“Discussions in such classrooms will inevitably boil over into contentious issues of judgment, conflict, and tension that characterize a free society. This is what Dewey meant when he wrote that schools are not training grounds for democracy but the places where democracy is enacted. Either the classroom becomes a site where we learn to talk to one another, or we will suffer the enduring consequences of never having learned to do so.”

Sam Wineberg (2001)

Introduction

“Believing, with Max Weber, that man is an animal suspended in webs of significance he himself has spun, I take culture to be those webs, and the analysis of it to be therefore not an experimental science in search of law but an interpretive one in search of meaning.”

Clifford Geertz, Interpretations of Cultures

“Culture is an adaptive process that accumulates partial solutions to frequently encountered problems”

E. Hutchins, Cognition in the Wild

A culture may be thought of as a set of beliefs and behaviors shared by a people for the purpose of communicating about and manipulating what they deem most salient for survival and prosperity in a given environmental niche. The interplay between a culture and its environmental niche is complex and invariably based on an insufficient understanding of how to entirely predict or control either the positive or negative effects of this interplay. This incomplete understanding and control of the forces unleashed by a culture, its arts and technologies, entails unintended consequences, consequences which may be, in the short or long run, deleterious for both the culture and the niche on which it depends. Members of a culture must necessarily reflect on how effectively their culture, its arts and technologies, serve their efforts to successfully manipulate their environmental niche.
To elaborate:

Art and technology are part of the “adaptive process” we term “culture,” a process, to use Hutchins’ succinct formulation, that “accumulates partial solutions to frequently encountered problems.” While culture is an “adaptive process,” we must recognize that our species has achieved no unanimity about what it means to adapt, that a given culture’s arts and technologies may be based in an erroneous idea of what is required to adapt, and that the environmental niche to which a culture seeks to adapt is always changing, due in part to the effects of culture itself. Human beings have invented an astonishing variety of cultures and equally various conceptions of what constitutes a problem and its solution; our purpose in CAT is to ask how effectively members of a culture use their arts and technologies to mediate between themselves and their natural and social environment, and to consider the implications of the fact that one culture’s conception of a solution can be another culture’s idea of a problem.

Arts and technologies are instruments for amplifying our sensory, cognitive and physical abilities in order to more effectively shape our world to our own ends. Both instruments are part of a single continuum concerned with identifying, communicating and controlling what a culture judges to be salient; they are concerned, that is, with determining what must be attended to and what can be safely ignored. A culture’s arts and technologies mediate—literally, stand between—ourselves, our experience of the world and the world itself; as such, like the brain and senses from which they originate, they predispose us to attend to some things but to ignore others. One may say that our brain’s interpretation of random sensory data is a process of “pattern recognition,” so long as we bear in mind that re-cognition literally means to “re-know”; we recognize patterns because we invented them and imposed them on the world. Accordingly, our arts and technologies may be said to be adaptive to the extent they are based on an accurate cognitive “mapping” of our surroundings. Conversely, a culture may be said to be maladaptive to the extent that its members notice only what its arts and technologies designate as significant, while ignoring what is truly salient for the purpose of adaptation and survival. In such a “negative feedback-loop,” we can at once amplify our natural capacities while utterly failing to make salient what is truly relevant to our survival, both as a species and as members of specific cultures.

Our method in CAT focuses upon cultural artifacts. The term “artifact” traditionally refers to objects of cultures other than our own, objects studied by social scientists to reveal facts about the culture that made them. We wish to subsume our own arts and technologies within the category “artifact,” in order to underscore our purpose to turn our gaze on our own culture. In this regard, it is important to juxtapose a natural scientist’s definition of “culture” (i.e., Hutchins’), with a definition provided by a social scientist. The cultural anthropologist Clifford Geertz encourages us to think of culture as the “webs of significance” or meaning a group of people weave from their experiences. Technological and other cultural artifacts might be thought of as the nodal points in these webs. Or to use another metaphor, a culture’s arts and technologies may be seen as “diagrams” of the culture that created them. Cultural artifacts—be they domestic implements, social rituals, sculptures, paintings, religious or secular symbols, political
systems, clothing, language, music, weapons, buildings, gestural signs, techniques of measurement and calculation, stylized motions, and many, many other things—are diagrams of culture we will attempt to decipher or “read.” Our purpose in “reading” the “encoded” meaning of cultural artifacts is to assess how plausibly and effectively a given culture has imposed its patterns on the world.

