Sustainable Solutions to Current Crises: Recommendations for the New Administration

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The hallmark of the current administration and the array of crises into which we have fallen is the result of a short-term mentality. We do not consider the next generation, let alone the seventh; indeed, all too often our leaders have considered the consequences no further out than the next election. Here at Redefining Progress, we focus on the long-term consequences of actions that we take today. This long-term perspective is helpful in asking how we should address our most urgent national priorities in a way that assures that we not only solve the current crises but also prevent their recurrence.

In this piece, I will focus on three crucial issues for the incoming administration: a sustainable financial system, a sustainable health care system, and a sustainable energy system. All should be a part of the new president's 100-day agenda.

Conditions of Sustainability

To be sustainable, any system needs three things:

The right **indicators**
The right **incentives**, and
The right **principles of justice.**

Indicators are needed for sustainability because you cannot manage what you do not measure. A good indicator will tell you how well a system is meeting human needs, or whether its productive capacity is being improved or eroded, or both.

An example of an indicator that measures both is the Genuine Progress Indicator (GPI). The GPI is an alternative to the GDP that better captures the effect of economic activity on human well-being. The Gross Domestic Product is simply a measure of the volume of market transactions in an economy, whether they represent activities that increase well-being or detract from it. Increases in national insecurity that cause us to buy more weapons, increases in sickness that cause us to buy more health care, and increases in crime that cause the victims to buy replacement products, all increase GDP but reduce well-being. The GPI corrects for these factors to better measure the economic activity that improves our lives.

The GPI also better measures changes in capital stocks needed to keep our economy productive. A cousin of the GDP, the Net National Product, includes changes in the stock of physical capital goods, declining if we are, so to speak "eating our seed corn." The GPI also included these changes, but adds changes in stocks necessary to maintain a productive economy: natural, social and human capital. When these fall, the GPI provides an early warning system of things that are unsustainable—such as the financial and global warming crises we are dealing with today. A steady or rising GPI, in contrast, indicates that we are maintaining both the provision of economic services that improve human well-being and preserving the kinds of capital we need to insure that the next generation can be as well off as we are, or better.

Another useful measure of sustainability that specifically focuses on environmental sustainability is the Ecological Footprint. The footprint of a city, state or country measures the ratio between its productive land area and the area required to meet its natural resource requirements and waste absorption needs.

The Ecological Footprint is a measure of the areas of productive land and water an individual, a company, a city, a country, or humanity requires to produce the resources it needs and absorb the waste it produces. When the footprint of a region is compared to the productive land and water within that region, the resulting ratio tells us whether it is producing more wastes or absorbing more resources than the region can support. Such Ecological Footprint Analysis tells us immediately if we are using an unsustainable share of the world's resources or depleting natural capital stocks essential to maintain the quality of life of future generations. A global footprint greater than one implies an eroding environment and a rendezvous with disaster.

The new administration should direct that the Ecological Footprint and the Genuine Progress Indicator, or comparable measures of well-being and sustainability, become a part of the normal statistical reporting on our nation's economic health, with comparable frequencies. The national statistical agencies should also report these measures for states, as they now do for the GDP, the employment rate, and the like. We should look to these measures when setting policy, choosing a course that increases our GPI and decreases our footprint. We should also seriously consider investing in other national indicators of aspects of well-being not captured by current measures.

In order to allow individuals the maximum of freedom while simultaneously strengthening the nation as a whole, we need to create incentives that align the individual good with the general good. The general good is simply the sum of the good for all people in society. So when we make decisions for our own good, we often support the general good at the same time. However, this is not always true, because some things that we do cause benefits to others in addition to ourselves, and other things impose external costs on others. As a result, our self-seeking choices may have benefits or costs to others that greatly exceed their impact on ourselves.

Thus we need incentives, so that firms and individuals cannot make a profit by harming the community and do not go broke by being responsible. Policies that create such incentives result in smart economics, a system of thought and practice that puts the nation on a path toward sustainability. Sometimes these incentives take the form of traditional regulation or criminal penalties, but increasingly, they use tools derived from the market—such as pollution charges and green investment incentives—to gently but firmly steer the private decisions into alignment with the common good.

