less traditional skills and visual sense, but with the ability to handle modern tools, now dominate the market. The rest have been forced either to switch professions or cater to smaller shops. Many traditional signboard painters who had undergone an informal apprenticeship to learn artistic skills now have been replaced by the new "workforce": the digital machines.

It is interesting to note here that the hand-painted signboards, especially in the developed parts of the world, have acquired status though in India they symbolize inferiority and substandard produc-

10   The "informal sector" might be an unfamiliar term in the developed world, but it signifies a major section of the population in the developing world that contributes services and is comprised of self-trained skilled and often self-employed persons.

tion. An example is that of Balkrishn Arts headed by Mr. Vaidya who, ironically, now makes Bollywood film billboards for European markets since the demand has died in India, but abroad their billboards fetch a good price.[11] Since the craft of signboard hand-painting in India has been marginalized to a great extent, it probably will take a few years until it attains the status of a rare skill and returns with a newfound vigor. Then, perhaps, it will adorn not just small shops with low budgets, but will embellish the façades of big and popular showrooms, restaurants, and other shops.

From this comparison, an analogy can be drawn between the mobility of social status in a society to the mobility of status in business. The mobility of social and business status depended on the choice that the signboard makers made from the three options available to them: leave the profession, update their skills by either owning the latest technologies or maturing to designer-like roles, or explore new markets for their vernacular products.

Lessons in Resilience from the Signboard Makers

Cultures have moved closer, affected each other, and constantly are transforming. New global symbols have begun to exist along with the traditional symbols. Signboards, as case examples, have illustrated how the underlying cultural changes are affecting the streetscape at all possible levels. But as Capstone suggests, "It is also not, and that is often confused, the disappearance of certain cultural attributes that make a culture disappear or no longer exist. A culture is more than just the attributes that are displayed. It is a deeper, more profound system that makes the cultures distinct. Cultures converge, but they do not disappear, as yet."[12] They are converging towards one mono-culture, and this is difficult to digest.

Merely changing languages on signboards does not necessarily make them suitable to a region. The numerous multinationals also need to realize that creating superficial variations of a product based on regional preferences is not the perfect solution. The products need to be developed in collaboration with, or participation of, the consumers. Only then will they infuse completely with the lives of their users. The signboard makers, like many other traditional craftsmen with their close socio-cultural connections, demonstrate the example of a parallel-design community that interacts with their clients and their community in such depth that their products blend easily with the environment. Also, the influence of the new "mindset" often is not as severe on the signboard-makers as on the formally-trained designers. Culturally-rooted designs come naturally to the signboard makers, but the formally trained Helvetica-bred designers have to work hard to create culturally-sensitive designs. (Figures 13 and 14) Today, many signboard makers perform designer-like roles when they conceive the design, produce sketches, and then employ other professionals such as computer operators, sign-cutters, and electricians to execute their projects.

11 Ivor Vaz, *Billboard Blues*, Times Property, *The Times of India* (September 21, 2002).

12 Willard Uncapher, "Between Local and Global: Placing the Mediascape in the Transnational Cultural Flow" (www.ctheory.com, 1994).

Figures 13, 14, and 15 (page 92)
A few successful attempts at presenting culturally-rooted designs with the new tools of the trade in a modern, yet Indian, style.

