Andy Goldsworthy: Multimedia, chalk boulders and paths by moonlight

A timberbuild future for Europe

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Artstation’s paperweight delight

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Once invited to join Captain Beefheart’s Magic Band, today Langdon Winner is possibly the only Beefheartian philosopher of technology around. Here he talks about, among other issues, Captain Amerika’s state of mind regarding its abiding obsession with the technical imperative.

Having the technology

Langdon Winner, the American Philosopher of Technology, has over the last two decades carved out a unique place in his stated discipline. In his early work, 1977’s Autonomous Technology, Winner investigated what he calls the logic of runaway or, as the title has it, ‘autonomous technology’. Throughout this work his concerns return to the principle of technological limits. In recent years this concern has been expressed by turning his focus towards computerisation, the Science Wars and GM technology.

Winner comes from a perspective of technological pessimism, informed both by Lewis Mumford, and the currently forgotten French sociologist Jacques Ellul, whose overarching view of ‘la Technique’ was signally influential in the early sixties. Winner was also an early rock writer, with a particular soft spot for eco-dadaist Captain Beefheart. Perhaps his is the closest we will get to a Beefheartian philosophy of technology.

Ellul’s book, La Technique translated as The Technological Society has been viewed as a tour de force in delineating how Western society has become party to the thrill of ‘la technique’, which he believes organises and orders modern humanity’s entire existence. The work is a grim, all embracing dystopian vision of the system and how technological society contains within it a logic of ever-increasing and totalising expansionism. This was unsurprisingly, influential in activating the green Radical Technology movement in the sixties and seventies. ‘La Technique’s central concept may be “the totality of methods rationally arrived at, and having absolute efficiency (for a given stage of development) in every field of human activity...advocating the entire remaking of life and tolerating no judgement from without”.

This theme of autonomous technology, out of control, is developed in Winner’s work. It, following its own exponential course, independently human direction...It has fashioned an omniscient world which obeys its own laws and which has renounced all tradition...Far from being controlled by the desired and rational ends of human beings, technology in a real sense now governs its own course, speed and direction. Winner’s prognosis may be gloomy, however it’s a scene which those involved in or advocating the green new media route need also to contemplate. How much can the green movement siphon off technological developments it likes and feel it can make use of if these are only offcuts from...
megamachine, albeit fashioned for new and laudatory green ends? Ought any green engagement with new media technologies, also integrate strategies and scenarios for limiting the exponential growth and development of technology, and the runaway condition it has arguably assumed? Winner's critical technology philosophy also easily extends to thinking about states of mind; how, for instance, our time and pace cultures are organised. One interrelated conclusion is that with acceleration of our pace and time cultures, societies and other forms of organisation are moving both further from balance, and from a capacity for creating cultures of balance. In Western cultures this speeding up, from the effects of 'runaway' technology or an assemblage of other influences, has produced cultures which are palpably 'out of balance.' These sorts of questions are only too absent from green think tanks' excursions into new media, such as Forum for the Future's Digital Futures: living in a dot com world, the research of which appears loath to acknowledge this dimension of digital life and livelihood. Since Autonomous Technology, Winner has also published The Whale and the Reactor, a series of essays. Many other essays have followed, and he is currently working on another major book, Technology and Human Experience, although it may be some time before this sees the light of day. This interview also took place some time ago, when the Internet was all the rage, but it has been updated, suitably enough, via subsequent email correspondence.

What is the map of the philosophy of technology, and where does your particular perspective fit in with that?

Langdon Winner: (laughs) — Well the map is quite complex and diverse. There are techno-enthusiasts, pragmatists, libertarians, socialists, Heideggerians, anarchists, and many others. At the center of the debate is a vast mainstream that sees the history of science and technology as an ongoing march of improvements. Philosophies in this vein stress the continuing expansion of scientific knowledge, technical means and material productivity, promising better living conditions for all. This has been the dominant viewpoint for two centuries and is likely to remain so. What's interesting is that 'progress,' a term long associated with this point of view, has recently gone out of fashion. This reflects an awareness that the continuing poverty of a major portion of the world's population along with obvious signs of environmental crisis don't exactly add up to progress in the grand sense. A more popular term in business and government these days is 'innovation,' a concept that suggests dynamic change but something detached from dreams of universal benefit emphasised during the Enlightenment.

Who else is on the map?

IW: Another important way of thinking about technology remains primarily Marxist, arguing that there needs to be fundamental change in the ownership and control of the means of production before the promise of modern technology can be secured. As you know, this philosophy has taken a beating in recent years because it became strongly associated with the failure of the Communist states that adopted Marxism as an ideology. However, there are still a good number of thoughtful left wing thinkers around who talk about making technological choices that include social justice as a central goal, something totally ignored in today's high tech boosterism.