As noted, part of our approach in CAT is scrutiny of our own culture’s attempts to mediate experience. Indicative of our own culture’s adaptive efforts are the words “culture,” “art,” and “technology.” Each of these words, like most words in a language, may be read as revealing artifacts of the culture that uses them. For our introductory purposes, let us limit our consideration to the word “technology.” It comes from the Greek “techne,” which means “art”; the cultural significance we impute to the word “technology” may best be indicated by the suffix “logy.” “Logy,” from another Greek word, “logos,” refers to the principle or pattern of reality to which our “techne” may be correctly and effectively applied. The conjunction of “techne” and “logos” reveals our culturally inherited belief that our technologies are rooted in a logical, and so presumably effective, comprehension of the order of things. The word “technology”--a relatively new word in the English lexicon—exposes our inherited assumption that our culture has discovered solutions to problems that are perhaps superior in their accuracy and efficacy to the solutions of other cultures, and that therefore these solutions may be applicable to the problems of all human beings. The belief that our technologies are instruments of progress is evidently supported by the power they afford us in manipulating our social and natural environment. Indeed, many of us are in thrall to the apparent potency and precision of our inventions. But we must consider whether our enthrallment is warranted.

One consequence of using our powerful and sensitive instruments has been to reveal the wide-ranging and potentially lethal consequences of those instruments. Our technological servants, it turns out, are imperfect; we have given ourselves a wizard’s power (you may recall Disney’s allegory “The Sorcerer’s Apprentice,” starring Mickey Mouse), without the necessary foresight to use that power wisely, to use it, that is, in such a manner that the desired effects are not negated by the unintended consequences. Returning to the idea that culture is an adaptive process, we might say that our culture has amplified the potency of its arts (i.e., “techne”) to a point beyond its power to imagine and control the consequences—in space and over time—of that power. As we will see, a traditional function of the arts has been to try to imagine, communicate, control the social and environmental consequences of human culture. A basic premise of CAT is that we, too, must bring our full imaginative and intellectual abilities, and not our instrumental prowess alone, to bear on the problems facing our culture. How might we more artfully employ our technological and other cultural capacities to identify, communicate, and so perhaps control the broad range and long term social and environmental consequences of those capacities?
Assignments:

Elucidations 50%: Using readings and subject matter from lectures and discussions, offer a concise and precise elucidation of specified terms and phrases (see below; approx. 10 terms/phrases per week). Your efforts will be collected and graded at random intervals during the quarter. All elucidations must be completed to receive this percentage of your grade.

Project and Project Essay 25%: (on encoded meaning of two cultural artifacts; one contemporary and one non-contemporary artifact).

Questions and Comments 15%: (judged on clarity, precision, concision, perspicacity, and relevance; the highest grades will be given only to those students who pose questions and comments in lecture as well as in discussion).

Final 10%: A short dialogue or play about oneself as a cultural artifact

Preliminary and Incomplete Definitions

CULTURE — “webs of significance [mankind] [it]self has spun...” Clifford Geertz, Interpretations of Cultures, 1973) [Max Weber]; “Culture is an adaptive process that accumulates partial solutions to frequently encountered problems” (E. Hutchins, “Cognition in the Wild”)

ART—“Culturally significant meaning, skillfully encoded in an affecting, sensuous medium” (R. Anderson, Calliope’s Sisters, 1990); “Making special” [for the purpose of adaptation] (Disanayeke)

TECHNOLOGY — “teks” (Gk): “making, creativity and ingenuity”; “to fabricate or to weave”; “tekton... carpenter or builder”; “techne...an art, craft or skill” (T. Hughes, “Human Built World, 2004); Technologia (Gk): “systematic treatment of an art”) (1658); Technology: “an ensemble of means” (Ellul); “a system of rules” for achieving an end (Strauss); “making and use of artifacts” (Durbin).
Part One: Salience

"For we are like tree trunks in the snow. In appearance they lie sleekly and a light push should be enough to set them rolling. No, it cannot be done, for they are firmly wedded to the ground. But see, even that is only appearance."

Franz Kafka

“We are like sailors who on the open sea must reconstruct their vessel but are never able to start afresh from the bottom.”

Otto Neurath

Week 1: Culture, Art and Technology and the Problem of Salience

Concepts:

1] Salience
2] Culture; “webs of meaning”; “partial solutions to frequently encountered problems”
3] Art; “making special”; “culturally significant meaning”
4] Technology; “systematic treatment of an art”; “a system of rules”
5] interplay; dialectic; feedback loop; “human factors” (e.g., evolved perceptual limitations; “evolutionary hangovers”; “social traps”; local and immediate perception; small-group animals; “boiled frog syndrome” (Gordon/ Suzuki); “Medieval origins of our ecological crisis” (White)
6] unintended consequences; social/cultural construction of technology; value-laden technology (Pacey)
7] reflexivity; defamiliarization; “Body Ritual Among the Nacirema” (Linton); “100% American” (H. Miner); “Shakespeare in the Bush” (Bohannon);
8] “bottom up” and “top down” pattern recognition

