

Under Technology's Thumb

Author: William Leiss

Publisher: McGill-Queen's University Press (1990-01-01)

Buy this book from [Amazon](#) or [Chapters](#).

The publication of William Leiss' book *The Domination of Nature* brought him wide recognition as a perceptive and judicious author. In this brilliant new collection of essays on the philosophy of nature, Leiss argues effectively for an attitude of caring and respect for the environment rather than one of domination.

Contents

Preface

ix

Part One-The Technological Imperative

Introduction: The Idols of Technology
3

Knowledge and Power
12

The False Imperatives of Technology: Idols of the Theatre
23

Sublime Machine: Idols of the Market-place
36

Things in the Saddle: Idols of the Cave
56

Dominion over Nature: Idols of the Tribe
74

Part Two - Making Choices

Technology and the Environment
93

Caring for Things
113

The Misinformation Society
126

Conclusion: Managing Technologies
141

Notes
149

Bibliography
159

Index
167

On the Back

The publication of William Leiss' book *The Domination of Nature* brought him wide recognition as a perceptive and judicious author. In this brilliant new collection of essays on the philosophy of nature, Leiss argues effectively for an attitude of caring and respect for the environment rather than one of domination.

“In these essays ... [Leiss] has made a notable contribution to our collective understanding of the distinction between technique and technologies and the relation of technology to society.”
Stanley Aronowitz, Graduate Centre, City University of New York.

“outstanding ... should generate considerable debate.” J. C. Day, *Professor, Natural Resources Management Programme, Simon Fraser University.*

Index Under Technology's Thumb

A

Adams, Henry, 38

advertising, 109, 115, 116

Aesthetic Movement, 39

Africa, 57

alachlor, 145-6

alar, 143

alchemy, 77, 79

alienation, 57, 64

allocative issues, 34, 139-40

alternative technologies, 11, 31

animals, 93, 110, 142-5

arsenic, 99-100

Art nouveau, 39

asbestos, 101, 102, 105

automation, 41, 42, 46-7, 49-55, 66, 71

autonomous technology, 41, 57, 61, 64, 66, 72, 73, 141

autonomy (as a value), 67, 88, 121, 128

B

Bacon, Francis, 3-5, 8, 12, 34, 42, 77-81, 140, 141-2, 144, 148

Balzac, Honore de, 38

being in place, 120, 122-3, 124.

Bell, Daniel, 20, 129, 135

benefits and costs, 6, 107, 118, 142, 144, 146, 147

Berger, Thomas, 93, 110

Bernard, Stephane, 26

biotic diversity, 88, 147

Borgmann, Albert, 114, 124

Brzezinski, Zbigniew, 19

bureaucracy, 33, 34, 123, 125, 133, 146

C

Caldwell, L.K., 18-19

Canada, 5, 93, 104, 105, 108, 110, 126, 129, 134, 135, 145

cancer, 76, 143, 144

Cannan, Edwin, 16

capital, 14-15, 18, 47

capitalism, 23, 32, 59, 66, 72, 74

caring, 11, 110-11, 115, 118-25

Carlyle, Thomas, 38, 39, 41, 42, 45, 48-9

chemicals, 13, 86, 87-8

Chief Joseph, 110

China, 86, 147

chlorofluorocarbons (CFCs), 99, 106, 147

commodities (commodityform), 58-61, 63, 67, 71, 73, 124

Commoner, Barry, 94

computers, 55, 139

conservation, 94, 113, 114, 123, 124, 125

consumer society, 118-20

consumers (consumption), 33, 47, 60, 70, 81, 88, 99, 100, 104, 109, 113

contextual circle, 109

Corliss engine, 36

cosmologies, 84

Covello, Vincent, 150

Currier and Ives, 52

D

'data flak,' 138-9

Davidson, J.O., 37, 38, 39

Dickens, Charles, 38

Dillingham, William, 51

dioxins, 88, 144

division of labour, 16, 31, 44-5, 59-60, 84

Drucker, Peter, 18-19

Dunn, William, 151

E

ecological systems

(ecosystems), 30-1, 80, 83, 97, 100, 101, 142, 143

education, 15, 19

Ellul, Jacques, 24-8

Emerson, Ralph Waldo, 8, 38, 44, 48-9, 57

energy 81, 82, 93, 103, 105, 113, 123, 125, 147

environment: Environmental Assessment Act (Ontario), 106;

