

COURSE OUTLINE FOR INTRODUCTORY PHILOSOPHY Fall 2004

I. General The purpose of this course is to expose students to the disciplines and ideas of philosophy and to encourage them to develop their philosophical self-awareness. This course will not serve as a forum for any particular school of thought but rather will promote a respect for everyone's views. Logistically the class will be divided into 17 parts corresponding to the block scheduling of a typical school year. The 18th week will be used for exams and a cushion for unexpected demands on time.

II. Weekly activities*:

MON: Explanation by the teacher of *WHAT* the Topic / Question is and the historical context which generated it. How does it fit into our society; its current relevance and universal meaning? In other words, why have people worried over this for centuries?

TUE & WED: Reports from students on various readings from the classics (the answer to the question of the week) and class discussion on the strengths and weaknesses of the positions of the readings. How could the weaknesses be addressed?

THUR: What's the solution? Class discussion on the possible ways to address the issue. Rather than the classics, here the students discuss their various points of view. Everyone needs to be prepared and to participate.

FRI: A brief quiz over the nature of the Question / Topic and Answers of the Week. The quizzes will be short answer and gone over in class to insure the students the opportunity to clear up any points that may not be clear. Then what's *your* answer to the question? An in-class writing will be done in which the student will clearly state his position on the question. Since all positions are basically correct answers to philosophical questions, the grading will be done on how the student arrived at his position, what thinkers he has cited who support his position, and how clearly and well he presents his argument.

*Some topics do not require a full week so the schedule will vary somewhat.

III. Material covered by week:

WEEK 1 CHAPs. 1&2	Topic / QUESTION	READINGS
	What is philosophy?	Lewis Carroll <i>Through the Looking Glass</i>
	How am I going to be graded?	Jorge Luis Borges <i>The Circular Ruins</i>
	How do we discuss issues?	Aristotle <i>On Anger</i>
		William James <i>The Will to Believe</i>
	Why use logic?	Deductive / Inductive; Fallacies

Metaphysics

WEEK 2 CHAP. 3	Topic / QUESTION	READINGS
	What is the nature of reality?	William James <i>What Is an Emotion?</i>
	<i>The Pre-Socratics</i>	Carl G. Hempel <i>The Deductive-Nomological Model of Science</i>
		Leo Tolstoy <i>What is Art?</i>
		Robert C. Solomon <i>What Love Is</i>

WEEK 3 **Topic / QUESTION**
CHAP. 4

The Nature of Form

READINGS

Plato *Does Might Make Right; The Equality of Women; The Ring of Gyges; The Death of Socrates; Aristophanes' Speech on Love*
Aristotle *The Inequality of Women*

WEEK 4 **Topic / QUESTION**
CHAP. 5

Mind and Matter
How are they related?

READINGS

Varela, Thompson & Rosch *The Embodied Mind*
John R. Searle *The Myth of the Computer*
William Lycan *Robots and Minds*
Gilbert Ryle *The Concept of the Mind*
Rene Descartes *Mind as Distinct from Body*

WEEK 5 **Topic / QUESTION**
CHAP. 6

Am I an idealist?

READINGS

George Berkeley *Colours*
John Locke *Of Identity and Diversity*
George Berkeley *To Be Is to Be Perceived*
Ludwig Wittgenstein *The Diary and The Beetle in the Box*

WEEK 6 **Topic / QUESTION**
CHAP. 7

Am I a materialist?

READINGS

The Dynamics of Personality
J.J.C. Smart *Sensations and Brain Processes*
Thomas Hobbes *Of the Natural Condition of Mankind*

Epistemology

WEEK 7 **Topic / QUESTION**
CHAP. 8

Can you know anything?

READINGS

David Hume *Of the Standard of Taste*
David Hume *On Pride*
David Hume *Of Personal Identity*

WEEK 8 **Topic / QUESTION**
CHAP. 9

What do you know?

READINGS

Rene Descartes *Meditation*
O.K. Bouwsma *Descartes' Evil Genius*
Alex Orenstein *Epistemology Naturalized- Nature Know Thyself*
Shannon Brownlee *Baby Talk*

WEEK 9 **Topic / QUESTION**
CHAP.10

How do I know what I know?

READINGS

John Locke *Where Our Ideas Come From*
Bertrand Russell *Appearance and Reality*
Lorraine Code *Is the Sex of the Knower Epistemologically Significant?*
Aristotle *Happiness and the Good Life*
David Hume *Of the Origin of Ideas*

WEEK10
CHAP.11

Topic / QUESTION
I just know!!!

READINGS

Education
Cultivation of the Mind

Theology

WEEK 11
CHAP. 12

Topic / QUESTION

READINGS

What causes cause?

Steven M. Cahn *Religion Reconsidered*
Blaise Pascal *The Wager*
William Paley *The Teloloical Argument*
St. Thomas Aquinas *Whether God Exists*
Charles Darwin *The Descent of Man*

WEEK 12
CHAP. 13

Topic / QUESTION

READINGS

Can God's existence be proven?

Martin Gardner *Proofs of God*
Bertrand Russell *Why I am Not a Christian*
Ramakrishna *Many Paths to the Same Summit*
St. Anselm *The Ontological Argument*

WEEK 13
CHAP. 15

Topic / QUESTION

READINGS

From whence evil?

Fyodor Dostoevsky *Rebellion*
David Hume *Why Does God Let People Suffer?*
Richard Swinburne *Why God Allows Evil*
J.L. Mackie *Evil and Omnipotence*

Ethics

WEEK 14
CHAP. 16

Topic / QUESTION

READINGS

What should I do?

Friedrich Nietzsche *Communication and Consciousness*
Simone de Beauvoir *The Second Sex*
Jean-Paul Sartre *Freedom and Responsibility*
Friedrich Nietzsche *The Natural History of Morals*
Ludwig Wittgenstein *Meaning as Use*
Jean-Paul Sartre *Hell Is Other People*
A.J. Ayer *Emotivism*
B.F. Skinner *Freedom and the Control of Men*

WEEK 15
CHAPS. 17&18

Topic / QUESTION

READINGS

Why shouldn't we be selfish?

Bernard Williams *A Critique of Utilitarianism*
John Stuart Mill *Utilitarianism*
Epicurus *The Pursuit of Pleasure*
John Stuart Mill *The Subjection of Women*
Thomas Hobbes *People Are Selfish*

WEEK 16
CHAP. 19

Topic / QUESTION

READINGS

What is a good thing and must I do it?

Joseph Butler *Benevolence and Self-Interest*

Richard Dawkins *The Selfish Gene*
 Joan Didion *On Morality*
 Ayn Rand *The Virtue of Selfishness*
 Immanuel Kant *The Categorical Imperative*
 Immanuel Kant *Foundations of the Metaphysics of
 Morals*

WEEK 17 **Topic / QUESTION**
CHAP. 20 & 21

Who can best lookout for my kids?

READINGS

Malcolm X *Human Rights, Civil Rights*
 Karl Marx and Friedrich Engels *The Immorality of
 Capitalism*
 Paul M. Sweezy *A Primer on Marxian Economics*
 Milton Friedman *The Social Responsibility of
 Business Is to Increase Its Profits*
The Ford Pinto Memo
 Adam Smith *Benefits of the Profit Motive*
 Isaiah Berlin *Two Concepts of Liberty*
 Martin Luther King Jr. *Letter from Birmingham City
 Jail*

WEEK 18 **Topic / QUESTION**
CHAP. 22

Do I plead for Justice or Mercy?

READINGS

John Stuart Mill *Higher and Lower Pleasures*
 Iris Young *The Myth of Merit*
 John Rawls *Justice as Fairness*
 Joel Feinberg *Economic Income and Social Justice*
 Robert Nozick *Fairness versus Entitlement*
 Robert Nozick *The Experience Machine*

IV. Grading:

Students will be evaluated by their presentations of their readings (25%), their participation in discussions (25%), their quizzes (25%) and their in class essays (25%). Experience has shown this grading formula to work well as an incentive for the student to read the text, do his required readings, participate in discussions and seriously consider his personal points of view.