The story of signboards and signboard makers reflects the cultural transformations in India. Many other traditional crafts that also have undergone similar transformations and marginalization can now look upon the signboard painters as models. The success story of a few signboard painters can be an inspiration for craftsmen in other fields to initiate change. By either adopting new technologies or by guiding the products from these technologies, the craftsmen can contribute and also command social respect as neo-designers of the new millennium. The ability to create culturally-entrenched designs should now be upgraded using new tools and technologies. Christopher Jones, while describing the craft evolution in his
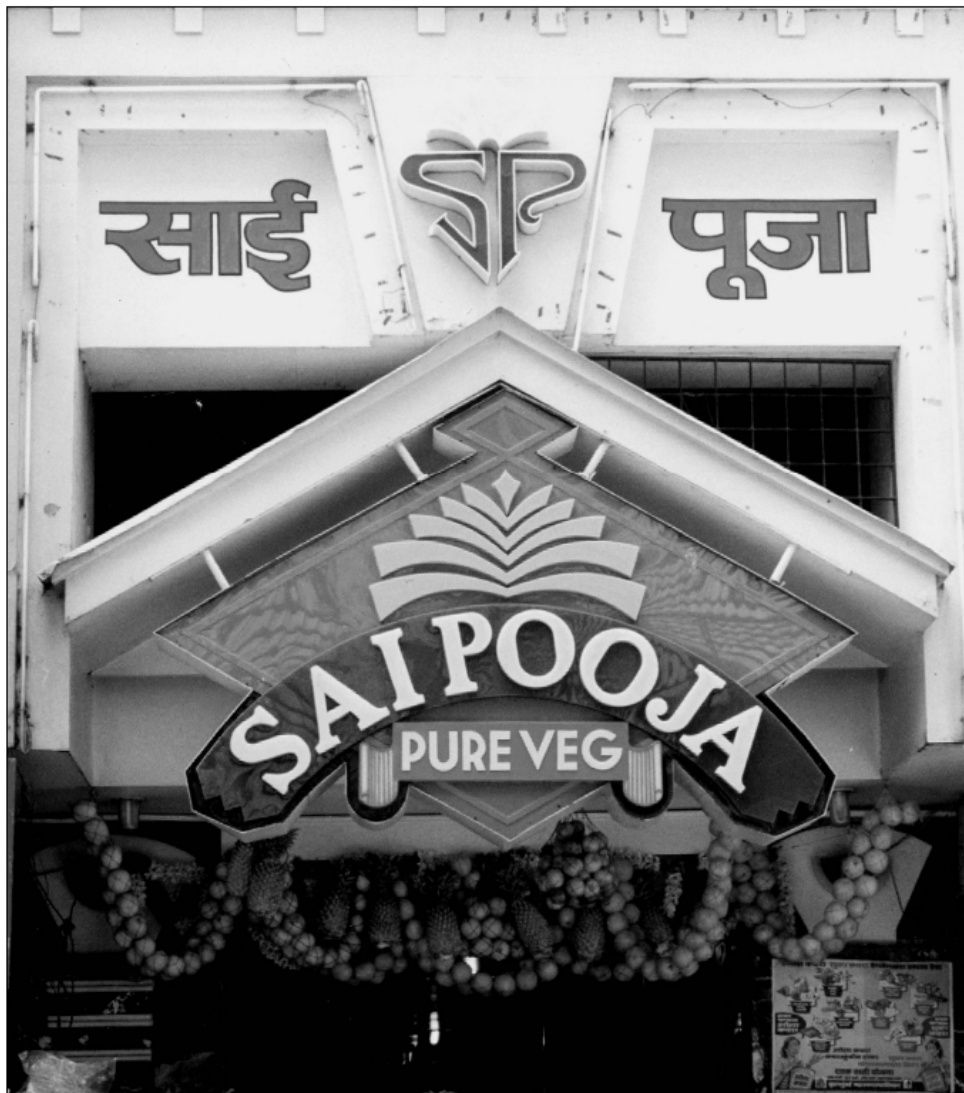
Figure 15

book, summarized the situation as: "We can see that the designers of the future can expect to find new fixed points of departure. Their job will be to give substance to new ideas, while taking away the physical and organizational foundations of old ones. In this situation, it is nonsense to think of designing as the satisfying of existing requirements. New needs grow and old needs decay in response to the changing pattern of facilities available. To design is no longer to increase the stability of the man-made world: it is to alter, for good or ill, things that determine the course of its development"[13] (Figure 15).

13   J. Christopher Jones, *Design Methods: Seeds of Human Futures* (London: Wiley-Interscience, John Wiley & Sons Ltd., 1970).

14   Sudhakar Nadkarni, "Design at Crossroads in India: The Challenge Amidst Confusion" in *A Design Perspective, Selected Papers by Faculty of Industrial Design Centre* (Bombay: IDC Publication, 1997). Readers might also be interested in the work shown in Steve Rigley, "India, Retooling the Culture for an Empire of Signs *Eye* 13:52 (Summer 2004): 56–64.

Even the formally-trained designer, at such a crucial juncture, has to respond proactively to the situation. A definite form can emerge through concentrated efforts even in the current state of flux. The ability to understand culture and the transformations taking place in it will provide the designer with an advantage for the design process. The designer can bring variety and richness back to the current banal and clichéd environment with a strong vocabulary of visual icons, languages, and symbolism rooted in the culture.

