On the Road to Cultural Bias

A critique of "The Oregon Trail" CD-ROM

By Bill Bigelow

he critics all agree: The Oregon Trail is one of the greatest educational computer games ever produced. In 1992, Prides' Guide to Educational Software awarded it five stars for being "a wholesome, absorbing historical simulation," and "multi-ethnic," to boot. The newer version, Oregon Trail II, is the "best history simulation we've seen to date," according to a 1994 review by Warren Buckleitner, editor of Children's Software Review

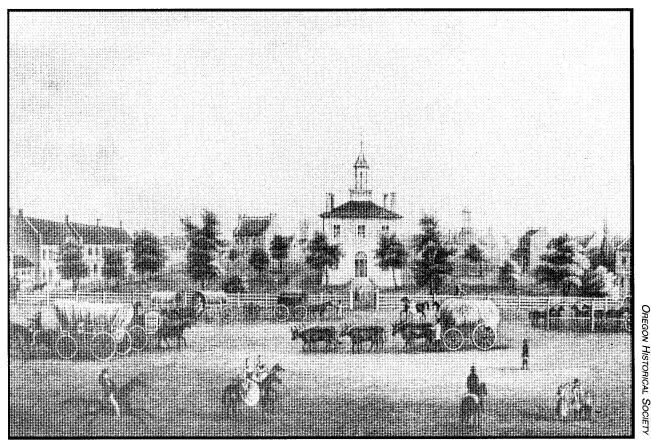
Newsletter. Susan Schilling, a key developer of Oregon Trail II who was later hired by Star Wars filmmaker George Lucas to head Lucas Learning Ltd., promised new interactive CD-ROMs targeted at children and concentrated in math and language arts.

Because interactive CD-ROMs like The Oregon Trail are encyclopedic in the amount of information they offer, and because they allow students a seemingly endless number of choices, they may appear educationally progressive. CD-ROMs seem tailor-made for the classrooms of tomorrow. They are hands-on and "student-centered." They are generally interdisciplinary — for example, Oregon Trail II blends reading, writing, history, geography, math, science, and health. And they are useful in multi-age classrooms because they allow students of various knowledge levels to "play" and learn.

But like the walls of a maze, the



Women played a different kind of role on the cross-country journey than the Oregon Trail CDs portray.



Beginning of the Oregon Trail: Independence, Missouri.

choices built into interactive CD-ROMs also channel participants in very definite directions. The CD-ROMs are programmed by people — people with particular cultural biases — and children who play the computer games encounter the biases of the programmers (Bowers, 1988). Just as we would not invite a stranger into our classrooms and then leave the room, teachers need to become aware of the political perspectives of CD-ROMs, and need to equip our students to "read" them critically.

At one level, this article is a critical review of the *Oregon Trail* CD-ROMs. I ask what knowledge is highlighted and what is hidden as students play the game. But I also reflect on the nature of the new electronic curricula, and suggest some questions teachers can ask before choosing to use them with our students. And I offer some classroom activities that might begin to develop students' critical computer literacy.

Playing the Game

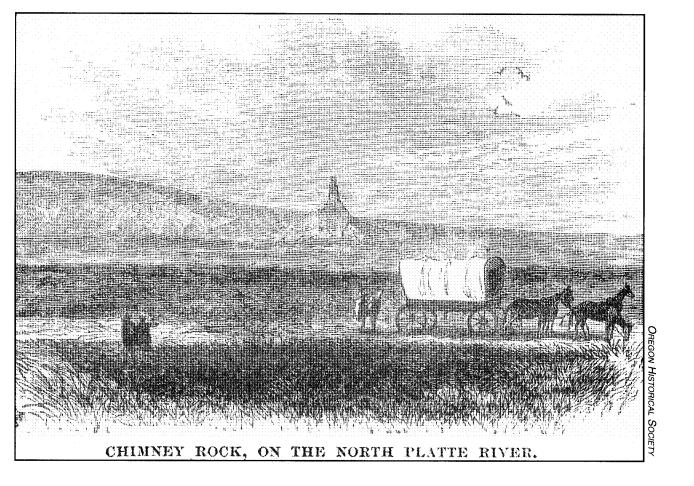
In both *Oregon Trail* and *Oregon Trail II*, students become members of families and wagon trains crossing the Plains in the 1840s or 1850s on the way to the Oregon Territory. A player's objective, according to the game guidebook, is to safely reach the Oregon Territory with one's family, thereby "increasing one's options for economic success."