I'm especially interested in a tradition of technological sceptics that begins in the nineteenth and twentieth century thinkers — William Morris, John Ruskin, Herman Melville, and Henry Adams, among others — and their twentieth century counterparts, including Mahatma Gandhi, Lewis Mumford, Jacques Ellul, Theodore Roszak, Vandana Shiva, and others. A consistent theme of this way of thinking is that the actual course of technological change is often a betrayal of the well-being of humanity rather than its fulfilment. The crucial quest in this way of thinking is to suggest alternative paths in modern material culture.

And your own point of view?

My understanding of technology begins with questions in political theory. What's always fascinated me is the powerful reweaving of the fabric of political society during periods of technological change. These episodes have tremendous positive potential because there is much in our world that desperately needs reform. But again and again people sleepwalk through what are called 'technological revolutions,' ignoring possibilities for genuine change. What we see are old patterns of justice and concentrations of power endlessly reproduced in new sociotechnical settings.

I emphasise some very old questions — questions about freedom, power, authority, order, justice, and democracy — noticing how they appear within the structures and processes of various technologies. For example: What is a reasonable definition of 'democracy'? Does could the internet be structured in ways that realize truly democratic conditions? Raising these questions is often taken as 'anti-technology' because the prevailing religion of our time requires that we ought to celebrate wildly, applauding whatever technological change happens to bring. I like to encourage people to criticise and agitate rather than nod off.
Has philosophy of technology moved beyond the academy?

Yes. Skeptical discourse about technology is more refined and widely understood today than it was, say, thirty years ago. At at meetings of Computer Professionals for Social Responsibility, for example, you find people who have read a great deal of philosophy and technology. They know the issues of surveillance and information technology, they know the critiques of later stage Marxists on labor process and inequality, and they know what Foucault might say about the applications of computer power/knowledge.

In environmental politics and movements in anti-globalization, the level of critical thought is far more sophisticated than was common 30 years ago. Technology criticism used to be rather a extraordinary topic, but it in many ways it has become a common theme in public discussions, enough so that some of its central themes are now targets for attack in the mass media. An hour long program on network in the US, 'Tampering with Nature,' tried to portray concerns about global warming and genetic engineering as hysterical extremism. The producer, John Stossel, a right-wing journalist known for fabricating stories, tried to show a group of children supposedly being brainwashed by environmental educators in the public schools. Fortunately, the parents of the children rose up in anger, pointing out that it was Mr Stossel who actually exploiting the kids.

Would you call yourself an Ellulian?

Do we need labels? My thinking owes a lot to Plato, Aristotle, Marx, Arendt, and dozens of other writers, not the least of whom was Lewis Mumford. But I resist being identified with any particular school because I want to remain free, learning from a variety of sources. I am, however, proudly a member of two international organisations both called The Jacques Ellul Society. One of them is a group of scholars who want to foster continued study of Ellul's writings and ideas. The other is a loosely knit band of technology critics – writers and activists – who support each other in agitation of various kinds.

Jacques Ellul seems to be a major player, although forgotten today.

Yes, I consider him a major thinker. He describes in the clearest form the kinds of techno-mania that seized Western society in early modern history and have held on tenaciously ever since. Ellul's basic insight, in my view, has to do with the role that 'la technique' plays in making judgments of all kinds. What was once a rather limited way of thinking about narrowly defined instrumental choices eventually became our culture's primary way of thinking about every decision, even the most personal ones. We always opt for efficiency, 'getting more from less' even when that involves sacrificing more fundamental ends.

Do you think Ellul still has a contemporary relevance for present day technological matters such as the internet and VR. And do you think he would have foreseen such technologies?

Oh absolutely. At the very end of the Technological Society, Ellul predicts that 'la technique' will eventually claim the human body itself. Humanity will relinquish its primacy and dissolve as technique achieves total supremacy. There are any number of ways that this could happen. The symbiosis between human bodies with electronic devices is one; the retailoring of species through biotechnology is certainly another. Ellul hoped that people would rebel against the total colonization of human being by technology. The next several decades will reveal whether or not his hopes were justified.

What sort of things do you think Techno communities, Silicon Valley etc, would learn from an exposure, as it were, of Ellul's thinking?

A great many people in Silicon Valley are true believers more than willing to cram new technology into every pore of our existence. Now and again, however, there are members of that community who recoil in horror when they notice where the path leads. Bill Joy, computer scientist and Sun Microsystems, has recently sounded a warning about several high tech paths – robotics, nanotechnology, and biotechnology, and others — that spell trouble for humanity in the decades ahead. What Mr Joy and others might learn from Ellul is the challenge to our freedom that the slide into total technology involves. Perhaps they would recognize how difficult — and yet how crucial it is — to say 'no' to technical renovations, even some that appear to have a lot going for them.

