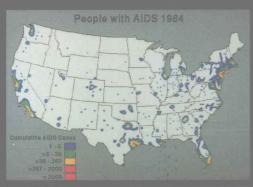
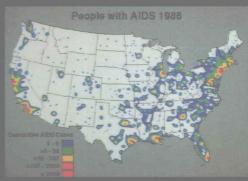
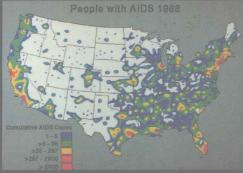
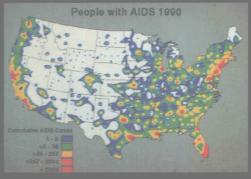
The Slow Plague

A GEOGRAPHY OF THE AIDS PANDEMIC









Peter Gould



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The Slow Plague



Liber geographicus pro bono publico

For Rod and Deb Wallace who somehow find the courage to keep going

Preface: why a geographer writes about AIDS

Over the past few years a number of people, both in and out of the academic world, have expressed everything from simple curiosity to outright puzzlement about a geographer investigating and writing about the AIDS pandemic. Usually their perplexity arises because they do not have a very clear idea about what geographers do in general, or the way geography provides a special perspective on our world. Few would have much problem with an historian writing a history of the pandemic, even if that history were quite recent, perhaps still immediate and on-going. Most people are used to narratives through time and take them for granted. After all, telling careful stories about human life over time is what historians do. Everyone knows that.

When you point out that, yes, things happen over time, and so always have a history, but that they also happen in space at particular places, so they must always have a geography, people either do a "Huh?," or sit back and say "Hm, yes, I never thought about it like that before." That lots of people have not thought about it like that before is not their fault. In many countries, geographic education is poor, or boring, or both. It is reduced to litanies of disconnected facts, rather like teaching the marvelously complex and colorful panorama of history as lists of dates to be memorized. I suggest that we have all suffered from such pedagogues at some point in our lives, and that we agree that they do not deserve the honorific of "teacher."

But there is another, and still rather puzzling reason for the lack of geographic perspective. Something happened in the early nineteenth century as the human sciences and humanities began to emerge from the flux of philosophical inquiry and into their own separate identities in the universities – economics, psychology, anthropology, sociology, political science, and, surprisingly, even geography and history. I say "surprisingly" because formal geographic and historical studies were pretty well recognized by the end of the eighteenth century, even if

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you did not find formal departments of these in the universities. But as these disciplines crystallized out of the emerging flux, disciplines that we simply take for granted today, something happened to split geography and history apart – not to say anthropology, economics, and the rest. In the process we seem to have lost sight of the importance of space and geography amid a more general concern with time and historical development. The result, very much to our intellectual detriment, is that we have tended to become a world that is intensely aware temporally, but still almost oblivious to the spatial dimensions of our lives. Why this happened, why spatial awareness was severed from the temporal, is still something to be carefully explored and explicated by intellectual historians, most of whom, fortunately, refuse to acknowledge the academic divisions of knowledge that increasingly have hardened into mere administrative conveniences or disruptive academic fiefdoms.

Fortunately this situation is changing rapidly today, and along all sorts of dimensions. International comparisons point up glaring deficiencies in geographic awareness in children, many of whom even lack what geographers somewhat disparagingly call "capes and bays" geography, some bare minimum knowledge of places that helps people give meaning to reports about their world. The various environmental crises have also generated a much richer sense of global and geographic awareness, as such destructive changes as pollution, deforestation, ozone holes, nuclear disasters, and global warming, make more and more people realize that what happens at one place on our planetary home can affect many others far away.

But I think a third major reason for the heightened awareness of geography and the geographic perspective is that the new generation of geographers is much less parochial intellectually, and takes genuine delight in reaching out to others. Fifty years ago, many prominent geographers were terribly defensive, spending much of their time defining where geography began and where it ended. A lot of professional geographic writing was a sort of intellectual urination around the territory to mark what was "real geography," indicative of a defensive us-versus-them complex. All that has changed, both to the benefit of geographical inquiry, and to adjacent areas receiving an infusion of "spatiality" to augment their "temporality."

Now the last thing I want to suggest is that geography and geographers deal exclusively with space and place and ignore other perspectives, or that these concerns are somehow exclusively theirs and theirs alone. That would be just as silly, contradictory and dysfunctional as an earlier generation's boundary-marking. As human beings we exist in space and time, and we also have the ability to think. In some simple, but quite profound sense, we are all geographers and historians and philosophers,

and have the capacity to sharpen our thinking and understanding along all sorts of lines and directions of inquiry. Perhaps the only thing that marks professional geographers from the rest is an absorbed fascination with that spatial domain, though certainly not to the exclusion of any other perspective that will help us light up this wonderful and complex world in which we find ourselves.

