NORTHERN LIGHTS

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I would like to focus this presentation on three issues:

1. ways to reduce our costs of housing by ninety percent as an example of how we can release vast resources towards accomplishing new goals;
2. forces at work today which are likely to demand major transformation in our cities, work, and institutions; and
3. ways to make our winter environments far more rewarding to live in.

HOUSING COSTS

Fifteen years ago, before the 1973 Arab oil embargo, I made the outrageous claim that we could reduce our energy use by ninety percent, while improving our quality of life. We're now well on the way to making that claim an accepted reality.

In 1981, I made a similar claim relative to housing costs. Expensive construction was being blamed for the growing unaffordability of housing. It seemed to me, however, that the problem must be elsewhere, for if housing techniques had become too expensive, all we needed to do was back up twenty years and build in older and quite adequate ways.

Unable to find any comprehensive study of what we spend on housing during our lifetimes, I made an attempt to assemble an overview. Out of it (Figure 1), I discovered a number of interesting things, as well as ways of bringing massive reduction in overall costs:

1. **Actual labor and materials for constructing a house constitute only a tiny fraction of our housing expenditures, less than ten percent!** Though substantial improvement in this area might be possible, and is continually being explored, its impact would be much less significant than changes in other areas.
2. **The biggest single expenditure we make for housing is finance charges; they now are double the selling cost of a house, make up more than forty percent of our lifetime housing expenditures, and soak up more than ten entire years of our personal incomes.** Finance charges are a monetary cost, not an economic cost, and are worth reconsidering to improve what we get from present policies. The magnitude of this cost, plus the penalty it imposes on construction with additional initial costs but major long-term savings, points to the priority for changes in this area.
   Realizing the absurdity of this huge cost burden for what in essence is an equal borrowing back and forth among us as each of us make an initial housing purchase, I proposed a no-interest revolving loan fund to eliminate this massive surcharge on housing. (Details can be found in "Hidden Costs of Housing", *RAIN Magazine*, March 1984.)
3. The second largest expenditure, and due to increase in the future, is operating energy. **Costs for energy average about twenty percent of lifetime housing costs, or as much as the entire purchase price of a home.** Techniques for reducing space heating and cooling by seventy-five to ninety percent are now widely known, and similar improvements in lighting and appliance efficiency are available. Removal of the financing cost penalty on initial costs of conserving technologies makes their true economic benefit far more visible.
4. **Over our housing lifetime, we spend about thirty-three percent of the purchase cost of a home on realtor fees**, as our homes are bought and sold every eight years. This cost falls into a different category, professional services that might be provided more efficiently in other ways. The use of a public multiple-listing service (now used privately by realtors), with handbooks for buyers and sellers, could operate at less than 1/1000 the cost of realtor's services, yet provide adequate service for the majority of sales.
5. **The economic cost of a house, the actual cost of construction, could be dramatically lowered by eighty to ninety percent simply by building more durably.** A house that lasts for five hundred years instead of fifty years only costs each generation that uses it one tenth as much as the fifty-year house. Durability incentives also lower insurance and maintenance costs.

