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## **Science** is Capital

dot matrix

dot matrix Science is Capital 2006

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basis to further their own ends (while remembering Mengele, people routinely forget Rosenberg and Riefenstahl and the role of art in the Nazi movement).

But Dot Matrix seems to be of the opinion that facts don't matter, that any wild speculation is as relevant as a controlled experiment and that science has no place in his revolution (a view that Kropotkin would heartily disagree with). However, I don't believe that the politics of exclusion is a healthy point of view as we work towards building another world. I'm of the opinion that we should use any tool and any method if it furthers our collective goal of human freedom. I view a proper understanding of science to be a dual-purpose tool that anyone can employ, akin to, say, a hammer. Frequently it is used to build the edifice of State power, but it can also be used to undermine and dismantle it.

Moebius Cube

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Dot responds:

What is the viability of cherry picking? Is it appropriate to isolate one fundamental aspect of a cultural understanding (in this case, whatever you consider to be the good points of science) from the rest of that culture (in this case the Control Society that we presumably both hate)? If "Science is Capital" raised any hint of this question for you, then I consider it worth the time you spent reading it.

Your examples of how excellently science has answered the questions that science has asked are not compelling to me.

But perhaps that is because I am "of the opinion that facts don't matter:" (Ah facts, my good friends...)

Or maybe I just haven't yet recovered from my abrupt and unplanned sex change.

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precise measurements of wind speed, barometric pressure, relative humidity, and temperature that you could predict the exact motions of a leaf caught in a summer breeze, let alone the universe as a whole. However, one could predict, within a fairly reliable probability, how far and in what direction such a leaf would travel under such conditions. This is the same principle by which models of global warming are generated.

Science operates through making predictions (hypotheses) and, if those predictions fail (repetition) the hypothesis is abandoned. It's the process of making a reasoned argument about the natural world. In order to make a reasoned argument you have to agree on certain axioms, otherwise you might as well debate in different languages for all of the sense it will make. So, while I'm not sure what Dot Matrix means by "a perspective of the world as a frozen (static) place" I can only presume he's referring to the laws of physics. However, I seriously doubt he's stating that the laws of gravity or thermodynamics are as arbitrary as the laws of the State.

But if he wants to believe that, no scientist will force him to do otherwise.

However, Dot Matrix is dead on when he critiques how science has been abused by the State. Whether you're talking about capitalists, fascists or communists, the State has routinely politicized science to further its grasp on power (including anthropology, in which 1/3 of all grants in the 1960s were from the CIA<sup>2</sup>). It is this that makes most leftists shun science as a whole (and why people immediately presume evolutionary interpretations of human behavior are one step away from Dr. Mengele's views on eugenics). However, if we're going to abandon science on those grounds we're also going to have to abandon philosophy, art, literature and music for also being employed by the power hungry on a routine

<sup>&</sup>lt;sup>2</sup> Church Committee Reports, Book 1.X. The Domestic Impact of Foreign Clandestine Operations: The CIA and Academic Institutions, The Media, And Religious Institutions, p. 182; www.aarclibrary.org

There is some truth to what he says.

For example, to use Bertrand Russell's analogy, if we see a cat on one side of the room and then, after being distracted, we see it on the opposite side, the most reasonable explanation is that the cat physically traversed that distance. We could, if we wanted, suppose that a wormhole opened and the cat was transported to that location (or perhaps it was a malicious angel sent to confuse us), but since we're not confident about the reality of wormholes or angels (nor of their habit of singling out stray felines) we can confidently discount those possibilities for the time being. The same applies to all natural phenomena (however Dot Matrix has clearly never seen the bitter arguments that occur over which interpretation best fits the evidence or he could never state that science "emphasizes a specific perspective on material reality."

Dot Matrix is also correct that many scientists (though certainly not all, such as systems theorists) incorporate reductionism into their approach in order to understand complex phenomena, by breaking them down into easier to understand components. However, I've yet to meet anyone actually engaging in science who believes that, say, understanding electron transport within synaptic neurons is all you need to explain the joy felt while listening to music. But, certainly, an understanding of why cancerous cells mutate would go a long way to understanding the disease at large (as would understanding the lifestyle of the person afflicted). In the same way, Kropotkin (and Marx) used reductionism in their arguments to promote their political theories.

