## **NETWORKED URBAN VILLAGES**

A treatise on the future organization of cities and an interconnected, healthy social life

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At the crossroads of a great turning, what does the state of the world promise for our future? Is there a better way forward?

The social and economic state of the world comprises long periods of calm, balance and stability in the cities, villages and neighborhoods of everyday life punctuated by explosions of economic chaos or social violence and conflict. On one side of the human ledger, violence facilitators like corporate oligarchy's, and obsessive militarism increase the frequency of violent episodes. These

At the same time the environmental state of the world is undergoing transformation detrimental to human life. Excessive human consumption and waste stress the climate, flora, fauna and the oceans. We

facilitators include cliques of profiteers who perpetuate rampant inequity. On the other side of the ledger are places where violence facilitators are kept in check, resulting in long periods of stability, calm and balance. The tragedy of today's world is that people know so little about those two solitudes. They are uneducated about or deny the reality or the causes of that violence and inequity: realities like ideologies that worship privilege and preach intolerance, fanatical religious beliefs, or thirst for power. Ignorance and helplessness fuel those these ideologies.

are assured by earth system science, biogeochemistry and systems ecology that, given the chance, the natural world can stabilize and adapt to even our worst abuses. But large numbers of people are uneducated, ignore, or deny how resource exploitation exceeds the capacity of the natural world to withstand the onslaught of unrestricted human growth. Human

disrespect for the environment and ignorance about science is at the heart of this looming environmental chaos.

Fueling the social and environmental state of the world are conditions of religious superstition, rampant consumerism, and fear of change. These are like poisons infecting living conditions; they create opportunities for crime and fear and they create a world devoid of social justice and deprived of respect for scientific inquiry.

The political state of the world remains clutched in the hands of the nation-state. This clustering of arbitrary boundaries draws as much from circumstance, fear, and greed as from geography. The modern nation-state is progeny to the feudal castle and fiefdom. But unlike feudal society, as Plato wrote long ago, the nation-state finds justice and order by looking to itself and it does that because of the ancient assumption that the nation-state is the individual writ large.

On one hand, nation-states may have helped lift millions out of poverty around the world, a process in part fueled by mass communication, transport, economic progress. Yet on the other hand, gross economic inequity and poverty still plagues nation-states around the world because nation-states have reached their effective limit in bringing humanity forward. They cannot authentically achieve social justice or economic equity. Schumacher once wrote in describing economic efficiency that small is beautiful. True, some nation-states in a few places have done better than others at social justice and economic equity. However, these tend to be the smallest and more representative nation-states. In the larger industrialized and corporatized nationstates such as China, the United States, India or Russia, the continuing reality of political purges, financial recessions and economic depressions illustrate that progress in justice and equity can easily regress. And, as recent times have shown, constitutions and customs do not guarantee protection.

It is unpopular to contend that nationstates are no guarantee of a truly just, equal and stable society, but popularity has never been the arbiter of truth. In truth, today's nation-state is governed less by warlord and more by the powerful unelected. While nation-states attempt to find solutions to world problems at the United Nations in security and peacekeeping, the persistence of civil and intra-national strife. genocide violence suggests they are spectacularly ineffective. Nation-states have created their own version of modern warlords, ethnocentric nationalism, and xenophobic patriotism and these are the breeding grounds for war and conflict. It is a truth acknowledged a half-century ago in the Russell-Einstein Manifesto, an anti-war document signed by a dozen world scientists including Nobel renown laureates Albert Einstein and Bertrand Russell: "The abolition of war will demand the distasteful limitation on national sovereignty".

In spite of some remarkable successes, and equally spectacular failures, nation-states have reached their limit. They have not become the panacea wished by their founders. They may persist for years to come, but they are living on borrowed time – they are not the way forward.

Now we face a great turning and, as always, there is another side to the calamity at our doorstep. It is an irony that, through this ebb and flow of history, we also currently enjoy a slow shift towards less violence and more civilization. To be sure, it is a subtle shift, sometimes barely perceptible, and there is nothing inevitable about progress. There can be no such inevitability when

such a large part of the world exists in social, economic, environmental, and political turbulence. To a lesser or greater extent, even the status quo in the wealthiest and most stable nations is in flux, a cautionary sign that warns us we may yet lose whatever achievements we have made through generations of

progress. As authoritarian nation-states re-emerge and anti-science sentiment grows, it is not difficult to imagine how we might lose those many gifts left by our ancestors in every field of scientific endeavor, from space exploration to medical science. We cannot allow that to happen.