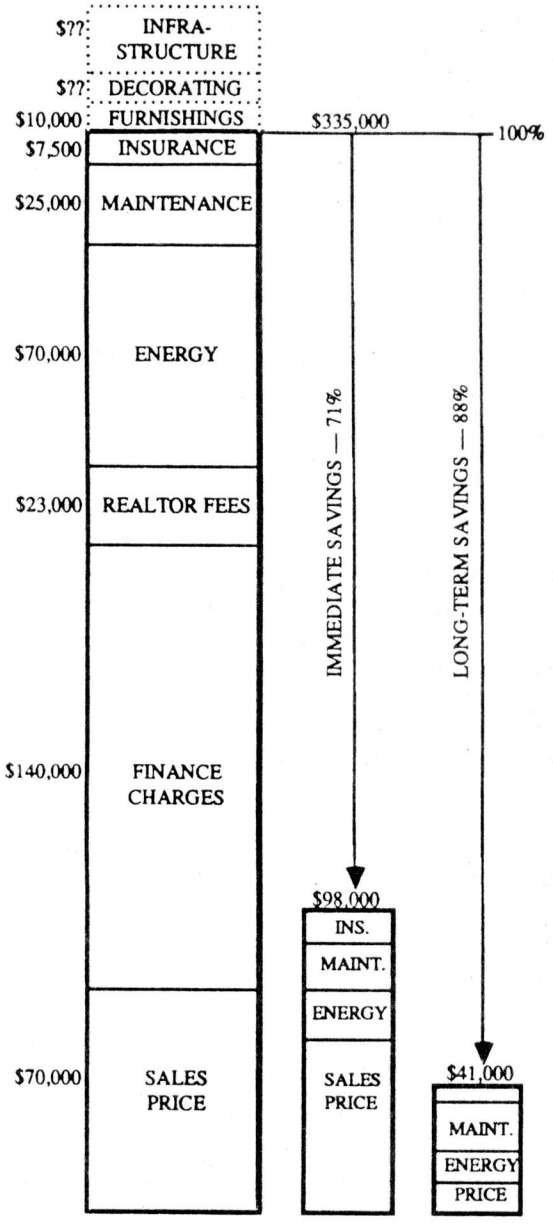

Figure 1. Lifetime Costs of Housing

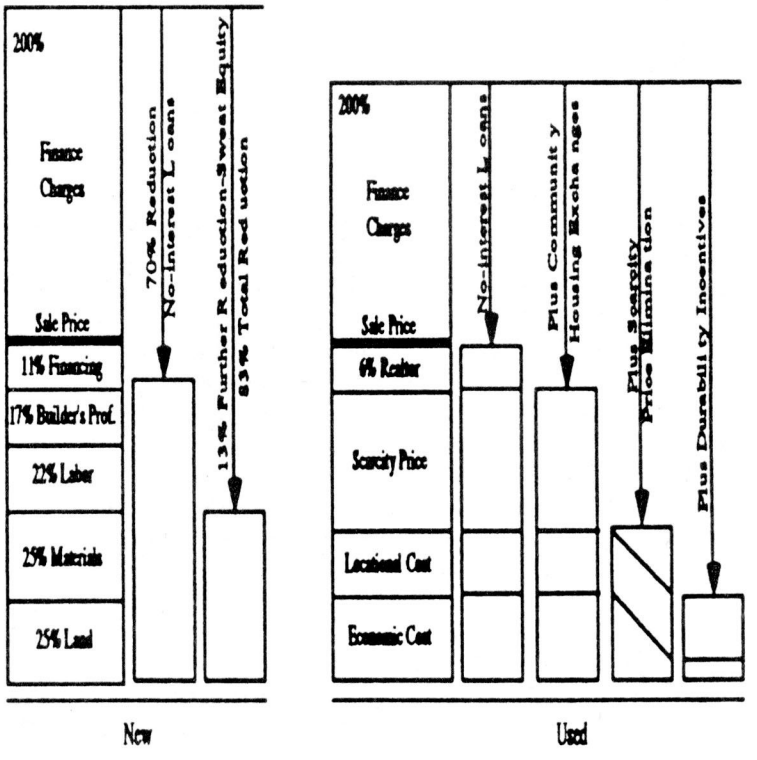

Figure 2. Purchase Costs of Housing

6. **The selling price of used housing is being kept artifically high because of a housing shortage.** In terms of economic cost, housing more than a generation old should be virtually free. Selling costs should be far less than for new housing. Creation of a housing surplus via a revolving loan fund can eliminate the *scarcity price* of older housing, creating additional reduction in housing costs.

This study did more than show how to reduce housing costs by ninety percent, or how to improve housing quality by a similar amount. Along with the earlier energy study, it confirmed that the vast amount of resources in all our institutions can be released for more effective application towards whatever goals we now value. It demonstrated the value of peeling back the layer of financial rules that obscure underlying economic realities, permitting development of specific strategies for each kind of component cost. And it underscored the basic economic significance of durability in its many forms and the value of planning for long-term economic benefit, rather than short-term financial *profitability.*

FORCES OF CHANGE

The second dimension I'd like us to consider is what unexpected conditions may force major changes in our urban patterns. One such condition, energy and resource limits, is already making initial impact on our lives and cities. Beyond its present impact on improving efficiency of use, its ultimate impact will require transformation of all our institutions whose present form has developed under conditions of cheap and plentiful resources. It already is focussing us into considering the special resources, needs, and opportunities of each region and climate zone, and into developing more effective and self-reliant patterns of work, housing, leisure, and economic activity.