What is your philosophy?

Brandon Buchanan

Adv. Phils

8.13.04

My philosophy of life is that your existence depends upon your body, mind, and spirit. I've labeled myself a trisymbiant. "Tri" meaning three and symbiant meaning one who needs another's existence in order to survive. Therefore, without all three, you cannot exist as a person. Each part also has a job. The body is the physical part of you. Your body has very low limitations without help from the mind. Your mind controls the body. Your mind cannot control outside objects unless the object is a part of you, as for an example, an implanted chip. Your spirit lives within you also, but in the minds of others, too. Your spirit affects how others view you and is responsible for emotions. These three all work together in order to exist. When death arrives, the mind is forever asleep.

The body cannot function and your spirit slowly dwindles afterwards. Another belief to add is that we are all enslaved. Enslaved to biological forces of which are hard to control. Hunger and thirst are forces which enslave us, yet we must do as they command or cease to exist. While others see eating as something they just do, I see it as a "slave master." This is my philosophy, in short.

"Control yourself before yourself controls you."

A Priori Arguments for God

Ontological Argue - based on the mere idea of God

Moral Argue - based on idea of moral law

— Ontological Argument

- God is perfect being

A being who exists is greater or more perfect than being who does not exist

Therefore, God must exist

Denying the existence of God would be to deny the existence of what must exist & is the thing you're talking about

St. Anselm's Version

1. God is a greater being if he exists than if he didn't exist

2. God is a greater being if he cannot not-exist.

Descartes' Version

God is most perfect being ^{by definition} because ~~he is~~

sum of all perfections

One attribute is existence

Is existence a predicate?

not in grammatical, but in logical

On Anger

- * 3 conditions for anger
- what the temperament is of angry people
- with whom they become angry with
- what sort of things makes them angry
-

POLICIES:

1.) You are adults and will be treated as such. You will find me like a mirror, the consideration, respect and politeness you show you will receive. You are expected to be in your seat when the tardy bell rings. Being late is rude to other students and rudeness in any form will not be tolerated. If you have a problem, tell me in advance and I will do what I can to help you.

2.) This schedule indicates what we are doing throughout the term, and we will stay awfully close to it. If you are absent, it is responsibility to cover the material. Missed work will be covered by make up quizzes and writings. Should there be a problem; discuss it with me in advance.

3.) Your grade will be determined as follows:

READINGS	25%
QUIZZES	25%
DISCUSSION	25%
WRITINGS	25%
Total	100%

4.) Readings and Discussion will be graded as follows:

Nothing to say	60	F
One positive remark	80	C
Two or more contributions	90	B
Well thought out contribution	97	A
Excellence	100	A+

5.) Writings will be graded on how well you express your ideas not on whether or not you may support any particular view. Proper use of logic and reasoning as well as construction of argument is critical. Papers should not exceed a page though may be shorter if well stated. You know yourself whether you have done a reasonable job.

6.) You are responsible for the material in the text chapters in the schedule; read them as we go. The quizzes are dependent upon the frame of mind of the ideas of the chapters and are extremely difficult to "fake" your way through. The class depends on your work and participation, **don't let us down!**

I hope you'll enjoy the class as much as I do!

Philosophy Schedule Fall 2004

Monday	Tuesday	Wednesday	Thursday	Friday
<i>Aug. 9</i> Chapters 1&2	<i>10</i> Readings	<i>11</i> Readings	<i>12</i> Discussion	<i>13</i> Quiz 1
<i>Aug. 16</i> Chapter 3	<i>17</i> Readings	<i>18</i> Readings	<i>19</i> Discussion	<i>20</i> Quiz 2
<i>Aug. 23</i> Chapter 4	<i>24</i> Readings	<i>25</i> Readings	<i>26</i> Discussion	<i>27</i> Quiz 3
<i>Aug. 30</i> Chapter 5	<i>31</i> Readings	<i>Sept. 1</i> Readings	<i>2</i> Discussion	<i>3</i> Quiz 4
<i>Sept. 6</i> Labor Day	<i>7</i> Chapter 6	<i>8</i> Readings	<i>9</i> Discussion	<i>10</i> Quiz 5
<i>Sept. 13</i> Chapter 7	<i>14</i> Readings	<i>15</i> Readings	<i>16</i> Discussion	<i>17</i> Quiz 6
<i>Sept. 20</i> Chapter 8	<i>21</i> Readings	<i>22</i> Discussion	<i>23</i> Quiz 7	<i>24</i> No school
<i>Sept. 27</i> Chapter 9	<i>28</i> Readings	<i>29</i> Readings	<i>30</i> Discussion	<i>Oct. 1</i> Quiz 8
<i>Oct. 4</i> Chapter 10	<i>5</i> Readings	<i>6</i> Readings	<i>7</i> Discussion	<i>8</i> Quiz 9
<i>Oct. 11</i> Chapter 11	<i>12</i> Readings	<i>13</i> Readings	<i>14</i> Discussion	<i>15</i> Quiz 10
<i>Oct. 18</i> Chapter 12	<i>19</i> Readings	<i>20</i> Readings	<i>21</i> Discussion	<i>22</i> Quiz 11
<i>Oct. 25</i> Chapter 13	<i>26</i> Readings	<i>27</i> Discussion	<i>28</i> Quiz 12	<i>29</i> No school
<i>Nov. 1</i> Chapter 15	<i>2</i> Readings	<i>3</i> Readings	<i>4</i> Discussion	<i>5</i> Quiz 13
<i>Nov. 8</i> Chapter 16	<i>9</i> Readings	<i>10</i> Readings	<i>11</i> Discussion	<i>12</i> Quiz 14
<i>Nov. 15</i> Chapter 17 & 18	<i>16</i> Readings	<i>17</i> Readings	<i>18</i> Discussion	<i>19</i> Quiz 15
<i>Nov. 22</i> Chaps. 19	<i>23</i> Readings	<i>24</i> Readings	<i>25</i> Thanksgiving	<i>26</i> Thanksgiving
<i>Nov. 29</i> Discussion	<i>30</i> Quiz 16	<i>Dec. 1</i> Chapter 20 & 21	<i>2</i> Readings	<i>3</i> Readings
<i>Dec. 6</i> Discussion	<i>7</i> Quiz 17	<i>8</i> Chaps. 22	<i>9</i> Readings	<i>10</i> Readings
<i>Dec. 13</i> Discussion	<i>14</i> Quiz 18	<i>15</i> Exams	<i>16</i> Exams	<i>17</i> Exams

- philosophy, according to Greeks, is love of wisdom.
- pursuit of wisdom
- if you know the right thing to do, morality is there to do it
- * fields of phil.
- aesthetics
- logic
- ethical
- value-theory
- * Metaphysics
- the study of reality
- What is real?
- objective of reality vs. transcendent reality
- * Epistemology
- Do you know? What can you know? How do you know?
- * Ethics
- morals
- moral absolutes & relativism
- right & wrong
- * Logic
- a tool of reasoning
- * Aesthetics
- What is art? What is beauty?

* Second Order Studies

- the philosophy of...