#### What we believe

As tempting as it is to imagine the wholesale sweep of a political or economic revolution to wash away our problems, the ideas behind revolutions usually emerge from theorists and thinkers on high. In truth, building a better future cannot occur in thought trusts from the mountaintop. The rise and fall of communist or fascist systems, the reform unfettered towards capitalism. religious conversions to Christian, Muslim or other ideologies might first appear as attempts at large-scale transformation. But those large-scale efforts seldom lead to sustainable conditions that are better for the everyday person than at the beginning of the transformation. Instead, as we have seen repeatedly, conditions end up very worse. True, some elites may benefit – the rich and powerful. And it is also true that, at least in a few cases, material improvements to middle-class life does emerge out of large-scale transformations such as the free market of the United States or the market socialism in communist China. Yet there is another form of transformation that takes local turns and, given competent leadership and organization, it is based at a smaller neighborhood level.

Local groups and humanists can do remarkable things. Consider philanthropy in the developing world. The ideologists point to Christian missionaries who work in poor countries or large-scale government aid packages to poor regions in the world. But they are no better than their secular, non-governmental counterparts at delivering valuable, humanitarian help. Economic aid or resources to the starving by large nation-states might be larger in scale, but they are not more efficient nor well-meaning than smaller groups, such as doctors-without-borders. As international development specialists know very well,

with adequate opportunities and resources, organized and well-led local providers are often more efficient and effective.

This is a time for change and it is time to accept our individual duty to chart a better future. What Enlightenment philosophers called the social contract was breached long ago by generations of manipulative politicians, ill-informed leaders, and by the self-interested publics they led. Every time war breaks out, or another polluter assaults the environment, culpability rests with the politicians who hone the skills of influence and ignorance, leaders who sit back in complacency, and publics who obsess on their own selfinterest.

It is time to shed our adolescent ignorance and dedicate our societies to pursue the truths in the world, take positive action in the face of complacency and reassert that altruism and compassion occupy the highest of our values. For that task we do not require the obsolete legacy of our past — divine intervention or mystical guidance. Instead, we require reason, informed inquiry, courage and compassion, traits that have been with us all along but suppressed and manipulated by the egocentric and power-hungry.

This is a time for change and it is time to accept our obligation to learn and practice the truth of our social and environmental world. It is time we learned, in a far more intensive and intimate way, how to appreciate the diversity of the cultural world, and how cultural practices impact our wellbeing. For half a millennia, science and informed, compassionate reason have led the way to our wellbeing and technological progress, all too often a progress distorted by the ideologues of

the day. Yet, through it all, science and compassionate informed. reason gradually emerged as the most effective methods for operating an advanced society. They are the logical choices to chart our path forward. As astronomer Carl Sagan once said, science and informed reason are candles in the darkness. But they come at a cost; they demand free debate and honest dialogue based on scientific inquiry, a method that stands at the opposite end of ignorance and blind faith. This is what Albert Einstein meant when he said "Peace cannot be kept by force; it can only be achieved by understanding." And while science is part of our way forward, it must be a broad science unrestrained by its narrow experimental method and informed by the ethics of equality, transparency and compassion. As the method of science evolves, truth must remain its core mission.

The conditions outlined above stem from the reality of a finite world and the uncontrolled growth of human population. Our science and technology have been unable to educate enough of us how to make informed decisions on the consequences of uncontrolled human growth. All those conditions are related to, in one way or another, our adolescent level of political growth and our modest ability to learn how to adapt to the natural world. We govern ourselves from afar and apart while nature organizes itself through interconnection.

In the long trajectory that is humankind's social evolution, we are still children with a shortsighted view of our place in the world and the universe in which we reside. We replace our doubts with fantasies and seek stability through religions that, ultimately, offer up falsehoods. The less we are able to grow beyond these immaturities, the more we sink into ignorance and allow turbulence to overwhelm us.

