# PLEASURE IN THE IDEA / THE ATLAS AS NARRATIVE FORM

School of Design, North Carolina State University Raleigh, North Carolina, U.S.A.

### INTRODUCTION

RIGHT NOW I'M READING a book called *The Butcher's Boy.* 1 It's by Thomas Perry. I don't know too much about him, but I think it's his first book. I've been reading it two nights now, last thing before I turn out the light. I'm about a third of the way through and it's okay. On the cover there's a picture of a handgun wrapped up in string and paper like a piece of meat, and the words, "The most electrifying novel of hunter and hunted since *The Day of the Jackal!*" The *Washington Post* is quoted as having said, "A brilliant suspense thriller, reminiscent of Graham Greene!" *The New Yorker* called it, "Totally enthralling!" The *Chicago Tribune* said, "The ending is a gasser!"

I wouldn't know. I'm just reading it for the information, in case some day I

get around to writing a detective story of my own.

Which is preposterous, on the face of it. But there are people like this, people who claim to read detective stories for nothing but what they learn about the law or who claim to dip into dungeons and dragons solely for the history; who buy romances for their exotic settings alone or read outer space fantasies only for the science. But is there anyone left who still believes them? Isn't it acknowledged that these things are read for their blood and macho heroics, for their sex and fantasy? That they're read to kill time? To achieve the uncomplicated and frankly disgusting pleasures of a 'good read'?

There are people who make these claims too (and proudly, as though daring you to challenge their 'unbridled hedonism'), but I find them as difficult to believe as those who claim to read detective stories for the facts. Neither explanation has the consistency or taste of real food, and I've always felt that while the fact-folks were trying to get me to eat Wonder Bread because it builds strong bodies ten ways, the pleasure-brigade was trying to stuff me with Twinkies because they knew I craved them deep down inside. Yet neither is true, for neither explanation so much as nods in the direction of the outrageous

complexity of genuine human motivation (which is multiple and opportunistic, layered and redundant) but insists instead upon a model of man that is simplistic and cynical, at once meretricious and puritanical. It is as though any pleasure needed an excuse, in the absence of which one were forced either to deny it (to smother the pleasure beneath a sacrosanct Quest for Knowledge) or abandon oneself to it entirely (to deny there were grounds other than pleasure for doing anything).

Though they reverse their terms, cartographers insist upon an equally vacuous and stultifying image of man. In the puritanical world where pleasure needs a mask, the map walks boldly uncovered: there is nothing of pleasure in maps. Maps, we are told, are tools (image of smithy bent over anvil), made, not because anyone particularly wants maps as maps, but because map buyers have information needs that maps allow them to meet. People who 'wax enthusiastic' over maps are suspect, and usually turn out to be writers and poets (images of long-haired romantics lost in reverie).2 Had I commenced with a description of another book I happen to be reading right now, the one I put down each night just before I pick up The Butcher's Boy - Patrick Moore's The New Atlas of the *Universe*<sup>3</sup> – ; and had I described the nebula on its cover and quoted from its dust jacket ("more than 700 diagrams, charts and photographs," "the awesome world of pulsars, quasars and black holes," "compelling and authoritative text"), and gone on to try to convince you that I was wrestling in bed with its four and a half pounds and 330 square inches for the sheer pleasure of it, you would no more have believed me than when I tried to tell you I was reading The Butcher's Boy for the facts.

But it's just as true.

After all, what possible use will I have for the names of the craters, chasms, fossae, mons, montes, mensae and patera of the surface of Mars? None: I have no use for this information, I pore over these plates with pleasure, with the same pleasure I take in looking at landscape paintings, or in reading landscape descriptions, the same pleasure that I find in a good book, in a novel for instance, even in a detective story. Nor am I alone or eccentric in this regard. I can't tell you the print order for The New Atlas of the Universe but it was a major selection for a number of book clubs, and amounts to the third edition of what its dust jacket describes as an "international bestseller". Are we to imagine there are such numbers of people with a need to know the distribution of the craters on Mercury? Of the craters on the satellites of Saturn? Even of those on the moon? No, the fact is that the book is bought and read for the same reasons – whatever they might be – that The Butcher's Boy is.

Whatever they might be ... Which is not to say what they are, or that they might not be present in varying degree.

Yet, if it is difficult to say why we read, it is less difficult to feel confidence in the contention that when doing so, the gathering of information is always and

inevitably mixed up with a certain pleasure in the text; or, from the other side, that any pleasure we might take in a text is sure to be, howsoever gratuitously, compounded with a little information. The most common question asked by any reader has got to be, "Did you know that ...?" directed toward any nearby ear, followed by some tidbit, some fact, the number of countries bordering Switzerland, or the brand of cigarettes smoked by Bond in From Russia With Love. I have no interest in suggesting that the text does not exist that is devoid of information - texts have been purposely constructed to achieve precisely this goal<sup>5</sup> - nor in maintaining that there exist no texts in which none but the slightest pleasure might be taken (though there is a certain pleasure in even the recitation of a gazetteer). But it is necessary to insist that the pleasure is in any case not a function of the subject (not just because it is a crime novel or because it is a stellar atlas), but inherent in the text's character, that is, in its honesty, its excitement, its subtlety, its respect for details, its consistencies, its ironies, its enthusiasms; and that this is as true for the reading of dictionaries and encyclopedias as it is for the reading of travel literature and biographies. The distance imagined to lie between texts of information and texts of pleasure is exactly that: imaginary. There is none, the distinction is false, the chasm lies elsewhere. But the conception of this distance, this distinction (which must have come as a great relief to those failing to create enthralling maps and atlases - "It's just information: who cares if it's not exciting?"6) - has all but dominated a half century's thought about the nature and the role and potential of maps and atlases; so that there is no tradition linking the reading of texts (presumably of pleasure) with the reading of maps (being scanned for facts), no way of conceptualizing how one might become 'lost' in a map as in a volume of poetry, no way of dealing with (or even admitting) the seduction of the map - unless one is a collector and the map is very old.

Nor is this a question of glancing over our shoulders as we stroll along the rim of the Grand Canyon asking, "Oh, my! I wonder what happened to Fred?" There is nothing innocent about his absence, someone casually overlooked along the way. Fred was pushed in. On purpose. For to have admitted that maps could be read like other texts would have been to admit that the map was in fact a text, that it was a semiological system exploiting any number of codes, that it was a representation like other representations, like a painting, for example; that it was, in its essence, fundamentally impossible to distinguish from, in point of fact, a novel of crime. This is not how we are used to thinking. But then we are not used to thinking about this distinction at all. 8

Nor can this be an occasion for much surprise: it is, after all, a distinction that, asserting the existence of facts, tries to pass itself off as nothing other than one of the facts whose existence it asserts, a distinction, that is, that tries to pass as fact, avoiding reflection as though and because it were founded on fact, above all else on the self-evident fact that a novel of crime is a fiction but a map is a system of facts. Tautological at best, such self-serving mumbo-jumbo is vulnerable to attack from at least two positions.

The first, of course, is that were the novel of crime not a system of facts (not essentially a representation of the world in which we live), it would not be read. Were bullets, knives and garrotes to materialize from thin air, were motives to erupt from any chain of events, were characters to behave utterly unlike people we have known, the text would have no interest as a novel of crime. The very point to such narratives is their commitment to the reconciliation of seemingly impossible situations (as in locked room puzzles) or outrageous events (the murder of an innocent child) with the world we all know. It is nothing other than this gap between the world as it is initially presented at the scene of the crime (for example, impossibly violent) and finally represented at the denouncement (where the impossibility is absorbed into the fabric of the world we know) that the novel of crime so inexhaustably exploits. This absorption, however, reveals the world in a new light (it is a place where such things might - do - happen), but only to the extent that the reconciled world of the novel as a whole is congruent with the world we live in. The world represented in the novel must thus at every point be capable of being mapped onto the world we know, but simultaneously reveal that world in a way we cannot see (or could not see) without the novel's intervention, through, that is, another's eye: exactly like a map.9

At the same time, from the other side, the *map* appears as a tissue of fictions. Out front, it is not to be taken literally, not to be mistaken for the world. As one of my favorite authors of 'crime capers' puts it,

"The map is not the terrain," the skinny black man said.