The enormous number of choices offered in any one session — what to buy for the journey; the kind of wagon to take; whether to use horses, oxen, or mules; the size of the wagon train with which to travel; whom to "talk" to along the way; when and where to hunt; when to rest; how fast to travel — is a kind of gentle seduction to students. It invites them to "try on this world view; see how it fits." In an interactive CD-ROM, you don't merely identify with a particular character, you actually adopt his or her frame of reference and act as if

you were that character (Provenzo, 1991). In *Oregon Trail*, a player quickly bonds to the "pioneer" maneuvering through the "wilderness."

In preparation for this article, I've played Oregon Trail II until my eyes became blurry. I can see its attraction to teachers. One can't play the game without learning a lot about the geography from Missouri to Oregon. (However, I hope I never have to ford another virtual river ever again.) Reading the trail guide as one plays teaches much about the ailments confronted on the Oregon Trail, and some of the treatments. Students can learn a tremendous amount about the details of life for the trekkers to Oregon: the kinds of wagons required, supplies needed, vegetation encountered along the route, and so forth. And the game has a certain multicultural and gender-fair veneer that, however limited, contrasts favorably with the white male dominated texts of yesteryear.

But as much as the game teaches,



it *mis*-teaches more. In fundamental respects, *Oregon Trail II* is sexist, racist, culturally insensitive, and contemptuous of the earth. It imparts bad values and wrong history.

They Look Like Women, But...

To its credit, Oregon Trail II includes large numbers of women. Although I didn't count, women appear to make up roughly half the people students encounter as they play. But this surface equity is misleading. Women may be present, but gender is not acknowledged as an issue in *Oregon Trail*. In the opening sequences, the game requires students to select a profession, special skills they possess, the kind of wagon to take, the city they'll depart from, etc. Class is recognized as an issue bankers begin with more money than saddlemakers, for example — but not gender or race — a player cannot choose these.

Without acknowledging Oregon Trail maneuvers students into thinking and acting as if they were all males — and, as we'll see, white males. The game highlights a male lifestyle and poses problems that historically fell within the male domain: whether and where to hunt, which route to take, whether and what to trade, to caulk a wagon or ford a river. However, as I began to read more feminist scholarship on the Oregon Trail, I realized that women and men experienced the Trail very differently. It's clear from reading women's diaries of the period that women played little or no role in deciding whether to embark on the trip, where to camp, which routes to take and the like. In real life, women's decisions revolved around how to maintain a semblance of community under great stress, how "to preserve the home in transit" (Faragher and Stansell, Schlissel, 1992; Kesselman, 1976).

Women decided where to look for firewood or buffalo chips, how and what to cook using hot rocks, how to care for the children, and how to resolve conflicts between travelers, especially the men.

These were real life decisions, but, with the exception of treating illness, they're missing from The Oregon Trail. Students are rarely required to think about the intricacies of preserving "the home in transit" for 2,000 miles. An Oregon Trail II information box on the screen informs a player when "morale" is high or low, but other than making better maleoriented decisions, what's a player to do? Oregon Trail offers no opportunities to encounter the choices of the Trail as women of the time would have encountered them, and to make decisions that might enhance community, and thus "morale." As Lillian Schlissel concludes in her study, Women's Diaries of the Westward Journey (1992): "If ever there was a time when men and women turned their psychic energies toward opposite visions, the overland journey was that time. Sitting side by side on a wagon seat, a man and a woman felt different needs as they stared at the endless road that led into the New Country." (p. 15).

Similarly, *Oregon Trail* fails to represent the *texture* of community life on the Trail. Students confront a seemingly endless stream of problems posed by *Oregon Trail* programmers, but rarely encounter the details of life, especially that of women's lives. By contrast, in an article in the book *America's Working Women* (1976), Amy Kesselman includes a passage from the diary of one female trekker, Catherine Haun, in 1849:

We women folk visited from wagon to wagon or congenial friends spent an hour walking ever westward, and talking over our home life "back in the states" telling of the loved ones left behind; voicing our hopes for the future in the far west and even whispering, a little friendly gossip of pioneer life. High teas were not popular but tatknitting, crocheting, ting, exchanging receipts for cooking beans or dried apples or swopping food for the sake of variety kept us in practice of occupations and feminine diversions* (Kesselman, 1976, p. 71).

The male orientation of *Oregon Trail* is brought into sharp relief in the game's handling of Independence Day commemoration. Students as pioneers are asked if they wish to "Celebrate the Fourth!" Click on this option, and one hears loud "Yahoos" and guns firing. Compare this to the communal preparations described in Enoch Conyers' 1852 diary (but not in *The Oregon Trail*):

A little further on is a group of young ladies seated on the grass talking over the problem of manufacturing "Old Glory" to wave

over our festivities. The question arose as to where we are to obtain the material for the flag. One lady brought forth a sheet. This gave the ladies an idea. Quick as thought another brought a skirt for the red stripes... Another lady ran to her tent and brought forth a blue jacket, saying: "Here, take this; it will do for the field." Needles and thread were soon secured and the ladies went at their task with a will, one lady remarking that "necessity is the mother of invention," and the answer came back, "yes, and the ladies of our company are equal to the task" (Hill, 1989, p. 58).