A system in which injustice accumulates is unsustainable because it gives rise to increasing dissatisfaction and ultimately to increasing rebellion or repression. Justice means at a minimum that it should not be possible to reap vast profits by fraud or by throwing external costs onto others, and that we should all have a share in the benefits that come from the common assets we own collectively. Though there are other conditions that must be met for a just economy, we currently fall short of even these minimal conditions, so we should focus on them first.

Injustice has its beneficiaries and its champions. So it is a feature of justice that it must periodically be fought for or it will be lost. Moreover, each generation recognizes new sources of injustice that were previously hidden by prejudice or that have emerged from changing conditions. People everywhere recognize these changes as advances once they have occurred: That women, people of color, and people without property can vote seems an obvious condition of a just society to us today, though none were true when our nation was founded. Similarly, we regard it as an unambiguous advance from barbarism that we do not send people to jail for their political or religious beliefs, cut off the hands of thieves, or sell farmers with their land.

As the cause of justice advances, future generations will rightly regard some current practices as equally barbaric. Examples of emerging notions of justice include a right by communities to control private appropriation of air and water resources that we rely on for life and health, and a right to access to the essential information we need to be productive citizens and function effectively in a democracy.

In the examples below, we will see that each of these crises can be addressed through sensible programs to create and use indicators, create the right incentives, and guarantee a just result.

Taming the Financial Sector

The great innovation of the modern market is to harness the power of evolution in service of reaping consumer dollars. Corporations become better and better at making money over time, as a matter of natural law, as those that are best crowd out those that are less good.

But as evolutionary theorist Steven Jay Gould taught us, all evolution is local, i.e. organisms—and likewise corporations—adapt to conditions of the time and place where they find themselves, not to future or past conditions; and they increase their individual fitness or profit, not their collective profit. So for example, a fishing fleet, if unregulated, catches the number of fish that maximizes its individual profit, even though the sum of those catches over time drives the fish population to extinction and the industry as a whole to ruin.

A similar phenomenon takes place with respect to rare risks. Firms that ignore risks of crashes and recessions do better in good years than more cautious firms. The market share of cautious firms shrink and they are ultimately bought out or ruined by more profitable and more reckless counterparts. Similarly, within a firm high-risk, high-return operations drive out low-return sure things—a tendency that can be accelerated by setting high internal hurdle rates for the return on new projects. Similarly, flashy daredevil managers who by luck succeed drive out cautious, responsible managers (and daredevils who fail by lack of luck). Even more disturbingly, in good times, daredevil financial managers and advisors show higher portfolio returns than cautious, careful managers. The portfolios and commissions of such managers swell; they are promoted and admired. So long as times are good, this dynamic is inherent. It is a feature of the market, not a bug.

To combat this tendency, we need appropriate indicators and incentives, and justice.

Any financial institution "too big to fail" becomes by that token a public risk. If there is any possibility, however slight, that a public bailout may be required, the public has a legitimate interest in the financial operations of such firms. Knowledge of a firm's operations is a precondition of creating effective risk indicators for that firm. Thus, the era of secret financial transactions must end. The nature and magnitude of the portfolios of our biggest banks, brokerage houses, insurance companies, and other financial holding and management companies must become public, so that we are never again blindsided by hidden risks in secret transactions. We should negotiate with our major trading parties so that such openness becomes universal; and multinationals that decline to abide by our rules should be denied the right to do business on our shores.

Appropriate risk indicators should be constructed by commissions that include government officials, academics, and a balanced number of industry and consumer representatives. Open transactions mean that competing private indicators can also be constructed and their performance monitored over time, so that the most effective and accurate indicators will emerge through a process of fair competition and public dialog.

We need four major types of incentive measures. First, we need incentives for financial institutions to make good on their promises. This means that all insurance and financial companies need appropriate reserve requirements, not merely traditional banks. No financial instrument should be tradable until an appropriate public process can set the reserve requirements needed to insure that the sellers can make good on its terms.

Second, we need similar incentives for individual managers within firms. A substantial portion of the compensation of financial managers of every kind should be deferred and held in trust, in an updated version of bonding. When reckless advice or negligent risk ratings impose vast costs on the public, claw back provisions should protect the public by reclaiming that compensation for the clients who relied on that manager's decisions or advice.

