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Toppling the Tripod: Sustainable Development, Constructive Ambiguity, and the Environmental Challenge

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Abstract

Discussions of global environmental governance seem to have gotten nowhere in the last thirty years despite environmental problems that continue to grow in scope and magnitude. Here, the role of sustainable development in that failure is examined, particularly the constructively ambiguous nature of the paradigm. It is suggested that an emphasis on the shifting, contextualized and relative term "needs" in the definition of sustainable development has led to paralysis at the international level in addressing environmental problems, particularly climate change. Contradictions that emerge when sustainable development is formalized in economic models as weak and strong sustainability are discussed. Finally, promising future pathways for environmental actions are explored.

Keywords: constructive ambiguity, environmental politics, climate change negotiations, global environmental governance.

1. Introduction

It is June 2009 in the small Swiss town of Glion overlooking the northern shore of Lake Geneva. In a beautiful hotel, some of the founding fathers of the environmental movement stare at a screen in quiet disbelief. They are gathered for the last day of a major conference on global environmental governance that has brought together three generations of environmental leaders: those that worked on the Stockholm Conference of 1972 and the Rio Conference of 1992, which established the environmental governance structure we know now, those leading the international environmental institutions today, and those emerging leaders who will be charged with solving the environmental problems of tomorrow. Over the past two days, these luminaries have discussed the original vision of the founders, the successes and failures of the last forty years, and ways of strengthening environmental governance in order to address the problems of the twenty-first century.

At this moment, we are watching a video projected onto a screen in the same room where most of these discussions have taken place. The black and white video is from 1982, and it shows a conference held in London to mark the tenth anniversary of the signing of the Stockholm Convention. In it, environmental leaders of the time — many of them household names, some of them now sitting in the conference room, older and grayer, watching their younger selves on screen — make

impassioned speeches about the environmental crisis and the need for collective political action to stem the decline.

For the forty minutes that the video runs, the room is eerily silent. The conference descends into none of the last-minute conversations or slow drifting away that usually marks the end of a high-level meeting. Instead, the participants watch intently as, one-by-one, the speakers in the video stand up and repeat, almost word for word, the arguments of the last two days. The talking points are the same: the immediacy of the environmental crisis, the dire consequences if it is not addressed, the lack of an effective response so far, the overconsumption of the North, and the development aspirations of the South. Ignoring the scratchiness of the 1980s recording, the speeches of 1982 and 2009 become indistinguishable.

The questions that hang in the room are almost tangible: Why have we been describing the same problems for over twenty-five years? Have we made any progress? And how can we expect to make progress now if we have no new solutions?

2. The Promise of Sustainable Development

For many years, environmentalists believed that sustainable development offered the key to solving the most basic socio-environmental problem – how to encourage economic growth without destroying the natural environment. Working for the past few years in environmental think tanks in Washington, D.C., I too believed that sustainable development was a sound way of ensuring prosperity and environmental protection for all. I appealed to the framework described by the Brundtland Commission in 1987 in which environmental, social and economic values are given equal weight in decision-making. Maybe most environmental problems had gotten worse, not better, over the twenty years since sustainable development was first popularized, but I felt confident that this was only because no one was truly practicing it.

After enrolling in a graduate program in environmental science, however, I began studying the tense relationship between North and South on environmental issues, particularly the deadlock in the international climate negotiations. This work has led me to believe that sustainable development is not only un-implemented but is actually un-implementable. Far from being the solution to our environmental problems, sustainable development actually stands in the way of a sober examination of what it will take to solve the environmental challenges posed by climate change, biodiversity loss, water shortages, overfishing, and desertification.

As a young environmentalist, part of a generation charged with solving the environmental problems of the twenty-first century, I fear repeating the failures of the last twenty years. I fear the illusory promise of sustainable development, which projects a mirage of consensus that evaporates when confronted with real problems that require real solutions. I fear that we too, like the founding generation before us, will fall into the trap of casually relying on superficial agreement without engaging with the very real tradeoffs between consumption and conservation.

I know that as environmentalists, we are often so focused on the future – on the next battle, the next crisis, the next generation – that we rarely take the time to look back and listen to the dusty recordings of twenty years ago. But a disinterested evaluation of our chances of success against the major environmental problems that

confront us in the twenty-first century makes it clear that we are in pressing need of a new strategy. And maybe that new strategy should begin by looking back, by taking a dispassionate look at the performance of sustainable development in the last twenty years. What was its original promise and why has that promise gone unrealized? Was sustainable development ever a real solution to the now decades-old questions posed by Northern overconsumption, Southern underdevelopment and global environmental constraints? Perhaps by doing this we can start a new conversation, one that really engages with the underlying drivers of environmental decline. If we don't, can we have any confidence that a summit similar to the Glion conference in twenty years time will not sound like a depressing repetition of the one in 2009?

