Some Americans say they don't believe in climate change because they believe in God - or, more exactly, because of what they believe about God. A few weeks ago, the New York Times guoted some Indiana Tea Party activists who explained that, because the world was created for human use and benefit, using its mineral wealth couldn't possibly be harmful. Then a Republican would-be Chair of the House Energy and Commerce Committee turned out to believe that Noah's Covenant - God's promise not to destroy the world again before the end of time - rules out climate change. We don't know how many people believe some version of this story, but it is clearly part of the skein of money and conviction that have helped to make denial of climate change nearly a tenet of the Republican Party.

This looks like a big failure for the strategy of the Intergovernmental Panel on Climate Change. The IPCC tried mightily to establish an untouchable consensus on the science of climate, which would serve as the basis of a reasoned political debate on the topic. In the US, at least, politics - and religion - turned around and ate the science.

What's going on here? Some accounts focus on money: lots of it goes into cultivating climate skepticism. Some draw on social psychology. Yale's Dan Kahan and his collaborators have done some invaluable studies, and inspired others, that show views on climate tracking broader political and cultural identity. People who dislike regulation, mistrust "big government," and get their sense of worth from traditional hierarchies tend to doubt climate change is real - though they sometimes feel differently when they're told that it could be fought with macho technologies like nuclear power and geo-engineering. Those who believe in regulation, mistrust markets and individualism, and would like to make social life more egalitarian tend to believe climate change is real and human-caused - though they are more likely to doubt it if they think it requires macho technologies rather than virtuous emissions control. It's fair to say that none of this bears on the merits of the science. Some of it has to do with what kinds of governance respondents feel comfortable or uncomfortable with: they resist believing in problems that seem to require regulation or other interventions (such as geo-engineering) that they dislike. These, in turn, seem connected with status: a certain version of the problem and its solutions makes me right, people like you, wrong.

I think there's another way of getting at the issue. The belief that climate change can't be real because God made the earth for us to use is just one instance of a deep and old American practice of enlisting nature to uphold our cultural and political identities - to prove that the world is made for people like us. Competing ideas about how nature works, why it matters, and what our place is in it have been on the scene for centuries, and they have always shaped our law-making around nature. Greens have been as much a part of this as today's climate skeptics. In some ways, even technocrats are part of this story, rather than standing outside as some like to imagine they can. Attractive as the IPCC's

science-first strategy was, the right starting place in American politics is not to end-run this messiness, but to find ways to engage it.

The place to begin is with a rough historical map of what I call American environmental imagination. There are, very roughly, four takes on nature that have shaped politics and lawmaking in this country. The Indianan Tea Partiers and their friends in Congress are invoking the oldest of these, an idea that goes back to the European conquest and settlement of the continent. On this take, the world is made for us to use, but we have to complete the design by working to make it productive. Idle land, minerals left in the ground, wilderness areas locked out of mining and timbering for backpackers' enjoyment, are all affronts. Using nature in this muscular, productive way is connected with the spirit of egalitarian democracy: farmers, loggers, miners, small businessmen, all the toilers, get special credit for honor, integrity, and down-home insight – in contrast to the lawyers and professors who never get calluses on their hands. Very frequently, this take is connected with religious belief in providential design: the world was engineered to answer our labor with fruitfulness. The fact that we get richer as we work is proof that we are working with divine design.

This theory helped to justify taking the continent from Native Americans (who seemed not to be doing much to make it bloom) and was the ideology of westward settlement. It formed the identities of generations of Americans, particularly those who labored to extract natural wealth. For the last century, its public assertions have often been defensive: the spirit of the honest settler has been invoked against the creation of national forests, wilderness areas, and national monuments – anything that moves land from use to preservation. When Utah county officials pilot a flag-draped bulldozer into a national monument or wilderness study area on the Fourth of July, they are calling in progress, labor, and liberty against effete preservation. When an early Tea-Party road show included testimonials on how the Endangered Species Act was parching farmers in the Central Valley (by requiring that water be kept in-stream), the point was the same. When macho Democratic Senate candidate Joe Manchin, in coal-mining West Virginia, wanted to show which side of this cultural divide he was on, he ran an ad showing himself pumping a bullet into the Waxman-Markey climate legislation.

I like to call this strand of environmental imagination <u>providential</u>, because of its emphasis on the world's being made for use, and the conviction that, if we work it properly, we will be rewarded. If you believe this at the level of identity – it is part of who you are, why it makes sense for you to do the work you do, live where you live, drive what you drive, and trust as you do in the afterlife, then climate change might be a pretty serious affront. After all, it amounts to saying that how we have lived on the continent is self-undermining, even self-

immolating. The providential God doesn't do this kind of grim historical irony.

The IPCC strategy, and much of the elite climate conversation, has belonged to another strand of environmental imagination: that of the engineers and managers. This is at least part of the reason that the two sides are so mutually baffled and contemptuous of each other. Our elite climate conversation is mainly the province of <u>progressive managers</u>, specialists in using government to design better systems to benefit the whole society. In the US, this approach to governance arose in the Progressive Era and triumphed, at least for a while, in the New Deal. Particularly in its Progressive origins, it was essentially connected with fights about nature. The paradigms of progressive reform were new approaches to continental development: soil conservation, national forests, irrigation systems, and wildlife preserves. Progressives justified them by painting the providential model of westward expansion as a disaster – which it often enough was: a tableau of blown-out farms, eroded slopes, silt-choked streams, and exhausted forests stripped for their best wood and then burnt or left in rotting chaos.