Whether we like it or not, globalization and its impacts are here to stay. Change is inevitable, and the design community cannot simply lament the past. It is best to ride the waves of transition and steer to establish an Indian identity rather than fall prey to the global semblance. The words of Professor Sudhakar Nadkarni seem ideal to describe the current transformations and the designers' dilemma: "Nowhere is a sense of transition more painfully apparent as it is in India today. This transition, arriving on the crest of time and spearheaded by technology as anywhere else, marks for us several changes: old to new, rich to poor and poor to rich, rural to urban, rusticity to chicanery, and most of all ... natural to artificial. While we welcome change as the harbinger of progress, we hold our own reservations about what this bridge to transition should be."[14]

Acknowledgment

The Challenges of a Sleeping Giant
Nina Sabnani

Animation may be the answer to India's multilingual, multicultural environment's needs, but who's listening? In a land where stories abound, and exaggeration, symbols, and metaphors are an integral part of the cultural language, it would appear entirely reasonable to claim animation and make it our own. Animation lends itself perfectly to direct communication without barriers of language or cultural differences. It is the language of imagination, and India is a country of myths and fantasy. So what seems to be the problem? Why are there no films or characters worth remembering? Why is animation in India largely a sweatshop industry? India makes eight hundred feature films every year, and yet when it comes to animated films, one can barely name one or two that have been made and not necessarily seen by the Indian audiences! One wonders if the Indian audience is not receptive to animation—or perhaps if animation in India is not truly Indian or not for Indians.

The Evolution of the Animation Industry
From being a propaganda tool to becoming a medium of expression and entertainment, animation in India has traversed a testing terrain. It has been synonymous with Disney cartoons, time-consuming hard work, intended for juvenile consumption, and the domain of those with extremely good hand skills. Perhaps the answers lie in the manner in which animation was introduced to India and continues to be interpreted by media moguls. Perhaps animation never was claimed by the Indian film industry for itself. From its very inception, it was the child of the state. It stayed as a government monopoly until the advent of TV. Animation didn't come to India in a significant manner until the 1950s, although there were pioneer filmmakers such as Dadasaheb Phalke, Gunamoy Banerjee, Jehangir Bhownagery, and Mandar Mallick,[1] to name a few who had experimented with animation.

Animation's potential as a propaganda tool was perceived by the government, which set up a special Cartoon Unit for animation at the Films Division in 1945. UNESCO and the U.S. Technical Aid Program brought an ex-Disney animator, Clair Weeks, to the Films Division in 1956 to train a group of animators who have contributed to the animation industry in India. Notable among them are Ram Mohan, Bhimsain, and the late Kantilal Rathod. Clair Weeks also trained the first batch of animators at the National Institute of Design in 1980. In the late '50s, the Films Division made some really interesting films that experimented with the miniature painting style as in

1   Jayanti Sen has been able to find more on the contributions to animation by filmmakers in East India. See "The Neglected Queen of Indian Animation," *Animation World Magazine* 4:7 (October 1999).

Figure 1
Bheeru No.1
Duration: 7 minutes, 41 seconds
by Uttam, Parag and Mehul
Synopsis: The film is inspired from the typical structure of film making in Bollywood. It comprises a range of emotions including action, romance, tragedy, comedy and the miracle popularity known as the "Masala Mix." (This film is done in Macromedia Flash with video as the final output.)
Producer: Ram Mohan

Radha and Krishna and the Ajanta fresco style as in *The Banyan Deer*.[2] The unit soon began to experiment with social awareness themes. Such films revolved around population control, national unity, civic hygiene, and similar public issues. While the issues they addressed were very important and meaningful, the manner in which they evolved tended to be simplistic. Take the example of family planning or population control. The film showed a man and his wife and two children standing under an umbrella while it is raining. Then the family begins to grow, but there is not enough room under the umbrella for everyone so some members of the family get wet. Moral of the story: don't have too many babies or you will not be able to provide for them. It didn't really solve the population problem, but it did get some laughs. These films were shown as shorts before the main feature in cinemas across the country. This really popularized animation in the pre-television days, and contributed to awareness of the medium. But since the subject matter of the films tended to be didactic, animation became synonymous with propaganda rather than as a medium for expressive communication. It is possible that it discouraged some from entering the field.

Without sufficient numbers of new films, cinemas also showed a lot of Disney shorts with Mickey Mouse and Pluto, and animation became synonymous with Disney. It stayed this way for many years until the cinemas stopped showing cartoons and newsreels, which were standard fare before the main feature. Possibly the theatres were not willing to pay for the shorts anymore, or were more interested in raising revenue from advertisements. Perhaps there simply wasn't enough time to show them. What happened is that animation left the big screen, and could only be seen at film clubs, among film buffs, and at national film awards ceremonies. Thus, the audience for animation disappeared even before Indian animation had an opportunity to make its mark in the industry. Those who were intrigued by animation had nowhere to go to learn animation techniques, and the technology did not permit individual efforts. Raw stock had to be bought with a permit, so only licensed production houses could buy it. And, if an individual really wanted to learn or make animation films, the only place was the Cartoon Unit, Films Division, or an apprenticeship in an advertising agency. Advertising agencies used animation sparingly, due to time requirements and the limited call for it. Animation became synonymous with labor and time, and therefore expensive. Before animation could be absorbed as an economic activity, it already was seen as a hole in the pocket.