If this seems too intrusive into the private negotiations between financial firms and their employees, we can create an alternative would allow firms to negotiate any compensation system they like with their executives and managers: simply make financial executives and advisors jointly liable with their firms for losses due to reckless or negligent investment decisions or advice. Instead of facing internal claw back rules, financial executives, managers and advisors shown to be egregiously irresponsible go to jail. We then let the private market fix the level of compensation that fund executives require to be willing to absorb such risk, and private investors decide which system gives them the greatest confidence that their assets will be adequately protected.

Certainly the financial managers responsible for the current mortgage default swap debacle have robbed the public of more money than all the bank robbers in the history of the world combined. A decade or two in the slammer seems quite modest when stacked up next to the social costs such behavior imposes. It may not be possible to impose such penalties on the robber barons of the last decade's gilded and deregulated age, though the effect would be salutary. But we can create such a system for the future, and must, or see any gains in stability swept away by the accelerating creativity of the wizards of Wall Street. This is an instance of a principle we have often seen: justice implies incentives, and many incentives require justice.

Third, we simply need greater transparency about financial instruments of every sort, enforceable by investor suit when a firm's failure to make fully accurate disclosure of known or reasonably determinable risks and liabilities leads to losses. As an aid to such transparency, all bailout funds for institutions, as opposed to individual homeowners, should be in the form of equity investment, and the public ownership share in such companies should be voted in favor of openness and responsible risk management.

Finally, we need an insurer of last resort for other financial institutions similar to the FDIC insurance for banks. Such an insurer should be financed by a small—say, one tenth of a percent—tax on all transactions in currencies, financial instruments, and their derivatives. This is an extended version of the Tobin Tax proposed by Nobel Laureate James Tobin (though it should more properly be regarded as a social insurance premium than a tax). To the extent that such a premium falls on international transactions, it should go into a special fund to finance our World Bank and IMF contributions and development assistance.

Reserve requirements and extended Tobin premiums will slow down the superheated speculative markets in debt swaps, currency futures, and derivatives of derivatives. This is probably a good thing. And knowing that future financial institutions will keep adequate reserves, that future financial managers will be better rewarded for prudent husbandry than speculative profiteering, that future financial instruments will be correctly described or the issuer will be liable, and that future financial failures will be adequately insured and paid for by the financial sector, will make us all feel better that our public investment in reviving the health of the sector is money well-spent.

Sustainable Health Care: First, Do No Harm

Since the popping of the dotcom and housing bubbles, the health care sector is the most egregiously unsustainable part of our economy that is not directly dependent on natural resource extraction. The current rate of increase in health insurance costs is insanely high, and the medical sector as a whole is exploding. America spends a larger share of our GDP on health care than any other industrial nation, over 50 percent more than the average for such nations; and our costs are rising at one of the fastest rates. Despite this, America has similar or worse health outcomes across virtually every dimension than our industrial counterparts.

Why do we get such poor health outcomes for our money? Because normal pricing mechanisms do not work in the context of the health system, for a number of reasons.

First, most people simply do not know enough about the effectiveness of alternative treatment approaches to choose between treatment alternatives. Often even doctors do not know whether the treatments they offer are effective or not, and billions of dollars are wasted on treatments of questionable efficacy, while vital, treatable conditions go begging.

Second, insurance funding makes people too willing to spend money on insured care, and not willing enough to spend money on uninsured care, resulting in overspending for the former and under-spending on the latter.

Third, we do not spend nearly enough on health care for our poorest citizens. Vital needs go unmet, with often disastrous results. But even those indifferent to the plight of the neediest suffer from our failure to provide such medical care. Detection or prevention of environmental hazards such as contaminated water or food or air pollution can be delayed when they affect low-income communities first or most intensely. Moreover, infectious diseases are quite happy to spread from the untreated poor to the surrounding community. It has been shown beyond reasonable doubt that communities with high uninsurance rates have higher incidence of many kinds of health effects—even among the insured.

Insurance companies generally have much higher administrative costs than national health plans, another factor which contributes substantially to the higher cost of health care in the U.S.

Finally, balance of negotiating power is grossly uneven between large medical establishments and insurance companies and individual consumers. It is often impossible even to learn what medical procedures cost, and the combination of no pricing information, third-party payments, bad information on care quality and effectiveness, and often desperate urgency about results causes—well, it causes what we started out by describing, a 50 percent higher share of GDP, one of the highest rates of price increase, and poor public health outcomes.