"Oh, yes, it is," Valerie said. With her right hand she tapped the map on the attaché case on her lap, while waving with her left at the hilly green unpopulated countryside bucketing by: "This map is that terrain."

"It is a quote," the skinny black man said, steering almost around a pothole. "It means, there are always differences between reality and the descriptions of reality."

"Nevertheless," Valerie said, holding on amid the bumps, "we should have turned left back there."

"What your map does not show," the skinny black man told her, "is that the floods in December washed away a part of that road. I see the floods didn't affect your map." 10

Etymologically – so to speak – the mark on the map to which Valerie refers may indeed have been placed there in the spirit of rendering word-for-word the reality on the ground. At this point in its career, however, it is fabulous. And certainly there is a sense in which all marks on all maps have this character. The map of France is not France: France is not so small, France is not so pink, France does not suffer from the pox. The map shares with the novel the property that it is not to be taken – except with disastrous consequences – for the thing to which it so minutely refers. Neither map nor novel is the thing itself: both are representations. That the novel, nevertheless, pretends to portray people and events which have never existed – that is, portrays fictions, inventions (which, however, because of their unbearable veridicality novels are often forced to

disclaim: "The characters in this book are entirely imaginary and bear no relation to any living person") -, while the map attempts to portray nothing but what anyone might actually be able to find in the world, cannot be denied. Yet the force of even this distinction is quite weak, especially when we turn from the ideal to the real. Nor is it necessary to recall, in this regard, the long history of mapping the open polar sea, or the Great American Desert. It is adequate, for instance, to look at maps of the Colorado River which show water flowing from its mouth into the Gulf of California (when we know that it has been siphoned off long since into a labyrinth of canals), or of Detroit which show a built-up inner city (which we know to be a wasteland of relic concrete gradually being clothed in scrub grass and ailanthus), or of the world threatened by Communism (when it is equally threatened by capitalism). 11 Perhaps I am insufficiently subtle, but confronted with these maps, and with novels more banal and predictable and representative of the world around me than many care to acknowledge, the distinction between the world of facts inhabiting a map and the world of fiction living between the covers of a pulp novel is hard for me to see. In fact, the sole distinction I cannot miss is their posture in the world, self-claimed fiction, self-proclaimed fact.

But once the map is seen as no more or less a quote (a representation, a text) than other quotes (other representations, other texts), it ceases being important to pretend it is something else. Once the disguise has been penetrated, it proves to be more comfortable with it off. With the map revealed as but a member of the larger family of representations (movies, histories, fables, essays, introductory texts, comedies, landscape paintings, photographs), it can be allowed to participate more fully in their larger traditions, to be admitted, for instance to the company of texts of pleasure (from which no amount of hard work has ever actually managed to exclude it). With their seductions acknowledged, maps may be permitted to exploit them. Once the possibility of becoming lost in a map has been admitted, the possibility of finding there a whole new métier may not be long denied. With the map being read, it will soon enough come to be narrated: it cannot be a distant prospect, the atlas as novel.

# THE NARRATIVE TRADITION

Not distant at all: always here, in fact, from the beginning. Thinking about atlases as places to look up facts, instead of as things to read, has blinded us to our own cartographic tradition, but the title of the first atlas read, "Atlas, or cosmographical meditations upon the creation of the universe, and the universe as created." Right here, at the font, in the words Mercator's son said his father had chosen for his publication, lie the origins of the narrative tradition. *Meditations*? Is this how we have been raised to think about atlases? Cosmographical meditations upon the *creation* of the universe? But what else, when you think about it, could it have been?

There are, after all, only two grounds for aggregating maps into an atlas of

maps, into a compendium, into a bound volume. The first is to keep the maps all together in one convenient place, to reduce wear and tear, to know where they're at, a sort of grand and neat alternative to shoving them helter-skelter into a drawer. The second is to make something greater than any single map can be; to, through the inter-relatedness of the maps, through their juxtaposition and sequencing, make something higher, something no individual map could aspire to, to – out of the maps regarded as paragraphs – create a discourse, a mediation, to tell a story.

If the only reason the maps are being aggregated is for the sake of neatness, then they may be arranged in any order, that is, in no order, not arranged at all, bound up randomly, as they come to hand. This is the first possible way of arranging maps in an atlas. Atlases of this character are rare, if only because when humans are put to the trouble of binding something up, they make the most out of it they can, sort them into some order, if only an arbitrary one. This, of course, is the second possible way of arranging individual maps in an atlas, arbitrarily: alphabetically by the names of the territories mapped or according to the code of some implaccable grid; and though it depends on the maps themselves, on the plates, some methodical arbitrary order facilitating access is not an unreasonable way to shuffle maps together being bound up to keep them off the floor. But the final possibility, that the maps be arranged narratively, to make a point, to tell a story, implies a movement from the simple desire to get things into shape to the more complex one of making of that shape some thing of its own, of giving it some sort of role and meaning beyond that of the individual maps, of making, in effect, an atlas.

In time, people forget that anyone ever bound up maps just to keep them off the floor. Atlases soon enough seem as natural a part of life as the maps themselves, and by the time this has happened the two grounds for making atlases and the three potential principles of order have collapsed into but a single rationale (to give the larger form some meaning - to make an atlas) with but two principles of order (the arbitrary and the narrative). And yet even this remnant diversity is in a way more illusory than real. In the first place, atlases whose structure is truly arbitrary are quite rare (no matter how many copies of them might be reproduced), and almost all of them are of streets or roads. One thinks immediately of the Thomas Guide, to say, Los Angeles with its arbitrary grid dicing the county into so many twenty-four square-mile chunks, laid out west to east in tiers stacked north to south, utterly arbitrarily, with purely contingent shifts in the system of numeration, so that suddenly there appears after a sequence of 17, 18, 19, 20, a 20A; or a sequence will run 45, 46, 47, 48, 92, 93, 94 as the grid has been expanded. 13 Or one thinks of a Rand McNally road atlas with its sequence of states, Alabama, Alaska, Arizona, Arkansas, California, Colorado....<sup>14</sup> Most of these turn out to be less arbitrary than at first they appear. Der Grosse Shell Atlas seems to slice Europe up without consideration for national boundaries, but in fact the map of the grid reveals a different story, with, for instance, a special grid being applied to Italy, another to Corsica and Sardinia, and yet a third to Turkey and the Middle East; and its variations in scale also imply a system of values anything but arbitrary. 15 The Official Arrow Street Atlas of Metropolitan Worcester and Central Massachusetts arranges its townships alphabetically, Brookfield, Charlton, Clinton, Douglas, Dudley, except that it puts Worcester in front of Auburn instead of after Westminster. 16 And why not? It is the most important town in the area. But to make this point is precisely that, to make a point, to forsake the enforced neutrality of the arbitrary for the domain of narration. The temptation to make sense is hard to resist: man is a meaning-making animal, and where man-the-maker of atlases attempts with arbitrary schemes to impose no meaning, soon enough man-the-reader of atlases will come along to find one anyhow, will read one into it, will insist on its manifest presence. After a time, all orders are perceived as natural, any arrangement will come to seem necessary, and the arbitrary will flip, willy-nilly, into the narrative. As when young children, confronted with a purely arbitrary sequence of pictures, hypostatize these into a narrative structure, first the picture of the stocking, then the shoe, then the bib, then the cup, and woe betide the parent or teacher who thinks of changing this order, starting in the back, or the middle, for the sake of variety, for the sake of sanity.

