The Gardens of Democracy
By Eric Liu and Nick Hanauer – 2011

Seeds
I – Gardenbrain vs. Machinebrain

- The failure of our politics to keep pace with reality
- The way ideology prevents adaption
- New science gives us new sight about how the world works
- What must follow is a new story: about self-interest, the meaning of citizenship, the nature of the economy, and the role of government – the gardens of democracy

One thing that has made America exceptional thus far has been its ability to adapt and evolve. The failure of American politics to address and solve the great challenges of our time – climate change, debt and deficits, worsening schools, rising health care costs, the shriveling of the middle class – is equally a failure of will/nerve and of ideas/understanding.

Our ideologies are based, on the one hand, on a top-down approach that may have made sense in centralizing and industrializing the America of the past, or on the other hand, on a laissez-faire economics and “don’t tread on me” idea of citizenship that may have made sense in agrarian 1775, but is extremely destructive in the interdependent and largely urban society we find ourselves in today.

The idea of this book is not to find the center between the two disparate views, but to reach those who think independently. The following are paired truths that we must keep in our minds at the same time.

- The federal government spends too much money. The wealthy should pay much more in taxes.
- Every American should have access to high-quality health care. We spend far too much on health care in the United States already.
- We need to eliminate our dependence on fossil fuels. We need to ensure our economy continues to grow.
- Unions are a crucially important part of our economy and society. Unions have become overly protectionist and are in need of enormous amounts of reform.
- We need strong government. We need strong citizens.

The great challenge of this age is to change how we see, and by doing so, improve our ability to adapt.

At every stage in history, people operate within a constructed frame of ideas, metaphors, and narratives, but these frames are not fixed. Every so often, the idea set shifts radically, and with it our notion of what is good for us – we are in the midst of such a change right now. A set of quiet scientific revolutions now demands that we see in terms of systems – and enables us to make sense of them. We are far better able to answer the following questions than we were half a century ago.

- What kinds of systems make up our economy, or society, and the ecologies that sustain us?
- How are the elements in these systems connected?
- How do the agents (people) within these systems behave?

Science tells us today that the world is a complex adaptive system, not a linear equilibrium system; that the elements within it are networked, not atomized; that humans operate in that system as emotional reciprocal approximators, not rational self-regarding calculators. Taken together, these insights suggest a new narrative about how strong societies emerge, adapt, and thrive.

In every age, those who define the metaphors define the terms of politics. We posit in these pages that this country has for too long been stuck in a mode of seeing and thinking called Machinebrain. We argue that the time has come for a new mode of public imagination that we call Gardenbrain.
Machinebrain sees the world and democracy as a series of mechanisms, balances, and counterbalances. It requires you to conceive of the economy as perfectly efficient and automatically self-correcting. Even the word 'regulation' is mechanical in origin and regrettable in connotation.

Gardenbrain sees the world and democracy as an entwined set of ecosystems – sinks and sources of trust and social capital, webs of economic growth, networks of behavioral contagion. It forces you to conceive the economy as man-made and effective only if well constructed and well cared-for. It presupposes instability and unpredictability, and thus expects a continuous need for seeding, feeding, and weeding ever-changing systems. Tending frames the work as presumptively necessary and beneficial rather than as something to be suffered – as regulation is viewed.

Using the construct of Gardenbrain means that the standard for citizenship is raised; understanding the economy as a complex adaptive system fundamentally challenges and changes our notion of what wealth is, how it is generated, and why fairness and fierce competition are allies; and the question of what government is and how it should be constructed is based on our new understanding of social systems and the world around us.

II - Self-Interest - True Self-Interest is Mutual Interest

The fundamental shift of this second Enlightenment is from atomized individualism to networked interdependence and this forces a new concept of self-interest.

What is Self-Interest?

Politics in a democracy can be understood many ways, but on one level it is the expression of where people believe their self-interest lies. Fundamental shifts in popular understanding of how the world works necessarily produce fundamental shifts in our conception of self-interest, which in turn necessarily produce fundamental shifts in how we think to order our societies.

In recent decades, a revolution has taken place in our scientific and mathematical understanding of the systemic nature of the world we inhabit.

- We used to understand the world as stable and predictable, and now we see that it is unstable and inherently impossible to predict.
- We used to assume that what you do in one place has little or no effect on what happens in another place, but now we understand that small differences in initial choices can cascade into huge variations in ultimate consequences.
- We used to assume that people are primarily rational, and now we see that they are primarily emotional.