Oregon Trail's treatment of African Americans reflects a very superficial multiculturalism. Black people are present, but their lives aren't.

between contrast the "yahoos"/gunfire of Oregon Trail and the collective female exhilaration described in the diary excerpt is striking. This comparison alerted me to something so obvious that it took me awhile to recognize. In Oregon Trail, people don't talk to each other, they all talk to you, the player. Everyone in the Oregon Trail-constructed world aims her or his conversation at you — underscoring the simulation's individualistic ideology that all the world exists for you, controller of the mouse. An Oregon Trail more alert to feminist insights and women's experiences would highlight relations between people, would focus on how the experience affects our feelings about each other, would feature how women worked with one another to survive and weave community, as women's diary entries clearly reveal.

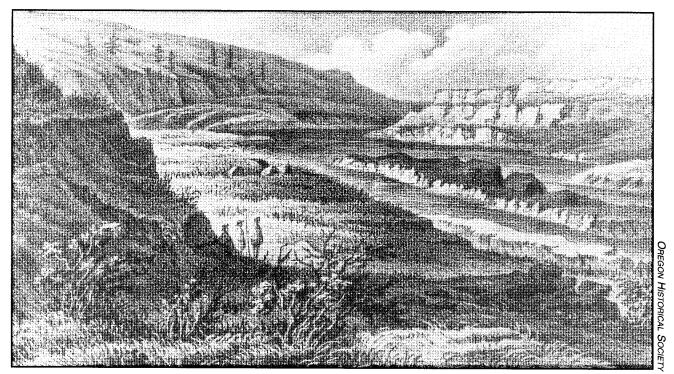
As I indicated, large numbers of women appear throughout the *Oregon Trail* simulation, and they often give good advice, perhaps better advice than the men we encounter. But *Oregon Trail*'s abundance of women, and its apparent effort to be genderfair, masks an essential problem: The choice-structure of the simulation privileges men's experience and virtually erases women's experience.

African Americans as Tokens

From the game's beginning, when a player starts off in Independence or Joseph, Missouri, African Americans dot the Oregon Trail landscape. However, by and large they are no more than black-colored white people. Even though Missouri was a slave state throughout the entire Oregon Trail period, I never encountered the term "slavery" while playing the game. I found race explicitly acknowledged in only one exchange, when I "talked" to an African-American woman along the trail: "I'm Isabella. I'm traveling with the Raleighs and their people. My job is to keep after the cows and watch the children. My husband Fred is the oxdriver — best there is." Are they free, are they enslaved? Are we to assume the Raleighs are white? I asked to know more: "I was born in Delaware. My father used to tell me stories of Africa and promised one day we'd find ourselves going home. But I don't know if I'm getting closer or farther away with all this walking." The end. Like Missouri, Delaware was a slave state in antebellum days, but this is not shared with students. Isabella offers provocative details, but they hide more than they reveal about her identity and culture.

Oregon Trail's treatment of African Americans reflects a very superficial multiculturalism. Black people are present, but their lives

^{*}The original spelling and phrasing have been retained in material cited here.



The Dalles on the Columbia River.

aren't. Attending to matters of race requires more than including lots of Black faces, or having little girls "talk Black"—"I think it's time we be moving on now." (This little girl reappears from time to time to repeat these same words. A man who looks Mexican likewise shows up frequently to say, with heavy accent: "Time is a-wasting. Let's head out!")

Even though one's life prospects and worldview in the 1840s and 1850s — as today — were dramatically shaped by one's race, this factor is invisible in *Oregon Trail*. Players know their occupations but not their racial identities, even though this knowledge is vital to decisions participants would make before leaving on the journey as well as along the way.

For example, many of the constitutions of societies that sponsored wagon trains specifically excluded Blacks from making the trip west. Nonetheless, as Elizabeth McLagan points out in her history of Blacks in Oregon, *A Peculiar Paradise* (1980), Blacks did travel the Oregon Trail, some as slaves, some as servants, and at least some, like George Bush, as

well-to-do pioneers. Race may not have seemed important to the *Oregon Trail* programmers, but race mattered a great deal to Bush: Along the Trail, he confided to another emigrant that if he experienced too much prejudice in Oregon, he would travel south to California or New Mexico and seek protection from the Mexican government (ibid, p. 19).