So on the one hand, the arbitrary is perpetually in danger of metamorphosing into the narrative, even in those cases where it has not been already betrayed by lapses and divagations. But on the other, the narrative tradition perpetually poises itself over the abyss of the arbitrary, ready to slip - at the first harsh word - into the realm of, at best, contingent order. Narrative sequences imply the imposition of meaning, reveal the system of values which underwrites not only their order but the structure of the maps themselves. Narrative sequences thus position themselves as threats to the facticity of the map. When this becomes too obvious, atlases retreat from narrative into arbitrary order like prairie dogs at the sight of the shadow of a hawk. Take Goode's World Atlas for example. 17 Can there be any doubt that in the order of world maps, first the political, followed by physical, landforms, climate, temperature, precipitation, natural vegetation, soils, population density, population change, gross national product, literacy, language, religions, calorie supply, protein consumption, physicians and life expectancy, there is an essay being written? If not a cosmographical meditation on the creation of the universe, then perhaps an environmental determinist disquisition on the origins of poverty? Can this be doubted? Right up front we have the physical environment sketched in. This itself is constructed from briefer essays, shorter narrative sequences: thus, given maps of landforms, climate, temperature and precipitation, the map of natural vegetation naturally follows, is a consequence of what preceded it, could be deduced from its precedents. This logic identically links the larger units. Given the maps of the physical environment and those of population density and changes, what else could one expect than what one subsequently encounters in the maps of protein consumption and life expectancy? This, not incidentally, happens to cast population in the role of independent variable, and so inexorably leads directly to the policy conclusion that birth control is a necessity for the Third World. Further, by giving the map of nation-states the ontogenetically privileged position of coming first – out in front of a long sequence of maps of the physical environment –, it imposes the impression that these nation-states have the same developmental status as landforms and climate, as though the nation-states were just as natural and hence *not* implicatable in any different way from the rains and the winds in the fate of man. It naturalizes the state. It makes it innocent.

But all this undermines our ability to accept the independence of the maps and the atlas. We see that they are servants of this way of thinking as opposed to that (as opposed to that of the editors, for instance, of The State of the World Atlas, who locate the causes of poverty exclusively in the system of states, dispensing entirely with the apparatus of maps of the physical environment except insofar as the system states impacts  $it^{18}$ ), an impression that could have been avoided had the plates in Goode's been arbitrarily ordered, alphabetically by title, for instance, which would not only have produced the sequence, 'Annual Precipitation and Ocean Currents,' 'Birth Rate/Death Rate,' 'Climate Regions,' 'Gross National Product/Literacy,' but would have also thereby preserved the fiction that Goode's was a reference volume in which to look things up as opposed to a polemic on the causes of poverty. This failure of presumptive objectivity raises further doubts, perhaps about the very accuracy of the maps themselves (an issue explicitly raised by the editors of The State of the World Atlas19) and with this vanishes the sole distinction that cartography could claim, that it presented an unbiased, objective, neutral, value-free picture of the way things are. It is precisely at this point that Goode's retreats: suddenly in place of a narrative structure we are confronted with an arbitrary sequence in which maps of wheat, tea, rye, maize, coffee, oats, barley, cacao, rice, millet and grain sorghum, cane sugar, beet sugar, rubber, grapes and so on follow each other in what appears to be nothing more than random order.

So the makers of atlases are torn: their ability to speak about the world is circumscribed by nothing other than what it is that gives them special license; but what is the point of presenting the maps if one is to say nothing through them? Inevitably the desire is to have it both ways and hope no one will notice, to, as Roland Barthes has put it, create myths. <sup>20</sup> The temptation is overwhelming: "The maps cannot be jumbled in any old way. Some order is absolutely necessary. It may even facilitate access. And after all ... poverty is the result of too many people leaning too heavily on too few resources so why shouldn't we say so?" It's true that the necessary language of logical implication is usually missing (there are no if ... thens or therefores) and this may suggest that the connective tissue of order is not actually present. But there is little of this connective tissue in narrative structures generally (practically none in novels for instance); and Barthes has gone so far as to say that, "Everything suggests, indeed, that the

mainspring of narrative is precisely the confusion of consecution and consequence, what comes after being read in narrative as what is caused by."21 It is not thus merely the habituation to a given order (as in the example of the child with his picture book) -nor the difficulty of resisting the impulse to make meaning -that results in the appearance of narrative sequences; but our propensity as readers willfully to confuse first in time and space with logically or developmentally prior. This can be resisted only with great effort -no order but the arbitrary (but then how does one select the subjects to be mapped?) - and at great cost to the strength of the motivations prompting creation of the atlas in the first place. Where the arbitrary is not brutally imposed, the atlas inevitably slides into narrative. But if maps are not to show what is, but only what some editors choose to show us; or not how it is but only how some editors want to make it seem. then what is the point of looking at them at all? Precisely! Exactly! But since all representations - poems, paintings, photos, movies - share this trait with maps, the question cannot be allowed to rest here, it has to be pushed to the obvious, why read at all?

But this is not a question cartography in particular need address (which is not to say cartographers should ignore it either). It is enough to admit that we do read, to acknowledge the kinship of maps and atlases to all other semiological systems, to give up trying to hold meaning at arm's length, to let it in, embrace it, to learn to speak without stuttering, without trying to pretend discourse is the furthest thing from our minds. It is to advance and carry on that I would prompt the editors of Goode's when they lapse from the narrative into the arbitrary, even though I might disagree violently with the story they wish to tell: it is possible to dissent from an argument, but how can one take issue with a halting sequence of images attempting to pass itself off as the truth? The narrative reading is inevitable: make the most of it. After all, objectivity does not consist in suppressing an unavoidable subjectivity, but in so acknowledging its intrusion that the reader is relieved of the necessity of ferreting out with difficulty what must sooner or later in any case come to the surface.

Nevertheless it is always exactly at this point that the trouble starts. It is precisely this impulse to deny the subjectivity of the map, to suppress the viewpoint of the atlas maker, that has so stunted the narrative tradition. Although it has always been from the narrative tradition that most energy for the creation of atlases has flowed, because it surfaces in so unmistakable a fashion the semiological character of the map, the tradition remains weak, being buried or truncated whenever it threatens to become so obvious as to impugn the independence of the maps it binds. And this remains true even when the atlas in question is overtly hung on an explicitly narrative thread as is the case, for example, with an historical atlas. William Shepard's venerable Historical Atlas, <sup>22</sup> for instance, is chronologically ordered, but such are the leaps in space and time that its maps seldom compose themselves into sequences, and one is no less likely to consult its maps than those of the Thomas Guide to Los Angeles via the index