But reductionism as the ultimate explanation is a commonly held fallacy about science that hasn't changed since William Blake condemned the evils of "single vision and Newton's sleep" at the turn of the 19th century. At that time scientists really did believe that if you had enough facts about the universe, you could predict everything about future outcomes (Newton, like many early scientists, viewed his research as determining God's plan). But no one today, outside of a few crackpots, would imagine that if you had

### Science is Capital

Revolution can no longer be taken to mean just the destruction of all that is old and conservative, because capital has accomplished this itself. Rather it will appear as a return to something (a revolution in the mathematical sense of the term), a return to community though not in any form that has existed previously. Revolution will make itself felt in the destruction of all that is most "modern" and "progressive" because science is capital.

#### - Jacques Camatte<sup>1</sup>

Science is a system of knowledge acquisition that is based on empiricism, experimentation, atomization, rationalizing causality, and methodological naturalism and that is aimed at finding the truth. Theories — predictive hypotheses — are the basic unit of knowledge in this system. Science also refers to the bodies of knowledge achieved from this research.

Most scientists feel that scientific investigation must adhere to the scientific method, a process for evaluating empirical knowledge under the working assumption of methodological materialism, which explains observable events in nature by natural causes without assuming the existence or non-existence or the supernatural. Particular specialized studies that make use of empirical methods are often referred to as sciences as well.

Conversations about science get complicated since the word refers to distinct yet connected things. For example, physics is a

<sup>&</sup>lt;sup>1</sup> Camatte, "Against Domestication" This World We Must Leave, 113

science (a field of specialized studies) that is not always scientific (according to the above definition), since quantum physics moves away from the distinction between observer and observed that is fundamental to experimentation. However, to the extent that physicists reject the implications of that moving away, physics continues in the trajectory that science (as a way of thinking) has established.

Science must be critiqued as the modern problem-solving technique. Science is so widely accepted that for many people it has in fact become synonymous with problem solving. Even people who are critical of most other aspects of the culture we live in, find themselves reverting to science when pushed to defend their ideas, e.g. anti-civilization anarchists who refer to biology when attempting to convince about an optimal diet, or to anthropology to prove the superiority of their blue print for future societies.

Of the various ways to critique science, the most fundamental addresses the scientific method, which emphasizes a) reproducibility, b) causality (that a thing or event causes another thing or event), and c) the relevance of things (material reality) over all else (more accurately, it emphasizes a specific perspective on material reality, the only perspective that science recognizes as valid). One problem with the scientific model is how it maintains and relies on a perspective of the world as a frozen (static) place. Also problematic is the idea that everything can be broken down into discrete, quantifiable parts, that the whole is never more than the sum of its parts. Underlying both of these perspectives are the premises that the best or only way to know the world is to distance ourselves from it, to be outside of it; that this distance allows us to use the world; that utility is, in fact, the appropriate relationship to have to the world.

On a practical level there is the understanding that scientists are operating within a system that is based as much (if not more) on hierarchy and funding as it is on paying attention to what is actually going on around us. There are multiple accounts (even from Dear Anarchy Staff, SCIENCE IS COLLECTIVE

A different conception of society, very different from that which now prevails, is in process of formation. Under the name of Anarchy a new interpretation of the past and present life of society arises, giving at the same time a forecast as regards its future, both conceived in the same spirit as the above-mentioned interpretation in natural sciences.

#### Peter Kropotkin<sup>1</sup>

While I agree with a significant portion of the critique of science by Dot Matrix, he unfortunately falls prey to a number of fallacies in his argument. I'll admit at the outset that I may be biased in my approach to this issue. I've studied what I believe to be science for approximately six years and plan to continue as I work towards the completion of my doctorate in evolutionary anthropology. I've found that a scientific understanding of the natural world has enriched my anarchist principles. So, with that perspective, I was a little surprised to learn that, despite my best intentions, the entire purpose of my endeavors to date has been to "stay distant from the Other" for the sole purpose of "control and manipulation."

Dot Matrix states that science is largely viewed as "the modem problem-solving technique" but is troubled that "even people who are critical of most other aspects of the culture we live in, find themselves reverting to science when pushed to defend their ideas."

This is bad, he informs us, because science "maintains and relies on a perspective of the world as a frozen (static) place," and is a methodology that emphasizes "reproducibility", "causality (that a thing or event causes another thing or event)" and promotes "the relevance of things (material reality) over all else." From this perspective, science dictates that "everything can be broken down into discrete, quantifiable parts" and that "the whole is never more than the sum of its parts."