What do we need to solve this problem? Once again, indicators, incentives, and justice.

We need a national medical statistical collection system that keeps track of the illnesses people get, the kinds of treatment they receive, and the outcomes that result. Every other advanced nation has such a system, though not all make good use of use the collected statistics to determine treatment effectiveness. We should use that system to systematically distinguish between medical treatments of proven effectiveness, those of experimental or uncertain effectiveness, and those not supported by an evidence base. Ideally, such distinctions will be incorporated into private medical contracts, influencing the services covered or the copayment rate, thus reducing the cost for effective treatments and increasing the cost for ineffective treatments. (Experimental treatments need special rules and are not addressed here).

We need to confront drug companies and other medical providers with effective and informed consumers ready to negotiate on an equal basis. Groups of companies and individuals should be encouraged to enter into consumer unions of a scale similar to insurance companies (in order to have adequate bargaining leverage). Such unions could negotiate collectively with the health industry over price and quality for the people they represent. Consumer unions should be empowered to represent their members in disputes with HMOs and other medical providers in a manner analogous to labor unions in the workplace. Indeed, labor unions should be encouraged to set up sister consumer unions for the people they represent. One may hope that such unions, once in place, will be able to extend coverage to other areas where consumers could use help with in negotiating the best deals, such as in purchase of automobiles and funerals. Membership in a consumer union should be portable if one loses one's job, like a COBRA plan sans time limit. Such unions should have nondiscrimination clauses similar to those proposed by Senator Obama for insurance companies.

The combination of negotiated coverage and rate schedules and evidence-based treatment assessment can be reasonably anticipated to lower the total administrative cost of the U.S. health system by making coverage decisions simpler and more uniform.

As discussed above, provision of basic insurance coverage to the uninsured is an essential part of providing reliable health care coverage to all Americans, insured or not. Of course, health care is also basic human need, a fundamental human right guaranteed by the Universal Declaration of Human Rights, and its provision is a duty under virtually all of the world's major religions. Money savings from collective negotiations by Medicare and Medicaid for lower-cost drugs and care can be used to meet much of the cost of extending basic health care coverage to the currently uninsured. Additional funding should come from a price-gouging surcharge on the profits of drug, medical insurance, and medical service companies equal to the percentage by which their average price increase for sales in the U.S. exceed the inflation rate. I would suggest an additional gouging surcharge of 50% for profits in excess of five percent on sales to countries with average incomes of $2 per day or less, with proceeds going to fund the world health organization and health aid programs.

All the measures proposed here are in principle compatible with either the Obama or the McCain health insurance proposals.

A Sustainable Energy System

It is now clear that, except for temporary interruptions such as the current economic downturn, the demand for oil is likely to grow faster than the supply for the foreseeable future, and oil prices will continue to be high and rising. Though we have no shortage of coal, it is the dirtiest and most environmentally damaging energy source in every stage of mining, transport, combustion and disposal. So-called "clean coal" technologies are expensive, and consume 25 percent of the generated power in extracting, compressing, and pumping global warming pollution into deep wells, can not be used by most coal plants because they are not close to suitable geographic formations, and are both untested and untestible except by using them for decades to see if they fail catastrophically (because leaks in geographic storage systems can take decades or even centuries to emerge). Alternatives to reduce energy demand and increase energy supply abound, but it is by no means clear which will ultimately prove to have the lowest economic and environmental cost. How shall we choose the best path to move forward?

First, there are two paths equipped with alluring sirens with huge advertising and lobbying budgets to lure us in. Let us call the first path the phony reductions path. On this path, genuine domestic emission cuts that may require substantial up-front investments to realize are replaced by international trading for cheap but largely imaginary emission offsets overseas.

It is amazingly easy to create phony emission reductions, even with the best of intentions. Suppose, for example, that we agree to permanently and bindingly protect a stand of forest that would otherwise be harvested for timber, and correctly measure the additional carbon that will be stored in that forest as the stand matures and carbon dioxide is pulled from the air into living trees and forest soil. If, however, nothing is done to change the global demand for wood, every tree we protect in that forest will simply be replaced by another tree, which is cut down somewhere else. Other offsets are beset by similarly severe problems. The sustainable business counsel recommends acceptance of offsets that are "real, additional, permanent, independently verifiable, enforceable, measurable and transparent." Such offsets may be desirable, but they are few and far between. The promise of massive, cheap offsets from trading are an illusion.