And Bush had reason to be apprehensive: African Americans arriving in Oregon Territory during the 1840s and 1850s were greeted by laws barring Blacks from residency. Black exclusion laws were passed twice in Oregon Territory in the 1840s, and a clause in the Oregon state constitution barring Black residency was ratified in 1857 by a ratio of 8-1— a clause, incidentally, not removed until 1926.

Upon completion of one of my simulated Oregon Trail journeys, I clicked to see how I turned out: "In 1855, Bill built a home on 463 acres of land in the Rogue River Valley of Oregon," experienced only "moderate success" and later moved to Medford, "establishing a small business that proved more stable and sat-

isfying." Although the *Oregon Trail* simulation never acknowledges it, "Bill" must have been white, because in 1850 the U.S. Congress passed the Oregon Donation Land Act granting 640 acres to free white males and their wives — only. It is unlikely that a Black man, much less a Black woman, would have been granted land in 1855 or been allowed to start a business in Medford some years later.

Why were whites so insistent that Blacks not live in Oregon? The preamble of one Black exclusion bill explained that "situated as the people of Oregon are, in the midst of an Indian population, it would be highly dangerous to allow free negroes and mulattoes to reside in the territory or to intermix with the Indians, instilling in their minds feelings of hostility against the white race...." (McLagan, 1980, p. 26). And Samuel Thurston, a delegate to Congress from Oregon Territory explained in 1850 why blacks should not be entitled to homestead in Oregon:

The negroes associate with the Indians and intermarry, and, if

their free ingress is encouraged or allowed, there would a relationship spring up between them and the different tribes, and a mixed race would ensue inimical to the whites; and the Indians being led on by the negro who is better acquainted with the customs, language, and manners of the whites, than the Indian, these savages would become much more formidable than they otherwise would, and long and bloody wars would be the fruits of the comingling of the races. It is the principle of self preservation that justifies the action the Oregon legislature (McLagan, 1980, pp. 30-31).

Thurston's argument carried the day. But *Oregon Trail* programmers have framed the issues so that race seems irrelevant. Thus, once students-as-pioneers arrive in Oregon, most of them will live happily after ever — never considering the impact that race would have on life conditions.

Just Passing Through?

Oregon Trail programmers are careful not to portray Indians as the "enemy" of westward trekkers. However, the simulation's superficial sympathy for Native groups masks a profound insensitivity to Indian cultures and to the earth that sustained these cultures. The simulation guidebook lists numerous Indian nations by name — and respectfully calls them "nations." The Oregon Trail guidebook explains that emigrants' fear of Indians is "greatly exaggerated:"

Some travelers have been known to cross the entire breadth of the continent from the Missouri River to the Sierra Nevadas without ever laying eye on an Indian, except perhaps for occasional brief sightings from a distance.

This is all well and good, for it is probably best for all parties concerned for emigrants and Indians to avoid contact with each other. Such meetings are often the source of misunderstandings, sometimes with regrettable consequences.

Emigrants often spread disease, according to the guidebook, which made the Indians "distrust and dislike" the emigrants. The guidebook further warns *Oregon Trail* players not to overhunt game in any one place as "few things will incur the wrath of the Indian peoples more than an overstayed welcome accompanied by the egregious waste of the natural resources upon which they depend."

What orientation is highlighted and what is hidden in the simulation programmed for students to follow? The ideology embedded in Oregon Trail I and II is selfish and goal-driven: Care about indigenous people insofar as you need to avoid "misunderstanding" and incurring the wrath of potentially hostile natives. Oregon Trail promotes an anthropocentric earth-as-natural resource outlook. Nature is a thing to be consumed or overcome as people traverse the country in search of success in a faraway land. The simulation's structure coerces children into identifying with white settlers and dismissing nonwhite others. It contributes to the broader curricular racialization of identity students absorb - learning who constitutes the normalized "we" and who is excluded.

Oregon Trail players need not take into account the lives of others unless it's necessary to do so in order to accomplish their personal objectives. Thus the cultures of Plains Indians are backgrounded. The game marginalizes their view of the earth. Contrast, for example, the Indians' term "mother earth" with the Oregon Trail term "natural resource."

The metaphor of earth as mother suggests humans in a reciprocal relationship with a natural world that is alive, nourishing us, sustaining us. A resource is a thing to be used. It exists for us, outside of us, and we have no obligations in return

The consequences of the Oregon Trail for the Plains Indians, the Indians of the Northwest and for the earth were devastating. In fairness, as they play Oregon Trail, students may hear some of the details of this upheaval. For example, on one trip I encountered a "Pawnee Village." Had I paid attention to the warning in the guidebook to "avoid contact" I would have ignored it and continued on my trip. But I entered and "talked" to the people I encountered there. A Pawnee woman: "Why do you bother me? I don't want to trade. The things that we get from the white travelers don't make up for all that we lose." I click to hear more. "We didn't know the whooping cough, measles, or the smallpox until your people brought them to us. Our medicine cannot cure these strange diseases, and our children are dying." I click on "Do you have any advice?" Angrily, she says, "No. I just want you to leave us alone." The implication is that if I just "leave them alone" and continue on the trail I can pursue my dream without hurting the Indians.