<sup>&</sup>lt;sup>1</sup> Kropotkin, "Anarchism: Its Philosophy and Ideal" (1896), en.wikiquote.org

work; more impasto than pointillist. I know that the historically minded people will read this as an excuse for sloppiness, just as I sometimes get frustrated with historically minded people for focusing too much on punctuation and correct dates, rather than on information that is more relevant to me.

The weakness of philosophical or broad brush writing is obvious: without enough fact to back up ideas, the ideas either are or seem to be mere personal ponderings. The strength of it, however; can be that it doesn't get tied down in arguments about what year something happened or whether the latest theories are relevant or not. In this case, I happily concede, that the most up-to-date anthropology might well seem more personal, more human, more respectful, less scientific.

But I don't think that that changes the message in the article, which is about trajectory, assumption, and yet another way we participate in the otherification of ourselves and each other. I believe that there will always be people who find ways to make their practices more human, more appropriate, no matter how bad the institution they operate within. But to address those is frequently to take the focus away from the momentum of the tradition, to distract with details.

The strength of labeling a particular kind of dehumanized interaction and expectation (in this case as scientific) comes from how much it allows us to look at things differently, to question something that we have been encouraged to take for granted.

There will of course be people for whom my method and writing don't work, and I hope I am being realistically humble, rather than cavalier, by acknowledging that. That said I value both pointillism and impasto, and I definitely welcome your critique along these lines. It is good for me to be reminded of what I am leaving out, what assumptions I make about my audience, and to remember that philosophy and history are not polar binaries, but can combine pleasantly, like peanut butter and jam.

conventional sources) showing that who is funding a study has a substantive impact on what the study discovers, from tobacco's impact on health to the possibility of restricting the spread of genetically modified organisms, but these examples are merely the most obvious.

The more subtle ones have to do with how we ask questions ("when did you stop beating your child?"), who we ask questions of (related to the questioner's access, biases, language, etc.), what questions we think to ask, and how we understand the answers we get, as well as what meta-interests the questions serve (how are the assumptions of this culture fed and/or challenged by who, how, and of whom these questions get asked?).

Western education predisposes us to think of knowledge in terms of factual information, information that can be structured and passed on through books, lectures and programmed courses. Knowledge is something that can be acquired and accumulated, rather like stocks and bonds. By contrast, within the Indigenous world the act of coming to know something involves a personal transformation. The knower and the known are indissolubly linked and changed in a fundamental way. Coming to know Indigenous [ways of knowing] can never be reduced to a catalogue of facts or a data base in a supercomputer; for it is a dynamical and living process, an aspect of the ever-changing, ever-renewing processes of nature.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> F. David Peat in Blackfoot Physics, 2; Understanding knowledge as an individual thing, a matter of a relationship and personal transformation, and not something that an expert can use to fill up empty containers (aka students), is a fundamental challenge to the over — emphasis on Mass that currently effects our lives so intensely — from questions of democracy and social change, to industrialization and how work is structured, to our sense of our own personal relevance in the world.

And on a philosophical level, knowledge is created from foundations that limit and construct it in specific ways. While on one hand science is a response to the superstition and hierarchy associated with religion, it also continues christianity's theme of a pure abstract and universal truth, separate from the sludge of everyday life, with scientists and doctors in the position of clergy that is, people who know more about us than we do. Some people believe in science (as something they don't understand that can solve their problems) in ways similar to how others believe in god. Some people cite scientific references the way that other people cite scripture.

Traditionally, science posits a neutral objective observer, a fantastical being to compare to any angel or demon: this neutral observer has no interest other than truth, which comes from information, and information is received inside of laboratories, with carefully identified variables and carefully maintained control sets. (The mystification of this awesome observer is only magnified, not ameliorated, by the addition of peer review, in which a body of knowledgeable colleagues examine the experiments and data to verify their validity).<sup>3</sup>

Science exemplifies this cultures tendency to specialize, and consequently to create experts, people who know every little thing about specific bits, but not how those bits interact with other things — clearly a result of thinking that is thing-based (vs. for example, relationship-based). So for instance, practitioners of allopathic medicine prescribe multiple medications to people, frequently without having any idea about how these specific drugs will interact with each other, much less any idea about how a person's feelings or other life experiences are related to their physical health.