As a result, there were very few animated Indian films, and little point having an Indian Animation festival. The National Film Festival had a small category for cartoons (the more common name for animation), and most of the entries came from the Cartoon Unit, Films Division, and invariably won all of the awards. Festivals dedicated to animation existed only outside of the country. Indian

2   For more details on the history of Indian Animation, see Jayanti Sen, "India's Growing Might," *Animation World Magazine* 4:7 (October 1999).

films could be sent to a festival only through the Films Division or the NFDC. If sent independently, the sender had to pay re-importation fees/duties to have them returned. There was no scope for a die-hard animator to even get his work seen, much less sell or get royalties for the work.

The Film and TV Institute in India (FTII) set up in 1961 does not have any specialization in animation to date, and the art schools were never really equipped for animation. This was before TV, before personal computers, and with virtually no training opportunities. Animation was seen as a domain for experts—those who could draw like Disney. Animation also was linked to children, so the Children's Film Society was the only funding body commissioning animated films. Cable TV was a long way off, so animation did not become part of Indian culture until Channel V and MTV made animation popular in the '90s.

Animation Training at the NID

Animation activities began at the National Institute of Design in the mid-1960s, with Ishu Patel emerging as the sole animator from the Institute during the '70s. Foreign collaboration and funding helped develop the first level of trained teachers of animation. It was under the aegis of the Indo-U.S. Subcommission and the United Nations Development Program that experts such as Clair Weeks and Roger Noake (from the UK) came to NID for extended periods between 1980 and 1984 to train specially recruited faculty.[3] Both believed that animation could become indigenous to India, and helped to shape the program to meet Indian needs. The Advanced Entry Program in Animation began in 1985 and, by 1989, courses were being offered at the graduate and postgraduate levels. With no real animation industry in India at the time, it was more in anticipation of a future need that such a program was initiated. The general awareness of animation was so poor that people actually would call up and ask for the "ammunition" department! Films made at the NID found no venue for display except at foreign film festivals. And even that was only possible with duplication on videotape because sending films to several festivals in the film format was prohibitively expensive.

The Animation Program at the NID encourages its students to explore various approaches to the medium, and to find innovative means of communication. Apart from acquiring the requisite skills, students had to bring their own observations and concerns about their environment to their films. Students and faculty have made films on diverse subjects and issues, ranging from colonial hangover to reckless driving. The strength and versatility of the program has been proved by the worldwide recognition given to its student films. The films have been selected for screenings at prestigious competitive film festivals in Ottawa, Stuttgart, Hiroshima, Lisbon, New York, Mumbai, and Trivandrum, and have won a number of awards.

Figure 2 (above)
Alpana
Duration 3 minutes, 35 seconds
by Prasun Basu
Synopsis: A film inspired by the Santhal dancers of Bengal. It is an exploration of bringing together hand drawn and digital media. ©National Institute of Design, Paldi, Ahmedabad, India (2002).

Figure 3 (below)
Kabad Khan (Rag Picker)
Duration 6 minutes by Sonali Bhatia
Synopsis: The trials and tribulations of a man who collect garbage and makes it useful. The film is made in the stop motion technique. ©National Institute of Design, Paldi, Ahmedabad, India (2001).

3   Excerpted from Nina Sabnani, "Frame by Frame," a paper presented on animation training in India, NID 1992.

Figure 4 (left)
The Protagonist
Duration: 3 minutes 15 seconds
by Prakash Moorthy
Synopsis: The age-old story of Divide and Rule in a little place in Kerala. ©National Institute of Design, Paldi, Ahmedabad, India (1987).
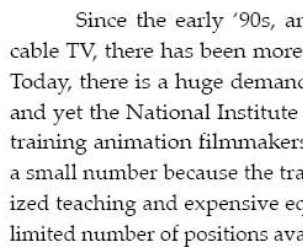
Figure 5 (right)
His Master's Choice
Duration: 6 minutes 55 seconds
by Shrinivasa Bhakta
This film is about Colonial Imperialism in Bengal in the early twentieth century. ©National Institute of Design, Paldi, Ahmedabad, India (1994).