However, this interpretation misses the fact that the Oregon Trail itself, not just contact with the so-called pioneers, devastated Indian cultures and the ecology of which those cultures were an integral part. For example, pioneers — let's begin to call them their Lakota name, Wasi'chu, "greedy persons" - cut down all the cottonwood trees found along the rich bottomlands of plains rivers trees which "offered crucial protection during winter blizzards as well as concealing a village's smoke from its enemies. In lean seasons, horses fed on its bark, which was surprisingly nourishing" (Davidson and Lytle, 1992, p. 114).

The Oregon Trail created serious wood shortages, which even the *Wasi'chu* acknowledged. "By the Mormon guide we here expected to find the last timber," wrote overlan-

^{*} The Lakota "used a metaphor to describe the newcomers. It was Wasi'chu, which means 'takes the fat,' or 'greedy person.' Within the modern Indian movement, Wasi'chu has come to mean those corporations and individuals, with their governmental accomplices, which continue to covet Indian lives, land, and resources for private profit. Wasi'chu does not describe a race; it describes a state of mind" (Johnansen and Maestas, 1979, p. 6).

der A.W. Harlan, describing the Platte River, "but all had been used up by others ahead of us so we must go about 200 miles without any provisions cooked up." A few weeks later, in sight of the Black Hills, Harlan wrote: "[W]e have passed many cottonwood stumps but no timber....." (p. 115)

Wasi'chu rifles also killed tremendous numbers of buffalo that Plains Indians depended upon for survival. One traveler in the 1850s wrote that "the valley of the Platte for 200 miles presents the aspect of the vicinity of a slaughter yard, dotted all over with skeletons of buffaloes" (ibid p 117). Very soon after the beginning of the Oregon Trail the buffalo learned to avoid the Trail, their herds migrating both south and north. Edward Lazarus points out in Black Hills/White Justice: The Sioux Nation Versus the United States - 1775 to the Present: "But the Oregon Trail did more than move the buffalo; it destroyed the hunting pattern of the Sioux, forcing them to follow the herds to the fringes of their domain and to expose themselves to the raids of their enemies" (1991, p. 14).

However, wrapped in their cocoons of self-interest, *Oregon Trail* players push on, oblivious to the mayhem and misery they cause in their westward drive. This is surely an unintended, and yet intrinsic, part of the game's message: Pursue your goal as an autonomous individual, ignore the social and ecological consequences. Look out for number one.

No Violence Here

Oregon Trail never suggests to its simulated pioneers that they should seek permission of Indian nations to travel through their territory. And from this key omission flow other omissions. The simulation doesn't inform players that because of the disruptions wrought by the daily intrusions of the westward migration, Plains Indians regularly demanded tribute from the trekkers. As John Unruh, Jr., writes in *The Plains Across*:

The natives explicitly emphasized that the throngs of overlanders were killing and scaring away buffalo and other wild game, overgrazing prairie grasses, exhausting the small quantity of available timber, and depleting water resources. The tribute payments... were demanded mainly by the Sac and Fox, Kickapoo, Pawnee, and Sioux Indians — the tribes closest to the Missouri River frontier and therefore those feeling most keenly the pressures of white men increasingly impinging upon their domains (1993, p. 169).

Wasi'chu travelers resented this Indian-imposed taxation and their

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resentment frequently turned to hostility and violence, especially in the later years of the Trail. The Pawnees were "hateful wretches," wrote Dr. Thomas Wolfe in 1852, for demanding a 25-cent toll at a bridge across Shell Creek near the North Platte River (ibid p. 171). Shell Creek and other crossings became flashpoints that escalated into violent skirmishes resulting in the deaths of settlers and Indians.

Despite the increasing violence along the Oregon Trail, one choice

Oregon Trail programmers don't offer students-as-trekkers is the choice to harm Indians. Doubtless MECC, producer of Oregon Trail, is not anxious to promote racism toward Native peoples. However, because simulation players can't hurt or even speak ill of Indians, the game fails to alert students that white hostility was one feature of the westward migration. The omission is significant because the sanitized, nonviolent Oregon Trail fails to equip students to reflect on the origins of conflicts between whites and Indians. Nor does it offer students any insights into the racial antagonism that fueled this violence. In all my play of Oregon Trail I can't recall any blatant racism directed at Indians. But as John Unruh, Jr., points out: "The callous attitude of cultural and racial superiority so many overlanders exemplified was of considerable significance in producing the volatile milieu in which more and more tragedies occurred" (p. 186).