In The Origins of Authoritarianism, Hannah Arendt uses the word scientism to express the logical extension of scientific thinkit makes more sense to make a more nuanced critique of the dominant (capitalist/statist/hierarchical) trends which still leaves some room for the minority tendencies which are often there (unless the institution or practice being discussed is clearly and absolutely tied to hierarchy, market-relations, etc.).

A similar argument can be made with regard to science more generally. While it has largely been captured and constrained by capitalist and statist interests, historically this has not always (and during particular periods often not at all) been the case. It remains definitely possible in my opinion for scientific practices to operate outside of the caricature of science you have constructed, though it is also true that for general shorthand purposes a critique like yours can be made which will work well enough for dealing with 95% (and maybe even 99%) of actual scientific practices here and now. Still, to be accurate, and to not perpetuate a falsely totalistic critique, I prefer to at least give a hint of the areas of actual and potential (and historical) scientific practice that lies outside of your critique.

Take care, Jason McQuinn

Dot responds:

I agree that my argument is simplistic along the lines that you say. While I did read and include information from a couple of recent texts, my point was not to write a careful study of today's anthropology which would necessarily include whatever details run counter to the main thrust of how capital and Control Society work through science in general and that field of science in particular. As you acknowledge, your response demonstrates a difference in our priorities. I would categorize your focus as primarily historical — meaning carefully factual, scrupulously specific, detail oriented in exactly the way you say you wish the article was. I would label my interest, on the other hand, as more philosophical, emphasizing broad brush strokes, a feel for how associations and context

<sup>3</sup> www.aip.org

on science and anthropology, and a lot more nuanced and relativistic instead.

For example, your critique reads to me as being very brash and impulsive in some major ways, almost caricaturing what you critique to the point that it becomes a false portrait which tends to lose the interest of readers like myself, who would prefer less blackand-white posturing and more exploration of grey areas. In the first place anthropology isn't merely a science and has never been merely a science. Some of the things you criticize anthropology in general for being are really only aspects of the scientific tendencies of anthropology and aren't true in anything like all instances of anthropological practice. You write as though you are possibly unfamiliar with the development of modem scientific anthropology from out of philosophical anthropology, or at least, as though you feel that philosophical anthropology has been absolutely eclipsed and doesn't need to even or ever be mentioned (which I feel is far from true). If you read the essay on the anthropological investigation of the post-situationist milieu by Karen Goaman ("Oppositional Currents and the Art of Anthropology") that I sent last week (and which will appear in the first issue of the new journal Modern Slavery), you'll recognize that while she is practicing anthropology (and is even doing so from within a university setting), she isn't practicing any sort of scientific anthropology, which results in her work being defined by your critique as either nonanthropological, or as some sort of anomaly that would be meaningless in an overview of the subject. From my perspective, I think her work is almost cutting-edge anthropology and in the future will be recognized as such by an increasing number of other self-critical, practicing anthropologists (though, probably not by any means a majority of anthropologists as long as most anthropological institutions and investigations are organized and funded by state and capital). My point is that capital and state influences tend to permeate every aspect of life, but rather than reject life or all of its individual constituents (from anthropology to art to everything else)

ing, which makes otherwise impossible moral or ethical questions (such as, "Can someone be worthless? And if so, can that person be euthanized?") easily resolvable. In other words, the inhuman aspects of totalitarian states are related to the reliance of those states on science as the ultimate arbiter of value: indeed, the idea that everything must be of measurable value is part of the scientific paradigm.

## Fragments on Why Anthropology Cant be Anarchist

By definition, anthropologists scientifically study groups of people — relationships, customs, behaviors, and social patterns.

(The "scientifically" is what separates anthropologists from say artists, comedians... or just curious people.) The history of anthropology is of civilized men and the occasional woman going to cultures foreign to them and reporting back about these cultures to their funders. As scientists — with all the quantifying and rationalist implications of that word — anthropologists are responsible for interpreting primitive/ Other peoples to the mainstream. To the extent that anthropologists are mediators between the civilized and the barbaric, they are also part of a cultural trajectory that includes missionaries.