A Second Enlightenment and the Radical Redefinition of Self-Interest

In traditional economic theory, as in politics, we Americans are taught to believe that selfishness is next to godliness, i.e. the market is at its most efficient when individuals act rationally to maximize their own self-interest without regard to the effects on anyone else. We believe that an invisible hand converts this relentless clash and competition of self-seekers into a greater good.

Before the Enlightenment, the average serf believed that his destiny was foreordained. We no longer believe that and, in the same manner, our new understanding of the world means we now need to change our ideas of how our economy and our government should work. Driving the original change after the Enlightenment was a new physics and mathematics that made the world seem rational and linear and subject to human mastery. Our century is yielding a second Enlightenment, and the narrative it offers about what makes us tick, individually and collectively, is infinitely more sophisticated that what we previously thought. Across many fields the following changes have occurred since the 1960s...

- Simple – Complex
- Atomistic – Networked
- Equilibrium – Disequilibrium
- Linear – Non-linear
- Mechanistic – Behavioral
- Efficient – Effective
- Predictive – Adaptive
- Independent – Interdependent
- Individual ability – Group diversity
- Rational calculator – Irrational approximators
- Selfish – Strongly reciprocal
Win-lose – Win-win or lose-lose
Competition – Cooperation

Where the rationalist schemes of central planners on the left and market fundamentalists on the right have led to costly hubris, public policy informed by the new science should now lead to constant humility. No one is an island and someone who thinks he can take for himself, everyone else be damned, causes a society to become too sick to sustain anyone. True self-interest is mutual interest.

III - Great Citizenship – Society Becomes How You Behave
A new basis for understanding healthy civic life, drawn from the science and reality of interdependence and contagion

The Squeeze on Citizenship
All around us there has been a slow and quiet seepage of trust and responsibility, i.e. today we have a federal law requiring chief executives of public corporation to declare they are not lying in their corporate reports. Two things have happened to accelerate this...

1. Our ideology treats everything – including people – like costs to be reduced.
2. The state has encroached increasingly into arenas of civic action, reducing the space that people have to show up for one another. What used to be left to common sense is now prescribed by law.

What’s lost is the willingness of people to make judgments in situations that are not formulaic, but are messy and human, and then to trust each other to make the best calls we can. What’s lost, in short, is citizenship, or living in a pro-social way at every scale of life.

Central to the concept of citizenship is an ethic of sacrifice – and a belief that sacrifice should be progressive, i.e. when it is inconvenient as well as when it is convenient and the scale of the contribution should grow in proportion to the ability of the person to contribute.

Citizen Gardeners
The self-made person may be an American icon, but he is also a fairy tale. Citizenship is a recognition that we are interdependent – that there are values, systems, and skills that hold us together as social animals, particularly in a tolerant, multi-ethnic market democracy. Citizenship is an acknowledgement that humans began as a social species and have only recently developed the concept of individualism.

Machinebrain uses malevolence to cancel out malevolence in the hopes of generating benevolence. Gardenbrain sees citizens as gardeners, tending to the plots we share, each affecting the next – we form each other, we are bound up in each other’s choices and are not truly separate entities. Other societies have always paid more attention that we Americans to relationships among things and people than to the separateness of all objects.

Creating Civic Contagions
Ironically, the Gardenbrain concept enables individuals to claim more individual power than does the Machinebrain concept. One of the central facts of life on an interdependent web is that every action and omission is potentially powerfully contagious. Humans are generally copying machines and when people are free to do as they please, they usually imitate each other. Social networks affect every aspect of our lives. Most people are wired for reciprocity, meaning we repay good with good and bad with bad, even at some personal cost, just to reinforce group norms. As a result, even when good behavior is the minority choice in a bad setting, those who hew to good behavior can eventually prevail. This understanding of the world as networked, complex, and adaptive frames our perspective and should inform our choices.

Anti-social contagions spread more readily than pro-social ones and we need to follow the following rules for pro-social citizenship.