4   For a further discussion on this theme, see John A. Lent, "Animation in Asia: Appropriation, Reinterpretation, and Adoption or Adaptation," www.latrobe.edu.au/www/ screeningthepast/firstrelease/fr1100/ jlfr11c.htm (Uploaded November 1, 2000).

Figure 6 left)
All About Nothing
Duration: 9 minutes 30 seconds
by Nina Sabnani
Synopsis: A stop motion film that conjectures on how the zero may have been invented. ©National Institute of Design, Paldi, Ahmedabad, India (1989).

Figure 7 (right)
Pakki Naukri
Duration: 4 minutes, 40 seconds
by D. M. Jagdish
Synopsis: The outcome of a permanent job in India is satirized in this film. ©National Institute of Design, Paldi, Ahmedabad, India (1991).

Since the early '90s, and more so since the rapid rise of cable TV, there has been more opportunity for Indian animators. Today, there is a huge demand for animation education in India, and yet the National Institute of Design remains the only site for training animation filmmakers. However, the NID can train only a small number because the training requires intensive individualized teaching and expensive equipment. Also, there still are only a limited number of positions available for such qualified individuals. In addition to the NID, several "institutes" of animation training basically teach animation software. Individuals emerging from these so-called animation schools call themselves "flash animators," "3D animators," and so on. They know the tools, but are not equipped to conceptualize or visualize ideas. They form the large labor force that is servicing the production industry.[4] NID graduates are working at TV channels such as the Cartoon Network, Channel V, and MTV as creative directors and producers, as well as with animation houses such as Famous, TOONZ, 2NZ, RM-USL, and Animagic, among others. There, they are given a free rein and encouraged to explore their own approaches. Some of them, including Vaibhav Kumaresh, Arnab Choudhary, and Prakash Moorthy, have evolved strong individual styles. Others have been absorbed into the animation industry overseas. NID graduates do not necessarily fit into the "sweatshop" industry. They often end up establishing their own shops or joining smaller production houses doing original work for the domestic market.

The Present Scenario

Contemporary animation discourse in India continues to be traditional in its content and approach as far as the industry is concerned. While modern and innovative approaches and personal expression in animation are being cultivated in educational institutions, they do not find resonance in this conservative industry. With the changing economic and technological scenario, some things have changed dramatically while others remain the same. It is possible to make animation films with just a computer and some software, without acquiring raw stock, renting animation cameras, or spending enormous amounts just for a simple dissolve. And yet, independent animation is like the poor farmer who tilled the land when we had kings and queens—he continued to till the land after Independence and TV, and continues while we chat online. Animation is not accepted in the same measure as Bollywood. Animation is not as glamorous, so it does not attract investors.

The problem also lies with the content of animation and the intended target audience. It is possible to identify the problems and phases experienced by the country by looking at the live-action films, mainstream or otherwise, made in India over the decades. This is not the case with animation in India. We have had a spate of films about the Ramayana and Pandavas, and now there is talk of Krishna. Such films do not address current situations or concerns. Indian audiences are not getting anything they can identify with. Most films employing traditional storytelling address the Western audience that wants an exotic India—not the India of today. And it even is not necessarily what the West wants, but what media moguls imagine the West wants. Focusing exclusively on the country's rich, historical tradition robs the average Indian of current opportunities. Some of the films being produced are directed at nonresident Indians who need to introduce their children to their cultural heritage. The Indians in India will continue to argue about the oversimplification that occurs in turning the epics into animated features, while others would rather watch the "soaps" dealing with everyday life. Obviously, there is no real audience for this sort of animation in India.

The nexus between the industry and training institutes is not very strong either. In most countries, art and industry drive each other, but the animation we see around us resists exploring such alliances. Animation as an art form is offered as a specialization in many art and design schools around the world, where it is explored from perspectives of drawing, illustration, and storytelling. Industry looks to these schools for fresh ideas and inspiration. The current relationship existing between Indian schools and the film industry is like a marriage of convenience. On the one hand, students need to cut their teeth on real-life projects, yet on the other hand, the industry needs a good portfolio to demonstrate in-house production capabilities in order to bring in big projects from overseas. This works well for now as they both get what they want, but this is not a sustainable,

Figure 8
Ae Bhai Zara Dekh Ke Chalo
(Look Brother Where You Go)
Duration: 3 minutes, 38 seconds
by Pavan Buragohain
Synopsis: A film about traffic safety and
crowded streets of Ahmedabad. First Prize
animation, I V fest, Tiruvananthapuram,1995.
© D' Three The Design Group (1993).