To those unable to see this truth, the turbulence creates a debilitating state of mind. It creates a simplified culture of those who seek the simplest solutions or grasp at political potions and the comfort of the familiar. That is the true origin of ethno-nationalism, fascism, religious extremism, military dictatorships, and totalitarianism. Political potions offer simple answers to complex problems and they deny the scientific truths in the world. Ultimately such potions fail. While they magnetic appeal disenfranchised, they condemn us to dangerous adolescence as our technology becomes more dangerous with the growth of bio-engineering, artificial intelligence, nuclear proliferation and greenhouse gas emissions. Unless we shed adolescence, self-interest, and scientific ignorance, they will be the undoing of every step forward have accomplished over the millennia.

It is true that some superstitions and cultural ideologies work to minimize our misery, but they come at a cost. They replace our fear with their own simplistic solutions. They start by claiming the boundaries for morality: How should we act? How should we procreate? How should we think about the world? Because some of their adherents act in compassion for others, they claim the righteousness of their cause. Then they deliver prophets, laws, and canons from some magic on high. They tend to create followerobedience through blind faith making their followers vulnerable to political extremism, especially against minorities, non-believers, and outsiders.

The antidote to superstition and cultural dogma is to call into question the authority of their leaders. That antidote includes methods that, as objectively as possible, identify harmful behaviors and provide humane alternatives. That antidote

includes compassionate and non-violent living based in connectedness and humanism. That antidote includes a form of living similar to Think Globally, Act Locally. It requires a habitat in which people can see the world in all its

### What we propose

Why do we propose a transformative process in the form of transformed habitat? Surely, the macro-processes that created the conditions described above can be solved only with macro-solutions? Solutions at smaller scales cannot work? Our view is that assertion is usually false many substantial changes because already occur at the micro-level in daily life; people regularly discover new approaches through daily problemsolving. We may not hear of those solutions because we lead personal lives that are, as we describe below, mostly disconnected from an active public life. But there are examples emerging around the world that suggest that is changing and, perhaps ironically, an internet-ofeverything can speed the message. This is why we believe our local habitat plays a major role in how we live and experience our lives (and how we solve problems), especially our public lives.

In spite of some bright lights of social interconnection, an overall retreat from public life remains a major concern - a withdrawal from the discomfort of strangers and the fear of violence. There is a fear of the "Other" or the stranger who walks the street. Immigrants are seen as invaders and the anonymous outsider as someone to fear. Parents keep their children monitored and indoors more than ever and social rituals in the public realm, such as the mischievous trick-or-treating are moved durina Halloween, controlled areas of little risk, places where surveillance can protect them from, mostly imagined, terrors. As Robert Putnam explains in Bowling Alone, the role of diversity, and at the same time, form intimate relationships with community both near and far. A life worth living is one in which the humanity of the different person far away is a connected part of those living together.

public life is in decline. Why is that the case?

While there are many reasons for these social ailments, among the most important is urban form. The modern city comprises land uses with vast suburban swaths of streets empty of active life, save children returning from school and the cars of their parents returning from work. It comprises downtown residential towers that are too expensive for all but the wealthy, creating a nighttime landscape empty of public activity except bars, taverns and the homeless. It comprises massive office park precincts and business communities on the urban fringe where life ends with the close of the bell and workers drive away to eat and sleep and return next day to begin all over again, a modern twist on Dicken's industrial-age factory life where the monotony and emptiness of work dulls the worker into a coma. That's not true of all such places and all workers, of course, but it is true of enough to drive a wedge between post-work social gatherings and post-work social retreat. Nowhere is that truer than in the massive box retail store or the large suburban grocery store where sales are abundant, but social relations increasingly impersonal.

In such conditions, naturally, the builders and controllers of our habitat create places of vigilance and protection – gated communities to keep others away, public CCTV to watch strangers, and an increasingly privatized public space. After all, it is difficult to make sales when the nearby environment feels unsafe. As criminologist Thomas Raymon says in his

essay Designing-In Crime by Designing Out the Social, "everyday micro practices of avoidance cause social relations to become increasingly fluid, transient and anonymous, with a lack of social integration and a general interpersonal indifference among strangers."

We believe the first step towards reclaiming our public social life, and our sense of interconnection, is within our habitat. Where we live impacts how we live and, though we imagine we ourselves freely choosing where we live, in fact most contemporary urban environments are already designed by others who we do not know, usually corporations and developers who make design choices long before arrive. Our so-called freedom to choose our habitat usually comes down to the travel distance to work, the distance to nearby shopping and other amenities, and the cost of land. What if we had wider choices, more options, and a habitat that offered a much deeper social life?