3. Constructive Ambiguity

A precise definition of sustainable development is tough to pin down; there are over one hundred published definitions by some counts and still no clear agreement. Perhaps the most frequently cited is that of the Brundtland Commission. In its 1987 report Our Common Future, the Commission describes sustainable development as "meeting the needs of the present without compromising the ability of future generations to meet their own needs."

But what exactly does this mean? This seemingly simple question evokes many, frequently contradictory responses. Ask an official from a developing country, as I have done many times at climate negotiations, and you will get a response that emphasizes alleviating poverty and meeting the needs of the poor through economic development. Ask someone from a developed nation, and you will most likely hear about considering future generations in policymaking and extending the time-horizon of planning decisions. Ask a typical representative of an environmental NGO, and he or she will tell you that sustainable development is about redefining development to include environmental, as well as economic, objectives.

At first, I believed that these multiple definitions simply represented confusion over the true meaning of sustainable development. Supporters will tell you that these different ideas are not fundamentally opposed but simply reflect complementary priorities in the implementation of sustainable development. But after seeing how the concept is used by governments and policy-makers, I have increasingly realized that this vagueness is not peripheral but is in fact central to sustainable development. Politicians and diplomats will often build agreement between parties on sensitive issues by using deliberately ambiguous language in order to create superficial consensus. It is likely that this process has existed for as long as diplomacy itself, but in the 1970s Henry Kissinger dubbed it "constructive ambiguity."

Constructively ambiguous language can be helpful: it lets each party read its own interpretation while preventing a breakdown of talks. If the issue at hand is relatively minor or peripheral to the main agreement, then parties can still make progress while punting the controversy to later talks. In some cases, the passage of time, intervening events or improved relations makes the original disagreement simply disappear. But if the issue at hand is central to the dispute, then constructive ambiguity only serves to delay the tough political choices needed for a resolution.

Looking back at the political landscape of the 1970s and 80s that produced sustainable development, it is easy to see how an outcome that Kissinger would recognize as constructive ambiguity might have arisen. Ever since the inception of the environmental movement in the 1960s in the United States and Europe, developing nations had been suspicious that environmental concerns would be used as a ploy to thwart their development aspirations. Many threatened to boycott the Stockholm Conference in 1972 and afterwards remained concerned that this new-found obsession with the environment was just another way for rich nations to pull up the development ladder behind them. The West had gotten rich while polluting and consuming resources and, in a new-found fit of environmental consciousness, was now telling developing countries they could not do the same.

The Brundtland Commission–whose official name was the World Commission on Environment and Development–was a semi-political body self-consciously made up of roughly equal numbers of representatives from each of the official UN world regions. Charged with squaring the circle of continued development for the poor and global environmental protection, the Commission's formulation of sustainable development was able to forge agreement only through ambiguity.

4. Two Cases

Sustainable development according to the Brundtland Commission promises to meet the needs of the present generation without compromising the ability of future generations to meet their own needs. This emphasis on needs constitutes the key ambiguity in the Brundtland Commission's definition. It seems like an intuitive concept, but is in fact a highly contextualized term. To see this, we simply need to compare two representative cases.

Let's take Ismail, a Kyrgyz herder I met on my travels in Central Asia. Ismail lives in the Pamir Mountains in Tajikistan. In the winter he teaches at the primary school in his village. In the summer he takes his son, his wife, his extended family and their flock of goats and yaks to the summer pastures higher up the valley. Ismail needs many things: he needs electricity and piped water in his village; he needs economic opportunities in the region so his son doesn't have to migrate to Russia to find work; he needs a motorbike so his family, two days ride from the nearest town, is not so isolated in their summer encampment. At the same time, he is better off than many others. With a diversified and relatively stable income and a large share of capital in the form of livestock, Ismail is solidly middle-class for the region.

Now let's take Jo, a housewife and mother of four living in the D.C. suburbs who is also solidly middle-income. Jo needs, and in fact has, many of the things that Ismail needs such as electricity, clean water, economic opportunities and transportation. But in addition, perhaps there are other things that Jo needs: a car big enough to transport a large and active family; reliable heating for the winter and air conditioning for the summer; a telephone and internet connection to maintain a standard level of connectivity.