Figure 9
Whose Reality?
Duration: 6 minutes, 50 seconds by Vaibhav
Kumaresh
Synopsis: A film about the distance between
the governed and those that govern.
Silver Conch, Mumbai International Film
Festival, 2000. © PRAXIS Institute for
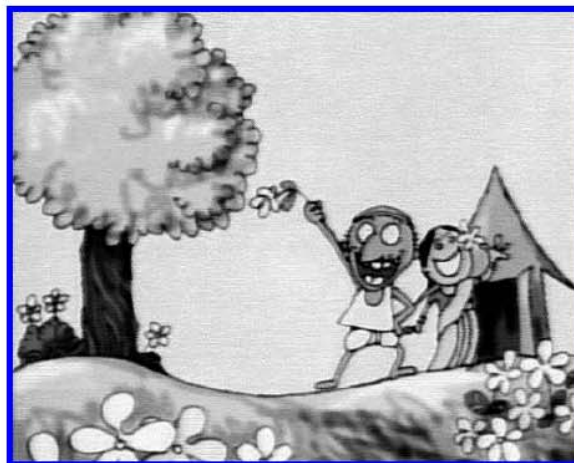Participatory Practices, Patna, India (1998).

Figure 10
Pudavai
Duration: 1 minute, 30 seconds
by Anitha Balachandran
Synopsis: A young girl's fascination with her
mother's sari brings it to life. Best Design,
Toonz, IN. SEA Animation Festival, Trivandrum.
Zagreb —2002 Best poetic film. © National
Institute of Design, Paldi, Ahmedabab, India
(2001).

sustainable, long-term relationship. As soon as a company gets a big project, it has no room for a creative person who wants to participate actively at the preproduction stage. And it may be quite difficult for the production house to actually indulge such a person. The industry cannot afford to take risks. However, animation students do not have these worries. They can experiment, explore, and push the envelope, the results of which can feed the industry. The schools can become laboratories for experimentation with content, structure, and styles. Encouraging this actively are Ram Mohan and Prakash Moorthy, who have been sponsoring student diploma projects giving a student free rein to explore storytelling, film language, and contemporary themes. While such gestures are supportive and welcome, a lot more is needed to make a difference and to bring Indian animation into its own.

The Sleeping Giant

It is said that animation in India is a sleeping giant and, once it awakens, will take the world by storm. Maybe this will happen. Or perhaps there are two giants: one has woken up, while the other still is fast asleep. The one that has woken up is the sweatshop industry, providing production facilities to film companies from abroad, while also providing job and training opportunities to many in India. It has its eyes peeled and fixed longingly outside for partnerships, and is happy to create some original work now and then, provided there is time and money. The second giant has its eyes tightly shut, and is scared to open them. Is it dreaming? Does it know its potential? This smaller giant can do a lot if it wakes up. It can create awareness about animation and its potential. It can create benchmarks for Indian animation, and make its own niche in the world, just like Bollywood. It can expand its audiences from children to viewers of all ages everywhere. It can finance, distribute, and showcase quality animation and still go singing to the bank. It can create jobs for students who emerge from animation institutes aspiring to create a revolution, and it probably can provide work for many production houses throughout the country. It is this second giant that we are worried about. Maybe this giant has a "Sleeping Beauty" syndrome, waiting for a prince to arrive.[5] This giant needs to realize that, in a democratic world, there are no princes, and that continuing to wait means sleeping on for another hundred years or more.

The challenges of the sleeping giant are many, but not insurmountable. They involve identifying and wooing an animation audience, as well as obtaining financing and distributing the films/content. The small giant needs to look around. There are lessons to be learned from the big giant. The Indian animation industry is a sweatshop industry because there is nothing Indian about it—nor is it addressing Indians in any significant way. It is based in India and provides jobs to Indians. This industry is big. In

5   Giannalberto Bendazzi, *Cartoons: One Hundred Years of Cinema Animation* (London: John Libbey, 1994).

2002, an Arthur Anderson report estimated the Indian animation industry to be worth $550 million and further anticipated growth to $15 billion by 2008.[6]

Clearly, there is a substantial body of professionals, quite active, and promising talent besides cheap labor. Ironically, animation still is not an established industry. There is no recognized body of animators, no trade laws, and no standards of operations. In July of 2002, some Indian animation companies in India came together to form a trade body (the name of which is yet to be decided) that will produce a white paper on the Indian animation industry, with facts and figures pertaining to exports, potential coproduction treatises, etc., while also promoting and protecting the interests of the Indian animation industry.[7] While this is good news indeed, one hopes that, along with their own interests, they also will extend their support to animators and animation schools that provide their talent.