The second path, the corporate windfalls path, (sometimes called cap-and-trade), in which we give away free pollution permits to big polluters and then gradually cut the permit supply, effectively squeezing the supply of fossil fuels and driving up the price. This creates a sort of "super-OPEC" that funnels vast amounts of wealth to the stockholders of big energy companies in the name of economic efficiency and environmental benefit. Some environmentalists, and even some big national environmental organizations, support it on the theory that it will bribe polluters to moderate their opposition to emission cuts, or attract conservative votes, or on the model of the sulfur dioxide program where the windfalls were much more modest.

Well, the windfalls are not modest under cap-and-trade. Aggregate transfers to the holders of free permits under plausible economic modeling are in the trillions (that's Trillions with a "T") by the time we reduce emissions to sustainable levels. They would constitute the largest subsidy program, and the largest wealth transfer, in the history of the world, to stockholders on regimes that are mostly wealthy, mainly overseas, and often inimical to U.S. interests and to democracy more generally. And because energy is a basic need, constituting a higher share of the budgets of the bottom income deciles, the cost of the subsidy would fall most heavily on those least able to bear it.

Well, if not phony reductions and not corporate windfalls, then what? You guessed it: indicators, incentives, and justice.

On the indicator side, we would like to see total global warming pollution go down—and go down fast, because the scientists tell us that we are dangerously close to global tipping points that could hurl the earth's climate into catastrophically dramatic and unpredictable change. Ideally, we would also like to see our economy strengthen. And in the best of all possible worlds, we would see the largest benefit go to those who need it most, the ordinary working families and the poor who have been so battered in the last few decades.

Fortunately, we know how to do this. A sustainable plan must have four parts:

A polluter-pays charge, to provide a market incentive to reduce emissions. This could be implemented as a fee, a tax, or a cap-and-auction, where the public owns the pollution permits and a year's emission rights are auctioned annually. Note that Obama has pledged to follow the last of these options.

- Revenue recycling. Polluter-pays revenues must be returned to the economy. Specifically:
  - At least 15 percent of the revenue should be returned to low and moderate income households as cash payments using a simple automatic approach like the earned income tax credit.
  - Another 20 percent of the revenue should be used to promote energy conservation and cost-effective new clean technologies. We estimate that this is the level of investment required so that the energy savings (net of the cost of the required investment) is sufficient to ought weigh the increase in price from the charge.
  - The remaining sixty-five percent can be used in a variety of ways. For maximum immediate economic benefit to most households, a big political advantage, and a philosophical demonstration that we all own the sky together, we could return the money directly to households in a climate dividend, as Peter Barnes suggests. For maximum long-term growth, we should devote it to high-value public investments, as by strengthening our educational system, financing R&D, and perhaps replacing some of our crumbling public infrastructure. For maximum environmental benefit, and some economic and distributional benefit as well, we could also devote this part of the revenue as well to energy efficiency and new clean tech. Or perhaps some combination of these would be best.
- For maximum economic benefit, market incentives and direct expenditure programs should be coupled with a variety of cost-effective regulatory initiatives to promote energy efficiency and new clean technologies and remove barriers to their adoption.
- It harms both the economy and the environment if we shut down pollution-intensive manufacturing in the U.S. only to import the same products from (often even dirtier) producers overseas. Environmentalists call this leakage, (because the cap on U.S. emissions "leaks" via trade); business calls it loss of competitiveness, and labor calls it runaway shops. But whatever name you use, you can stop it completely by treating the pollution that is emitted in producing a product as if it moves with the product. If the polluter-pays charge is a tax, this is called border adjustment. If it is a cap-and-auction, it is called consumption-based accounting. Either way, it is allowed under WTO rules, administratively straightforward, and need be applied to only a few highly energy-intensive products to solve essentially all of the problem.

We have called this combination of indicators, incentives, and justice-based policies the Climate Asset Plan, or CAP. It embodies the polluter-pays principle, which is both a principle of environmental justice and a pre-condition for economic efficiency. Extensive modeling has shown that it strengthens the economy, creates jobs, provides the greatest benefit to low-and moderate-income households, produces rapid reductions in global warming pollution, and also reduces a host of local pollutants that cause asthma, lung cancer, heart disease, premature birth and neurological damage.