- **Small acts of leadership compound.** Small acts, tiny everyday choices, accrue and compound into tipping points because systems are fractally interrelated. Adults have to be more comfortable talking about and modeling character in the most modest-seeming of acts.
- **Infect the supercarriers.** If we look at good citizenship as a contagion – one we want to accelerate rather than to contain – then it behooves us to seek out the nodes of networks in every community whose influence and reach are disproportionate. The supercarriers are those who, regardless of station, are so trusted by others that they can make a meme spread very rapidly.
• **Bridge more than bond.** What sustains the ecosystem of citizenship is not reinforcing old and already strong ties (bonding), but building new and somewhat weaker ties with people unlike yourself (bridging). Great citizens build bridges between unacquainted realms, more than they reinforce bonds among people already close. Bridging spreads trust while bonding concentrates it.

• **Create Dunbar units.** Citizenship is moral and philosophical, but it comes to life only on a face-to-face human scale. Across all cultures and time periods, the maximum size of a coherent community has always been about 150 individuals – this is known as Dunbar’s number after the social scientist who named the phenomenon. We should be de-chunking ourselves into units of no more than 150, and then connecting the chunks. A small-town ethos situated in a high-tech web makes for effective 21st century citizenship.

• **Make courtesy count.** A cooperative consideration of, and deferral to, the needs of others is the start of true citizenship. At the root, courtesy is about subordinating the self, even if momentarily, and it breeds trust.

• **Trust in trust.** Trust is foremost among the social virtues that make healthy societies. When market actors behave in ways that erode the trust that citizens have in one another – as the Wall Street Banks did – they send a signal that trust is to be degraded. When the state acts in ways that erode the trust that citizens have in one another – by codifying a presumption of deceptiveness – the state is contributing to the depletion of trust. Trust is the DNA to be found in all the other habits of citizenship. It is what fuels the fractal impact of small acts of leadership. It is what empowers supercarriers to infect others. It is why we need to preserve a human scale for citizenship. And it is why courtesy counts.

**The Power of One**

There are latent dangers in the networked ethics described above...

• The tendency for individual to lose their voice and identity in the midst of the collective – "hivemind". Citizenship of the kind we are describing is the opposite of dehumanizing conformity, i.e. independent thought can be used as a contagion on those in your immediate circle. The individual actually has more power than in an atomized system. The corollary to always being influenced by others (which we are) is always being able to influence others (a power we dramatically underutilize).

• Simple bullying that majorities can use to swamp minorities. Cooperation, not conformity, presumes difference – and takes its moral value from the fact that joint action is undertaken out of difference rather than out of sameness. Behavior that is pathologically selfish, that breaks down group trust and cooperation, may very well be deserving of exclusion.

**How You Behave**

In a networked environment, where behaviors are contagious and can lead to cascades of anti-social one-upmanship, there is only one way to stop the spiral. It is up to the individual to recognize that society becomes how you behave – not anyone else but you.

People who study complex adaptive systems can demonstrate and compare the effects of the following two scenarios:

1. Others will act the way you act.
2. When you act in a pro-social way, the net result for you and everyone else is better.

This vision requires that people lean forward and engage rather than lean back and let things happen – a key component of good citizenship. Participation, freely chosen rather than incentivized or delegated, springs from intrinsic motivation – and intrinsic motivation yields the kind of happiness that money can't buy and laws can't create.

The most challenging aspect of true citizenship is that it requires us to be continuously aware and alert to the ways in which both the market and the state tend to crowd out citizenship in ways that are gradual and often imperceptible, like the boiling of the proverbial frog.

**IV - True Capitalism – We’re All Better Off When We’re All Better Off**

In the financial crisis of 2007-2009 financial institutions were obliterated, the net worth of most Americans collapsed, and most of the world’s economies were brought to their knees. At the same time, this has been a era of radical economic inequality, at levels not seen since 1929. Traditional economic theory does not admit the possibility that these two phenomena are connected in any way – and yet they are deeply connected to each other. Each is causally linked – one brings and amplifies the other.
The economy is not a self-correcting machine, but much more like a garden, requiring tending and modifying behaviors based on weather variables.

The problem is that the traditional model is not an academic curiosity; it is the basis for an ideological story about the economy and government’s role – and that story has fueled policymaking and morphed into a selfishness-justifying conventional wisdom. Fortunately, it is now reasonable to assert that economic systems are not merely similar to ecosystems; they are ecosystems, driven by the same types of evolutionary forces as ecosystems.

In an economy innovation is the result of evolutionary and competitive pressures. Within any given competitive environment individuals and groups cooperate to compete, to find solutions to problems and share the gains from those solutions. The most successful strategies for cooperation spread and multiply. Whether you are predator or prey the opportunity to thrive compounds and then concentrates. It bunches. It never stays evenly spread.