Anthropologists, as well as other social scientists, extend the realm of science by making people's homes into laboratories, by presuming that it is possible and appropriate to engage objectively with people in cultures very different from their own (or even people from their own culture), for the purpose of distilling the most meaningful information. And, as with all sciences, what is considered most meaningful is part of an on-going debate (with many unexplored and unquestioned assumptions), a debate ultimately framed by funders — from private grantors to universities. Why do people get paid to study people? What do the funders get for their

money? They get increased markets (in the form of the studied), increased control of existing markets (more information about what motivates people — thus how to sell more effectively), and more products (from tourism to books to drugs).

As a discipline, anthropology is compelling for a number of mostly obvious reasons, including that it provides a more holistic view of people than the views from economics, political science, sociology, etc. More significantly, it provides evidence that our options as a species are more varied than we are taught to believe. Because anthropology provides people (who become anthropologists) with a funded way to do interesting things and have interesting conversations, and the kind of people who want to find out about other cultures can be intriguing people, it is tempting to conflate the people, and their experiences, with anthropology itself. But the study of people scientifically, the creation of experts, the context of meeting and learning about people while being funded by corporations, is inherently skewed and manipulative, no matter the intentions or integrity of the people involved.

In "Anthropologists and Other Friends," esteemed American Indian writer Vine Deloria Jr. brilliantly refutes the possibility of exploring people in a vacuum, by describing the reciprocal creation that happens between agents of mediation (in this case, anthropologists) and the mediated (in this case, Indians). Deloria examines how the anthropologists, by having clear ideas about what Indians do (ie, who is Authentic) and by attending only to those Indians who are willing to act the way they're supposed to, encourage those Indians to continue acting Authentically, which then reinforces the anthropologists in their definitions and expectations. This creates a self-perpetuating cycle — a closed loop in which people from two groups create and support mutual judgments (which they take as fact). Two of these judgments are "real Indians do specific kinds of rituals" and "real anthropologists are experts in the culture that they study." It is the very premise of purity of a static identity (a premise required by science), that is so falsifying to extwenty years to the African scene of his original fieldwork to find that the locals were citing his monographs in lawsuits.

To me, there is nothing scandalous about supposing that someone from another culture might understand it better, on some levels, than some or all of those who live it. Any economist of any nationality understands important aspects of my country better than I do.

In some ways, from reading maybe twenty books, I understand the Roman Empire better than any Roman ever could. A Swedish economist, Gunnar Myrdal, probably understood American race relations in the 1940s better than any American, black or white. The "emic" and "etic" (internal and external) perspectives are complementary; neither should be privileged. Dot is a hierarch. Trying to come across as a champion (self-appointed) of the native experience, Dot instead exhibits intolerant hostility toward epistemological pluralism, and should stand in the corner reading Paul Feyerabend to Fred Woodworth. But I have a question which I answered, I suspect, in my first paragraph. Do you have to be an anthropologist to understand the culture called anthropology? Is Dot an anthropologist? Or maybe a failed graduate student?

It's tremendously exciting writing this, not knowing whom I am insulting!

Hooray for Captain Spaulding!

**Bob Black** 

Dear Dot,

It is good that the arguments presented in "Science as Capital" (Anarchy #61, Spring/Summer 2006) have definite bite. And they will probably stimulate some response in the letters section (as long as most readers aren't brain dead). However, I think you could develop a much more effective critique (effective from my perspective, at least — from your perspective you may have different priorities) if you were less globally aggressive in your attacks

isn't?) Missionaries try to change the natives; ethnographers try not to. Neither missionaries nor anthropologists are mediators, because both communicate cross-culturally in only one direction — but in opposite directions.

The best thinking in the essay is "mediated" from Vine Deloria, Jr., whose polemic against anthropologists would have furnished a far better text. Even his criticisms, however, are outdated commonplaces. Everything he and Dot have to say may be found in the discipline's rich penitential literature going back fifty years. In fact, every thing factual Dot says is out of date by fifty to one hundred years. The societies anthropologists study are not frequently described as "primitive," and they have not been exclusively "kinbased" for eighty years. Anthropologists like Robert Redfield and Oscar Lewis noticed that the method of embedded fieldwork is suitable to all kinds of face-to-face communities, not just bands and tribes. They have produced countless studies of peasant communities (in Mexico, India, Sicily, etc.) and more recently urban neighborhoods. They have followed the Indians from the reservations to the big cities.

"The only reason to stay distant from the Other, the whole purpose of an Other, is for control and manipulation? What extravagant nonsense. Has not Dot identified other purposes, such as careerism? Has Dot ever ridden a bus? Or been bothered by salesmen, panhandlers or police? (In Berkeley, of course, these things never happen.) Often you want to keep the Other an Other, not for control or manipulation, but to avoid it.