One important lesson to be learned from the big giant is to raise the stakes. It makes sense—the larger the risk, the greater the responsibility and commitment. This will facilitate taking on larger projects such as episodic animation. The second lesson is to derive comfort from the existence of a large body of on-the-job-trained professionals who could service the domestic market just as well. A third lesson is to form an apex body of Indian animators committed to producing benchmarks, organizing festivals and film markets, facilitating loans and scholarships, and encouraging young talent. This body also could create standards for licensing, rates for payments, and platforms for coproduction. Yet another lesson from the bigger giant is knowing what to avoid imitating. It might be useful to do some things differently.

Reexamine Audience Engagement
The first step would be to reexamine this question about the Indian audience not being receptive. If the Indian audience could identify with the characters in the films, it would watch them. A country that loves the cinema and is willing to skip a meal in order to watch a movie cannot really ignore animation if it truly addresses issues that the average Indian can identify with. The live-action serial *Ramayana* (with lots of special effects) was so popular that streets would empty on Sunday mornings when it was aired.[8] The Indian audience should not be underestimated. This potential audience is close to 900 million if not one billion. The Indian animation industry doesn't have to look outside of the country for its audience!

The next obvious step would be to know this audience. There is no "one" audience, but niche audiences. No authoritative survey of Indian audiences and their expectations from an animated film has been made. This could provide the clues to what kind of films are needed. Much can be learned from the advertising industry that does this as a norm. Field testing the ideas also will strengthen the animation industry.

6   "Entertainment India's Second Largest Export" (Posted by Vidyadhara on May 22, 2002). Available at: www.indolink.com/Forum/India/messages/1713.html.

7   More information about the members of the Animation Association of India is available in *Animation Reporter* 1:2 (July–August 2002).

8   Mark Tully has cited incredible instances on audience behavior with reference to this serial in *No Full Stops in India* (New Delhi: Viking, 1991), 129.

Contextualizing Traditional Storytelling

If the little giant just looks around, he will find that India is a country where diversity is celebrated. India has been known to absorb everything in its fold, be it cricket or the English language. Defining anything as "Indian" is not easy. Shashi Tharoor has provided one of the best metaphors for India. In an interview, he said, "... if America is a melting pot, then, to me, India is a 'thali,' a selection of sumptuous dishes in different bowls. Each tastes different, and does not necessarily mix with the next, but they belong together on the same plate, and they complement each other in making the meal a satisfying repast." (A *thali* is a meal with Indian bread, vegetables, rice, yogurt, and lentils all arranged together on a large plate.)[9] Indians living in different regions are quite different from each other, and yet there is something that makes all of them Indians. This "something" possibly is their outlook on life and their philosophy of "live and let live." One such connection is a narrative tradition, although storytelling varies from one place to another. Indian stories have been the subject of some animation films, but the visualization concepts employed have been weak. Indiscriminate borrowings from the oral tradition do not consider the strengths of that tradition. Some of the films based directly on traditional stories haven't undergone the metamorphosis required for text to become audio-visual. The translation of an oral text into a visual medium is challenging, and unless skillfully done will be static. An oral narrative's focus is quite different: more about thoughts and abstract feelings, and less about visualization—all left to the listener's imagination. Take the example of the "Monkey and the Crocodile" from *Panchatantra*.[10] This text visualized as it exists would end up like "talking heads," a common result for narratives not scripted for animation. By contrast, the version of the "Monkey and the Crocodile" story by Vikram Seth in *Beastly Tales from Here and There* is so visual, it lends itself easily and beautifully to animation.[11] One of the greatest strengths of the oral tradition is its adaptability to the passage of time. An oral storyteller is constantly adapting the story and its events to suit current times and contexts, reflected in the use of language, metaphors, and events. This facilitates the audience's identification with the story's events and characters. The little giant can draw inspiration from this living tradition and "shape-shift" it to current times to draw its audience.

Finding One's Voice

The little giant may find to its dismay that, as a nation lacking pride in our own abilities to create, we copy. Is it necessary to imitate the best-selling West? Why reinvent the wheel? There can never be another Disney, so why not find one's own voice? The challenges of the small giant are also to address the issues of self-reliance and self-worth. The colonial hangover may not be over yet. This industry may not be the only one that is production-based. Looking at other areas such as textiles and fashion, the ratio of production versus

9   Shashi Tharoor is a diplomat and a writer. He has explored the diversity of culture in India, and written several books and articles. See http://resurgence.gn.apc.org/articles/tharoor.htm.