#### Connection to Habitat

Above all other political systems, especially fascist or communist dictatorships, religious theocracies. corporate kleptocracies and feudal monarchies, and in spite of its flaws and inefficiencies, local democracy with checks and balances and a well-educated electorate, remains the most resilient antidote for confronting tyranny and ignorance. But this is not the democracy of large nation-states where cracks have emerged in the pillars of equity and efficiency, especially when corporateruled, unfettered capitalism infects the election process. Instead, we have a solution at a different and more powerful scale by scaling democracy down to areas of local habitat.

For thousands of years, human habitat evolved in the small village where local economies thrived and people developed close relations with those around them. In some cases, small villages were a place of resolution, or at least truce, between the tribes of our hunting and gathering days, and tribalism has been an age-old precursor to conflict and violence. Villages became a place for commerce and markets from diverse peoples and places, a place where different groups could exchange and trade. To be sure, there are flaws with traditional village life: the tyranny of the majority over minorities and inward-looking prejudice (flaws too often aggravated, not resolved, within the nation-state). One reason for such flaws was that traditional villages emerged in feudal societies infected with the very religious superstition discussed above. Further, most traditional villages were also absent of any meaningful form of democracy. Scientific inquiry was absent and governance consisted of monarchies, shamans, priests and others in the selfinterested clan. Open-minded accessible education was non-existent and

power sharing was rare.

Modern day urban villages, especially those embedded within cities, offer an opportunity to recapture the value of local meeting places, local economies, connectedness to familiar faces and through a local system of comprehensive education - scientific inquiry. To achieve that it is necessary to honor an educated and diverse population and assert a fair system of democratic decision-making. Of course, these are the goals of all modern, nation-state democracies. But embedded within the massive scale and size of most nation-states lives the flaw called the diffusion of intention – an inherent flaw of all large systems. This is a governance flaw of bulky bureaucratic systems that waters down the best intentions of leaders and impedes implementation of many of the most desired aspects of modern society.

Nation-states attempt to prevent the diffusion of intention by decentralizing functions and services, but that is an ineffective response for power-sharing and decision-making. Decentralization is not an authentic restructuring towards urban villages; it does not deliver the best elements of what Schumacher called "small is beautiful". The appeal from massive economies of scale and distant economic decision-making, so common in the modern nation-state, might benefit economic production, but it rarely satisfies a high quality of life in urban villages. Nowhere is that truer than with the suburban box store that sucks economic life from downtown stores and the virtual/regional malls that displace local economies.

How might the authentic restructure start? Urban villages must network with other villages and exchange their financial, social and cultural benefits with each other. That might take the form of a networked market, bartering of services, or knowledge exchanges. Networked urban villages might operate through direct product purchasing from urban villages that specialize in one product or food, and not all networked urban villages need produce food or a product. Some may offer technical skills, entertainment, arts, music, or multiple assets to the larger networked city.

There was a time when customers could order aoods from mailed catalogues - an older type of e-commerce prior to the Internet. That commerce was based on corporations that controlled larae distribution and production networks. Today, with global communication and a handful of shipping companies, the same can be achieved between specialized local centers and neiahborhood production facilities. Similar economies of scale compared to multi-national corporations will be difficult to achieve in the beginning, but as neighborhood networks grow in size and power, and as they harvest the services of larger companies to satisfy their own bidding (after all, corporations exist by serving the needs of their customers), the neighborhood village customer base will become the new economic model.

As Galbraith told us long ago, the New Industrial State manufactures demand for its own purposes. A reformed network of urban villages can trigger locally oriented, self-directed economies that manufacture their own demands. The corporations that remain will be those that service a growing network of customers who reside and work within or near, urban villages.

# Networked urban villages

Networked urban villages will trade between, their within. and local economies. Eventually, as their number increases, they will share their unique knowledge, education or skills with others across the entire urban landscape. We believe in the equality, if not primacy, of local democracies and therefore one of aoals must include creating opportunities for all to enjoy meaningful participation in local decision-making. If we ensure equal access to liberalized education based on science, reasoning skills, and creative expression, we ensure our electorate can vote with those skills in hand. That is a crucial step to help inoculate our future from the ills of medieval village life.