and table of contents. But what then is the point of arranging the atlas chronologically? It is a question one could as well address to the editors of Everyman's Atlas of Ancient and Classical Geography<sup>23</sup> whose arrangements are just as incoherent. It is not that there is no intention to advance (and prove, or at least illustrate) any number of theses. Its editors note in their introduction with respect to Greece, "how vitally its physical features affected its history and its place among the nations. We see how its ridged headland ... " and so forth and so on. It is a theme wonderfully suited to a cartographic exposition. Eagerly we turn to the plates themselves, but ... what is this? There is in fact no map of Greek typography, even to find significant features (like Mt. Olympus) is next to impossible, and when found turn out to be but names unassociated with any other mark.<sup>24</sup> Did the editors not mean what they wrote? Or, like the editors of Goode's, did they shy from the cartographic commission out of fear that we would turn from Everyman's when all we wished to do was "to lighten the search for place names and landmarks". 25 Even the detailed almanac - it is scarcely more than that - that accompanies the plates in The Anchor Atlas of World History, 26 little helps to achieve even the most meager sort of history. Except by way of detail, its six hundred pages offer little more than the bizarre 'chronograms' or 'histomaps' that Rand McNally used to publish, like The Histomap of History: The Rise and Fall of People and Nations for Four Thousand Years, its band of orange and pink and vellow widening and narrowing (often disappearing) as Mongolians sweep out of Inner Asia and Ottoman Turks seize control of the Byzantine Empire. <sup>27</sup> It is narrative all right, but at the level of that of the kids' book I mentioned, Tana Hoban's What Is It?, first a picture of a sock, then a picture of a shoe, then a picture of a bib, then a picture of a cup, then a picture of a spoon, then a picture of a bowl, then a picture of a purse, then a picture of some keys, then a picture of a plastic teddy bear, finally a picture of a plastic pail, and ... that's it folks. 28 It is narrative because the images are bound into an order that forces itself upon us, significant because consecutive (and it is easy to justify the order – you have to put on your socks before you put on your shoes, you have to get dressed before you eat lunch, and then mom drives you to the playground where you play in the sandbox –, but the problem is that you can justify the order a thousand different ways, there really isn't any, we just want to feel that there must be, it is all astrology); and so, though it is narrative, it is narrative of a sort of sub-zero degree, narrative because having experienced narrative we attempt to read all sequence this way. But it is no different with the Histomap of History (first the Egyptians, then the Assyrians, then the Persians, then the Greeks), with Everyman's, with Shepard's Historical Atlas ....

How different this is from the (still relatively conventional) *Times Atlas of World History*<sup>29</sup> with its highly deliberate linkages and expository paragraphs or from Joseph Campbell's *The Way of the Animal Powers*, the first volume of a projected *Historical Atlas of World Mythology*.<sup>30</sup> I have simply let the atlas fall open and I find myself reading a sequence of four maps, all labeled 'Paleolithic

Industries,' but at something like eight thousand year intervals commencing c. 38,000 to 33,000 BC. In addition to culture (Advanced Mousteroid industries, Aurignacoid industries), continental landmasses and glaciation are mapped. For a reason. An argument is being made about the movement of Mousteroid industries across the Bering landbridge into the Americas, where, with the subsequent closure of the Yukon corridor, they are cut off from the contemporaneous but independent development of Aurignacoid traditions in Eurasia. One of the four captions reads:

Map 11. During the 14,000 years between the time of Map 10 and that of Map 12, western Alaska was culturally a part rather of Asia than of North America. While in the Old World during this season Mousteroid tools were being supplanted by Aurignacoid, in both continents of the New World local refinements were appearing of the inherited Mousteroid tradition. Separated by polar tundra and glacier-covered mountains, the two systems were now developing independently.<sup>31</sup>

Propelled by the language of logical implication, supported by sequences of clear maps intelligently centered just off the pole, enriched by illustrations of early man and representative stone tools, the whole comprises a narrative sequence that is not just one thing after another, but a single thing, an argument, a demonstration no single map could quite as strongly make, a discourse, a meditation on some data, an atlas ....

Or we could turn to the brilliant series of atlases Colin McEvedy has done for Penguin, in which maps and texts of equal weight constitute themselves an extended historical essay, The Penguin Atlas of Ancient History, ... of Medieval History, ... of Modern History, ... of Recent History, ... of African History, and with Richard Jones an Atlas of World Population History. These may be entered through their posterns of indicies and tables of contents (though in comparison to other sorts of atlases these are so skimpy as to verge on non-existence), but their sally ports are through reading, as of any other narrative, with the maps in the role of further paragraphs, the text taking on the function of further maps. As McEvedy writes of his atlas of African history:

What it is not intended to be is a reference atlas. The maps show only the bare essentials of African geography; the text contains no more facts than are needed to sustain the narrative. If you know what you are looking for and it is in the book you should be able to find it either directly – the book is organized in a simple, chronological way – or by using the index. But it is not a compendium, it's an outline, as indeed it has to be if it is to cover the whole story of man in Africa. Which is really what the book is about.<sup>33</sup>

If in place of 'man in Africa' this had read 'state of the world,' it would not have been out of place in the introduction to Michael Kidron and Ronald Segal's *The New State of the World Atlas*, except that the latter has *no index at all* and has

reduced the verbal text to a fraction of McEvedy's without in any way sacrificing the sense one has of following a subtle essay as one reads the 57 double-page map spreads. One reason for this is the presence below the title of each map of a pithy - almost aphoristic - verbal summary of its point. This has the effect in the first place of removing them from the class of 'reference maps' right off ('reference maps' have subjects, but they do not have - acknowledged, explicit - points); and in the second of causing each spread to be read as a link in the chain of argument: "There are two-and-a-half times as many military people as health workers in the world; and over a quarter more is spent on supplying them than on health care," "All states are armed against their citizens. Many states use exceptional methods to terrorize them," "The days of our years are three-score and ten - if you happen to be European or North American," are typical. Their sharply pointed quality makes it clear to the most obtuse reader that this atlas is not a hodgepodge of 'neutral' maps, but a lively polemic about a self-perpetuating system of sovereign states so preoccupied with aggrandisement and conflict as to lead to world cataclysm. The sharpness of tone promotes close attention to the maps - if only in search of alternate readings; the concision propels readers to the explanatory notes (which explicitly discuss the quality of the data mapped). It soon becomes apparent that the plates build on each other, that the divisions of the atlas have a rhetorical - not arbitrary -basis, that the notes are vital to any deep understanding of the maps: soon the atlas is being read for the essay on the destructive potential of the nation-state that it happens to be.

And nothing but an atlas could have accomplished this with equal force.

The graphic power of the maps in conjunction with the moral and intellectual integrity of their choice and organization results in a *discourse of conviction* well beyond that of either prose (inevitably fated by virtue of its undimensionality to sacrifice the gift of spatial interconnectedness) or television (inevitably fated to sacrifice most of the facts because of temporal constraints) and most anything in between. The polydimensional possibilities of the map multiplied by those acquired through thoughtful sequencing endow the narrative atlas with potential among the persuasive arts second to none.

Nor need any of this imply reduction in the standards of thoroughness and accuracy, detail and accessibility currently associated with our finest 'reference' atlases. Plates in an atlas with an index – to say nothing of the refined forms of tables of contents increasingly encountered (such as those encouraging entrée along more than one dimension, regions, for example, along one axis, themes along another) – can be arranged in the subtlest of narrative sequences without loss of convenience. Further, once maps have been liberated from the no more than contingent distinction between 'general reference' and 'thematic', such narrative sequences will be able not only to unfold genuinely geographic arguments, but also come to be appreciated for the reference function they in fact already fulfill. As Edward Tufte points out, "The most extensive data maps, such as the cancer atlas and the count of the galaxies, place millions of bits of

information on a single page before our eyes. No other method for the display of statistical information is so powerful."<sup>34</sup> And as Jacques Bertin has insisted:

A geographical map is a representation of the arrangement of elements on the surface of the earth. The order defined by the terrestrial surface confers two exceptional attributes to the map.

- The map supplies intrinsic information as to topographical proximity, which only it can transcribe completely.
- The map constructs a constant and universal reference shape, constituting the most powerful means of introducing into the problem *the extrinsic information necessary for interpretation and decision-making*.<sup>35</sup>

Maps can convey incredible quantities of information with an efficiency and effectiveness that cannot be matched. All that has been lacking has been the will and imagination to exploit this matchless potential in the acknowledged service of an argument, an argument never foregone, but simply strangled, rendered simple-minded, forced to stutter, to hide, to play coy. Acknowledging the argument, making it overt, placing the rhetorical power of the narrative atlas explicitly at its service, will result in the release of incredible cartographic energy. What is at stake is an attitude. The genuinely narrative atlas is not a function of its subject – it does not have to be about history –, but of its attitude toward information and its role in our lives. It's an attitude that insists that information is important and active, not trivial and passive (not waiting for someone to come along and look it up). And active and important information is a force.