Perhaps Jo doesn't really need these things, but only wants them. Yet this highlights the ambiguity embodied in the Brundtland Commission's definition of sustainable development. Beyond the most basic biological necessities, what we feel we need becomes inextricably tied up with what we want. Our needs are constantly

evolving and are defined relative to what those around us have and want. If Jo truly feels that she needs an SUV to accommodate and protect her family, who has the authority to tell her that she doesn't? And if she needs one, it becomes increasingly hard to tell Ismail, and the other four billion inhabitants of the developing world, that they do not also need the same. In a constantly changing world of highly unequal consumption, distinguishing necessities from luxuries becomes not just difficult but highly politically charged.

5. International Climate Negotiations

It is easy to see why environmentalists believed that the sustainable development paradigm held so much potential. It promised to elevate environmental values alongside economic values in policy-making and, with its emphasis on future generations, promised to push planning horizons out so that the long-lived effects of environmental decline would be considered and averted.

But this is the precisely the point of constructive ambiguity – all parties, environmentalists included, can read their own meaning into the ambiguous term. The international climate negotiations where I have most experience offer a classic example of how the constructive ambiguity at the heart of sustainable development plays out in environmental policy-making. Perhaps the only thing that all countries can agree on in these talks is the importance of sustainable development. But dig a little deeper and you find that this rhetoric disguises real and intractable differences, and these differences have made it extremely difficult to negotiate an effective climate change treaty.

Industrializing countries such as China and India refuse to commit to any absolute caps on emissions by citing the energy and transportation needs of their still relatively poor populations. Developed countries such as the United States acknowledge the need to reduce emissions but argue that it shouldn't be done in a way that jeopardizes sustained economic development, a position that results in small emissions cuts and an emphasis on emissions offsets of questionable environmental validity. The combined result of these commitments to sustainable development has been continued growth in emissions with no prospect of reversing this trend in time to avert dangerous and irreparable climate change.

Working at the Copenhagen climate talks as part of the Maldives delegation, I saw first-hand how a seemingly theoretical concept such as constructive ambiguity has produced very real consequences for this vulnerable island nation. From the Maldives' perspective, climate change has laid bare the inadequacy of the sustainable development paradigm: the needs of its future generations, the need for a homeland not sunk beneath the waves, are pitted directly against the needs of the current generation to maintain and increase an unsustainable standard of living. Unfortunately for the Maldives, this has always been, and will likely remain, an unfair and quite likely unwinnable contest.

6. Weak Sustainability, Strong Sustainability

The ambiguity described above, which forms such a central element of sustainable development, means that the concept does not lend itself to easy application. Attempts to practically apply sustainable development to policy analysis

must involve confronting and resolving its inherent ambiguity. The risk is that this in turn will cause a breakdown of the political coalition supporting the idea, since this coalition only makes sense in the context of the multiple, conflicting interpretations permitted by constructive ambiguity. Nowhere does this contradiction become clearer than in the work of economists attempting to apply sustainable development to economic analyses and their competing definitions of weak and strong sustainability.

The notion of weak sustainability recognizes three kinds of capital, reflecting the three legs of the sustainable development tripod described by the Brundtland Commission. Economic capital covers the traditional understanding of capital as goods or assets. Social capital covers human resources such as an educated workforce or networks of relationships. Natural capital consists of renewable and non-renewable resources such as forests, clean water, minerals and biodiversity. In the world of weak sustainability, all forms of capital are interchangeable and an economy is sustainable if the total stock of capital remains constant.

This may sound arcane and just a little bit dull, but think for a minute about what counts as sustainable development under the weak definition. Crucially, an economy is sustainable even if it uses up all of its natural capital, as long as a portion of that income is invested to ensure equally high income for future generations. In other words, overfishing a fishery until it collapses would be a sustainable development pathway if roads, schools, power plants and other infrastructural investments were built with the fishing income. In fact, if the price is high enough, complete destruction of a nation's natural resource base could be considered sustainable.