Readings: Gordon/Suzuki; White; Linton; Miner; Geertz (on culture); Bohannan

Week 2: Pattern Recognition and Pattern Imposition
1] pattern recognition-imposition/salience /brain as “meaning generator”
2] “convenience of being reasonable”; “nothing like a fish”.
3] seeing (Dillard, Thuan); “drawing a fish” (Scudder); Allegory of the Cave” (Plato);
Ferris’ “hour-glass” and “bottleneck”
4] “the mind is what the brain does”; brain, mind, consciousness; “cognitive space”
(Ehrlich)
5] the “binding” problem (Duve); the “cathedral” model of the mind (Mithen);
6] the “binding problem,” narrowly and broadly conceived; religion, religare
7] “somatic marker hypothesis”; reason; interpretation (selecting, naming, framing);
filtering out, filling in
8] “evolution by natural selection”; niche, selection pressure, adaptation, mutation;
“tree,” “shrub”; “punctuated equilibrium”; “tipping point”; contingency
9] argument from design; “blind watchmaker”; order, randomness, chaos; teleology
10] “monumental impulses”; nature-culture analogies (McNeill); phenomena, noumena, 
epiphenomena

Readings: Franklin, Dillard; Thuan; Damasio; Plato; Ferris; Duve; Eldridge (on 
evolution); Dawkins; Geertz (on man)

PART TWO: Interplay

Week 3: Arts as Solution and Problem

1] Dialectic, interplay, feedback-loop; ; mind-matter; nature-nurture;
2] Cultural artifact; “an object is a diagram of forces” (D’Arcy Thompson); natural 
artifact; cultural artifact;
3] Art; “Making special” (Dissanyake); “culturally significant meaning” (Anderson);
names for beauty (Sartwell)
4] ambiguity of “encoded meaning” (Mithen)
5] Mythos, ethos; [story level/theory level]; identity, narrative, situation
6] “religion is never merely metaphysics” (Geertz); “soft technology”;
7] “anger in a unjust world” (Tavris); “as if” (Vaihinger); describe/prescribe
8] small “f” and Big “F” functional; “Cultural determinism” vs. “Structural functionalism”
9] gifts (Mauss); tattoos (Gell ) toys (Barthes); cars (McCluhan); status (“Ongka’s Big 
Moka”; potlatch); “the dozens”
10] material conditions and consciousness (Marx); base-superstructure; hegemony
11] use value; exchange value; festishization of commodities; retail therapy; alienation;
hegemony

Readings: Disannayake; Anderson; Mauss; Geertz (on religion); Tavris; Keesing; Sartwell
Week 4: Technologies as Solution and as Problem

1] technology as value-laden cultural artifact (Pacey); “culturally constructed”; “encoded meanings” of basic technologies (e.g., fire, fulcrum, wheel, irrigation, so on) “human-built world” (T. Hughes)
2] “Man’s Place in Nature” (Huxley); “Great Ape”; Homo sapiens (ludens, faber, aestheticus, economicus, so on); “Dance Monkey, Dance” (Cline); anthropocentrism;
3] Progress; “Great Leap” (Ehrlich); Rubicon (Huxley); Paleolithic; civilization; whig history
4] Samurai sword; assegai (Zulu); value-laden military technologies, strategies, tactics (Keegan)
5] Cadillac escalade; eyelash curlers; jet fighter; “death and taxes”
6] “bricolage”; “motley”; “local knowledge”; knowledge ecologies
7] “human factors”
8] “Venus” of Willendorf; Paleolithic art (Bahn); Acheulean handaxe (Proctor)
9] sugar; “the sadness of sweetness” (Sahlins; Mintz)
10] value-laden technologies; hegemony (Ewen, Hochschild)

Readings: Pacey, Marx, Keegan, Proctor, Barthes, Strebeigh, Bahn, Ewen, Hochschild, Vincente

Week Five: Cultures’ “Ultimate Artifact”: Language

1] Culture as technology (Tuan, tavris); “soft” technology; intellectual technology
2] Language; “the ultimate artifact” (A. Clark); language as art and as technology
3] alphabet; characters; etymology; words, images, things; pictographs; ideograms; metaphors
4] intellectual compression”; mnemonic; “meme” (Dawkins); sign, symbol, words
5] Metaphor, analogy, trope; “metaphors we live by” (Lakoff and Johnson); “don’t think of an elephant”; cultural coherence of metaphors; “politics and the English language” (Orwell)
6] euphemism-dysphemism;
7] “words think us”; abstract nouns as “empty containers” (e.g., pets); aporia; compression, clarity, communication]
8] “education by metaphor; Logos-logic;
9] “language games”; “family resemblance”;
10] Sapir-Whorff hypothesis