environmental impact, 29-30, 87, 88, 89, 94, 142-8;

environmental issues, 11, 86, 95-6, 101-7;

environmental standards, 100 1, 108

estrangement (alienation), 59, 64

Etzioni, Amitai, 151

exchange-value, 58, 59

exposure, 143, 144

F

factory system, 34, 40, 45-6, 51, 59, 66

false consciousness, 61

fatalism, 7-8, 29, 126

fetishism (of commodities), 57-62, 65, 71, 72, 73, 155; *see also* technology: technological fetishism

Flaubert, Gustave, 38

fluorspar, 102

food chain, 102, 107

Forbes, R.J., 24-5

Forster, E.M. 38, 42, 49, 53

France, 104

Frankfurt School, 62, 67

freedom, 25, 68, 70

G

Galbraith, John Kenneth, 18, 24-7

general intellect, 16-17, 21

genetic engineering, 82, 87

genii, 37, 39, 41

Germany, 104, 134

Gilman, Sander L., 39

goods, 58, 60, 111

goods-producing sector, 130

Grant, Ulysses S., 36

Great Britain, 104, 105, 106, 134

green revolution, 76

greenhouse effect, 90

gross national product, 94, 129, 132-3

H

Hayek, F.A., 21

hazards, 143, 145, 147

Hegel, G.W.F., 57, 58

Heine, Heinrich, 38

heirlooms, 121, 123

Hesse, Hermann, 38

Howells, William Dean, 36, 43

Huxley, Aldous, 38, 39, 53

I

IBT scandal, 145

ideals, 121

ideology, 4, 12, 19, 74, 96, 104

idols, 5-10, 23, 36, 56, 74, 150

Illich, Ivan, 21, 38

India, 86

individuality, 121, 122

industrial, industrialism, 9, 20, 23, 32, 38-40, 42, 47, 56, 64, 65, 70, 73, 86, 110, 124, 126, 135

inertia, 69, 70, 71, 72

information, 132-3, 138;

 information economy, 129, 132-5, 136;

 information revolution, 126, 134, 135, 139;

 information society, 7, 22, 129, 132, 135-7, 139

informed citizen, 128, 136, 139

insecurity, 94, 113

intellectual capital, 17, 19, 20

intellectual technology, 20, 129

Italy, 105

J

Japan, 86, 104, 134

Johnson, E.A.J., 15

K

Kasson, John F., 36, 37

knowledge, 14-22, 79, 81, 126, 136, 139; knowledge managers, 19, 20, 21

L

labour, 45-7, 56, 57, 59-60, 62-6, 69-70, 73

Lane, Robert E., 19, 21

Lang, Fritz, 37

Lasswell, Harold, 26

latent politics, 98

Lawrence, D.H., 38

lead, 98, 101, 102

Lear, Norman, 95

Lem, Stanislaw, 55

Leyton, Elliott, 102

liberalism, 13-14, 67, 118

life-styles, 114, 119

literacy, 137-8

Locke, John, 14

Luddites, x

Lukacs, Georg, 57, 62-8, 72-3

M

McDermott, John, 21

machine, machinery, 12, 20, 23, 36-55, 56, 63, 70

magic (mystery), 30, 59-61, 71, 72

manifest politics, 97-8, 101, 109

Mann, Thomas, 38

Marcuse, Herbert, 57, 67-8, 73

market (market-place), 14, 32-3, 59, 60, 61, 63, 64, 66, 72, 88, 94, 104-5, 109, 116, 117, 123, 127, 128, 135