If you think this scenario is farfetched, consider the nation of Nauru. This tiny island in the central Pacific would be just an insignificant dot in the ocean were it not for the fact that the island is composed entirely of one of the highest grades of phosphate rock ever discovered. Since the beginning of the twentieth-century over 80% of the surface has been mined and shipped to Australia and Japan to produce fertilizer, turning the island's interior into a weird moonscape that is entirely unusable and largely inaccessible. The phosphate on Nauru is a non-renewable resource. Production peaked in the 1980s and will likely cease entirely within the next decade. Nine in ten Nauruans are now unemployed and the government employs 95% of those that do work. Nevertheless, a fraction of phosphate revenue was diverted into a $1 billion trust fund that could provide continued income to citizens. According to the doctrine of weak sustainability, Nauru once counted among the most sustainable economies in the world – even while it proceeded to render most of its terrain completely uninhabitable.

Weak sustainability departs so far from what we instinctively understand as sustainability that it seems as if logical contortions are needed to connect the two. A natural and instinctive reaction is to dismiss weak sustainability as a manipulation of the true spirit of sustainable development, but its counterpart, strong sustainability, also has serious problems. For the requirements of strong sustainability to be met, the stock of natural capital must remain constant. This formulation ensures environmental protection but at the expense of economic development, a "morally repugnant" effect in the words of Oxford welfare economist Wilfred Beckerman. Beckerman argues that strong sustainability would require devoting huge resources

to protecting every one of the million species of beetle for future generations, an inexcusable luxury in the face of acute poverty and real human needs today.

Taken together, where does this leave us? Refreshingly, the formalism of economics leaves no room for ambiguity here. Either natural capital is exchangeable with other forms of capital or it is not. The former, resulting in weak sustainability, produces outcomes that few would consider sustainable. The latter, strong sustainability, prevents trade-offs between the environment and economic growth but could halt development as we understand it today. Sustainable development is constructively ambiguous because it holds out the promise of both environmental protection and economic growth, without engaging in the real exchanges that happen between the two. Because of this, sustainable development has not only failed in implementation, but has fostered the dangerous illusion that there are no trade-offs, that we can consume and conserve at the same time – that we can have our fish and eat them too.

7. A Voice of Reason

To understand exactly how sustainable development failed in the two decades since the Brundtland Commission, we need to go to the top – to those formulating environmental policy at the international level. The conference in Switzerland on global environmental governance brought together the current and all the former executive directors of UNEP for the first time in history. Cumulatively, this group represents almost four decades of experience at the helm of UN's most important environmental institution, working to navigate the treacherous waters of international environmental politics and to advocate for the environment at the highest levels of government. If any single collection of people can be said to be eyewitnesses to the politics of sustainable development, it is these four men and one woman, who together have experienced all the successes and failures of global environmental governance since Stockholm, as well as the back room political deals and horse trading that accompanied them.

Even in this company, Mostafa Tolba stands out, though it is hard to put a finger on exactly why. Perhaps it is his venerable age, which at 86 makes him easily the oldest. Perhaps it is because, as an Egyptian native, he is the only representative of the global South. But I suspect that, most probably, it is the sheer length and depth of his leadership in the environmental field that singles him out and gives his remarks a special emphasis, as if his words are underlined in the minds of those listening. Tolba headed UNEP for a remarkable seventeen years, between 1976 and 1992, steering it through some of the most important environmental landmarks, including the Montreal Protocol to protect the ozone layer, the CITES treaty to prevent trade in endangered species, and the preparations for the Earth Summit.

Dr. Tolba leans forward when he talks and speaks quietly but distinctly into the microphone. He fixes the person he is addressing with a stare, made larger by the thick glasses he usually wears, and emphasizes his points with sharp jabs of his index finger. His words are direct and challenging. "Look at all the work we have been doing for the last forty years, and human beings are still destroying the natural resources. Where is the impact on human behavior?" Tolba cites the Ecological Footprint Indicator, a measure of the land area needed to support the average individual, to make his point. Globally, the biological capacity of the Earth can

support 2.1 hectares per person. In 2005, the average global citizen used up 2.7 hectares. This means that we are now consuming over 128% of the Earth's reproductive capacity every year, mining its natural resources to support our lifestyles. Tolba's conclusions are characteristically to the point: "This means that in 2005, thirty five years after the establishment of UNEP and after all the discussion of global environmental governance, people are not shifting from over-consumption and they are not shifting from environmental destruction."

"Let's remember that back in 1972 the slogan was 'Only One Earth'," says Tolba, reminding us of the first major political conference of the environment in Stockholm, where he headed the Egyptian delegation. If current consumption trends continue, then we will require the productive capacity equivalent to a second Earth sometime within this century. "We keep saying we borrowed the Earth from our children, but we are doing absolutely nothing to return back what we borrowed, either intact or with interest."