* Rational

- everything can be reasoned out
- nonrational - where reason gives out
- irrational - just wrong, impossible four sided triangle

* Foundationalism

- the start or premises
- how to begin a philosophical discussion

* Four Different Approaches

- speculative - seeks to answer the big '?'s
- analytical - looks at problems caused by language
- existential - focuses on existence of human beings
- phenomenological - what is directly seen and experienced

* Religion vs. Science

- religion - philosophy with commitment

* Four Principles When Studying

- clarification - things are logical when clear
- deconstruction - don't be biased
- modified scepticism - just the facts
- smartness - realize that the philosopher knows more

Chapter 2 - Logic

* The Three Laws

- law of non-contradiction - can't be both + tall
- law of the excluded middle - anti-gray, no middle, either/or
- law of identity - it is what it is
- the laws are all the same

* Argument

- series of premises strung together to reach a conclusion

* Syllogism

- two premises in a conclusion

* Two Types of Logic

- deductive reasoning - whole to the part math
- inductive reasoning - part to the whole polls / science

* Fallacies

- formal fallacies - mistakes in logic
- informal fallacies - "fallacies of relevance"
- appeal to force - why is my argument correct
- appeal to man - attacking persons instead of argument
- appeal to ignorance - if not proven wrong, they they are right
- appeal to crowd - emotional appeal to masses, the majority
- appeal to pity
- appeal to authority - he says
- begging the question - circular reasoning look, it does it well
- accident - can make exceptions to the rule
- converse accident - generalization from skewed conditions
- false cause - making a relation with relation conspiracy
- complex question - the new H.C. that says who

* Fallacies of Ambiguity

- equivocation - changing the meaning of a word in an argument
- amphiboly - could be understood in two different ways; double entendre
- misplaced accent - big bold & fine print
- composition - if one is, the whole is
- division - if whole is, one is

* * Terms

- ontology - being
- deontology - duty
- epistemology - knowledge
- teleology - outcome
- categorical imperative - Kant
- inductive - generalization
- deductive - logic
- One & Many - unity of reality with plurality of perceived world
- Mind-Body Duality
- tabula rasa - clean slate
- causality - basis for cosmology (first cause)
- cosmology - cosmos or universe
- natural theology - proving God through nature
- revealed theology - revealed faith, personal experiences
- problem of evil - if God is omniscient & omnipotent, why evil?
- utilitarianism - social hedonism
- Cyrenians - hedonists (first law) government; live for moment
- hedonistic calculus - Bentham
- Bentham; Mill; Cyrenians; Epicurus
- materialists say freedom of will is an illusion

* * People

- Berkeley says tree makes sound because God hears it
- existence is before essence is existentialism
- innate knowledge is present at birth

- Chomsky supports innate knowledge from language
- Modern physics ...
- Esse est percipi - to be is to be perceived
- inevitable basis for rationalism is ↑
- Mill vs. Bentham - quality vs. quantity
- Kant says to be moral, you do your duty
- faith in absolute for transcendence
- Behaviorism is output of materialism
- human satisfied but yet dissatisfied - John Stuart Mill
- Kant says person who dies on mission is moral as who finishes
- value theory - morality
- logic - rationalism
- pluralism - more than one substance
- monism - one thing
- teleological ethic - outcome based
- form - Plato, explains recognition
- theodicy - having God with evil
- Berkeley believed matter was mind
- determinism depends on causality

- 1 ☐ The Question of Justice
Chapter 22
- 2 ☐ The problem – What is justice?
 - ♦ What is fair?
 - ♦ Is it possible for two people to agree on the definition of justice?
 - ♦ If not, then how can we begin to talk about achieving justice?
 - ♦ To many, it involves the distribution of wealth
- 3 ☐ Libertarian View
 - ♦ Personal liberty is the highest social ideal.
- 4 ☐ Socialist View
 - ♦ Equity of persons is the highest social ideal
 - ♦ Marx among others
- 5 ☐ Liberal View of Justice
 - ♦ A combination of liberty and equality is the highest social ideal
 - Contractual: Trades off equality for greater welfare
 - Utilitarian: Accepts any kind of inequality if it maximizes happiness
 - ♦ The attempt to combine the libertarian and socialist views of Justice.
- 6 ☐ John Rawls
 - ♦ Rawls is in the liberal tradition
 - ♦ He would be called a liberal tax-and-spend Democrat
 - ♦ Contractual justice - more welfare for less equality
- 7 ☐ Original Position
 - ♦ Purely hypothetical situation
 - ♦ Like Locke's state of nature
 - ♦ Start from here to consider what is fair for all
 - ♦ Must be coupled with the...
- 8 ☐ Veil of Ignorance
 - ♦ To be fair, try to imagine yourself stripped of all factors that might prejudice you (wealth, education, political party, etc.)
 - ♦ Forget your vested interests
 - ♦ Allows you not to play favorites - you might be stacking the deck against yourself

- 9 ☐ **Rationality of the Parties**
- ♦ **The parties are presumed to be capable of a sense of justice and everyone knows this**
 - ♦ **Parties rely on each other to understand and go along with the principles they established**
 - ♦ **The people have a capacity for justice -they can be just within the context**
- 10 ☐ **Rawls' Two Principles of Justice**
- ♦ **Principle of Equal Basic Liberty for All**
 - ♦ **The Difference Principle**
- 11 ☐ **Equal Basic Liberty for All**
- ♦ **Accommodates the libertarian ideal of individual freedoms and rights.**
 - ♦ **"Each person is to have an equal right to the most extensive basic liberty compatible with a similar liberty for others."**
- 12 ☐ **Difference Principle**
- ♦ **Social and economic inequality are to be arranged so that they are both...**
 - **Reasonably expected to be to everyone's advantage AND**
 - **Attached to positions and offices open to all – social/economic mobility**
- 13 ☐ **More Difference Principle**
- ♦ **For example, it is to everyone's benefit that a doctor earns more than others if that is to the benefit of others**
 - ♦ **Strays from pure equality (a.k.a. communism/socialism) and allows for unequal distribution of wealth in a fair way**
- 14 ☐ **Problems with Rawls**
- ♦ **Can the veil of ignorance ever really work? Can you wish away all your knowledge, prejudices, etc.?**
 - ♦ **Why minimize the risk when you can maximize the gain? Industrial revolution - no pain no gain**
 - ♦ **Is it really fair? - Hit man and worker on a desert island**
- 15 ☐ **Robert Nozick**
- ♦ **Writes in response and opposition to Rawls -he sounds like a Libertarian**

- ♦ Theory goes back to Locke's ideas
- ♦ Principle of equality with respect to entitlement
- ♦ Supports individual rights and libertarianism

16 ☐ The Minimal State

- ♦ "Night watchman" state
- ♦ Means that the proper function of the state is like that of a night watchman whose task is to protect the goods of those who have hired him.
- ♦ The purpose of the state is to defend the properties of its citizens, enforce contracts, etc.

17 ☐ Principle of Justice in Holdings

- ♦ These are rules about property
- ♦ Principle of Justice in Acquisitions
- ♦ Principle of Justice in Transfer
- ♦ Principle of the Rectification of Injustice in Holdings

18 ☐ Principle of Justice in Acquisition

- ♦ An acquisition of a thing is just if
 1. the thing is previously unowned and...
 2. the acquisition leaves enough to meet the needs of others

19 ☐ Principle of Justice in Transfer

- ♦ Formal: a holding is just if it has been acquired through a legitimate transfer from someone who has acquired it through legitimate transfer or through original acquisition.
- ♦ Informal (in plain English): a possession is just if it is not stolen and wasn't stolen before

20 ☐ Principle of the Rectification of Injustice in Holdings

- ♦ An honest attempt must be made to identify the sources of illegitimate/ illegal holdings and to compensate the victims

21 ☐ Entitlement and Distributive Justice

- ♦ Entitlement Theory- People are entitled to the property they have acquired legitimately and can dispose of it as they will, as long as it doesn't infringe on others' rights
- ♦ Principle of Distributive Justice- a distribution is just if everyone is entitled to the holdings they possess under the distribution

22 ☐ Problems

Justice As Fairness
John Rawls

- ♦ Is it fair? It's all well and good if you aren't disadvantaged or discriminated against.
- ♦ Nozick says have-nots are jealous of the haves - thus their resentment. But, is that all there is to it?
- ♦ He relies heavily on natural rights without backing them up

23 ☐ One More Problem

- ♦ Does it contradict our moral sensibilities? Does a small tax on the able-bodied to prevent the starvation of the orphans and handicapped really violate the rights of those being taxed?