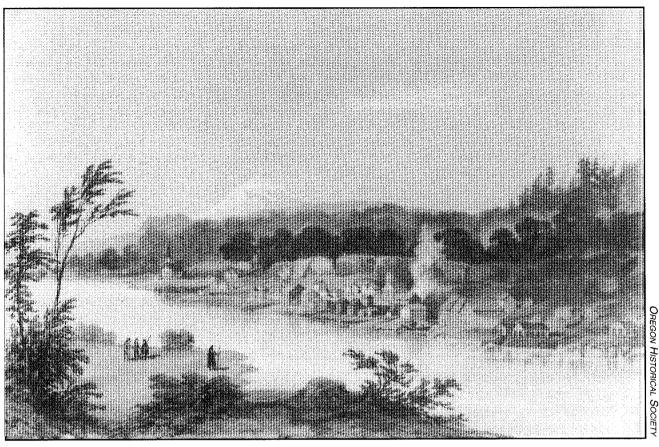
The End of the Trail

Soon there will come from the rising sun a different kind of man from any you have yet seen, who will bring with them a book and will teach you everything, after that the world will fall to pieces.

— Spokan Prophet, 1790(Limerick, 1987, p. 39)

Someone can spend two or three hours — or more — playing one game of *Oregon Trail* before finally reaching Oregon Territory. Once we arrive, the game awards us points and tells us how our life in Oregon turned out. And yet it fails to raise vital questions about our right to be there in the first place, and what happened to the people who were there first.

In its section on the "Destination," the guidebook offers students its wisdom on how they should view life in a new land. It's a passage that underscores the messages students absorb while engaged in the simulation. These comforting words of advice



End of the Trail: Oregon City.

and social vision are worth quoting at length:

Once you reach the end of your journey, you should go to the nearest large town to establish your land claim. If there are no large towns in the area, simply find an unclaimed tract of land and settle down.... As they say, possession is nine-tenths of the law, and if you have settled and worked land that hasn't yet been claimed by anyone else, you should have little or no trouble legally establishing your claim at a later time.

As more and more Americans move into the region, more cities and towns will spring up, further increasing one's options for economic success. Rest assured in the facts that men and women who are willing to work hard will find their labors richly rewarded, and that you, by going west, are helping to spread American civilization from ocean to ocean across this great

continent, building a glorious future for generations to come!

The Lakota scholar/activist Vine Deloria, Jr., in his book, *Indians of the Pacific Northwest*, (1977) offers a less sanguine perspective than that included in the CD-ROM guidebook. People coming in on the Oregon Trail "simply arrived on the scene and started building. If there were Indians or previous settlers on the spot they were promptly run off under one pretext or another. Lawlessness and thievery dominated the area" (p. 53). From 1850 on, using provisions of the Oregon Donation Act, thousands of "pioneers" invaded "with impunity."

As Deloria points out, there were some in Congress who were aware that they were encouraging settlers to steal Indian land, and so shortly after, Congress passed the Indian Treaty Act requiring the United States to get formal agreements from Indian tribes. Anson Dart, appointed to secure land concessions, pursued this

objective in a despicable fashion. For example, he refused to have the treaties translated into the Indians' languages, instead favoring "Chinook jargon," a non-language of fewer than 300 words good for trading, giving orders, and little else. Dart's mandate was to move all the Indians east of the Cascades, but he decided some tribes, like the Tillamooks and Chinooks, should keep small amounts of land as cheap labor reserves:

Almost without exception, I have found [the Indians] anxious to work at employment at common labor and willing too, to work at prices much below that demanded by the whites. The Indians make all the rails used in fencing, and at this time do the boating upon the rivers: In consideration, therefore, of the usefulness as labourers in the settlements, it was believed to be far better for the Country that they should not be



Settlers in Oregon built their homes on the lands of Native Americans.

removed from the settled portion of Oregon if it were possible to do so (Deloria, 1977, p. 51).

Meanwhile, southwestern in Oregon white vigilantes didn't wait for treaty niceties to be consummated. Between 1852 and 1856 self-proclaimed Volunteers attacked Indians for alleged misdeeds, or simply because they were Indians. In August of 1853, one Martin Angel rode into the Rogue River valley gold mining town of Jacksonville shouting, "Nits breed lice. We have been killing Indians in the valley all day," and "Exterminate the whole race." Minutes later a mob of about 800 white men hanged a seven-year-old Indian boy. In October 1855, a group of whites massacred 23 Indian men.

women, and children. This incident began the Rogue Indian war, which lasted until June 1856 (Beckham, 1991, p. 103). Recall that this is the same region and the same year in one *Oregon Trail* session where "Bill" built a home and experienced "moderate success" — but thanks to the *Oregon Trail* programmers, learned nothing of the social conflicts swirling around him.