Tolba traces the failure to reverse environmental destruction directly back to the sustainable development paradigm. "Thirty-five years ago we realized that there is a problem of deterioration and we came up with the famous slogan 'alternative patterns of development and lifestyle'. And at the Earth Summit in 1992 we had the Brundtland Commission and sustainable development. But did we change the lifestyles that are deteriorating the planet? Who of you changed his lifestyle over the last ten or fifteen years?"

Hearing this direct challenge brings home some painful truths. I care about the environment – I ride a bike, I eat very little meat, I recycle, I shop at the farmers market. But I also know that as a citizen of a developed country I am a member of a privileged global elite whose ecological footprint is unsustainable. If everybody on Earth lived like me, we would face environmental catastrophe.

"You," and here Tolba is addressing you, me, and the other one billion inhabitants of the developed world, "are pulling us in the developing countries into this same mischief of over-consumption and destruction of the natural resources that we have. There will never be sustainable development if we don't change our own way of life."

If Tolba is right, then the core of the many environmental challenges is the huge per-capita resource use in the North that provides a massively unsustainable development model for the billions around the world seeking a route out of poverty. Sustainable development has failed because it doesn't engage with this development model. Instead it promises to meet the needs of the present generation when the needs and aspirations of developing countries will always be to become developed, to achieve the high levels or prosperity and accompanying resource consumption that prevail in wealthy countries – an outcome that can never be sustainable.

8. New Ways Forward

After Tolba's talk and the video screening, participants at the conference in Switzerland begin packing up and heading home, some perhaps a little subdued at hearing their speeches echoed in a crackly, black and white recording from 1982. Among the participants, there is general agreement that political momentum is building toward a major summit in 2012, a symbolic date, commemorating 20 years from Rio and 40 years from Stockholm.

From my perspective, anticipating the environmental challenges that lie ahead, there is little to commemorate. The U.N. Environment Programme established in Stockhholm is generally considered weak, marginalized and ineffective. The climate change, biodiversity and desertification conventions signed at Rio have all failed to halt the environmental deterioration they were designed to address. Many of the leaders that gathered in Glion seem to truly believe a new summit will make a difference but, given the record of the past, can we hold out any hope that they are right?

I cannot say I have the answers, but the shortcomings of sustainable development may point the way forward. If, as Tolba suggests, sustainable development failed because it did not address the development model provided by wealthy countries, then this is the place to start. Ironically, this would imply that there should be less global environmental problem-solving, not more. If the environmental challenges of the 21st century such as climate change and biodiversity loss can be ultimately traced to unsustainable lifestyles in the developed North, then this is where these problems will be solved. Recognizing and acting on the long-range connections that link consumption with environmental degradation millions of miles away will allow us to treat the cause of environmental decline, not just its symptoms. Certainly this will mean exposing and rejecting the economic assumptions that underlie so much of how we understand development today: that more is always better; that the invaluable has no value; and that governments exist only to help us satisfy our superficial wants.

More importantly it will mean ceasing to use the developing world as an excuse to avoid examining our own over-consumption. Fundamentally, climate change is not a problem of deforestation in Indonesia but of patterns of energy use in developed countries. Biodiversity loss is not caused by poor farmers trying to make a living, but by patterns of globalized commodity production that push ever outward into pristine wilderness areas. The real pressure on Earth's resources comes not from population growth in the global South but from per-capita consumption in developed countries and growing per-capita consumption in those aspiring to be developed. These facts may be uncomfortable, but they should also be inspiring because they mean we can address these problems here and now, in our own communities, without waiting for the slow machinery of global environmental politics to grind into action.

Ultimately, and perhaps inevitably, this article will end on an unsatisfactory note. The goal is to point out the inadequacies of our current approach to environmental problem solving, not to replace it with a new "big idea". And, in fact, I suspect that any new big idea will prove as illusory as sustainable development for the simple reason that we do not know what a prosperous society with very low per-capita resource consumption looks like. Instead, I believe that the next big idea may only be understood retrospectively. That, if we are successful at solving the environmental challenges of the twenty-first century, we will look back and see the actions of individuals and communities, which seemed at the time mundane, small, and perhaps hopeless, as part of a mighty normative shift that ultimately redefined how we understand the world and our place in it.

The challenge now is therefore to resist the seductive glamour of the next big idea, but instead to see the potential in practical, local leadership and to foster that potential. In doing this, we can only hope that thirty years from now,

environmentalists watching a crackly, color recording of the 2012 summit will not find the conversations so strangely familiar.