24 ☐ Alasdair MacIntyre

- ♦ Challenged Rawlsian and Nozickian accounts of Justice in After Virtue, because they both leave out something crucial.
- ♦ His conception of justice has to do with how deserving a person is.
- ♦ Ex: a hardworking person sees himself as deserving of what he's earned

25 ☐ Justice as Virtue

- ♦ Works on MacIntyre's idea of desert- how deserving a person is- as the crucial component of justice, and the one that is missing in both Rawlsian and Nozickian theories.

26 ☐ Tradition of Virtues

- ♦ We can't set aside a long legacy of doing the right thing (virtue) that dates back to Aristotle
- ♦ It also has a couple thousand years of Christian tradition of the view of justice to back it up
- ♦ All those people couldn't have been totally off about virtue and justice

27 ☐ Virtues and the Individual

- ♦ Rawls and Nozick emphasized the rights of the individual over those of the community
- ♦ Fail to consider the "idea of the desert" - People getting what they deserve
- ♦ This makes sense when one believes "we're all in this together" and that some do better than others.
- ♦ Fair isn't always equal

28 ☐ Virtues and the Community

- ♦ Not a big jump from the individual to society
- ♦ Virtues are good for the individual so it stands to reason that they are also conducive for the common good of the community

29 ☐ Rawls and Nozick v. MacIntyre

- ♦ Rawls and Nozick are rooted in Lockean tradition (individual is king)
- ♦ Rawls justice is tied to fairness and Nozick to entitlement
- ♦ MacIntyre's view focuses on the common good to which individuals can contribute to their society through virtuous activity

30 ☐ Questions for MacIntyre

- ♦ Should a person be rewarded for what he is rather than does?
- ♦ Is it practical to try to "police" moral defects in people?
- ♦ Is it fair to reward virtuous activity with economic prizes?
- ♦ Would such prizes be appropriate in the first place?

31 ☐ The End

1. 26 L of the A letters of the alphabet Z
2. 7 = D of the W day of the week
3. 1001 = AN arabian nights
4. 12 = S of the Z signs of the zodiac
5. 54 = C in a D (with J) cards in a deck with jokers
6. 9 = P in the SS planets in the solar system
7. 88 = PK piano keys
8. 13 = S on the AF stars on the american flag
9. 32 = DF at which WF degrees fahrenheit at which water freezes
10. 18 = H on a GC holes on a golf course
11. 90 = D in a RA degree in a right angle
12. 200 = D for PG in M dollars for paying up in monopoly
13. 8 = S on a SS sides on a stop sign
14. 3 = BM (S H T R) blind mice (no how they wrong)
15. 4 = Q in a G quarts in a gallon
16. 24 = H in a D hours in a day
17. 1 = W on a U wheel on a unicycle
18. 5 = D in a ZC digits in a zip code
19. 57 = HV heiny variety
20. 11 = P on a FT players on a football team
21. 1000 = W that a P is W words that a picture is worth
22. 29 = D in F in a L Y days in february in a leap year
23. 64 = S on a C B squares on a chess board
24. 40 = D and N of the GF days and nights of the great flood
25. 76 = T in the BP
26. 50 = W to L Y L ways to leave your lover
27. 99 = B of B on the W bottles of beer on the wall
28. 60 = S in a M seconds in a minute
29. 1 = H on a U horn on a unicorn
30. 9 = J on the SC justices on the supreme court
31. 7 = B for SB
32. 21 = D on a D dots on a die
33. 7 = W of the AW wonders of the ancient world
34. 15 = M on a D M C men on a dead man's chest

- thus, the problem which Marx called...

* * Alienation

- biggest problem for Marx
- separation
- alienation from objects they produce, themselves, human nature, and fellow man
- Marx blamed this on capitalism and private property

* * Communism

- theory that gets rid of private property & gets rid of a class society
- workers of the world unite; you have nothing to lose but your chains.

* * Objections

- only objective reality - a metaphysical problem
- socioeconomic problems
- human nature may not allow it

* * Libertarianism

- a politically conservative position that presses for individualism rights to a role purely to the individual
- freedom of individuals to pursue their life as long as they don't harm anyone
- denial of the state's role in all forms of public welfare
- gov't should only protect from outside invasion, internal threat, protect rights, enforce contracts

Liberalism & Marxism

Old but or not

* * Classical Liberalism - Locke

- think freedom and not Democracy
- the author that said life, liberty, & happiness
- freedom from (negative) gov't
- freedom to (positive) self interest
- Bill of Rights is best example of this
- social-political theory that says man is good, and gov't is there to protect from the evil ones
- the gov't protects rights & stays out of the way

* * Individualism

- another name for classical liberalism
- puts individual over state
- state guarantees rights

* * Locke's Basics

- natural law - the rational knowable morality which is knowable in God's will
- state of nature - the human condition of natural freedom and rights prior to the imposition of social organization and regulation - theoretical
- social contract - agreement between people & gov't
gov't protects people for some rights
- tacit consent - by living in society, you agree to live in it

* * Property Rights

- most important to Locke
- based on natural rights
- "to preserve himself, his liberty, and property."

- we join a gov't to protect our property
- * * laissez-faire Economy
- enters the Industrial Revolution & Adam Smith
- hands-off economy - best for everyone
- all of this sounded good in 1776

- * * Karl Marx
- enters the radical
- philosophers who wanted to change things
- by the mid-19th century, capitalism isn't looking so good
- Marx came up with a radical solution
- heavily influenced by Hegel's dialectic
- thesis + antithesis \rightarrow synthesis

- * * Marx Basic
- only objective reality governed by dialectic of history
- every philosophical question is economical
- to Marx, everything is a class struggle
- his goal is class warfare (workers vs. owners)

- * * Dialectical Marxism
- the metaphysical view that reality is matter in motion and evolves historically is accordance with the principle of the synthesis of opposite states
- Marxists

The Question of Society

Individual decisions involve society

* * Plato - the Elitist

- The Republic - perhaps about the best book in philosophy
- thinks society is good, but bad societies exist

* * Types of Governments

- from bad to worse
- timocracy - rule motivated by emotion
- plutocracy - rule by rich (oligarchy)
- democracy - ruled by lowest common denominator
- dictatorship - absolute rule by single person, see Lord Acton
- He tried it in Syracuse (dictator)

* * Philosopher King

- the answer - aristocracy - rule by the best
- who are the best? - those who are most enlightened with regards to reality, truth, and goodness
- in other words, philosophers
- "philosophers must be kings"

* * Aristotle - The Democrat

- Though state was good
- more common sense
- saw need to include rank, though still a mob
- man is a rational & political animal

* * Natural Law

- general and universal rule of conduct, both personal & social, derived rationally from nature
- the state is a creation of nature that evolves

- no man is an island, entire of each other. - John Donne

* * St. Thomas - 4 Kinds of Law

- eternal law - God, unalterable rule of all things
- natural law - universal rules from conduct of human nature
- human law - statutes contrived by humans
- divine law - special revealed will from God

* * So what?

- natural law presupposes a reason to the universe
- requires a rational universal with rules
- "That's not fair" you say into that philosopher

Reality and "The Matrix"

This topic is the basis for all other writings written about the Matrix. As Morpheus stated, "If you define real as what you can smell, what you can touch, then real is simply electric signals interpreted by your brain." If one is to agree with this definition, one must also agree that the Matrix is real and that a life in the Matrix is as no more real than a life outside of the Matrix. Considering the character Morpheus is, he more than likely did not agree with this decision. Instead, I perceive his true definition of what is real by liberation. It is obvious that in the second and third movies, Neo was able to control the machines outside of the Matrix. He then realized that not only he freed his mind from the Matrix, but could free his mind in the real world, a world built on rules, some of which could be bent, others broken.