It's the sort of thing Goode's wants to be – but won't let itself become.

But it is also the sort of thing atlases increasingly will have to become if they are to continue to matter, certainly if they are ever to matter to our children.

## THE NARRATIVE ATLAS AND THE CHILD

I turn to children last because they are first in my thoughts. Before trying to imagine what an appropriate atlas for children might look like, I wanted to assure myself that I understood what an appropriate atlas for adults might look like. There is a patronizing air about much of what we make for children that I cannot stand still for, and given that my respect for compendia like *The Times Atlas of the World*<sup>36</sup> or *The International Atlas* of Rand McNally<sup>37</sup> has always been limited by the very limitations of their ambitions, I have never been able to summon up *any* for the thin versions of these that typically pass as atlases for children, thinner and more crude, with thicker lines and brighter colors, but fewer maps and fewer names, as though the eyes of children were weaker than those of adult atlas readers, what shall I do for children? Certainly *children* have no information needs that maps allow them to meet, no matter how generously we construe the meaning of 'need'. Few enough have even specifiable

information wants. How to imagine the atlas construed as a reference tool for children? When not disgustingly pretentious, the image it arouses is simply amusing. And yet to imagine no role for atlases in the lives of children is to give in to despair.

Though I had not originally contemplated them with this end in mind, narrative atlases would seem to be especially well adapted for use by children. The narrative structure answers the question that faced with a conventional atlas is all but unavoidable for child, parent or teacher: "Why turn the page? It is bound to be just like the one before. North Dakota, South Dakota, France, Spain – what's the difference?" Unless you have something to look up .... But what does a kid of seven – or eleven or seventeen – have to look up that requires a map of the Dakotas, of France, of Spain?

Nothing. So confronted with the maps in his textbooks and the atlas provided by the schools he has no need to feign indifference: he *is* indifferent, as you are, as I am. There is no reason to look at these products of imprisoned imaginations. And yet, there they are. The conventional strategy for forcing attention is to ask questions, questions as fatuous as the anssumptions upon which they are based:

Review the maps in this unit and then make a list of all the nations of the Orient that are: 1 archipelagoes, 2 peninsulas, 3 single islands. Does this part of the world seem to have a greater number of these land formations than those you have studies so far?

Use degrees of latitude and longitude to describe the locations of the part of Australia with a marine climate. What important topographical feature is found in this area?

Use the map of North Africa in Chapter 24, page 192, to describe the location of each of the following in degrees of latitude and longitude: industry, mineral deposits, and orchards.<sup>38</sup>

Faced with these I am not surprised the kids are indifferent; I am surprised they do not rip the book to pieces. And yet, I cannot join those who assume either the indifference or the fury to be directed toward North Africa, Australia or the Orient; or, for that matter, toward reference works. It is easy to overlook this, but kids can spend hours with the *TV Guide*, the almanac, the box scores on the sports page – small print and statistics of all kinds. It is not the statistics and the facts that make their eyes glaze over. It is not the geography that turns their heads toward the window and the world outside the classroom. It is the nothing that is made of it, or worse, the pretense that nothing is being made of it when even the most doltish can feel the chauvinism coming off the text like heat from asphalt in the summertime. Emptiness and lies, these are what the kids cannot stomach.

How differently they behave in the presence of maps and atlases that *speak* to them in any way at all. *The War Atlas*<sup>39</sup> is *read* – and *re-read* – in stunned amazement. Afterwards kids are propelled into action, to ask, "What can we do?" *Gaia: An Atlas of Planet Management*<sup>40</sup> provides one answer. Kids *read* 

this and begin to think constructively about their role in our collective futures. They also begin to wonder how we got into this mess. Jacquetta Hawkes' The Atlas of Early Man41 is as useful a place as any for (at least) high school and college students to begin trying to construct an answer to this question. No, it's not a great book: none of these is. In their understandable eagerness to distance themselves from the dullness and dumbness associated with most school (and other) at lases, each has sacrificed more than it needed of topography and climate, of graticule and (especially) nomenclature - and this limits the reader's ability to construe variant readings of the data presented, to move from atlas to atlas, to move from these atlases to others (even to 'reference atlases'). It is also possible to argue that in divorcing themselves from the 'cool' of the 'reference atlas', these narrative atlases embraced graphic conventions too 'hot' (The War Atlas), too 'pretty and insubstantial' (Gaia), too 'sketchy' (Early Man). From one perspective, this sort of objection is beside the point. What is important is the fact that these atlases, in committing themselves explicitly and narratively to a point of view, become thereby full (not empty); and, in admitting what they were about, become, through this gesture, truthful in a way 'reference atlases' hiding their messages behind the false front of 'objectivity' - never have. "There is an evil," Roland Barthes writes, "a social and ideological disorder, ingrained in sign systems which do not frankly proclaim themselves as sign systems."42 Evil in precisely this sense, a Goode's breeds but cynicism. At the very worst, The War Atlas promotes debate.

What nevertheless is implied by the criticisms I have adumbrated is none other than the reactionary origin of the content and style of these exemplars of the narrative manner. Had these been created solely with the intention of being able most usefully to unfold their various arguments, they would not be so emphatically distanced from the content and style of those atlases most widely available. It is as though their authors had repeatedly muttered through clenched teeth, "Anything but that!" hatcheting from their work the least hint of academic or commercial style. In a way this was no more than silly. But, while the motivation is understandable, too much is thus forsaken that is important, vital, even essential. The graticule, for example, makes no appearance in these atlases, 43 though, one must first ask, why should it? I, for one, do not believe it unreasonable for a student presented with the graticule in vacuo to wonder what the point of learning it is, to insist that it's dumb: as soon learn the structure of the 'seams' on a basketball for the graticule is not, after all, a property of the planet we live on (as is the quality of its water, the cleanliness of its air), but a scheme we have evolved for describing it. All the same, it is not a useless scheme, and where it is useful I believe it should appear (at which point it might also make sense to teach it - it is not arcane, and with motivation almost anyone can master it in minutes). Here, in The War Atlas, is a plate displaying major strategic nuclear target areas, hundreds of them on a small scale map. I can imagine kids (and their parents) wanting to know, "Am I living in one of them?" In the

absence of names (difficult to deploy at this scale), the graticule is not an unreasonable alternative. Designed to accept it, this plate would have achieved another important goal: it would have worked as a gestalt (portraying global destruction) at the same time that it worked in its parts (portraying the destruction of this or that particular place), be read one way from a distance, another up close. 44 I would imagine the impulse that left the graticule off this map was similar to the one that excluded a map of named nation-states from Gaia. Again, this is not a plate that needs to show up in each and every collection of maps, up front, labelled 'political', as though in denominating these areas that topic was exhausted. Nothing was ever more naive, or duplicitious. But nations are endlessly demarcated in Gaia, and where the text reads, "We live in a world dominated by nations, more than 200 of them, from mini-states to superpowers," a map with them named would not have been out of place. It need not limit itself to the display of names and boundaries (as the 'political' map always has, giving rise to the horrible question what to color them), but might show something else as well (perhaps the dates of 'independence', which is what the map adjacent to the quoted text does show, in five classes, but without naming the countries). Not to do so is stupid (reaction so often is): one might sympathize with the wish not to have a map entitled 'Political' in an atlas in which every map raises political issues, but to suppress the names of nation-states is no way to achieve this. Kids (and adults) have a legitimate interest in relating the often mapped boundaries to the names so frequently mentioned in the text. The atlas's refusal to do so is felt in Gaia precisely as the inevitable presence of the 'political' map up front in Goode's is experienced, as a sign which dares not speak its name, in other words, a myth.