What is it that makes it difficult? Can you give an example?

What's most difficult in our time is to pay any attention to first questions, basic concerns that ought to engage us as moral agents, when the lure of powerful technical application beckons from all sides. In Silicon Valley and elsewhere the past twenty years there's been a major push to incorporate computers and electronic communications into education. What's happened in the process is that the fundamental purposes of education have been all but ignored. Teachers, administrators and parents have been absorbed by decisions about hardware and software. Is Macintosh better than IBM? Which email package should we adopt? Should kids learn PowerPoint? It's as if the world of education had suddenly been seized by a bizarre fascination with plumbing. But if you ask people to talk about what
education is all about, what it ought to accomplish, they have nothing to say. In some quarters 'getting wired' has become the be-all and end-all of teaching and learning.

Are you thinking of people like Seymour Papert?

Papert has definitely been in the forefront of every backward step in this field. What's interesting about the techno-educators is that they never own up to the failures of earlier promotions. They're always on the cutting edge of what's coming next. Hundreds and hundreds of millions, perhaps billions of dollars have been spent over the years on digital gadgets that had no discernible positive effect, other than to boost the morale of school administrators who want to appear up to date. This has played an important role in decline and demoralisation in secondary education in the United States. We've had one technological revolution after another which you'd think would have improved student learning beyond measure. But our middle schools and high schools are still in deep crisis. Fundamental social problems - inequality of educational resources, for example - are ignored as people twiddle with the latest instruments.

Would you identify yourself with Jerry Mander, Kirkpatrick Sale and the Neo-Luddites or do your self as distinct from that?

I've talked with Mander and Sale and find their contributions to the debate entirely positive. I occasionally attend Neo-Luddite pow-wows in which activists from a variety of positions - feminists, deep
ecologists, labor activists, participatory democrats and the like – have come together to share notes. Stephanie Mills’s book, *Turning Away from Technology*, offers conversations from meetings of that kind.

I’m not worried about being called a Neo-Luddite. After all, the British Luddite movements of the 19th century were an appropriate expression of human concerns about early industrialisation. The point, of course, is not to smash machines. The great need is to rethink what we are doing and seek democratic, socially just, ecologically sound alternatives. The real wreckers in our time are those who forge ahead without these fundamental concerns in mind.

*Many people associate the Unabomber with radical technology criticism. What do you see as his role?*

Just after the Unabomber’s manifesto was released and before its writer was captured, I gave a seminar at my university about the document. It seemed to me that although the Unabomber had read the anarchist literature on technology, nature and society, he’d pushed the argument in dreadful directions, emphasizing the psychology of power and need for individuals to regain power by destroying modern civilization. This is a remarkable departure from the philosophy of recent anarchists, Murry Bookchin among them, who’ve seen the challenge as that of rebuilding society and its material infrastructures on ecological foundations, an entirely positive project.

Notable also in the Unabomber’s manifesto is its complete lack of emphasis on cooperation and community. In my seminar I predicted that when the Unabomber was found, he’d turn out to be a loveless, isolated soul. And, in fact, when Theodore Kazinsky was finally arrested for his serial killings, he was living as a sociopathic hermit.

Unfortunately, Kazinsky’s critique covers some of the territory explored by those interested in the peaceful reconstruction of the technological order.

His murderous example makes it much more difficult to argue some key points, for example, the human burdens of our over-organised world.

*Do you see practical instances of people asking the right questions today?*

Yes, there are a great many individuals and groups, so many in fact that it’s difficult to summarise the variety and scope of their efforts. There are well-organised initiatives around the globe on a wide range of technology-related issues: wilderness and rain forest protection, biodiversity, anti-logging, endangered species, organic agriculture, bio-piracy, local democracy, quality of working life, green design, renewable energy, new urbanism, resistance to sweatshops, rights of disabled people, alternatives to consumerism, green design, democratizing electronic media, community computer networking – the list goes on and on. The web page of the Turning Point Project lists some of the more active groups and summarizes their central concerns. One valuable service the Internet performs is to make it very easy to obtain information about progressive causes, their viewpoints and projects.

*What role do the anti-globalism demonstrations at Seattle and elsewhere play here?*

In some ways the protests resemble the anti-Vietnam War movement of the 1960s and early 1970s as well as the movement against nuclear weapons of the 1980s. They dramatise policies that upper level decision makers had hoped to shelter from public scrutiny. Global corporations and government bureaucrats had gotten used to working on matters of trade, finance, patents, biotechnology policy and the like in peace and quiet in lovely seaside and mountain retreats. But whenever publicly announced meetings are held these days, protestors also show up to disrupt the gathering, attract headlines and force at least some attention to the unseemly deals being made. This is a highly positive development. Confronted with scenes of resistance, establishment politicians and journalists have been forced to embrace absurdity, claiming that the World Trade Organisation is actually the best hope of the world’s poor and that the demonstrators want to keep the South in poverty.