JOAN DIDION

On Morality

JOAN DIDION *lives in Venice, California, and is the well-known author of* Slouching Toward Bethlehem *and* Play It As It Lays.

AS it happens I am in Death Valley, in a room at the Enterprise Motel and Trailer Park, and it is July, and it is hot. In fact it is 119°. I cannot seem to make the air conditioner work, but there is a small refrigerator, and I can wrap ice cubes in a towel and hold them against the small of my back. With the help of the ice cubes I have been trying to think, because *The American Scholar* asked me to, in some abstract way about "morality," a word I distrust more every day, but my mind veers inflexibly toward the particular.

Here are some particulars. At midnight last night, on the road in from Las Vegas to Death Valley Junction, a car hit a shoulder and turned over. The driver, very young and apparently drunk, was killed instantly. His girl was found alive but bleeding internally, deep in shock. I talked this afternoon to the nurse who had driven the girl to the nearest doctor, 185 miles across the floor of the Valley and three ranges of lethal mountain road. The nurse explained that her husband, a talc miner, had stayed on the highway with the boy's body until the coroner could get over the mountains from Bishop, at dawn today. "You can't just leave a body on the highway," she said. "It's immoral."

It was one instance in which I did not distrust the word, because she meant something quite specific. She meant that if a body is left alone for even a

few minutes on the desert, the coyotes close in and eat the flesh. Whether or not a corpse is torn apart by coyotes may seem only a sentimental consideration, but of course it is more: one of the promises we make to one another is that we will try to retrieve our casualties, try not to abandon our dead to the coyotes. If we have been taught to keep our promises—if, in the simplest terms, our upbringing is good enough—we stay with the body, or have bad dreams.

I am talking, of course, about the kind of social code that is sometimes called, usually pejoratively, "wagon-train morality." In fact that is precisely what it is. For better or worse, we are what we learned as children: my own childhood was illuminated by graphic litanies of the grief awaiting those who failed in their loyalties to each other. The Donner-Reed Party, starving in the Sierra snows, all the ephemera of civilization gone save that one vestigial taboo, the provision that no one should eat his own blood kin. The Jayhawkers, who quarreled and separated not far from where I am tonight. Some of them died in the Funerals and some of them died down near Badwater and most of the rest of them died in the Panamints. A woman who got through gave the Valley its name. Some might say that the Jayhawkers were killed by the desert summer, and the Donner Party by the mountain winter, by circumstances beyond control; we were taught instead

that they had somewhere abdicated their responsibilities, somehow breached their primary loyalties, or they would not have found themselves helpless in the mountain winter or the desert summer, would not have given way to acrimony, would not have deserted one another, would not have *failed*. In brief, we heard such stories as cautionary tales, and they still suggest the only kind of "morality" that seems to me to have any but the most potentially mendacious meaning.

You are quite possible impatient with me by now; I am talking, you want to say, about a "morality" so primitive that it scarcely deserves the name, a code that has as its point only survival, not the attainment of the ideal good. Exactly. Particularly out here tonight, in this country so ominous and terrible that to live in it is to live with antimatter, it is difficult to believe that "the good" is a knowable quantity. Let me tell you what it is like out here tonight. Stories travel at night on the desert. Someone gets in his pickup and drives a couple of hundred miles for a beer, and he carries news of what is happening, back wherever he came from. Then he drives another hundred miles for another beer, and passes along stories from the last place as well as from the one before; it is a network kept alive by people whose instincts tell them that if they do not keep moving at night on the desert they will lose all reason. Here is a story that is going around the desert tonight: over across the Nevada line, sheriff's deputies are diving in some underground pools, trying to retrieve a couple of bodies known to be in the hole. The widow of one of the drowned boys is over there; she is eighteen, and pregnant, and is said not to leave the hole. The divers

go down and come up, and she just stands there and stares into the water. They have been diving for ten days but have found no bottom to the caves, no bodies and no trace of them, only the black 90° water going down and down and down, and a single translucent fish, not classified. The story tonight is that one of the divers has been hauled up incoherent, out of his head, shouting—until they got him out of there so that the widow could not hear—about water that got hotter instead of cooler as he went down, about light flickering through the water, about magma, about underground nuclear testing.

That is the tone stories take out here, and there are quite a few of them tonight. And it is more than the stories alone. Across the road at the Faith Community Church a couple of dozen old people, come here to live in trailers and die in the sun, are holding a prayer sing. I cannot hear them and do not want to. What I can hear are occasional coyotes and a constant chorus of "Baby the Rain Must Fall" from the jukebox in the Snake Room next door, and if I were also to hear those dying voices, those Midwestern voices drawn to this lunar country for some unimaginable atavistic rites, *rock of ages cleft for me*, I think I would lose my own reason. Every now and then I imagine I hear a rattlesnake, but my husband says that it is a faucet, a paper rustling, the wind. Then he stands by a window, and plays a flashlight over the dry wash outside.

What does it mean? It means nothing manageable. There is some sinister hysteria in the air out here tonight, some hint of the monstrous perversion to which any human idea can come. "I followed my own conscience." "I did what I thought was right." How many madmen have said it and meant it? How

many murderers? Klaus Fuchs said it, and the men who committed the Mountain Meadows Massacre said it, and Alfred Rosenberg said it. And, as we are rotely and rather presumptuously reminded by those who would say it now, Jesus said it. Maybe we have all said it, and maybe we have been wrong. Except on that most primitive level—our loyalties to those we love—what could be more arrogant than to claim the primacy of personal conscience? (“Tell me,” a rabbi asked Daniel Bell when he said, as a child, that he did not believe in God. “Do you think God cares?”) At least some of the time, the world appears to me as a painting by Hieronymous Bosch; were I to follow my conscience then, it would lead me out onto the desert with Marion Faye, out to where he stood in *The Deer Park* looking east to Los Alamos and praying, as if for rain, that it would happen: “. . . *let it come and clear the rot and the stench and the stink, let it come for all of everywhere, just so it comes and the world stands clear in the white dead dawn.*”

Of course you will say that I do not have the right, even if I had the power, to inflict that unreasonable conscience upon you; nor do I want you to inflict your conscience, however reasonable, however enlightened, upon me. (“We must be aware of the dangers which lie in our most generous wishes,” Lionel Trilling once wrote. “Some paradox of our nature leads us, when once we have made our fellow men the objects of our enlightened interest, to go on to make them the objects of our pity, then of our wisdom, ultimately of our coercion.”) That the ethic of conscience is intrinsically insidious seems scarcely a revelatory point, but it is one raised with increasing infrequency: even those who

do raise it tend to *segue* with troubling readiness into the quite contradictory position that the ethic of conscience is dangerous when it is “wrong,” and admirable when it is “right.”

You see I want to be quite obstinate about insisting that we have no way of knowing—beyond that fundamental loyalty to the social code—what is “right” and what is “wrong,” what is “good” and what “evil.” I dwell so upon this because the most disturbing aspect of “morality” seems to me to be the frequency with which the word now appears; in the press, on television, in the most perfunctory kinds of conversation. Questions of straightforward power (or survival) politics, questions of quite indifferent public policy, questions of almost anything: they are all assigned these factitious moral burdens. There is something facile going on, some self-indulgence at work. Of course we would all like to “believe” in something, like to assuage our private guilts in public causes, like to lose our tiresome selves; like, perhaps, to transform the white flag of defeat at home into the brave white banner of battle away from home. And of course it is all right to do that; that is how, immemorially, things have gotten done. But I think it is all right only so long as we do not delude ourselves about what we are doing, and why. It is all right only so long as we remember that all the *ad hoc* committees, all the picket lines, all the brave signatures in *The New York Times*, all the tools of agitprop straight across the spectrum, do not confer upon anyone any *ipso facto* virtue. It is all right only so long as we recognize that the end may or may not be expedient, may or may not be a good idea, but in any case has nothing to do with “morality.” Because when we start deceiving ourselves into thinking not

that we want something or need something, not that it is a pragmatic necessity for us to have it, but that it is a *moral imperative* that we have it, then is when we join the fashionable madmen, and

then is when the thin whine of hysteria is heard in the land, and then is when we are in bad trouble. And I suspect we are already there.