10   The *Panchatantra* belongs to the oral tradition, and is attributed to Visnu Sarma, whose existence has not been conclusively established. For more details, see *Book IV: Loss of Gains, The Pancatantra,* translated from Sanskrit with an introduction by Chandra Rajan (New Delhi: Penguin Books, 1993), 353.

11   Vikram Seth, *Beastly Tales From Here and There,* (New Delhi: Viking, 1992), 1.

Indian branded products would be significant. The Asian countries have long been the provider of cheap labor, and under the guise of providing job opportunities everything becomes acceptable.[12] It is true that a large-scale production provides jobs to a large number of people, giving them training opportunities and a steady income. But should we not concern ourselves with creative freedom and creative expression, too? There is an analogy from the ancient past for this argument:

> As Bossy says to Rusty in *Hitopadesa,*
> "A life which is well known to be
> Of learning, fame, and bravery,
> Though even of a moment's span,
> It is truly lived by man.
> For even crows can long survive
> By eating scraps to stay alive."[13]

Finance and Distribution

Where can the money come from? Most investors are concerned with return on investment, and thus time becomes a deterrent. TV channels want the films to fit into their program package, and investors want the films finished in the same time as live-action episodes. However, if animation turned episodic, these problems could be solved and the characters would gain more exposure. TV audiences are familiar with serialized drama. They are willing to wait a week for the next episode, and have learned to remember several stories at once. Episodic animation will create more awareness about animation and also build viewer loyalty. Episodic animation or series animation has been quite successful in several countries. In the UK, Mark Baker and Neville Astley have moved from making shorts to a series (*The Big Knights*) without compromising their style or ideas.[14] Revenues may be raised from advertising if a serial becomes popular. Even if the funding problem is solved, the other challenge is finding venues for such work. At the moment, TV channels are happy to show old reruns from Disney, MGM, or Warner Brothers at throwaway prices. Indian filmmakers will need to get beyond producing one-of-a-kind films, however beautiful, because program packaging is more important to a TV channel than just the quality of a film. Here again, serialization could be the answer. Last but not the least, where are the training schools? Investments are needed to train future animators, and not just for today's production labor force.

Another Way of Telling

The most important lesson the little giant needs to learn is to trust that we can deliver, because nothing is achieved alone or without having faith in another's ability. Like our petty kingdoms in the past, we are divided and fragmented in our endeavors. Everyone wants to start his or her own studio rather than work together. Everyone wants to start his or her own training school or, better still, join hands

12 For a further discussion on this theme, see an interview of Ram Mohan by John A. Lent, "Animation in Asia: Appropriation, Reinterpretation, and Adoption or Adaptation" available at: www.latrobe.edu.au/www/ screeningthepast/firstrelease/fr1100/ jlfr11c.htm (Uploaded November 1, 2000).

13 Narayana, *The Hitopadesca* (New Delhi: Penguin Books India,1998), 89.

14 *Animation 2D and Beyond*, Jayne Pilling, ed. (East Sussex, UK: Rotovision 2001), 10.

with a well-known foreign university rather than explore possible collaborations within the country. Look at other Asian countries: Japanese animation has its own identity; and South Korea is producing its own features. It is no longer just a sweatshop industry. Both Japan and Korea can boast of their own animation films and festivals. The little giant needs to join forces—work in large teams. This keeps the spirits high, and the team can take on more challenging work. Schools and industry can collaborate along with artists, psychologists, sociologists, and storytellers. Alliances could be formed with the huge Bollywood industry, which has no dearth of writers and lyricists. Animated characters can become household names, like Bart Simpson, simply from weekly exposure. Characters from everyday life can become heroes, far beyond those from the animal kingdom. The target audience need not always be children, and the films do not always have to be funny. Apart from entertainment, there is a whole edutainment industry waiting to be serviced, perhaps even a gaming industry? The films need not appear only on TV, a networked environment is all set to distribute content. Today, things are different. Indian filmmakers are exploring individual styles and contemporary themes, and this is only the beginning. The challenges are many, but there is hope for animation to become an indigenous form. The current scenario is inviting. There is a trained labor force, there is a huge potential audience, there is a strong storytelling tradition, and there are eager storytellers waiting in the wings. There also is a small but sizeable number of trained animation filmmakers. This is the final wake-up call. Is the sleeping giant listening?

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