It is not, however, desirable that the intrusion of the explicitly narrative be limited to the overtly 'thematic'. After all, every atlas is thematic, none moreso than those elephantine compendia of maps of surface elevation (to say 'topography' would be too generous), lakes and rivers, roads and railroads (again, 'transportation' is merely pretentious here), urban places and political boundaries that have for decades been able to pass themselves off - under the misnomer 'general reference' - as free of themes, as though there had been no point lurking behind this peculiar selection of things to map, as though their theme had not been from the beginning "The Earth as the Home of (Western) Man". Take the plates of any popular 'general reference' atlas, The Times Atlas of the World, let's say, and rearrange them to best enable the structure to support this theme (nor am I referring to the 'thematic' plates up front, but to those, constituting the bulk, which epitomize the 'general reference' ideal). For example, instead of ordering them in some pseudoregional fashion (which only reinforces often untenable notions of the structure of the globe, Africa, for instance, being divided from Europe by the Mediterranean instead of the Sahara), let them reflect the incidence per plate of cities with populations in excess of some arbitrarily large number, 750,000, perhaps, or a million. The atlas so structured would unfold, on each page successively turned, an increasingly surprising view of the world, not where the large cities are, but which parts of the earth are urbanized and which are not, turning the atlas into an animated version, in effect, of Bill Bunge's perpetually illuminating 'Continents of Mankind'. 45 One might read so minimally narrative an atlas which would nonetheless have sacrificed none of its 'general reference' character (the key to the plates on the end papers, the index and a revised table of contents would see to that<sup>46</sup>). In fact, this supplemental order would provide an additional dimension of reference without modifying the substance of a single plate! With a little imagination such an atlas might come to achieve the quality of the best children's books, capable - because of the inherent interest of each page - of riveting the attention of the child too young to follow the narrative, but yet capable - due to the presence of the narrative - of retaining, indeed reigniting, his interest with increasing age, the pictures he had come to *love* for themselves acquiring meaning as units of structures previously unnoticed. Such books are ingested on many levels, for in good ones there are many aggregations of significance beyond the solitary image, two or three of these colluding here to comprise an episode a couple of episodes conspiring to a sequence, a string of sequences cohering in the architecture of still larger arguments; and in the best each of these is open, plural, richly polysemous.<sup>47</sup>

What is it that prohibits our atlases from aspiring to this degree of signification which has, at any rate the courage to declare itself?<sup>48</sup> Will and imagination? Certainly these have never been abundant. But more critical is the refusal to acknowledge the map as text, the refusal to admit the *flush of pleasure* inseparable from the *act of intellection*,<sup>49</sup> the unwillingness to forego the *snobbery* of a bankrupt (if still heavily capitalized) Science.

One admonishes, give it up, with but little expectation of it happening.

### NOTES

<sup>2</sup> All these images come from Barbara Bartz Petchenik's "Maps, Markets and Money" (pages 9 and 10) and her "Facts and Values" (page 34), both of which appear in *Cartographica* Autumn 1985.

<sup>3</sup> Patrick Moore, The New Atlas of the Universe, Crown, New York, 1984.

<sup>5</sup> With, of course, none other than the goal of savaging the system of order that makes meaning possible in the first place. See, for an early example, the *Ur Sonata* of Kurt Schwitters, discussed and

<sup>&</sup>lt;sup>1</sup> Thomas Perry's *The Butcher's Boy* was originally published by Charles Scribner's Sons, New York in 1982. The paperback edition I was reading was published by Charter Communications, New York in 1983.

Though published in the United States by Crown, The New Atlas of the Universe is actually a Mitchell Beazley production, and the first two editions, 1970 and 1981, were both copyrighted by Mitchell Beazley, London. The atlas is an example of an increasingly large class of glossy, heavily illustrated atlases and encyclopedias pouring out of England, quite often from Mitchell Beazley; and distributed in this country by Simon and Schuster (Hugh Johnson's ever popular The World Atlas of Wine), St. Martin's (Jacquetta Hawk's The Atlas of Early Man) and Crown (lately with Cambridge University Press as supplier, as in the Cambridge/Crown The Cambridge Encyclopedia of Earth Sciences). It is not easy to say what these seductive, often sumptuous books are all about, but on the face of it, they are not intended simply to satisfy peoples needs for information. Two clubs, by the way, that offered The New Atlas of the Universe are the Library of Science and The Natural Science Book Club (both of which do happen to be Macmillan clubs).

partially reproduced in *Kurt Schwitters in England*, by Stefan Themerson, Gaberbocchus, London, 1958, in *Kurt Schwitters*, by Werner Schmalenbach Abrams, New York, 1967, and elsewhere. Without claiming too much for Schwitters, it might be said that a whole world of 'text sound compositions' has erupted from his work (also known as *poesie sonore*, *verbosonie*, sound poetry, and so on). A good introduction is the record 10 + 2: 12 American Text Sound Pieces 1750 Arch Records, 1750 Arch Street, Berkeley, California, 1974. And this just scratches the surface of the meaningless text.

<sup>6</sup> "If the statistics are boring, then you've got the wrong numbers," is how Edward Tufte concludes his discussion of this point. See his *The Visual Display of Quantitative Information*, Graphics Press, Cheshire, Connecticut, 1983, page 80. This, by the way, is an example of a book I read for the sheer pleasure of watching a serious intelligence unleash itself, sitting up in bed with it one night until I

finished it: like reading a thriller, which it is.

Had the textual qualities of the map been no more than casually overlooked, there would not exist the total separation that we find between the reading and map reading literatures. But practically from the moment that cartographers noticed that they had readers, they treated these readers as no more than eyes; that is, they reduced the question of map reading to one of visual perception. The literature on reading, on the other hand, while it does not ignore the perceptual issues, relegates these to a fundamental, but essentially trivial, position. Compare, for example, the references in articles on reading that have appeared in one visually biased journal, Visible Language, with those on map reading that show up in cartographic periodicals. There is NO overlap. Articles on map 'reading' are concerned with eye movements, gray-scale discrimination and the visual estimation of size to a perverse, to an obsessive degree. References in such articles are to similar cartographic research or to the literature of visual perception (for a peculiarly horrifying example see Michael Dobson's "The Future of Perceptual Cartography," in Cartographica, Summer, 1985; or James Antes, Kang-tsung Chang and Chad Mullis' utterly vacuous "The Visual Effect of Map Design: An Eye-Movement Analysis," in The American Cartographer, October, 1985). Articles on reading, on the other hand, admit the complexities of the reading task, embracing in their references the literature of a psychology that goes well beyond perception, as well as including material from linguistics, semiotics, hermeneutics and pedagogics to name but the most prominent ancillary fields. But, then, the map has been trying to pass itself off, not as a text, but a tool of science, a phase English went through centuries ago (though not entirely painlessly; see Robert Adolph's illuminating The Rise of Modern Prose Style, MIT Press, Cambridge, 1968). As for what it might mean to enjoy a text, that's something few have concerned themselves with, reading as enjoyment, reading for fun. Try Roland Barthes' The Pleasure of the Text, Hill and Wang, New York, 1975, for starters.