Are we going to get the CAP, or something like it? We don't know yet.

At the national level, both presidential candidates have pledged to create a firm cap on greenhouse gas emissions. But there are two big barriers to adopting the CAP (besides energy industry opposition to doing anything at all, which goes without saying). They are closely related. The first is that many people want to distribute emission allowances "downstream," to businesses that are big purchases of energy and big polluters, rather than the energy companies themselves. The second is that most of the comprehensive climate bills passed so far give a fraction of the allowances away to polluters, instead of auctioning them all, or putting a pollution charge on all emissions. Why are these connected, and why are they big problems?

First, virtually everyone who wants to give allowances away rather then auction them wants to give a lot of them to polluting industries that buy energy. This is because giving all the allowances to energy companies would be too naked a giveaway. Consumers see immediately that energy prices are up, and that all the money goes to energy companies, who are already widely seen as reaping an unfair windfall under the current high energy prices. If you spread the allowances around a little among polluting industries, prices still go up and the ultimate burden is still on consumers, but the revenue from higher energy prices goes to stockholders of more companies, which means more business support. Those companies still lose output and jobs because of higher prices, which hurts the economy as a whole, but windfall profits from free allowances create higher dividends, so stockholder benefit. By contrast, if you require the permits (or levy a pollution charge) upstream, at the energy company level, you still see price increases—but you can offset them with auction or charge revenue, by lowering other business taxes or giving it straight to households to increase consumer demand. This protects the environment and the economy.

And second, if you give away even one percent of the allowances, you need to set up all the machinery for giveaway and put it in place. You need a historic baseline for every company. You need a huge, opaque beurocracy to allocate allowances and give extra to the friends of politicians whose votes you want. You need an elaborate and fully detailed system of allocation rules. (An auction just needs one computer to accept bids by email, and a staffer to turn it on. That's about it. Allocation is by price, sales are public, and there is no way to game the system and no windfalls to fight over). Because the allowances are immensely valuable, you need to prepare for huge amount of litigation over those rules, and the attendant delay.

But the worst thing about giving away a fraction of the allowances is that once you have put the machinery to give allowances away in place, every industry with a lobbyist will be finding some reason why they should be getting a bigger share. Their industry is too competitive. Their profits are too low. They are a growth industry that should not be stifled. They have a special relationship with the head of the committee, or a swing senator. They are already reducing emissions. They cannot reduce emissions for technical reasons. Or whatever. Any lobbyist who can not find some reason for his industry to have an exemption should have his Guccis revoked. And ultimately they will do what they did to the Btu tax: load it up with special gifts like a Christmas tree—and then kill it because it is too complicated.

In the end, we need two things to get the CAP, or something like it: something good for the economy as a whole, and for folks from the bottom of the economy to the top. You need to auction 100 percent of the allowances, and use the revenue in a sensible way. And you need to consult more than the environmentalists and the polluters when you design the legislation. If you talk to the labor unions and the consumer groups and the civil rights/people of color organizations and the environmental justice folks and the low-income advocates before you put the plan together, and involve them in the process, then the plan that you get back will be good for all of America, it will pass, and it will stay passed. That is what the new President needs to do, before he submits his climate plan to Congress.

Sustainable Solutions

As we go forward, we need to be asking new questions of our politicians, and making new demands. We need to know how to solve our biggest problems in ways that are good for every American – including the privileged, but not limited to them. We need to solve our problems in ways that will work in the future, not just today, and in ways that work for the world, not just us. These solutions exist, and can be found, with the political will.

But do we have the political will? This is the real question. Ultimately, we need to ask ourselves and each other how to build a movement to support sustainability that is itself sustainable. We must turn to our own movements, our own organizations and agencies, and ask why they have been so weak and so fragmented, and how they can be made strong and united. We must look to our sources of funding, our sources of political power and support, our alliances, our ideology, and our deepest values. And we must ask, in order to build a movement to succeed: How do we construct the necessary indicators of our own sustainability? How do we create the needed incentives, to grow, cooperate, and win? And how do we guarantee that our own internal decisions and choices, our efforts to work together, and the programs that we jointly put forward will be just? Only when we have good answers to questions can we assure a victory we can pass to our children, as the victories of the past have been passed to us.