A second, but more subtle force, is the convergence of research in many fields that is bringing a new understanding of ourselves and our relation to our world. Our recently discovered neuropeptide system, a body-wide mechanism of information transfer paralleling our synaptic nervous system, underlies our emotions and feelings as well as maintenance of body tissues. This system has been observed in all cells of our body and even one-celled organisms. We now must think of all living cells as having consciousness, emotions, and feelings. Psychological research is revealing the central importance of love, self-esteem, mutual respect, and being needed by others for personal, social, and environmental health. Discoveries in physics and archeology are supporting the accuracies of ancient oral histories and religious traditions. Ecological studies have demonstrated the complex value to us of even obscure and seemingly insignificant organisms and relationships. The *success* of our economic system has brought out the heretofor unasked question, "What do we do when our material needs have been met and other kinds of needs come to the fore?" Together, such new perceptions are altering our priorities, goals, processes, and sense of self, work, and value.

The third force I see having potential major effects on our cities is a fundamental change in balance of world power. Almost all systems in a complex modern society are extremely vulnerable to disruption. As the vulnerability has increased, so has the variety and simplicity of means of sabotage. The destructive power an individual can now wield against such vulnerable societies through terrorism is as great as through nuclear weapons, and may indeed force the abandonment of such weapons by all nations. The result is an immense increase in the power of individuals and small groups to have their voices heard and their demands brought before the communities of the world. Instead of having to meet only the demands of a majority, we now must begin to consider and meet the needs of all. This may force us to do some good things, and without question will bring a demand for fairness and equity, that will bring basic changes in our present resource allocation, institutional operation, and urban infrastructure.

NURTURING OUR SPIRITS

Finally, I'd like to suggest that along with these pressures have come exciting new opportunities to make life in our northern environments far more rewarding.

Anyone who has survived a northern winter will attest that what needs greatest nurturing is our spirits. Until recently, the difficulties of accommodating our physical needs, comfort, and safety has absorbed all our attention. With our growing ability to meet the physical problems of winter living, it is possible now to address the needs of our spirits and create winter homes and cities which have souls in addition to warmth, and which nurture our well-being and inner health as well as that of our bodies.

Modern society has been a *colonial* society, establishing almost everywhere foreign ways of life which are only now having the time and ability to develop love, respect, and passion for the places we inhabit and for all with which we share those places. Carl Jung and Laurens Van der Post have repeatedly made clear the damage to our psyche by keeping to foreign ways of life, which cut us off from the essentially unique kinds of nurture

that each different place gives to us. Lack of mutual respect among people and opportunity to live different lives in dignity have characterized colonial societies in almost every part of the world. History has repeatedly shown us that this leads to deep-rooted tensions, and disruptive reactions are untimately needed to restore balance, respect, and viable mutual accommodation.

The alternative, to which a colonial society can transform as it matures, is a sacred society. This occurs of its own where our understanding, respect, and love for the specialness and variety of others and our places has grown strong. It then causes us to nurture, rather than destroy, to bond together, rather than break apart, and to embrace the uniqueness which our surroundings and neighbours can give us. In such a society all our actions take on new meaning and potentials. Living, acting, and building with a sense that we and all that lies about us is sacred is only a reflection of specific patterns that our sciences now tell us are essential for personal and social well-being.

Sacred building, for example, is one at home in our universe. Our places always reflect how we see the universe around us. As we perceive certain harmony in our surroundings and reinforce that harmony in our building, we also strengthen our confidence in an underlying harmony and rightness in the universe, and in our ability to positively influence the mysterious forces affecting our lives. A Navajo hogan, an African kraal, or a Renaissance city all reflect a special view of the universe, consistent with the beliefs and the world their builders dreamed into being.