So despite strictures, warnings and disparagements from tribal elders. several research traditions in geography have adamantly refused to sever time from space, the history of places from the larger spaces in which those places are embedded. Historical geographers, for example, explicitly incorporate history and time into their very title, but others have also been fascinated with tracing human developments through time and over geographic space. If it did not sound so jargony, I would really like to call these geographers "spatio-temporalists," but we will put that term aside for later, and simply note that most of them seem to be associated with inquiries that concern the diffusion of things. These may be anything from innovations, ideas, new crops, new technologies to ... and - here it comes - new diseases. But it is the process of diffusion, rather than its content that is of particular interest. Many of these studies are descriptive, teasing out on maps, in written text, and in algebraic equations (often all three), the way things spread. Some are highly formal, writing out mathematical "rules of the game," and then testing these with computer simulations. Others actually twist, reshape and transform the familiar map to help the geographer account, in a simplified but more understandable form, for why things happened to occur as they did at particular times and at particular places. In passing, it is worth noting that the first computer simulations in the entire social and behavioral sciences were undertaken by diffusionist geographers, on machines that today are truly museum pieces.

Given this long and rich tradition, it should really come as no surprise that a geographer writes about the AIDS pandemic, or that the geographic perspective focuses a rather different light on it compared to traditional (and they can be very traditional!) people in medicine and epidemiology. Many of the things I am writing about are based on personal experience and highly specialized research. But I have a very strong feeling that from time to time people in universities should climb down that circular staircase in the ivory tower, and try to reach out beyond its academic walls to let other people know what has been seen from its vantage point. Perhaps it is worth reflecting upon the fact that "specula," the root of "speculation" is a watchtower. That is why this book is one of a series labeled liber geographicus pro bono publico — a geographical book for the public good, which sounds just a bit pretentious until we translate it more loosely as "a book for the busy but

still curious public." I cannot in all honesty say "I hope you enjoy it." It is a book about a catastrophic pandemic, about life and death, of great courage and not a little perfidy. But I do hope it lights up one aspect of this terrible disease in a way that often seems to have been suppressed before.

Acknowledgements: intellectual antennae

As a geographer, I have the great privilege of teaching and learning in a large university, and of belonging to some of those invisible colleges whose threads of shared concern and delight encircle the globe. Inevitably, this means that as soon as you start to work on something others soon hear about it, and in their generosity they become your intellectual antennae somewhere "out there," picking up pieces of information, new research findings, and conflicting perspectives that otherwise you might have missed. A world pandemic today produces millions of words each week, and even if many of them are repetitive and redundant, no one can possibly keep up with all of them. This means that any account is selective, partial, and written from a particular perspective. It cannot be otherwise, but it helps to have friends and colleagues sensitive to your interests. I have lost count of the references, articles, reports, and many other sources of information that came in an envelope, during a telephone call, stuck in my box, shoved under my door, or in conversations. I cannot possibly acknowledge them properly, but to all that helped in these ways - please accept my thanks.

Nevertheless there are just over a baker's dozen whose contributions to this account must be named – or there is no justice in this world. At Penn State, Deb Straussfogel was central to some of the earlier experiments in computer modeling, and she will recognize her efforts in chapter 6. Joe Kabel has been my right-hand man over the past four years of modeling and research, teaching me far more than I ever taught him – always the sign of a good graduate program. He will see his efforts in chapter 14. More recently, he was joined by Ralph Heidl and Bill Holliday, whose shared concern for the graphic visualization of important problems was augmented by computer skills capable of handling large amounts of geographic information. They will recognize their expertise underpinning a number of the maps in this book. Equally aware that geography matters, Terry Dawson recognized how the issue

of confidentiality was totally embedded in this way of looking at the world, and she will see herself reflected in chapter 13. Beyond my own university, I want to acknowledge the privilege of working with Wil Gorr at Carnegie-Mellon University, the person who pioneered the most promising way we presently have of forecasting what maps of epidemics are going to look like some years into the future. We tried hard to engage the interest and purse strings of certain powers, and although our joint efforts did not bear fruit I shall always cherish my association with a generous and open scholar, and a fine teacher. Woody Pitts deluged me with references from Hawaii and California until my bibliographic cup really did run over, while Bill Bowen at Northridge generously shared both his time and his remarkably detailed cartographic insights. John Thompson scavenged the local reports for me wherever his travels took him in North America, Europe and Africa, and Rich Symanski has needled me with a typically "rich" correspondence that sometimes made me think again.