On the progressive take, nature didn't call out for settlement, at least not in the providential style. Instead, it called out for management. Expert administrators and designers could provide that, and so, on this take, they become the heroes of continental development. The individual settler went from being God's soldier to looking hapless and inadvertently destructive. In some ways, this same fight is playing out again. Scientists and policy engineers say we have to re-engineer our whole economy to avoid undermining the planetary system it depends on. Others hear this as meaning that their efforts to live the American dream, under increasingly straitened circumstances, have made them participants in a huge and unfolding environmental injury. This alleged injury was and remains invisible to them, but the experts claim they can diagnose and cure it.

The third take on nature has been tremendously important for about a century of environmental lawmaking, but so far is less central to climate politics. This is the <u>romantic</u> view of nature. It can be summarized in a place-name: Yosemite Valley. Beginning in the middle and later nineteenth century, growing numbers of Americans found that, in the most spectacular places, facing sheer cliffs and mountain vistas, they felt elevated, clarified, restored. American scenery became a kind of secular religion, the national parks and wilderness areas its temples and churches. Besides contributing a lot to the politics of parks and wilderness, this take has been the touchstone of many of the most committed environmental advocates, particularly in groups like the Sierra Club – founded around the personality of arch-Romantic John Muir, and built on the strength of Ansel Adams's visual paeans to American sublimity. I've wondered <u>elsewhere</u> whether the romantic spirit has something to contribute to the politics of climate change; but, so far, it has been largely

absent from the field.

The fourth take is the newest addition to the American environmental imagination. It's also the broadest and most diffuse. My hunch is that the politics of climate change will define the form that this take develops over the next few decades. This is the ecological take, founded on the discovery that everything is connected, that our actions - particularly in an industrial society - have consequences that are often remote, long-distance, unintended, even unforeseeable. In its first generation, in the 1960s and 1970s, ecology founded the perception that pollution was causing a massive public-health crisis, perhaps threatening life itself. Rachel Carson's Silent Spring was just one part of a massive alarm about air and water pollution that helped to power the environmental statutes of the 1970s. The basic solutions - imposing appropriate technology and other controls, industry by industry and medium (meaning, say, air or water) by medium mitigated the problem; but they also turned out to be too simply, too blocky, not nearly "ecological" enough. It came to seem that not just our problems, but our solutions, had to involve complex and elusive systems of interdependence, ways of responding to unforeseen consequences, effects cross-cutting different statutes and jurisdictions, and so forth.

Since then, ecology has increasingly become a master-metaphor for social life itself. At a palpable scale, the enthusiasm for local food whose sources one can see is a way of trying to weave the web of interdependence more closely, to turn those invisible and long-distance harms into a set of visible and approachable mutual benefits. At the largest, most abstract scale, visions of comprehensive carbon-pricing – building a disincentive to emit greenhouse gases into every economic decision, from whether to drive or walk to what car to buy to how much capital is invested in alternative-energy research – are attempts to redesign a vastly complex system so that its many interrelations become mutually supportive rather than undermining.

Climate change is the ultimate story of interdependence and unforeseen consequences. To those who adopted the ecological take on nature in the 1960s and 1970s and thereafter, it seems to follow from the same logic: our traditional efforts at mastering the world for our convenience, and getting ever richer as we do so, need to give way to a more subtle and humble approach – not voluntary global poverty, but a recognition that the world does not exist for our benefit, that it imposes its own limits, and that our mastery of it is fragile and incomplete. This is why the ecologically minded often see geo-engineering schemes as accelerating the same mistakes that brought us here, while technophile progressive engineers embrace them, and traditional providentialists deny the problem in the first place.

All of this requires a lot more than I can say here, but I'll to offer a few take-away points.

First, this cultural story is not an alternative to the focus on money and power, or the socialscience story: it's a complement, that tries to get at the relationship between nature and identity because that relationship is part of the stories the other approaches pursue. It's why money can mobilize some attitudes much more easily than others, and why some takes on nature reinforce people's ideological commitments, while others offend them. Second, it's not a counsel of despair for the ambitions to build climate politics on science and design a smart climate regime. Rather, it's a counsel of reality: those ambitions have to run through politics, not around it, and expect to be having the messy kinds of conflicts that are springing up around climate. It might be helpful to remember that the policy engineer's perspective isn't just the "right" one: it's also one part of a history of political and cultural conflict. The clash between it and a providential take, or the ecological perception that it's hubristic, won't just go away before the force of reason.

The four environmental attitudes I've sketched came into being at different times, but they co-exist now, often even within individuals. Speaking for myself, I feel them all. As a farm boy (providential laborer), high-country devotee (Romantic), law professor (progressive technocrat), and student of environmental problems (you'd better have an ecological take, if you care about these), I sometimes resonate spontaneously to each. That's probably not so very unusual. Moreover, all four are constantly changing, and being fought over. Some evangelicals, and plenty of mainline Christians, continue to argue that "earth care" is the best understanding of the biblical call for "dominion," meaning something like "skilled and respectful mastery," and that humility before a complex, often unknowable world is part of the spirit of their tradition.

We'd better look forward to a lot more arguments about the meaning of all these traditions. We can just hope to make them something more than shouting, bafflement, and contempt.