Read: Tuan, Lakoff/Johnson, A. Huxley

PART THREE: Unintended Consequences

Week Six: Contests Within Cultures

1] cultural “fault lines”; words as indicators of cultural fault lines
2] sub-culture; counter-culture
2] material conditions and consciousness (Marx); base-superstructure; hegemony
3] use value; exchange value; festishization of commodities; retail therapy; alienation; hegemony
4] Bestand/”alienation” (“More”)
5] “false consciousness”; “Merchants of Cool”; “commodity fetishism”
6] “theory of the leisure class” (Veblen); base/superstructure/hegemony/haves and have-nots;
7] “domination and the arts of resistance” (Scott)

Read: Hebdige, Taussig, Marx, Scott; MacDonald; B. Anderson

Week Seven: Contests Between Cultures,

1] “environmental determinism” (Diamond); inevitability
2] Europe and the people without history” (Wolf; Trask); “third world”; Core/periphery; alterity; world systems; theory; imperialism; cultural imperialism; cultural relativism
3] globalization; “parasitic capitalism”; “feral”-, “turbo”- capitalism
    “invisible hand”; laissez-faire
4] synchronic, diachronic; history, past.
5] “machines as the measure of man” (Adas);
6] exceptionalism; “triumphalism”; “out of Africa” vs multiregional hypotheses; “killer apes”; “machiavellian intelligence” theory; Neandertal; genocide
7] “The Worse Mistake we ever made” (Diamond); the “original leisure class” (Sahlins);
   “Neolithic, paleolithic
8] politics of…” (memory, identity, display; (MacDonald));
   social or cultural construction of history, identity, technology; “Culture Wars”, history wars
9] “Imagined communities” (Anderson);
Chapter Eight: Modern Conditions

1] Modernization (secularization, industrialization, urbanization)
2] Modernity; metropolis (Simmel); Nietzsche, “Twilight of the Idols”, “Great Chain of Being”
3] Modernism; Total work of art; manifesto; total war
4] “autonomous technology” (Winner); megamachine (Mumford); Koyannisquatsi
5] “rationalization,” “disenchantment,” and “iron cage” “science as a vocation”; small v and big V vocation
6] globalization; core-periphery; Other; alterity
7] media; “the medium is the message” (McLuhan); “social surgery without anaesthesia

Read: Simmel, McCluhan, Nietzsche

PART FOUR: Reflexivity

Week 9: Knowledge or Certainty?

1] “knowledge or certainty?”
2] Blot/diagram; Noise/Signal; dichotomies
information, knowledge, wisdom: “
3] science; “not a path to truth but a limit to error”; “what we might know although we are fallible” (Bronowski); “hidden likenesses”; thought experiments”;”paradigm; falsification; fact, evidence, truth, validity, fallacy; inductive, deductive, empirical; ”disagreements about things we can measure” (Patel)
4] education (educare; educere); phronesis; praxis; “knowledge a man must have” (Booth); “pedagogy of the oppressed” (Friere); horse/unicorn (Haldane)
5] “existence precedes essence” (Sartre)
6] aesthetics (beauty, sublime, kitsch, camp); “truth is beauty and beauty truth”; “whatever is is right” (Pope)
Week 10: The “Great Experiment”:

1. “great experiment” (Seabright); trust, transparency,
2. “Asymmetry of Human Agency”; efficiency; progress; utopia; Caneiro’s hypothesis
3. “perils of obedience” (Milgram); Stanford prison experiment (Zimbardo)
4. Panopticon; self-mortification; “presentation of self in everyday life”
Szasz, goffman, said
5. small world” hypothesis; “six degrees”; social distance, scaling, self-similarity, fractal, scaling, fractal, self similarity
6. pragmatism; praxis; “liberal irony” (Rorty); skepticism; irony; cynicism; fatalism; nihilism

Read: Seabright, Milgram, Rorty

Attendance Policy: One of our goals is to cultivate your ability and desire to engage one another in serious and sincere intellectual discourse. For this purpose we require your consistent attendance in lecture and discussion, and to this end—though it may seem rather Draconian—we will deduct a full letter grade for more than two unexcused absences. Also, for the purpose of encouraging promptness and, with it, respect for your fellow students, teaching assistants and instructors, attendance will generally be taken at the beginning of a class.

On Nov 14 all first year CAT students must attend the Robert Pennock Convocation lecture at 7 in RIMAC, and in the third week of class, all CAT students will be required to attend an evening 90 minute academic orientation session (time and date to be announced). Attendance will factor into the participation grade, and will be asked to write a page or two in response to each event