<sup>8</sup> We have been willing to admit that map makers are human, but unwilling to think that they might be fabulists – novelists –, except coyly, when dismissing the dragons in the oceans and the cannibals up the Amazon. There has been little progress in our thought on this subject since J.K. Wright published "Map Makers Are Human: Comments on the Subjective in Maps" in the Geographical Review in 1942 (but anthologized in his Human Nature in Geography, Harvard, Cambridge, 1966). We still want to try and pretend that the subjective is by way of an intrusion, instead of facing up to

the fact that it ran off with the map the instant it was born.

There is of course a fathomless literature on how it is that a novel manages to 'work', even on what it actually does; and it is a literature that is of increasing volume and importance. A decent introduction to much newer thinking can be had through Jonathan Culler's *The Pursuit of Signs: Semiotics, Literature, Deconstruction*, Cornell, Ithaca, 1981. But I'd also like to recommend J.R.R. Tolkien's heartbreaking "On Fairy-Stories" from *Tree and Leaf*, Houghton Miflin, Boston, 1965. Oxymoron or not, this common sense about fantasy, which is the acid test for any mimetic reading of reading.

Donald Westlake wrote all this in High Adventure, The Mysterious Press, New York, 1985, page

121.

Another more complex example is that given by Philip J. Gersmehl in his "The Data, the Reader, and the Innocent Bystander – A Parable for Map Users" (*Professional Geographer*, 1985, pages 329–334). Or maybe it is less complex, simpler, easier to see through. This is his abstract: "In 1977, I published a set of coarse-resolution dot maps that showed the general distribution of soil orders in the 48 states. Through a sequence of copies made by various people, one of those maps eventually appeared in a planning document as a shaded-area with the title 'Principal Peatlands of the United States'. Along the way a saline desert muck of conjectural extent and location was 'transformed' into

a documented energy resource for the nation." But to one extent or another, every map shares this history: the map is NEVER the world.

12 Lloyd Brown, The Story of Maps, Little Brown, Boston, 1949, page 165.

<sup>13</sup> Thomas Guide 1985 Los Angeles County, Thomas Brothers, Los Angeles, 1984, pages IV and V.

14 Allstate Road Atlas, Rand McNally, Chicago, 1980, pages 4-17.

15 Der Grosse Shell Atlas, Mairs Geographischer Verlag, Stuttgart, 1968/69, page I.

<sup>16</sup> Official Arrow Street Map Atlas/Metropolitan Worcester and Central Massachusetts, Including 56 Cities and Towns, Arrow Maps, Boston, 1972, page 1. It's got a great title: especially effective is the 'Official' attached to the word 'Arrow' less as an adjective than a sort of christian or given name, so that the whole name is Official Arrow.

17 Goode's World Atlas, 16th Edition, Rand McNally, Chicago, 1982. I make reference to the Third

Printing, Revised, 1983, pages 2-35.

<sup>18</sup> Michael Kidron and Ronald Segal, *The State of the World Atlas*, Simon and Schuster, New York, 1981; and *The New State of the World Atlas*, Simon and Schuster, New York, 1984. Because Kidron and Segal *speak* through their atlas it seems reasonable to list them as authors of the atlas; whereas it seems silly to have mentioned that Edward Espenshade and Joel Morrison are listed as editor and senior consultant, respectively, of *Goode's*, through whom, if anyone mumbles, it is the late Paul Goode and the collective responsible staff at Rand McNally. It's not that *Goode's* doesn't say anything; it's that it speaks in a voice for whom no one seems particularly eager to take credit.

<sup>19</sup> See the introductions to both editions and the notes to the plates. Kidron and Segal note "a definite drop in the standards of the data provided by the United Nations and other international organizations," an observation they amplify and in the notes illustrate. I compare Goode's and The New State of the World Atlas in my review of the latter in The American Cartographer for April,

1986, pages 172-173.

<sup>20</sup> Roland Barthes, *Mythologies*, Hill and Wang, New York, 1972. Especially important is the long essay "Myth Today". Further work in this vein appears in his *The Eiffel Tower and Other Mythologies*, Hill and Wang, New York, 1979. Cartographers will also profit from his extended reading of an advertisement for Italian food in "Rhetoric of the Image," in *Image – Music – Text*, Hill and Wang, New York, 1977, from which collection anyone interested in his mythologies should also read the brief essay called "Change the Object Itself: Mythology Today."

<sup>21</sup> Roland Barthes, "Introduction to the Structural Analysis of Narratives," in Image - Music -

Text, cited above, page 94.

William Shepard, Historical Atlas, Eighth Edition, Barnes and Noble, New York 1956. One names Shepard not because he authored the atlas (see below) but because like Goode's this is how it is known: Shepard's. This is a re-working and translation of Putzger's Historis cher Schul-Atlas, not something one could learn from an examination of Shepard's itself, which makes an allusion to "plates, originally made in Germany," but goes no further. I learned this from the excellent paper given by Armin Wolf to the Eleventh International Conference on the History of Cartography in Ottawa in 1985. The title of Wolf's paper was: "What Can the History of Historical Atlases Teach? One hundred editions of Putzger's Historischer Schul-Atlas Reflecting 100 Years of German History." Wolf can read through maps.

<sup>23</sup> Everyman's Atlas of Ancient and Classical Geography, Dutton, New York, 1952. I have no idea what the history of these maps is, but I would be willing to bet they were created in the 19th century.

This is a slight revision of the 1907 edition.

<sup>24</sup> I am looking at the map on page 32, 'Graecia,' which is where the index sent me. There is no topography on this map at all. Olympus also appears on page 35, the right-hand side of 'Graecia Septentrionalis.' There are lines in this map which I take to be contour lines, but they are impossible to read, no contour interval is given (assuming that they are contour lines), and in any case do not help me locate Olympus – to say nothing of understanding how the physical environment affected Greek history.

<sup>25</sup> This is from 1907 introduction to *Everyman's*. The sentence reads in full: "The new maps are designed to lighten the search for the place-names and the landmarks they contain by a freer spacing and lettering of the towns, fortresses, harbours, rivers, and so forth, likely to be needed by readers of the classical writers and the histories of Greece and Rome." Needless to say, the original plates are in

Latin, even the titles, thus, 'Aegyptus'. It was another world!

<sup>26</sup> Hermann Kinder and Werner Hilgemann, The Anchor Atlas of World History, Doubleday, Garden City, New York, Volume I, 1974, Volume II, 1978. They were translated by Ernest Menze

from DTV-Atlas zur Weltgeschichte, Deutscher Taschenbuch Verlag, Munich, 1964 and 1966 respectively.

<sup>27</sup> John B. Sparks, *The Histomap of History*, Rand McNally, Chicago, 1955. I do not know whether

this is still published. If it isn't, something like it is.

<sup>28</sup> Tana Hoban, *What is it*?, William Morrow, New York, 1985. There are zillions of books like this. You sit there with the child asking, "And what's this?" as you go from page to page. Kids learn words, get used to looking at printed images, and familiarize themselves with books. They also acquire the rudiments of narrative structure. The Hoban book is a simple and attractive version of the genre.

<sup>29</sup> Geoffrey Barraclough, editor, The Times Atlas of World History, Hammond Maplewood, New

Jersey, 1979.

<sup>30</sup> Joseph Campbell, The Way of the Animal Powers, Volume I, Historical Atlas of World Mythology, Summerfield Press, London, 1983.

31 Ibid., page 35.

<sup>32</sup> Colin McEvedy, The Penguin Atlas of Ancient History, 1967; The Penguin Atlas of Medieval History, 1961; The Penguin Atlas of Modern History, 1972; The Penguin Atlas of Recent History, 1982; and The Penguin Atlas of African History, 1980; all Penguin, Harmondsworth, Middlesex, England; and Colin McEvedy and Richard Jones, Atlas of World Population History, Penguin, Harmondsworth, Middlesex, England, 1978.