Like a garden, the economy consists of an environment and interdependent elements, but it also contains the expectations and interpretations all the agents have about what all the other agents want and expect. That invisible web of human expectations becomes, in an ever-amplifying spiral, both cause and effect of external circumstances. What I think you think about what I want creates storms of behavior that changes what is. The economy, like a garden, is never in perfect balance or stasis and is always both growing and shrinking. And, like an untended garden, an economy left entirely to itself tends toward unhealthy imbalances. This is a very different starting point, and it leads to very different conclusions about what the government should do about the economy.

Markets properly understood are not actually efficient. So-called balances between supply and demand do not in fact really exist. And because humans are not rational, calculating, and selfish, their behavior in market settings is inherently imperfect, unpredictable, and inefficient. Laypeople know this far better than experts.

Evolution is purpose-agnostic. If the market is oriented toward producing junk and calling it good GDP, market evolution will produce ever more marketable junk. If this is true then the following must also be true...

- The market is often wrong
- Markets distribute goods, services, and benefits in ways that often are irrational, semi-blind, and overdependent on chance
- Market outcomes are not necessarily moral because they reflect a dynamic blend of earned merit and the very unearned compounding of early advantage or disadvantage
- If well-tended, markets produce great results but, if untended, they destroy themselves
- Markets, like gardens, require constant seeding, feeding, and weeding by government and citizens
- Markets require judgments about what kind of growth is beneficial
- In a democracy we have not only the ability but also the essential obligation to shape markets – through moral choices and government action – to create outcomes good for our communities

Markets have an overwhelming benefit to human societies, and that is their unmatched ability to solve human problems. But markets are agnostic to what kind of problems they solve and for whom. Markets are meant to be servants, not masters. Government shouldn’t try to pick winners, but choosing the game we play is a strategic imperative for government.

Gardeners don’t make plants grow but they do create conditions where plants can thrive and they do make judgments about what should and shouldn’t be in the garden. These concentration decisions, to invest in alternate energy or not, to invest in biosciences or not, to invest in computational and network infrastructure or not, are essential choices a nation must make. Governments issue grand challenges, they catalyze the formation of markets, and use public capital to leverage private capital. To refuse to make such game-level choices is to refuse to have a strategy.

Markets as Machines vs. Markets as Gardens

Understanding economics in this new way is a shift from a tradition that prizes fixity and predictability to a mindset that is premised on evolution.

- Machine view: Markets are efficient, thus sacrosanct
- Garden view: Markets are effective, if well tended
In the traditional view, markets are sacred because they are said to be the most efficient allocators of resources and wealth. Complexity science shows that markets are often quite inefficient, but it also shows that markets are the most effective force for producing innovation, the source of all wealth creation. The question, then, is how to deploy that force to benefit the greatest number.

- Machine view: Regulation destroys markets
- Garden view: Markets need fertilizing and weeding or else are destroyed

Traditionalists say any government interference distorts natural markets, but complexity economists show that markets get overrun by weeds and exhaust their nutrients if left alone.

- Machine view: Income inequality reflects unequal effort and ability
- Garden view: Inequality is what markets naturally create and compound, and requires correction

Traditionalists assert, in essence, that income inequality is the result of the rich being smarter and harder working than the poor, but complexity economists believe income inequality has much more to do with the inexorable nature of complex adaptive systems like markets to result in self-reinforcing concentrations of advantage and disadvantage

- Machine view: Wealth is created through competition and by the pursuit of narrow self-interest
- Garden view: Wealth is created through trust and cooperation

Where traditionalists put individual selfishness on a moral pedestal, complexity economists show that norms of unchecked selfishness kill the one thing that determines whether a society can generate wealth and opportunity: trust. See Afghanistan.

- Machine view: Wealth = individuals accumulating money
- Garden view: Wealth = society creating solutions

One of the simple limitations of traditional economics is that it can’t really explain how wealth gets generated. Complexity economics says that wealth is solutions: knowledge applied to solve problems. Wealth is created when new ideas emerge from a competitive, evolutionary environment. In other words, money accumulation by the rich is not the same as wealth creation by a society. Our focus should be on making sure everyone has a fair chance – in education, health, social capital, access to financial capital – to create new information and ideas. Extreme concentration of wealth kills prosperity in precisely the same way that untended weeds overrun and then kill gardens.

Equality of opportunity, then, isn’t just a moral imperative – it is an economic imperative.