The Role of Duty

You must do the right thing

16

* * Reminders

- teleology - the ends; consequences
- deontology - bound by duty

* * Duty

- deontology
- obligation
- ought

* * Two Kinds of Duties

- conditional ought - you ought to do an action if you want something else to occur (teleological)
- relative to a situation
- unconditional ought - you ought to do it period (deontological)
- it is universal & necessary

* * The Overruling of Consequences

- the only reason to do an action is from duty
- the consequences are considered, but duty determines what to do

* * The Overruling of Nature

- naturalistic ethics - based on nature, history, psychological
- these ethics can be based on what might be
- genuine morality is based on necessity & universality

* * Kant

* * The Good Will

- innate gifts - intelligence, courage, strength
- accidental gift - power, wealth, honor
- nothing has unconditional value on their own

- the Good Will is absolute and unconditional good
- without Good Will, innate and acquired gifts are turned evil
- an action must be done from duty in order for it to be moral

* * The Categorical Imperative

- "Act only according to that maxim by which you can at the same time will that it should become a universal law."
- do like if someone else could do too
- can we universalize our actions?
- can we demand that everyone else act in same circumstances as we would?

* * Imperative

- a command
- constrains will when we do wrong

* * Categorical vs. Hypothetical

- hypothetical imperative - commands you to do something
- hypothetical statement - "if ... then"
- do something as a means to an end
- categorical imperative - do something because it's right
- only cat. imperatives affects reality

* * Categorical Imperative

- not concerned with what you do, but how you do it
- concerned with nature of morality itself
- focuses on what makes action right or wrong
- transcends culture

* * The Test of Moral Actions

- Do I want everyone else to do this?
- Principle of Universality - process to universalizing something

* * Objections

- there are none
- first and only perfect philosophy
- just kidding
- is there a moral law at all?
- is ethically neutralism so easy to be thrown out?
- is it possible to truly forget desire and urges?
- can consequences be ignored easily?

Hedonism

if it feels good, do it

37

* *

Consequences

- do consequences matter?
- can action be judged based on consequences?
- in agreement with teleology? if so

* *

Teleology vs. Deontology

- belief in purposes, ends, or goals in universe
- deontology - action is right or wrong based on duty

* *

Hedonism

- doctrine that pleasure is highest good

* *

The Pleasure Principle

- pleasure is standard of right action
- action to be valued in light of the kind of pleasure that results

* *

Egoism

- I-ism
- any ideas that make self center of all consideration
- psychological ... - everyone by nature pursues his/her own interest
- ethical ... - everyone should pursue pleasures/interest

* *

Egoistic Hedonism

- ethical egoism + hedonism → this
- most widely practiced moral philosophy
- Cyrenaic & Epicurean

* *

Cyrenaicism

- Started by Aristippus of Cyrene
- subjective sensations are basis of knowledge
- we should act in a way to maximize sensations

- the idea is to get as much pleasure as immediately as possible
- a bit of calculation involved... you can put off pleasure to increase pleasure later, but don't wait too long

* * Epicureanism 300 B.C.

- (atomist who didn't believe in after life)
- more important than Cyrenaicism
- live as pleasant a life as possible where pleasure is absence of pain
- stressed avoidance of mental anguish and fear and the indulgence in pleasures of the mind
- the goal is to moderate pleasures
- health of body and peace of mind is the idea - the life of pleasure

* * Cyr. / Epi. Agreements

- both are hedonistic
- some calculation
- egoistic

* * Cyr. vs. Epi.

- Cyr. is bodily, immediately, and positive pleasure
- Epi. is absence of pain, mental pleasure, sustained pleasure

* * Naturalistic Ethics

- appeals to way things are
- does anyone enjoy pain over pleasure?

* * Does "is" mean "ought"?

- if people act in a certain way because it's natural, then is it right or good to do so?
- if something is as good, then it ought to be viewed good

* * Factual vs. Value Judgement

- factual - empirical state of affairs
- water freezes at 32°F
- value - evaluates or judges something's worth
- pleasure is highest good

* * The Naturalistic Fallacy

- trying to make an "is" into an "ought"
- trying to make a factual judgement into value judgement
- just because something is doesn't mean it should ought

* * What if ought = is?

- can allow the perversions of sadists or other perverts
- it seemed natural to him & brought him pleasure
- does that make it right?

* * Egoism vs. Altruism

- Egoistic hedonism runs smack dab up against altruism
- altruism - people should seek good
- is it altruism ingrained in us?

* * Is psychological egoism true?

- are all actions selfish?
- is altruism even possible?
- is there a difference between an act motivated by self interest and one that is attended self-interest?
- why rescue a drowning child?
- why give money to the needy?

* * Can you be a consistent egoistic hedonist?

- what happens when one hedonist deprives another of pleasure?
- if someone gives in, it's no longer egoistic
- can egoistic hedonism be practiced consistently?

Utilitarianism

social hedonism

* *

- doctrine that an action is right if it promotes the greatest happiness for the greatest number of people

* *

The Principle of Utility

- utility - usefulness
- that which promotes balance of good & evil

* *

Benevolence Principle

- happiness is to be distributed between people

* *

Jeremy Bentham Version

- founder of utilitarianism
- very smart (studied Latin at 8)
- his version stresses quantity of pleasure over quality
- gourmand (all you can eat)

* *

Bentham's Process

- when making a decision, considers options
- choose action that brings most pleasure and least pain to most people

* *

Hedonic Calculus

- the way to determine most pleasure
- weighs pleasures in 7 ways
- intensity - how strong it is
- duration - how long it lasts
- certainty - how likely it will occur
- propinquity - how close you are to it
- fecundity - ability to produce further pleasure

- purity - freedom from ensuing pain
- extent - number of people affected by it
- don't you do this when you make decisions?

* * Joy Actions

- knowing vs doing can be a problem
- actions are motivations to do the right thing but you don't want to
- nature - natural laws
- law - civil laws
- opinion - public or personal
- God - he'll get you

* * J. S. Mill Version

- equally smart - student of Bentham
- studied Greek at 3
- his version stresses quality over quantity
- the greatest pleasure is the best pleasure
- better to be a benchwarmer in NFL than all-star QB football player

* * Bentham vs Mill

- Bentham - "if you of porcupine furnish more pleasure, it is more valuable"
- Mill - "it's better to be a sad human than a happy pig"

* * Mill's Internal Actions

- let conscience be your guide
- consciousness is natural occurrence but must be acquired
- it's like reasoning or speaking, it has to be acquired

* * Act - Utilitarianism

- case by case basis
- what should you do that is the best?
- each act is examined by summed merits
- you make decisions based on circumstances

* * Rule - "

- looks for rules to bring happiness to people
- looks for rules that can be applied in every situation

* * Objections to Utilitarianism

- all consequences but no motives
- it's still hedonistic - you still count yourself in the equation
- can hedonic calculus work?
- the game looks good, but would you allow 100 persons to die for 10 people to live happily?
- could you do something that is correct, but is wrong?
- naturalistic fallacy

Challenges of Morality

* * Logical Positivism

- morality is cognitively meaningless
- statements about morality are not bad or good, but just gibberish

* * Verification Principle (Hume)

- cognitively meaningful if it is a relation of ideas or a matter of fact
- if you can't prove your claim, you are talking gibberish
- no transcendent, no causality, and no morality, or free will

* * Emotivism

- moral propositions are emotional outburst
- arouse a similar response in yourself to others
- no moral expressions have ~~no~~ cognitive meaning

* * Objections to Emotivism

- violates itself
- neither analytical & empirical verifiable
- can it work in practice?
- you can't be morally wrong as long as victim has no time to disapprove

* * Ethical Relativism

- individual may mean one person, society...
- denies objective values or universals
- culture & nation are usually thought of; cultural relativism

* * How can it work?