It is Dot Matrix, not the typical anthropologist, who essentializes the natives by positing an Authenticity which the anthropologists (Other to the Other) with their metaphorical test tubes will never experience. Has Dot experienced it? If not, how does Dot know that they falsify? By now, a lot of anthropologists, especially in the United States, are natives (Jomo Kenyatta, first president of Kenya, was a British-trained social anthropologist), and many natives read the books written about them. Jack Goode returned after

perience and so limiting to the sort of information that studiers can gather about the studied. (This model of knowledge creates a similar dynamic between activists and the targets of their activism — leading people to embrace concepts like "real women," "the real working class," and "real wildness.") To the extent that an activist is interacting — in theory or practice — with abstractions rather than with actual relationships, to that extent activists become invested in maintaining the distance between themselves and what — or whomever they are attempting to save. And interaction with abstractions (vs. relationships) is what is required for things like funding and school credit; it is what makes a work scientific.

Anthropologists will always emphasize the difference between the studied and the studier. This tendency is also demonstrated by all people who want (for reasons of money or status, or both) to be experts on another group of people and it usually means reifying (or freezing) the studied, attempting to keep them distinct, pure, Authentic.

In Fragments of an Anarchist Anthropology, David Graeber encourages us to "break down the wall" between cultures studied by anthropologists (cultures frequently described by words like "primitive" and "kin-based") and modern societies. He posits this wall as the belief that some inherent, essential shift occurred to create modern cultures as fundamentally different from previous cultures. He suggests that it is much more interesting and relevant to look at the ways that we are the same as the people being studied. While his point about the usefulness of "the wall" is unassailable, the point is that creating and maintaining this wall is exactly what anthropology is for. As Graeber himself notes, it's anthropology when people are talking about "primitives," but sociology, political science, economics, architecture, psychology, etc. when talking about people like the studiers. Science insists that we distance ourselves — both as groups and as individuals - from the rest of the world, so as to more effectively use it. The social role of anthropologists is that

particular category of distancing that involves cultures that are different along specifically those "primitive" and "kin-based" lines.

While major paradigms will always have offshoots that grow in tangential directions, these branches grow only to the extent that they are useful to the main body. Interesting people will want to do interesting things to and with the tradition, but to the extent that these people expect and work for recognition within the field, to the extent that they are judged by standards set within the field, to the extent that their work is used by corporations — then they are part of the scientific trajectory with all that that implies.

The only reason to stay distant from the Other, the whole purpose of an Other, is for control and manipulation, of both the Other and the Same. Put simply, Others are easier to kill (however that killing might look in different circumstances), and the easier they are to kill, the more both sides of the Same/ Other split feel the pressure to conform.

Anthropology, like the other sciences, is useful to the status quo in its ability to make the studied into objects that can be manipulated and consumed by the current system, and in its ability to increase control over the studiers.

### Responses to Science is Capital

bob on science as capital:

Dear Bay Area Anarchist Collective,

I enjoy enigmatic epigrams as much as the next guy, but what does it mean, actually, to say that "Science is Capital"? That it's expensive? Dot Matrix seems to think that saying science is based on "funding" is some sort of objection to it. Anarchist magazines are also based on funding, only not as much. Envy, however, is not argument. "Funding and school credit" are the obsessions of a failed graduate student.

Theories cannot be both "predictive hypotheses" and "unit[s] of knowledge" (why not call them facts?), because no amount or arrangement of facts is predictive of anything. Science does not assume that "the world is a frozen (static) place," because it includes dynamic relationships and developmental processes. Since a primary object of scientific study is natural systems, it is of course absurd to fault it as static. Dot's idea of science went out with Linnaeus, if indeed it ever went in.

Anthropology is not "by definition" the scientific study of human groups — all the social sciences do that — it is by definition the study of man by the various methods of biology, archeology, linguistics and ethnology. The latter, the least scientific variety, is the only one Dot is talking about. (Few scientists, incidentally, still speak, as does Dot, of the scientific method.) I have no idea what it means to call even cultural anthropologists "mediators between the civilized and the barbaric," falsely implying that they use this pejorative terminology, nor what it means to say they "are also part of a cultural trajectory that includes missionaries? (Who among us