Nor did Bill learn that, even as a white person, he could protest the outrages committed against the Rogue River Valley Indians as did one anonymous "Volunteer" in a passionate 1853 letter to the *Oregon Statesman* newspaper:

A few years since the whole valley was theirs [the Indians']

alone. No white man's foot had ever trod it. They believed it theirs forever. But the gold digger come, with his pan and his pick and shovel, and hundreds followed. And they saw in astonishment their streams muddied, towns built, their valley fenced and taken. And where their squaws dug camus, their winter food, and their children were wont to gambol, they saw dug and plowed, and their own food sown by the hand of nature, rooted out forever, and the ground it occupied appropriated to the rearing of vegetables for the white man. Perhaps no malice yet entered the Indian breast. But when he was weary of hunting in the mountains without success, and was hungry, and approached

the white man's tent for bread; where instead of bread he received curses and kicks, ye treaty kicking men — ye Indian exterminators think of these things. (Applegate and O'Donnell, 1994, p. 34)

Oregon Trail hides the nature of the Euro-American invasion in at least two ways.

In the first place, the Oregon Trail CD-ROM simply fails to inform simulation participants what happened between settlers and Indians. To the Oregon Trail player, it doesn't feel like an invasion; it doesn't feel wrong. After one of my arrivals, in 1848, "Life in the new land turned out to be happy and successful for Bill, who always cherished bittersweet but proud memories of the months spent on the Oregon Trail." (This struck me as a rather odd account, given that I had lost all three of my children on the trip.)

The only person that matters is the simulation player, in this case Bill. I was never told whether life turned out equally "happy and successful" for the Klamaths, Yakamas, Cayuses, Nez Percés, Wallawallas, and all the others who occupied this land generations before the Wasi'chu arrived.

The second way the nature of the white invasion is hidden has to do with the structure of the simulation. For a couple hours or more the player endures substantial doses of frustration, tedium, and difficulty. By the time the Willamette or Rogue Valleys come up on the screen we, the simulated trekkers, feel that we deserve the land, that our labors in transit should be "richly rewarded" with the best land we can find.

Data Deception and What to Do About It

In the Beatles' song, all you need is love; in *Oregon Trail*, all you need is data. *Oregon Trail* offers students gobs of information: snake bite remedies, river locations and depths,

wagon specifications, ferry costs, daily climate reports. Loaded with facts, it feels comprehensive. Loaded with people voicing contrasting opinions, it feels balanced. Loaded with choices, it feels free. But the simulation begins from no moral or ethical standpoint beyond individual material success. It contains no vision of social/ecological justice, and hence promotes the full litany of sexism, racism, and imperialism, as well as exploitation of the earth. And simultaneously, it hides this bias. The combination is insidious, and makes interactive CD-ROMs like this one more difficult to critique than traditional textbooks or films. The forced

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identification of player with simulation protagonist leaves the student no option but to follow the ideological map laid out by the programmers.

Nonetheless, my critique is not a call to boycott "edutainment" resources. But we need to remember that these CD-ROMs are not teacher substitutes. The teacher's role in analyzing and presenting these devices in a broader ethical context is absolutely vital. Thus teachers across the country must begin a dialogue toward developing a critical computer literacy. We need to figure out ways to equip students to recognize and evaluate the deep moral/political messages imparted as they maneuver within various computer software programs.

Before choosing to use CD-ROMs that involve people and place, like *The Oregon Trail* — or, for example, its newer siblings *The Yukon Trail*, *The Amazon Trail*, and *Africa Trail* — teachers can consider a series of questions. These include:

- Which social groups are students not invited to identify with in the simulation? For example, Native Americans, African Americans, women, and Latinos are superficially present in Oregon Trail, but the stuff of their lives is missing.
- How might these social groups frame problems differently than they are framed in the simulation? As we saw in this critique of *Oregon Trail*, women tended to focus more on maintaining community than on hunting. Native Americans had a profoundly different relationship to the earth than did the Euro-American "tamers of the wilderness."
- · What decisions do simulation participants make that may have consequences for social groups not highlighted in the simulation? And what are these consequences? Even though the very existence of the Oregon Trail contributed to the decimation of Plains and Northwest Indians, simulation participants are never asked to consider the broader effects of their decision making. What may be an ethical individual choice may be unethical when multiplied several hundred thousand times. (In this respect, CD-ROM choice-making both reflects and reinforces conventional notions of "freedom" that justify disastrous social and ecological practices.)