**Inequality and Economic Crisis**

The crisis of income and wealth concentration is the most serious threat America faces today. The problem is concentration and the hollowing out of the middle. The higher the level of inequality, the higher the level of social pathology. This is true of obesity, depression, violent crime, infant mortality, incarceration, pollution, etc.

**Trickle-down Economics**

If you believe the economy is a self-regulating machine, then you must believe that government intervention in the market is inherently bad. “Trickle-down economics” – the idea being that money will trickle its way down from wealthy capitalists to everyday Americans. Politically it has been a great success, but empirically most of the gains in the last three decades have gone straight to the top, particularly the top 1%.

To understand why it has not succeeded it is necessary to examine one of the core intellectual foundations: the notion that redistribution of wealth is inherently illegitimate and ineffective and that it kills the profit motive.

**Redistribution, Spending, and Recirculation**

Examining each aspect of the redistribution argument:

- Increases in income tax rates generally do not make already wealthy capitalists less likely to pursue profit or to engage in job-creating economic activity, whether it is starting a business or buying a car. True, there is a point of diminishing returns past which workers keep too little of the value their work creates, but we are nowhere near that point. America’s growth rates were never higher than during the period of supposedly job-killing high taxes.
- The trickle-down economics crowd posits a false choice between government-mandated redistribution on the one hand and free markets on the other. In fact, the reduction of tax rates for the wealthy is, in itself, a redistribution of wealth – just not in the direction normally thought of when discussing income redistribution.
- Redistribution is not the optimal word to describe what is planned, because the word implies a one-time event and what is meant is an ongoing policy direction.
The deeper misconception is that conventional Machinebrain wisdom conceives of and describes government activity as “spending”. The association we have with the word spending is that when government does it, our money is gone. The fundamental reality of the role of money in an economic ecosystem is as an essential lifeblood that circulates throughout it again and again. In this sense, the government does not spend money; it circulates it. It does not redistribute money; it recirculates it. Social Security’s main benefit isn’t to keep the elderly from living in cardboard boxes, but to ensure that they continue as dynamic consumers in our economy. To varying degrees, all government economic activity is some form of circulation.

**Middle-out Economics**

Circulate wealth in ways that bring prosperity to the middle class so that it can buy goods and services and set in motion a feedback loop that benefits everyone over the long term.

Trickle-down economics takes care of a few great men, on the mistaken idea that we can count on them to create jobs for the rest of us. Even a hard-nosed industrialist like Henry Ford understood this when he paid his assembly line workers higher wages than the market said he needed to – they were thus able to afford to buy his Model T automobile.

Trickle-down economics means lower income taxes on the rich, lower capital gains taxes, lower estate taxes, lower regulation, and lower investment in public goods like education and infrastructure. It is about empowering the few on the theory that the many can derive second-order benefits. Its action is top-down.

Middle-out economics means investing aggressively in the middle class, more focus on education and infrastructure, higher wages, and strategic public-private investment in high-potential arenas coupled with strongly progressive taxation and aggressive estate taxation. It is about empowering the many so that the few can derive second-order benefits – and set in motion another cycle of prosperity.

- **Progressive taxation is one key here** – it blunts the natural mathematical tendency of markets to concentrate into winner-take-all monopolies and circulates resources back into the general economy.
- **Another key is a robust and adaptive labor union movement** – willing to push management and decalcify itself. Unions are a vital counterweight to concentrated corporate power, but they can become protectionist in their own right and need to be closely tended by the gardener.

Gardenbrain economics teaches that we are all better off when we are all better off. No one benefits more in the long term from recirculation of wealth through taxes and government spending than the rich or those who wish to be rich.

There are five core principles that undergird middle-out economics:

1. **Grow from the middle out**: Foster a healthy middle-class customer base with purchasing power and everyone will get richer.
2. **Maximize the number of able, diverse competitors**: For a nation to thrive and to win in a global economic competition, it needs to put as many players on the field as it can.
3. **Break up opportunity monopolies**: Both advantage and disadvantage compound, resulting in monopolies dotting and clotting the economic landscape. The richest 5% of Americans get more than half of all the benefits of the exemptions and deduction in the tax code – this is not a receipt for continued health of our nation.
4. **Promote true competition**: Current policy doesn’t help people get rich; it rewards the already rich for being rich. True capitalism is about making sure everyone is on the playing field, not just those who can afford the equipment. It is about continuously upending the order of things, not defending it.
5. **Harness market forces to national goals**: No company in America has provided the infrastructure that made its lines of businesses possible, much less educated its own workforce. The question is not whether to have government in the economy but how wisely to deploy it. Government’s job, in collaboration with the private sector, is to set great goals. The market’s job is to unleash a truly competitive frenzy in pursuit of those goals.