The so-called frailties intrinsic to human behavior, such as aggression and jealousy, are neither pre-determined nor

While inevitable. such traits are exacerbated by geographic and social tribalism, there are long periods of time when aggression, jealousy, tribalism and other violence generators do not ascend. An honest examination of the human timeline through history reveals as many, or more, years of peace, tranquil living, exploration, and trade conflagrations of war and violence. As research by psychologist Steven Pinker suggests, non-violence and peaceful tendencies are embedded into human behavior just as much as aggression and fear. The key to maximize non-violence and peace is to offer urban villagers the necessities of a decent and joyful life, access to knowledge and the capacity to understand it, scientific truths about the mundane and wonderful, and skills for ethical reasoning and secular humanism. Those gifts are already available throughout the world in different forms, libraries, and educational avenues. The networked village can be the place that provides easy access to that knowledge and those opportunities in both electronic and real forms.

In networked urban villages, education means learning, and contributing to the learning of others, far beyond the borders of the village. The networked village is, therefore, part of a much larger cultural and educational ecosystem around the world. Eventually, if we are successful, the power of Nation-states, with their harmful prophesies of xenophobic patriotism and militarism, will exist as a relic in our adolescent history. We will look back at nation-states as an artifact of our progenitors and a step along our evolution toward a better society. We should never forget that the World Wars between nation states, and the genocide within them, was once the zenith of our violent tendencies and we finally grew beyond those dark ages by practicing the ethics of secular humanism, compassion and interconnection. We must teach our young this message and use that knowledge to change our behavior toward a more mature collective existence.

Networked and ecologically interconnected urban villages offer a new way to overcome inward-looking and warring city-states that plagued our early history in places like ancient Greece. The patriotic nationalism of ancient city-states different than the patriotic nationalism of modern nation-states: both disrespect cultural differences and both act with blind self-interest. Thus, they triager the violent tendencies of human nature. From such conditions, war and conflict are inevitable and they ultimately destroyed those societies and others like them.

### A new narrative

The physical structure of urban villages will vary based on a range of factors, but essential element of their development or re-development is that they should possess an organic resilience. This refers to the ability to adapt to changing conditions and accomplish multiple goals in cases of economic, demographic and social change. Organic resilience is absent many neighborhoods that have very few ways to adapt to changing conditions, for example following financial recession economic adjustment after which local stores fail or the housing market collapses.

Organic resilience can have many faces: Public spaces in neighborhood could be designed to satisfy multiple purposes; neighborhood shopping districts can provide not only housing and entertainment, but also places where people might apply new ideas for commerce and art; a diverse population could include people of multiple ages, races, talents, and resources so that all their talents and resources might flourish. Planning and development practices that hamper organic resilience, such as single use zoning or covenants that restrict housing types, risk creating an adaptability deficit, the enemy of organic resilience.

Some claim ideal neighborhood sizes to range from 3,000 to 5,000 residents, with smaller subunits of 100 – 500. Others focus on the market span or educational reach of food markets or school catchment areas – walkability being the operating premise. Specific definitions of village size, boundaries and how transparent to make those boundaries will emerge from on-going dialogue within each

municipality, a dialogue itself bounded by the constraints and opportunities of local geography and the economic or social assets at hand. At all steps, however, there must be special attention to diversity, the celebration of that diversity, and the self determination of each neighborhood to make its own ethically-informed choices. The indigenous Maori people of New Zealand call this concept Turanga wai wai – a place to stand.

Another principle of this new narrative is placing a premium on pro-social public places. Today, that is impossible with vast swaths of parking lots, expressways, roadways, and sprawlina architecture that separates people. One way to start the shift towards pro-social urban design is to focus, as modern planning has learned, on walkability less about the transport of people and more about human-scale pathways that offer, not only easy and safe movement, but interesting things to see and do along the way. Outdoor socializing has been an essential element of all human cultures reaching back to ancient times when elders shared our myths during fireside story-telling. Today we celebrate during special festivals or during sporting events, but we need much more within the neighbourhood. Urban designers talk about these principles and, sometimes with luck, decent design, and opportune circumstances, they achieve them. But too often that is more rhetoric that reality, as corporate interests and investor capital eclipses walkability and pro-social spaces.

Walkable routes, paths, trails, and sidewalks, and design of human-scale, public spaces to support them. These are the building blocks that connect activity nodes within the urban village and to surrounding urban villages. One way to assess the success of human scale, social spaces lies in the neighborhood size and the walkways on which they are based. Perhaps a yardstick might be if the young and elderly can comfortably and safety walk across the village without getting exhausted or lost? In a neighborhood village of a few thousand residents with shops, parks, schools or other amenities, this will become a goal for the talented urban designer and developer.