- What decisions do simulation participants make that may have consequences for the earth and non-human life? Similarly, a simulation participant's choice to cut down trees for firewood may be "rational" for that individual, but may also have deleterious effects on the ecological balance of a particular bio-region.
- If the simulation is time-specific, as in the case of *The Oregon Trail*, what were the social and environmental consequences *after* the time period covered in the simulation? The wars between Indians and U.S. Cavalry in the latter decades of the 19th century are inexplicable without the Oregon Trail as prologue.
- Can we identify the ideological orientation of a particular CD-ROM? The question is included here simply to remind us that all computer materials indeed, all curricula have an ideology. Our first step is becoming aware of the nature of that ideology.

These are hardly exhaustive, but may suggest a useful direction to begin thinking, as CD-ROMs become increasingly available and as they come to cover more and more subjects.

Finally, let me use the example of *Oregon Trail* to sketch out a number of ways that teachers can begin to foster a critical computer literacy:

- Once we've identified some of the social groups that are substantially missing in a CD-ROM activity like Oregon Trail, we can make an effort to locate excerpts of their diaries, speeches, or other communications (to the extent that these cultures are print-oriented) and read these together.
- We might then engage students in a role-play where, as a class, students face a number of Oregon Trail problems. For example, class members could portray women on the Oregon Trail and decide how they will attempt to maintain a community in transit. Or they might role-play a possible discussion among Oglala people as they confront the increas-

ingly disruptive presence of Wasi'chu crossing their lands.

• Students might be asked to list all the ways that African Americans would experience the Oregon Trail differently than Euro-Americans would — from planning to the trip itself. (It's unlikely, for example, that every white person on the streets of Independence, Missouri said a friendly "Howdy," to blacks encountered, as each of them does to the implied but unacknowledged white male *Oregon Trail* simulation player.)

Oregon Trail
is sexist,
racist,
culturally
insensitive, and
contemptuous
of the earth. It
imparts bad
values and
wrong history.

- In playing the *Oregon Trail* simulation, students could assume a particular racial, cultural, or gender identity, and note whether the choices or experiences described in the simulation make sense from the standpoint of a member of their group. For example, would a typical African American in Missouri in 1850 be allowed to choose which city to begin the trek west?
- As we share with students the social and ecological costs of the Oregon Trail, we could ask them to write critical letters to each of the "pioneers" they portrayed in the simulation. Some could represent Rogue Valley Indians, Shoshoni people, or even Mother Earth. For instance, how does "Mother Earth" respond to the

- casual felling of every cottonwood tree along the Platte River?
- A Native-American elder or activist could be invited into the classroom to speak about the concerns that are important to his or her people and about the history of white-Indian relations.
- We could encourage students to think about the politics of naming in the simulation. They could suggest alternative names for the Oregon Trail itself. For example, one historian of the American West, Frederick Merk, aptly calls the Oregon Trail a "path of empire" (1978). Writer Dan Georgakas names it a "march of death" (1973). Other names might be "invasion of the West," or "the 20trespass." Just as Columbus's "discovery" of America, naming shapes understanding, and we need classroom activities to uncover this process.
- Students could write and illustrate alternative children's books describing the Oregon Trail from the standpoint of women, African Americans, Native Americans, or the earth.
- Now have them "play" The Oregon Trail again. What do they see this time that they didn't see before? Whose world view is highlighted and whose is hidden? If they choose, students might present their findings to other classes or to teachers who may be considering the use of CD-ROMs.

The Oregon Trail is not necessarily more morally obnoxious than other CD-ROMs or curricular materials with similar ideological biases. My aim here is broader than to merely shake a scolding finger at MECC, producer of the Oregon Trail series. I've tried to demonstrate why teachers and students must develop a critical computer literacy. Some of the new CD-ROMs seem more socially aware than the blatantly culturally insensitive materials that still fill school libraries and bookrooms. And the flashy new computer packages also invoke terms long sacred to educators: student empowerment, individual choice, creativity, high interest. It's vital that we remember that Computer programs are not politically neutral in the big moral contests of our time. Inevitably, they take sides.

coincident with the arrival of these new educational toys is a deepening social and ecological crisis. Global and national inequality between "haves" and "have-nots" is increasing. Violence of all kinds is endemic. And the earth is being consumed at a ferocious pace. Computer programs are not politically neutral in the big moral contests of our time. Inevitably, they take sides. Thus, a critical computer literacy, one with a social/ecological conscience, is more than just a good idea — it's a basic skill.

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