The Chinese laid out cities and homes in a geometry of cosmic order, with the ruler's palace to the north, facing the life-giving sun, and markets, roads, rivers, and houses located within both a functional and cosmic order. In the same manner, each member of the household and each activity had a prescribed place within inward facing courtyard homes, reflecting and reinforcing prescribed relationships within the family, society, and the universe.

Similarly, the delicate interlacing geometries of Islamic ornament infuse their buildings with a sense of cosmic order, reflecting the unfolding of the limitless forms of creation from a single source, as well as the eternally transforming relationships that tie together all of creation.

Sacred building is also building at home in our world. The oppressive, wet, Pacific Northwest winter is transformed when we walk in the silent, mist-filled, and moss-covered forests that the endless maritime rain brings into being as nowhere else on earth. The overpowering heat and dryness of the desert finds meaning and acceptance in what it in turn makes possible. The solitude and freedom from distractions of more peopled places, the overpowering sense of stellar space and time of the brilliant starlit nights, the epochal sense of geographical duration and change that arise from an earth unencumbered by a profusion of life are sensed nowhere else with the same power and intensity. The soul of northern winter lies in the powerful, seasonal cycles of growth and rest, of light and dark, of silence, solitude, and peace of life resting until a new season. It is a closeness to the stars and the wonder of the aurora, the beauty of sundogs, icefog, snowforms, and shadow. It lies in the preciousness of warmth as the soul of the desert lies in the preciousness of water. It is a demanding place, but not a hostile one.

When we live close to our natural surroundings, we come to know and love them deeply and to build in ways which reflect our sense of joy in being a part of them. A sacred building keeps us in touch with the rise and setting of the sun and moon and the cartwheels of the stars across our skies. It keeps a healthy native environment around it, so we learn the attributes and oddities of life long adapted to our particular place.

Every building that truly moves our hearts conveys one message over all, of the unhindered pouring forth of love and energy that has gone into its making. It is the unstinted, giving, love and perfection, as Wendell Berry notes, that an old woman pours into an intricate piece of crochet work she knows she will never live to finish, and is found alike in the hidden parts of Gothic cathedrals, the intricate design of Persian carpets, or the embracing warmth of a country hearth.

The way we build also reflects our attitudes towards others. It does this in how we give or refuse craftspeople opportunity to do their best, rather than least, to put their hearts, instead of just their time, into their work. In using the traditional design wisdom of a region, we honor the work, insights, and hard lessons of the past. By planting trees, we honor a will to have a future. Providing opportunity for birds to nest, wildflowers to grow, and squirrels to play, we honor the other lives with which we share our world. Allowing the natural contortions of materials to remain in our building, conveys the struggles and adventures of the lives that have been given up into the making of our buildings.

Paying attention to details shows how rethinking our building processes can transform our personal attitudes and values as well as our surroundings. Mirrors, for example, greet us at every turn in our homes, offering us images of ourselves at our unsuspecting worst, damaging self-respect, and reinforcing excessive attention to external appearances. Relocating a mirror inside a closet or medicine cabinet door, out of sight except when needed, can do wonders for our spirits.

Particularly in a wealthy society like ours, we

need to be reminded that what we leave out of a building can be as important as what we put into it. The trappings of comfort, convenience, and luxury often stand in the way of simplicity, peacefulness, and harmony. Richness and obvious beauty are not necessarily the best and deepest ways to move our hearts, and learning to let loose of our limitless desires is as essential in our building as in our lives.

In these and other ways, our surroundings reflect with absolute clarity our nature, our beliefs, and our dreams. We need such imagery to focus our energy and to visualize our goals. Our every action needs to occur within a physical and symbolic context which embodies, reinforces, and evokes the beliefs and values which we and our society embrace. We and our universe are sacred, and our actions must stem from that boundless source of love, joy, and energy.

We have both the opportunity and incentive now to take a quantum leap into better surroundings, better lives, and a better planet. We must remember that our destiny is not to conquer the stars, but to become worthy of them.

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