# The ethic of the networked urban village

The operating ethic of networked urban villages must be an obligation to learn and practice the truths of our social and environmental world. That ethic must include learning in science and reason and, above all, it must cultivate a deep appreciation and compassion for the diversity in the physical, cultural and political world.

To put that ethic into operation, we need to:

- Shed our adolescent ignorance, violent tendencies, and accept our obligation for continued and intensive learning about all our environments;
- Create a society that practices social

- and environmental harmony;
- Learn, in a far more intimate way, how to form local democracies, embedded with compassion and accountability;
- Decentralize problem-solving and enable local decision-making to allow that to flourish;
- Construct a social ecosystem of urban villages throughout cities, with regional administration to ensure cross-system coordination for needed amenities such as water, sewer, and other utilities.

It may be possible to coordinate decisions and relations between villages through overarching agreements, perhaps a network of social ecosystems dedicated to keeping peace and fostering harmony. Large corporations, using their economies of scale and their mastery of production, should service the urban villages and their associated ecosystems, however they should never use their corporate power to usurp the quality of local life in those villages.

What about all the other types of human settlement? Other forms of habitat will still exist such as rural and agricultural life, central districts of dense entertainment and specialized services, and centers of technology and complex manufacturing. As with corporations, they will exist in partnership with urban village networks. Some may provide services or goods. Others may provide alternative lifestyles for those uninterested in urban life. Such is the nature of an ecosystem of networked urban villages. Today's urban forms and habitats will not vanish; they will adapt as we work to build this new dominant form of living. Many may choose to remain in the old forms of suburban sprawl, rural hamlets, or other types of habitat. That is the nature of change and evolution is a gradual process. Nothing will prove more convincing to the unconvinced than stories of success and examples of a more vibrant, safe, and sustainable habitat. The creation of a thriving and more connected lifestyle will remain the true measure of success for those building an ecosystem of networked urban villages.

Today in much of the developed world the dominant form of urban living remains large residential concentrations of suburban homes, urban and exurban apartment towers, and walkup residential buildings. In the networked urban village, a new form of urban living will emerge, one that builds on existing and cohesive neighborhoods. In The City After the Automobile, architect/planner Moshe Safdie describes how a "fundamental conflict – misfit – exists between the scale

of cities and the transportation systems that serve them. The automobile has devastated the physical fabric of both older and younger cities." Any new, healthy configuration for a city designed around networked urban villages will need transport innovations to bind them together and those innovations must provide comfortable and convenient movement. Long and uncomfortable waits at transit points, must fade into the past as a type of disrespect. Networked urban villages will include neighborhood hubs education, mentorship, celebration. They will offer young people opportunities to learn and practice the responsibilities of citizenship beyond schools so they can add value to any specialized education they might require or request. Hubs will allow both informal and formal education to coincide with real-life learning.

The geography of a networked urban village will provide access to a full range of the necessities of local life: food, health and medicine, recreation, supplies and services. In some cases that might require clustering a few villages around a hub. However it will differ dramatically from the clustering of today's suburbs where shopping malls and commercial strip developments, require cars, parking lots and vast distances of hostile architecture. The urban village will have higher densities, walkable paths protected from the elements with convenient distances from home.

Years ago, services were offered by general stores or corner stores but they rarely had the scope of life necessities to support an urban village. Sometimes, weekend farmers markets offer local food – a ritual from villages of old now re-emerging in cities everywhere. With advances in communication, transport, and electronic technology the new urban village will have much higher capacity to

deliver a more intensive scope of services. Local residents will not need to drive long distances to far away shopping plazas. Farmers markets, as well as art fairs, craft markets, and other forms of regional economies, can once again become a regular and frequent part of life, eliminating food deserts and creating food oases in every urban village.

### Steps forward

A transformation to urban village culture may seem tumultuous. Many things can go wrong.

First, habitat transformation promises significant change in the way we build and live and, as with all change, there is a tendency to fear calamity and collapse. Consider the collapse of empires and civilizations throughout history. Ancient collapses were typically triggered by perfect storms of environmental disasters, crop failures, famines and droughts, or in modern times economic over-reach, all which led to the collateral decline of central administrations, ruling classes and empire-based tradina routes. conditions today exist in a very different environment, especially complex technology, the evolution of artificial intelligence, and a global communication system in the form of the internet. Further, even our flawed democratic traditions, under attack from demagagues and modern dictatorships, still represent an enormous difference from ancient societies. None of those ancient societies were truly democratic.