**We Are All Better Off When We Are All Better Off**

If you don’t trust government to spend your money, why should you trust the super-rich to spend your money? There is a golden goose that lays the golden eggs in our economy and that goose should be the one we trust to spend our money – the middle class.

A certain amount of inequality is inevitable and even beneficial, but too much inequality is as fatal to society as enforced equality.
V - Self-Government – Big What, Small How

The Limits of Limited Government: Small What, Small How

The theory of "limited government" from a pretty conservative point-of-view...

- Democratic government derives legitimacy for the people.
- It should be limited and as close to the people as possible.
- It's charge is to safeguard individual rights and liberties.
- In doing so the government's scope of power is limited to a military to secure the territory, police to enforce laws, courts to adjudicate disputes, and some taxes to cover these costs.
- Any other role for government is illegitimate, and any additional taxes constitute theft and push us toward communism.
- In any event, such redistributive policies are always inefficient compared to a free market.

This philosophy fails on three levels: theoretical, empirical, and political.

1. **Theoretical emptiness**: Free enterprise is presupposed to exist in a vacuum, with the utter absence of context. It assumes all people are equally free to learn, get capital, make beneficial connections, and be "enterprising", i.e. individuals exist separate from the community, rather than exist because of the community.

2. **Empirical failure**: The history and unrivaled success of Western capitalist democracies is the story of more activist government, not the reduction of government to its minimalist function. The success of freedom means limiting one's own sphere of action in the short term so that over the long term we can all do more. What it is not is freeing everyone to act in their own self interest, with no regard to the interest of others in the society.

3. **Political failure**: The most practical test of the limited-government idea is whether its adherents, when they are in power, can put the idea into practice. They have not.

Libertarian Blindness: No What, No How

Libertarianism rests on a linear understanding of social and economic systems and on the falsehood that humans are reliably and inherently rational, calculating, and selfish. Modern systems thinking shows these assumptions to be false – humans are not rational and calculating and only some are cooperative enough to respect other people's rights. The behavior of selfish non-cooperators influences others and pushes the society to a tipping point of wholesale distrust.

Despite claims to the contrary, the more highly regulated countries are the more prosperous ones and countries with little or no regulation are more impoverished. While over regulation can stifle progress, the lack of regulation does not permit it.

The libertarian thesis of limited government depends on a 19th century notion that an economy or a society is a closed system. However, an economy is an open system and the elements are not in a zero-sum relationship, but in symbiosis with each other. Ecologically, more of one thing doesn't mean less of another, but often results in an expansion of both.

Prosperity is a consequence of our ability to innovate. Innovation requires ever-increasing amounts of technology. That technology can only be created and managed by people with ever-increasing amounts of training and education. Prosperity also requires more trade. More trade requires more infrastructures – roads, bridges, airports, treaties, trade agreements, contracts, and the people who create them. These investments don't just enable prosperity, they propel it – expanding (i.e. opening) the economy.

The Failure of the Left: Big What, Big How

Where the left differs from the right is in its penchant for top-down prescriptive solutions – the same mistake is made about the ability of humans to calculate their self-interest rationally. The attempt is to "bracket uncertainty" and is self-defeating in three ways:

1. **Sclerosis**: In a dynamic society problems come too fast and big institutions are too slow. Once established, these large institutions are self-perpetuating.

2. **Impacticality**: Big government also substitutes central expertise for on-the-ground practical knowledge. When not only goals but means are determined at the center, government is always a step behind reality.

3. **Crowding out citizens**: State action crowds out community and citizen ownership of problems and solutions. Frequently, the most innovative solutions are found when groups of citizens evolve their own networks to address problems.
The Government We Need: Big What, Small How

Government needs to have a stronger hand in setting great national goals and purposes; a lighter touch in how we reach those goals. Government should be less a service provider and more a tool creator – i.e. fostering research and making sure that research is released to the general public, instead of letting corporations patent it. Government needs to be responsible for funded challenges to guide the strategy. The idea that states or communities should be laboratories for democracy is meaningful only if the labs are funded sufficiently to run good experiments.