33 Colin McEvedy, The Penguin Atlas of African History, op. cit., page 7.

<sup>34</sup> Edward Tufte, *The Visual Display of Quantitative Information*, Graphics Press, Cheshire, Connecticut, 1983, page 26. Tufte is extremely sanguine about the potential of maps.

<sup>35</sup> Jacques Bertin, *Graphics and Graphic Information Processing*, Walter de Gruyter, Berlin and New York, 1981, page 139. I reviewed this wonderful book in the Summer 1985 issue of *Cartographica*.

<sup>36</sup> The Times Atlas of the World, Seventh Comprehensive Edition, Times Books, London, 1985. This atlas no longer bears an editor's name on the title page as did the five-volume Mid-Century

Edition. Like Goode's, no one is really responsible for its shape and character.

<sup>37</sup> The International Atlas, Rand McNally, Chicago, 1969. This atlas, prepared by an international consortium of cartographic firms under the direction of Rand McNally, bears, needless to add, the imprint of no single cartographer or geographer. And yet it contains, by way of foreword, a fifty-four page "atlas-essay" by Marvin Mikesell that Rand McNally at one point or another even

published separately.

These chapters and unit review questions were written by Mary Anne Shea for Saul Israel, Douglas Johnson and Denis Wood's World Geography Today, Holt, Rinehart and Winston, New York, 1980. I have always wanted to repudiate something of mine: I repudiate this, for which, in any event, I do not have to burden myself with responsibility for these dreadful questions (though there is little enough to brag about in the text itself). The book, probably the best-selling high school geography text in the United States, has been under the control of, and essentially written by, the publisher's staff for at least the past ten years, that is to say, under the control of and written by graduates from colleges in the northeast with degrees in English. I was never able to discover what geographic qualifications Mary Anne Shea brought to the task of writing these questions. She certainly brought no others. Nor was it ever clear to me why I was disbarred from participating in the question-writing myself. Most of these dreadful books actually have no authors at all, but are produced entirely in-house by unqualified hacks, as is World Geography Today at this point, Doug Johnson and I having severed our relationship with the book a number of years ago without having been replaced.

<sup>39</sup> Michael Kildron and Dan Smith, *The War Atlas: Armed Conflict – Armed Peace*, Pan Books, London, 1983. This is a great book, from the folks at Pluto Press who also gave us *The State of the World Atlas* (see note 18). John Graham, a teacher in Calgary, Alberta – who generously gave me his copy of the book –, reports finding students spontaneously making off with his copy to read in groups. I have subsequently had similar experiences with college freshmen. This is an atlas that *gets to* 

people.

Norman Myers, editor, Gaia: An Atlas of Planet Management, Anchor Books/Doubleday and Company, Garden City, New York, 1984. Despite the American publisher, this is another of those 'graphic' publications that have been pouring out of England (see note 4). John Livingston, in his Winter 1985 Cartographica review of this atlas, notes that its view of the earth is "pastoral. It tends at

most times to be paternalistic and benevolent, with a detectable dash of Schweitzerian *noblese oblige*. Perhaps the most revealing word in Myers' epilogue is 'stewardship', which notion, as many critics have pointed out, is unshakeably proprietary." He also regards the maps as "exceedingly well done, many downright ingenious, all richly informative." Livingston is largely right on all counts.

<sup>41</sup> Jacquetta Hawkes, *The Atlas of Early Man*, St. Martin's New York, 1976. This again is an English production, much in the line of the McEvedy atlases (see note 32), except that it is much more richly illustrated with artifacts, is world-wide in scope, and concerned with technology, architecture and art instead of the rise and fall of political, and the movements of ethnic, entities. Although Hawkes tries to make of her history a connected narrative, her volume is less pointed than are those of Kidron and Smith, and Myers, less thus, in an important sense, 'narrative'.

<sup>42</sup> Roland Barthes, *The Grain of the Voice: Interviews 1962–1980*, Hill and Wang, New York, 1985, page 66. The remark was made in the context of a justification of *The Fashion System* as equally as committed and moralistic as *Mythologies*, and Barthes is saying that the evil is inherent *wherever* signs do not proclaim themselves, not merely when this occurs in an overtly political context. I could

not agree more.

<sup>43</sup> Except on a handful of maps off in an appendix to *Early Man* on which a number of archeological sites are located.

<sup>44</sup> This is a design principle dear to the hearts of both Edward Tufte (see note 6) and Jacques Bertin (see note 35) who constantly push for the maximization of the utility of the map (or graphic). They insist that at each distance from which a graphic might be read a different level of structure should be revealed, as is true of things in the world. But see Tufte and Bertin for some brilliant examples.

<sup>45</sup> This map displays in black and white those portions of the globe occupied by more than thirty persons per square mile. No indication is made of land or water, no nations are shown. Among other things that leap to the eye from this map are the similarities – as far as human occupance is concerned – among tropical rain forests, deserts and oceans. This is also the only truly monothematic map I know of. It first appeared on the cover of the *Field Notes* volumes 1 through 3 published by the Detroit Geographical Expedition and Institute East Lansing, Michigan, 1968–70. It has subsequently appeared in a highly refined form (250 or more persons per square mile) as Map 28 in *The Nuclear War Atlas*, the Society for Human Exploration, Victoriaville, Quebec, no date. This is another splendid exemplar of the narrative possibility I have failed to discuss in the text only because of its relative rarity. Bill Bunge's name, by the way, appears as author on none of this, but that of it he didn't write, he directly inspired.

The idea that the regionalization helps people find what they are looking for in these atlases is quite simply mistaken. It only seems that way. If you are looking at a map of the Midwest United States, do you move forward or backward in the atlas to find the map of Georgia? There is simply no way of knowing. In his "National Geographic Consciousness and the Structure of Early World Atlases" (read in 1985 to the Eleventh International Congress on the History of Cartography in Ottawa), James Ackerman maps general patterns (spiral/circular and composite-linear) and specific sequences (Ptolemaic, a 1595 Mercator, Sanson's 1658) for what he terms "continuous map sequences in atlases". As your personal experience will have already demonstrated, the variety is great, the regularities few if constant (the first country dealt with in Europe is often Great Britain and so on).

But in general, the regionalization may be sacrificed with no loss in accessibility.

<sup>47</sup> My favorite examples are the *Tintin* books by Hergé, published in almost every language in the world by an equally extensive number of publishing houses. The degree of detail in each drawing is so startling that young children who cannot read are nonetheless trapped into spending hours with them. A first level of structure is provided by visual jokes which run across increasingly long numbers of panels as the series progresses from an early *Tintin in the Congo* to a late *Flight 714* – in which the sticking plaster joke provides a subtext for whole pages of the narrative. A second level of structure appears for young readers who can begin to appreciate the linguistic foibles of Thompson and Thomson (or Dupont and Dupond) as these glue blocks of text together. Plot episodes comprise a third level of structure and by the time children have graduated from elementary school, the whole plot is laid bare. Of course these books can be returned to by adults with added pleasure. Certainly Hergé understood what Tufte and Bertin were talking about (see note 43).

<sup>48</sup> Only after the message implicit in contemporary atlases has been forced out of the closet into articulated speech can the terror implicit in the argument be addressed at all. Against the hidden implicit argument masquerading as common sense, as 'only natural,' as "the way it's always done,"

there is no defense at all. These must be unmasked (atlases must become narrative) before the problem of the closed text can be addressed.

<sup>49</sup> Roland Barthes asks, "...what is an idea for him, if not a *flush of pleasure*?" in the autobiographical *Roland Barthes*, Hill and Wang, New York, 1977, page 103. I could not appropriate so lovely a phrase without acknowledging my debt.

DENIS WOOD is an Associate Professor of Design in the School of Design, North Carolina State University, Raleigh, North Carolina, U.S.A.