Singling out one person might seem insidious, but it is not. Kerry Demusz served as an honorary research assistant in a faraway land, and quickly became a collaborator and thoughtful critic. I shall never know how she compiled her monthly reports for me in the midst of learning her second, non-Western language, all the while plunging into AIDS-related activities involving the empowerment of women. She is the stuff senators are made of. I hope you vote for her one day.

Lori Lynch did all the typing and revisions with infinite patience and good humor, and she has my heartfelt thanks.

Finally, two others will always represent for me the very best of socially-engaged scholarship confronting Establishment mendacity and bureaucratic apathy. I hope the dedication of this book indicates the respect that this spoilt brat in his ivory tower has for those in the front lines trying to create a truly civil society.

Hatteras, May 1992

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Prologue: new plagues for old – the horseman rides again

Ring-a-ring-a-roses, A pocket full of posies. Atishoo, atishoo We all fall down.

Children's song from the plague years

In memory – a collective memory impressed upon materials as varied as papyrus, vellum, paper and magnetic disc – the human family recalls many plagues. Like all memories, these traces of remembering fade with time, becoming a whisper, even silence, in preliterate cultures after a few generations, or maintaining themselves in faint, ghost-like forms for millennia in those with the power to support memory with pictures, characters and letters. Some of the oldest writing records the trace of scourging pestilence, and the memory sharpens, becomes more detailed and precise, as we approach our own printed times.

Only 700 years ago plagues moved slowly, inching across the land with the plodding caravans, or with the speed of other carriers such as rats and insects. Three forms of bubonic plague, known collectively as the Black Death, took about 12 years to move over land from China, until they reached Asia Minor and the Black Sea in 1346, infecting the sailors and merchants of the trading posts. Once on water the Black Death moved faster: the next year it was in Sicilian and other Mediterranean ports, poised for a great flanking attack by sea along the coastline of Europe, ready to sweep northwards across the continent, pushing in front of it a great wave of well-founded fear. By 1348, coastal villages as far away as England were infected: those of Norway and Sweden followed in successive years.

Then, in 1493, a new plague arrived: the "pox" appeared in the ports of Spain, carried by the sailors of Columbus from a new and unsus-

pected world. By 1495, it had become the "Naples Disease", carried back to France by the soldiers of Charles VIII after their campaign. Only 25 years later, it was reported by the Portuguese in Goa and Macau, half a world away. We have lived with syphilis ever since. And died with it too. In the 1660s another of many waves of bubonic plague came to Euope, this time the Great Death, the carts piled high once again with the dead, stopping at more and more doors marked with the X of death rather than the cross of life. And so the story continues to our own times. Typhoid, typhus, smallpox, measles, cholera and influenza . . . each disease in its turn sweeps across the map, moving through time and over space to give every epidemic a history and a geography.

Ours is an epoch when both historical time and geographical space become more and more structured and conditioned by human technology. Distance, that old separating protective distance, begins to contract as the technology of sailing ship, hardened road, steel rail, automobile and airplane shrinks the globe, tightening the physical bonds connecting the human family. Space is compressed, and time speeds up. By 1866, Adrien Proust, father of Marcel, knows you can only stop a plague by severing yourself from the connecting structures that support and carry the traffic of disease. The farther away you can break the chain the better. The *cordon sanitaire* is his idea, as he declares that Egypt is the first line of defense for Europe against new epidemics like cholera. His own extensive travels in Persia try to elucidate the old pathways, north to Russia, and west to the Mediterranean, pathways of infection for Europe and North Africa over the centuries.

Many of these plagues are still with us, though contained by public health measures, vaccines and cures that are simply taken for granted – until, in 1918–19, an influenza pandemic kills over 30 million people, or cholera sweeps though Latin America in 1991, carried by contaminated streams in Peru to the huge Amazon basin, or by infected air travelers spreading it from city to city. Fortunately, one plague has disappeared forever: smallpox has gone, squeezed relentlessly into a smaller and smaller area in Somalia until in 1977 the last potential carrier was vaccinated, and smallpox finally had nowhere else to go. Measles, another disease surviving only in a human host, is next on the WHO's (World Health Organization's) list to be eliminated. For those diseases capable of surviving outside of the human body – cholera in water; rabies, malaria, bilharzia, and many more in other living hosts – the problem of eliminating them is much more difficult, perhaps impossible.

Of all diseases, those caused by the viruses are often the most difficult to eradicate, not the least because many display a distressing capacity to