This approach recognizes that both strategic direction and adaptability are essential to any successful endeavor. Unintended consequences is exactly what is to be expected, and this will lead to some creative destruction – exactly what large, vested interests will fight to prevent – but to do nothing will have unintended consequences that will bring the entire society down.

The Elements of a “Big What”

- To set strategic goals for the community with an implicit moral opinion that some outcomes are preferable to others. When a market is left to itself, what ensues is an anti-social race to the bottom. The government’s job is to forge broad agreement on goals and set in motion pro-social races to the top.
- To equip every citizen with the greatest possible capacity – and equal opportunity – to join in the pursuit of those goals. It also means investing heavily where it is strategic and where national scale is essential and where only the government can build a wealth-generating commons that market participants alone would never venture to build, i.e. the Internet.
- To generate trust and encourage cooperation. One of the government's core purposes is the active promotion of trust and creation of social capital. National service should be mandatory because it enables people who wouldn’t otherwise cross paths to work together. At a local level, seed funding that helps neighborhood groups get started is a wise investment.
- To sustain true competition and break up concentrations of wealth and power that are unearned and self-perpetuating.

Elements of an Effective “Small How”

- Radically re-localize – actually provide robust funding for local means and intentionally link up all the local experiments. In nature, systems that sense change are always decentralized so that threat detection is as local as possible – but then all those local sensors are connected into networks so that response can be coordinated for the whole. Think locally, act globally.
- Be the citizen's hardware store – government provides apps that enable citizens to share information and government agencies like public libraries to act as civic connectors.
- Be a smarter prime contractor – at every level the imperative should be to shift responsibility for executing what are now government services to private competitive organizations, to include non-profits, particularly where profit motives in the delivery of social services would be harmful. Government, like an effective foundation or venture investor, has to get far better at running competitions.
- Create and amplify positive feedback loops – one of the central features of open complex systems like our economy is feedback loops, both good and bad.
- Offer pounds and pounds of prevention – every part of government needs to think more like a public health officer: to be mindful always of desired outcomes, track closely trends in behavior, look at the world like a network of networks, identify the key nodes of virulence, and focus energy and effort on those nodes to foster contagions of good and to contain contagions of bad. Invest far more in early learning than in prisons.
- Design more nudges – government should be clear and vocal about pro-social goals and activities.
- Tax more strategically – and progressively – we should use the tax code like a personal trainer: to get us in shape by reinforcing good habits and punishing bad ones.
- Create incentives and rewards for over-performance – incentives for excellence is a tool missing from the current government playbook.
- Weed relentlessly – when the experimentation we champion has yielded successful models they should be replicated, but when a program has failed or outlived its usefulness, it should end. Government should have a goal of ending a percentage of programs every year, so those resources can be deployed to new challenges. Government should be living, organic, evolving – not inert, inanimate, and unchanging.
Reclaiming Democracy

Before we can repurpose government, the rules of democratic practice and governance must first change. An underlying issue that Americans must confront before change can be made is the creeping corruption of a campaign finance system that treats money as speech, forces politicians to court the moneyed, enables lobbyists to become unelected lawmakers, and gives rising credence to the belief that the government is bought and paid for.

- Reform redistricting and reduce gerrymandering.
- Restrict money in politics.
- Stop the revolving door between members of Congress and their staff and corporations they regulate.
- Reform the filibuster.
- Voting in the United States should be mandatory and rules to allow for this need to be implemented.

Adapt or Die

The key watchword for government should be effectiveness.

Government is what a society creates to solve common problems that each citizen alone could not solve. It must maximize individual opportunity at the same time it maximizes trust, cooperation, and equal opportunity that frames up each individual’s starting prospects.

VI - Harvest – We Reap What We Sow

Society becomes how you behave. We are all better off if we are all better off. We don’t need big or small government, but government that is big on the what and small on the how. This book has been describing a grown-up version of freedom – limiting some of our own freedom on the margins enables us to enjoy more and better freedom at the core. Great civilizations usually succumb to sclerosis, paralysis, and decay in the face of change. American civilization has a built in advantage, in that we are adaptive by design, but nothing is foreordained. Teamwork is what we need to what we need for this diverse nation to be greater than the sum of its individual parts. It is a pragmatism of what works, rather than any particular ideology. Values are not opinions, but facts and they have consequences. With independence long achieved, the question now is can we do the daily work of interdependence?