- views are different because of nurture
- differences are very important
- to absolute moralists, differences aren't important

* * Objections

- if there are things that are universally true, then why can't something else be?
- even if individual isn't be wrong, the largest group is right
- moral relativists say "that is not fair", then you are not

* * The Bottom Line

- either absolute or relativistic
- no third option?

* * What is existentialism?

- easy to explain, hard to define
- the individual is basis for all philosophy
- subjectivity is starting point
- contradicts Plato
- God is dead & we must accept this
- condemned to be free
- contribute to humanity on our own
- freedom is responsibility, so they normally become crazy

* * Humanism

- there are objectives, but in humans
- a man is measure of all things - subjectivism
- ... humanism
- Nietzsche is an existentialist
- Kierkegaard - Christian existentialist
- Gabriel Marcel - 1 also

* * Determinism

- all things are caused by causality
- in morality, a denial of free will and no morality
- you can't make a wrong choice
- hard & soft
- hard argues that all actions are determined by external factors
- there are things to do with murder like cancer
- you don't punish cancer
- individual is not responsible for actions
- soft argues cancer is within individual
- our choices are caused by our character
- erases the need for morality
- problem with where character comes from

* * Obligations

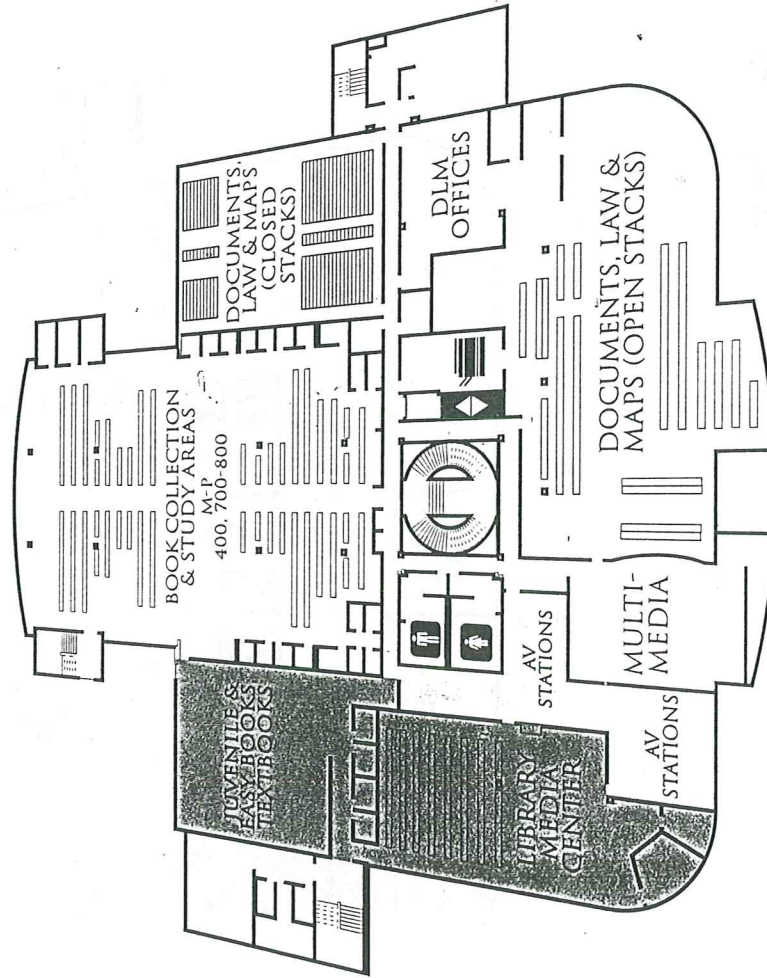
- Where does character come from?
- is there any difference between hard & soft if character comes from external sources?

* * Bottom line

- someone will be against themselves saying "that's not fair"

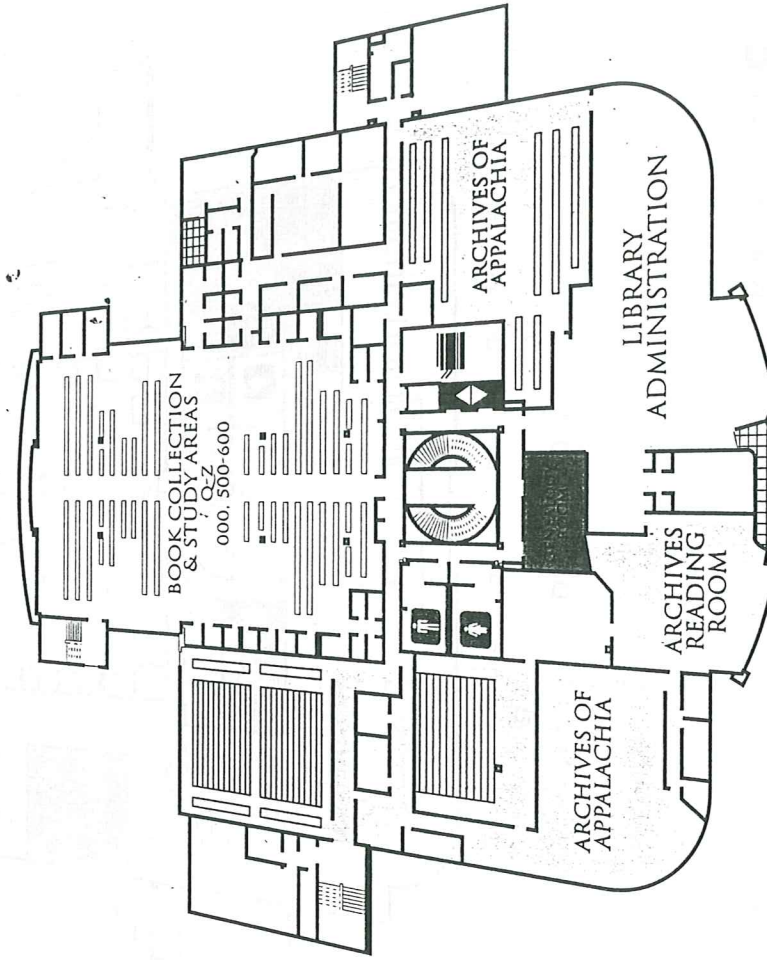
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- MEN'S RESTROOM
- LADIES' RESTROOM
- COPY ROOM
- ELEVATORS