*The emphasis in your writing on ‘runaway technology’ seems similar to Gregory Bateson’s ideas about schismogenesis and the runaway condition in Western culture. Bateson offered as a contrast other cultural models, e.g. Bali, which exist in a steady state. Do you think technology can be used as a midwife to the steady state condition?*

I am not an expert on Bateson’s position or the contrasts it presents. In my view, today’s varieties of technology-out-of-control stem from an increasingly willful, self-conscious renunciation of intelligent limits. The Kyoto treaty on global warming is a good example. It’s perfectly evident what steps need to be taken. But even the modest standards for cutting back on green house gases are denounced by the US and some other countries as a threat to their economic vitality.

I think it is possible to create a prosperous, technological society that based on ecological sustainable, socially just patterns of production. This would entail overcoming countless bad habits we’ve inherited from the industrial age – waste, pollution, over-consumption, continuing violence to ecosystems, and flagrant disregard for the well-being of people in the South. The more I’ve studied modern technology, the more appalled I am to see how often our society chooses paths in energy, agriculture, water, transit, and industrial production that are just plain crude, an insult to
wise stewardship and sound engineering. The good news is that there's plenty of room for ingenuity and invention based on the goal of living lightly on the Earth.

I notice that you are teaching at the Schumacher College at Dartington in January 2003 in a course entitled 'Digital Future? Information Technology and the Earth'.

Yes, I'm looking forward to it.

Other people in the course include members of the 'Digital Futures' project. Their work tends to be broadly optimistic and welcoming concerning the environmental synergy of sustainability and the new media economy. What's your view on that?

I've read 'Digital Futures: an agenda for a sustainable digital economy' but not the larger book published by the project. I'm reluctant to pass judgment on the approach until I've seen more. In its prose and graphic style, however, the 'agenda' reminds me of a good number of techno-utopian documents that have been produced during the past two centuries. There's always a brighter day ahead if only we embrace the promise of whatever new technology has just been introduced – the factory, railroad, telephone, electric power, airplane, radio, television, nuclear power, computer, and so forth. As these stories work their way out, however, the utopian hue is tarnished and we're left with a complex mix of outcomes.

Are you saying that digital technology will not move us toward a desirable future?

I'll reserve judgment. Certainly the raw potential of digital communication has promising aspects. But much of the utopian hue that surrounded the Internet during the 1990s has begun to fade during the dot-com collapse of the past year. What's happening now is an entirely familiar struggle for control over a new medium. Monopolies are in the making. AOL recently announced that it already controlled some 40 percent of all advertising on the internet. That level of penetration would be horrendous if observed in any other communications medium. The model of communications that AOL has in mind is one that its partner Time Warner has tried repeatedly – the pay-per-view model, an amplified version of cable television. This model of corporate controlled, consumerist communication could well become the internet of tomorrow. I notice that AOL is one of the sponsors of the 'Digital Futures' project. That's interesting, isn't it?

Are there ways digital technology could help us 'live more lightly on the Earth'?

Yes, but they are not ones favored in our corporate, growth-oriented economy. For example, we could explicitly resolve to use teleconferencing to replace the resource exhausting, environmentally destructive practices of automobile and airline travel. What's happening instead is that the new communications serves as a stimulant for more local and global travel, burning more petrol and jet fuel. The power-mad development of the digital society celebrated in publications like Wired Magazine, for example, contains no hint that the new technology should lead to de-intensification of demand for material resources. For the time being, the practices of the 'New Economy' do not supplant the excesses of the industrial age, but merely add to them.

What are you working on right now?

Well, along with my teaching I have three teenage sons and, believe me, that's plenty of work right there. Beyond that I'm finishing a book on politics and design and another one that's a collection of essays from recent years. I continue to write columns for the online journal NetFuture and have just finished an essay on the posthuman prospect.

A new departure for me is a series of televised 'techno-satires'. The first of them is 'The Automatic Professor Machine,' a send-up of the claims and pretensions of so-called distance education. It's available on CD and VHS video tape and free of charge in as a streaming video at my web site: www.ripl.edu/~winner. There are several other pieces of this kind I'd like to do. Our society's involvement with technology is often so preposterous that comedy seems an appropriate response.

Are you involved in political causes?

Yes, I consider political activity a key part of both my personal life and scholarship. I'm on the board of the Loka Institute which encourages democratization of decision-making about technology and supports community-based research. On a local level I'm a member of Roxbury Farm, part of a growing movement in community-supported biodynamic agriculture. Right now I'm busy with citizens' organisations that are trying to save New York's Hudson River Valley, resisting the re-introduction of heavy industrial plants there. That's politics down and dirty.