Marx, Karl, 9, 16-17, 21, 38, 44-5, 49, 56-63, 65, 68, 71, 72-3

Marx, Leo, 44

mass communications media, 115, 116, 138

master and servant, 9, 40-4, 46, 49, 50, 52

matter (materiality), 69-71, 81, 82, 83

mechanical (mechanistic, mechanization), 41, 48, 49, 65, 70

mediation, 71, 73

Melville, Herman, 8, 38, 42, 43, 50-2, 71

Mersenne, 77

Mesthene, Emmanuel, 24-7

metaphors, 8, 39-53, 85, 139, 141

Mexico, 108

microelectronics, 5, 126

Mill, John Stuart, 15

misinformation society, 136-8

modes of production and reproduction, 12, 29-33, 63

Morris, William, 38, 46

Museum of Modern Art, 36-7

N

nature, 10, 13, 42, 52, 73, 81-90, 141;

 dominion over, 12, 73, 74-85, 141;

 harmony with, 85-7;

 non-human, 83, 85, 87, 90, 97;

 respect for, 79, 87-90

 necessity, 42, 50, 52, 68

 negative externalities, 80, 88

 neutrality thesis, 27-8

New Guinea, ix, 33-4

Nicaragua, 138

Nixon, Richard, 76

North, Oliver, 138

O

occupational hazards, 102, 105

occupational structures, 130-4, 139

OECD, 129, 134, 135

Orwell, George, 39

Owen, Robert, 38

ozone, 90, 100, 147

P

paradox of control, 141, 148

pesticides, 143, 145, 147

Philadelphian exposition, 36

Philosopher's stone, 82

Political economy, 15, 16-17, 20, 32, 38-39, 44, 58, 90, 96, 99, 103-4

Pollution, 103, 104, 107, 108, 147

Polychlorinated biphenyls (PCBs) 98, 99, 100, 101

Porat, Mark, 129, 133, 135, 136

Post-industrial society, 20

Practico inert, 57, 68, 73

Praxis, 69, 70

Preferences, 88, 117, 125

Primitive society, 30, 84, 109

Probability, 143

Professional technical elite, 130-1

Public policy, 19, 103, 106-7, 110, 120, 126-8, 133, 135, 139, 140

Q

Quality of life, 97, 108-9, 111, 125, 136

R

Radioactivity, 99, 101, 105

Rationalization, 64-5, 66, 67, 72-3, 84

Reification, 9, 57, 62-8, 72, 73

Religion, 6, 76-80, 86, 89, 114, 117, 120, 142

Republicanism, 42

Research and development, ix-x, 24

Risks, 13, 70, 87, 88, 142, 144-6

Ruskin, John, 8, 38, 42-3

S

Sartre, Jean-Paul, 57, 68-72

Say, J.-B., 15

Science, 10, 16, 74-83;

 Scientific culture, 75, 76, 77

 Scientific method 4, 6, 75, 82;

 Scientism, 6, 10

Self interest (interests), 13-14, 67, 78, 89, 106, 109, 127, 148

Services sector, 130, 135

Seveso, Italy, 88

Siane people, 33

Simmel, Georg, 62, 65

Smith, Adam, 15, 16, 38, 44-5

Social relations, 31-2, 43, 73, 84, 104, 106

Socialism, 32-3, 65-6, 73, 74, 104

Sorcerer's apprentice x, 41

'star wars' (SDI), 5

stewardship, 89

sublime, 37-8, 44, 50-1, 55

T

technetronic society, 24, 152

technique, 25-7, 29-35

technocracy, 20, 126-7, 137, 139

technology (definitions), 25-35, 68;

 technological fetishism, 5, 137;

 technological fix, 28, 75-6;

 technological hyperbole, 5, 34;

 technological imperative, 7, 8, 10, 11, 23-9, 33-65, 126;

 technological order, 24-6;

 technological rationality (instrumental rationality), 23, 57, 67-8, 73;

 see also autonomous technology; rationalization

Technology and Culture, 24

Technostructure, 18, 21

Thoreau, Henry, 38

Tinguely, Jean, 36-7, 55

Tu, Pierre, 16

Tylor, Edward, 57

U

UNESCO, 24

United States, 104, 108, 130-5, 136, 137, 138, 145

Use-value, 58, 60, 64, 65

V

Values, 11, 28, 90, 117, 118-19, 126, 128

Veblen, Thorstein, 38, 48, 54

W

Walker, Timothy, 42

Weber, Max, 62, 64, 67, 72-3

Wells, G.G., 53

White, Lynn, Jr, 33

Wilderness, 52, 93, 109, 124

Will, 80, 84

Z

Zamayatin, Yevgeny, 38, 39, 41, 42, 53-4, 153

Zero-sum game, 3, 34, 139-40

Zola, Emile, 38, 49