The environmental crisis today may indeed trigger collapse of nation-states, but urban villages with local democracies in networked, economies of scale, have at their disposal a powerful and robust diversity of ideas, tools and experience. Networked urban villages are adaptable social and economic ecosystems. The basic lesson of ecosystem diversity is that that the more variable the life forms and activities in the ecosystem, the more robust

it is against environmental collapse. Urban villages represent an ecosystem of resources and provide a formidable antidote to environmental disaster. They provide an incubator for recovery.

Second, there will be a fear of regression to earlier tribalism and exclusion. After all, one predecessor to the modern nationstate were the city states of Greece, cities that were constantly at war or strife with each other. Local governance is clearly no guarantee, in itself, of a step back from xenophobia and territorial power politics. Most large cities today have large areas where residents live in isolated gated communities and practice another form of urban parochialism called NIMBY - Not In My Backyard. Immigration xenophobia is yet another example. It is important to realize that social anthrophobia is neither new nor surprising; people are often suspicious of that they do not understand and outsiders they do not know. As Indian philosopher/economist and Laureate Amartya Sen describes, identity with one group to the exclusion of others is not an inevitable process, although when it happens in the extreme, violence often emerges. All the more reason to sustain an intensive and interconnected network of educated citizenry in the urban landscape.

Therefore, the principle of village networking emerges as a crucial part of the urban village. In an urban landscape the distances between villages may not be far. In most cases they are likely to adjoin each other, making physical connectivity a simple matter. However, networking does

physically not only mean economically connections, but also social connectedness through a wide variety of strategies - exchange visits, shared festivals, cooperative agreements, combined markets, and others. While distinct cultures may exist in each village, the entire village network will require a loose urban confederation of transport, resource, cultural and dispute resolution mechanisms to ensure a coherence across the entire urban area.

Today the urban confederation envisioned here is non-existent. Many city halls and regional governments govern surrounding neighborhoods in a loose attempt at networked associations. Still other urban regions resist amalgamating nearby towns or small cities and establish a loose form of interconnected small cities across the megalopolis, what German geographer Walter Christaller described as central place theory.

However, neither neighborhood associations within the city, nor central place theory outside the city, describe the much smaller scale, and more tightly concentrated form of the networked urban village described here.

Third, there is always a fear of the tyranny of one group over another within the urban village. Medieval villages were not immune to self-serving power politics nor internal strife, particularly since democratic traditions were not the basis for power in medieval politics. Democratic decision-making is a core principle of the networked urban village through the primacy of individual rights, collaborative work alongside individuals who choose to work alone. and accountability/transparency during matters of important decision-making. One group's identity should never become the basis for control over others. These are the political antidotes to the tyranny of the group.

What then are the next steps forward? Incremental education and piecemeal steps? Wholesale rebellion and unrest? If we seize on the lessons of history, it is clear that both options are possible. Revolution and unrest, already underway in some places, is the quickest but most violent. Incremental evolution is probably the least violent, but it takes the longest. Further, given the environmental threat facing society, there may not be time before climate disasters force a revolution forward.

If we maintain the ethic of secular humanism and compassion, we cannot support changes that result in violence. We cannot become the society we desire by practicing the hypocrisy of its opposite. But ultimately, we may not have much to say in the path of change – it is happening upon us with increasing frequency everyday. Climate change is forcing that change and, unless the modern nation states - particularly those most powerful nations – take more decisive action and move beyond the climate deniers who populate the corporations, massive social unrest will emerge no matter what happens in political circles. The seeds of the collapse of the corporatized nation already sown. catastrophe will force events forward.

Our task remains to create blueprints for the aftermath. We need case studies, pilot studies, and real-life examples for the ecological, networked urban village. We need our story disseminated and published. We need to share this new ethic with others, particularly the young, and we need to map out how to expand the vision so that others who become embroiled in the chaotic unrest can see that there is another way forward.

We will need to protect networked urban villages as places of hope and progress from violence and unrest. That will be difficult but not impossible, especially with the kinds of innovation and genius that can emerge from a network of creative urban villages with free, engaged, and

educated citizens. This is the future to which we commit ourselves.