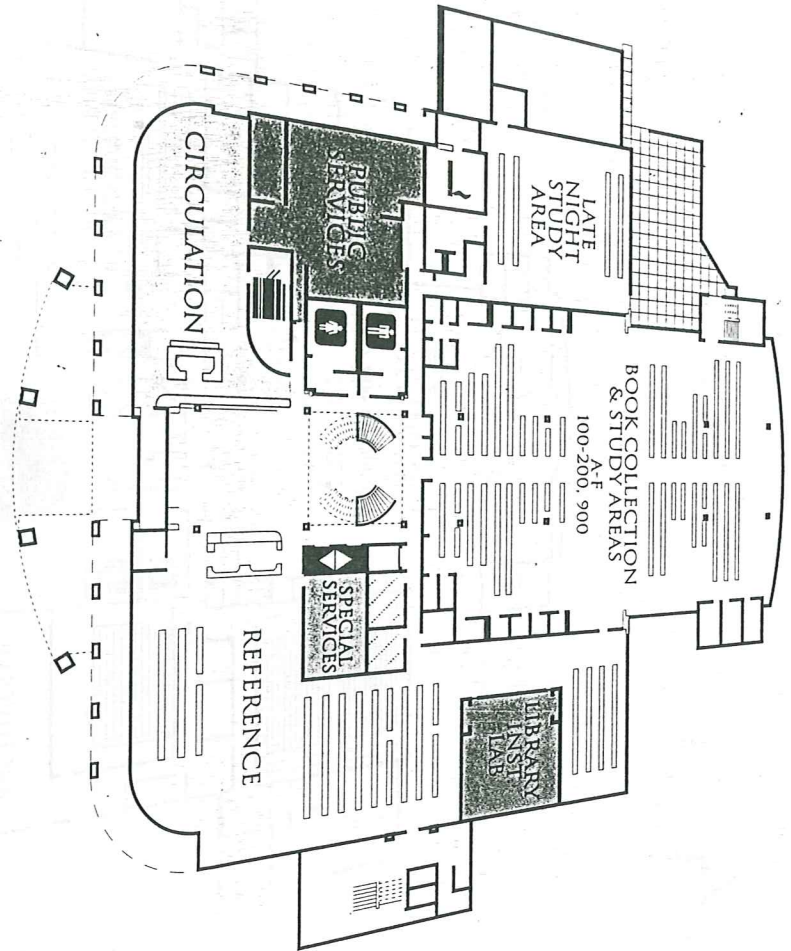
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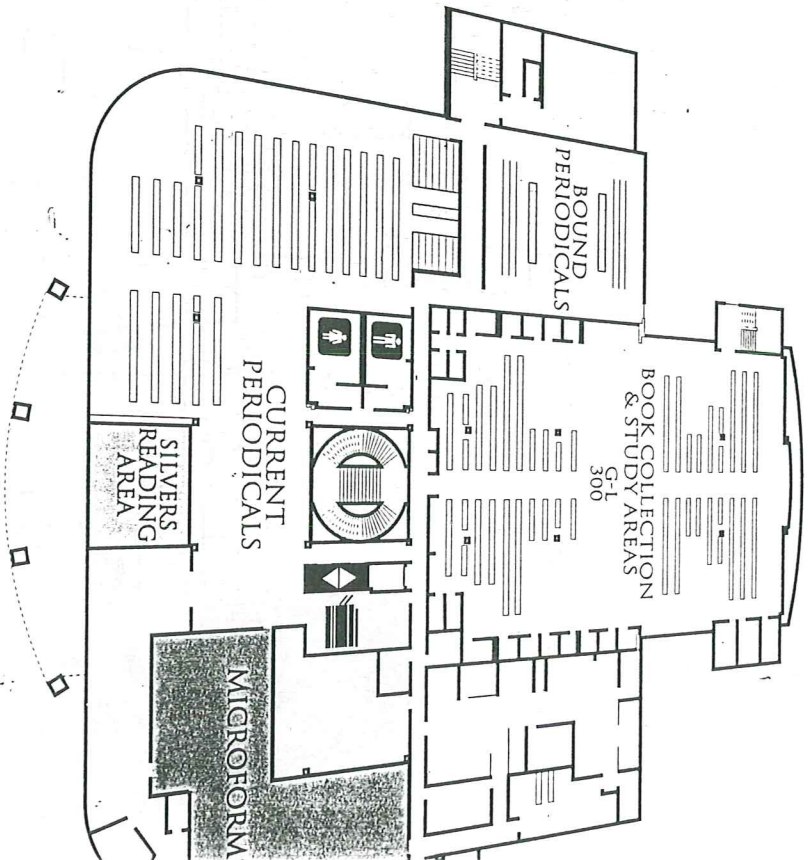
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-  MEN'S RESTROOM
-  LADIES' RESTROOM
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-  ELEVATORS

2



-  MEN'S RESTROOM
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-  COPY ROOM
-  ELEVATORS

God + Evil

* * Evil

- most arguments argue against argument for God
- only argument against God with basis

* * Kinds of Evil

- natural evil - evil or suffering from natural causes
- cancer, the black death, AIDS
- moral evil - evil that comes from personal depravity
- war, torture, Holocaust

* * Theodicy

- justification of God
- how can you justify a good God in an evil world?

* * Issues on God + Evil

- is he willing to prevent evil, but not able? then he is impotent, is he able, but not willing? then he is malevolent, is he both able + willing? whence then is evil?

* * Some Solutions to Evil

- God is limited
- God's ways are sheer
- the goodness of the whole
- Perfect World is impossible
- Evil is Necessary By-Product of Nature

* * God is limited - I.S. Mill

- matter + force existed... God fixed it and made it a creation
- argues for finite God

- not very logically satisfying
- * # God's Way is Inscrutable
 - impossible to understand God and his ways
 - how can our minds comprehend it?
- * # The Goodness of the Whole
 - similar to above
 - if thought outside of the box, then it is good
- * # Perfect World - Not Impossible
 - anything created by God is less than God because it is not him
 - if it's not perfect, it has potential evil
 - perfect world is impossible
- * # Evil is Necessary
 - even in an orderly world there are changes and natural processes
 - by-product of changes & disasters
- * # Evil is a lack of good
 - St. Augustine says the world is becoming
 - evil is not anything, but a lack of good
 - abuse of free will brings evil into the world
 - questions nature & not reality of evil
- * # Free Will vs. Predestination
 - if he is omni - free will seems impossible
 - Boethius - Consolation of Philosophy - Book V - something can be divinely known without the knowledge being the cause of it

* * Free Will as Condition for Morality

- no righteous act could be performed except by free choice of the will, and I asserted that God gave it for this reason
- only allows Adam & Eve free will, after that, all are evil.

* * The Free-Will Defense

- if God created humans for free-will, why make them good?
- the fact that God creates creatures that go wrong (moral evil) takes away from neither his omniscience or goodness.

* * Evil as Therapy

- therapeutic evil - evil is the instrument by which God brings reform to his creation
- evil in the world leads to development of individuals and human race

* * Theodicy: Irenaeus vs. Augustine

- Irenaenus - men start out imperfect
- Augustine - started out good

* * Problems with this Position

- how can there be improvement of the soul in something like the Nazi death camps?
- even if you accept that things happen for good, what about the individuals?

* * Evil is irrational

- all human existence is irrational
- evil is supreme evidence of the ultimate irrationality of human experience

* * Nihilism

- nothing is
- says it's a rejection, life is meaningless

* * Defiance of Evil

- Camus - recognize evil but don't accept it
- human dignity lies in constant revolt against irrationality, and evil as the only meaningful response
- suicide & conscious revolt are the two extreme responses to evil

* * Implications of an irrational Universe

- can there be real values in an irrational universe? no
- a life of revolt has no greater value than suicide
-

D-B Library Scavenger Hunt

Name Brandon Buchanan

With your partner answer the following questions using the appropriate sources. Put both the answer and the source.

- ✗ 1. What British magazine is the equivalent of Time, Newsweek and The Business Journal all rolled up into one?

The Economist

- ✗ 2. What is the headline for the Kingsport Times News for Sunday October 24, 2004?

Racing near the finish line

- ✗ 3. What are the names of the three main London newspapers?

The London Times, The Guardian, The London Telegraph

- ✓ 4. Who is the current leader of Burundi?

President Pierre Nkurunziza, www.photius.com

- ✓ 5. What is unique about the book *Sabotage* by Jay Leibold? *FIC LEI*

chase own ending

- ✓ 6. When were Charles and Di married?

July 29, 1981 1100 GMT, news.bbc.co.uk

- ✓ 7. Using the Encyclopedia Book of the Year, what is the number of the jockey of the winning horse, Ponder, in the 1949 Kentucky Derby?

#1, Book of the Year 1950

- ✓ 8. What is the call number of Taking Sides on Political Issues? *320.973 Whelan, library catalog*

- ✗ 9. What was John McCain Jr. (father of current U.S. Senator) the first to do?

- ✗ 10. In Europe, what day of the week is 11/10/99? *Wednesday, computer clock*

Monday

Bonus

- ✗ Who was the only African-American to be held hostage all 444 days in Iran 1980-81?

* * Thomistic Form

- interested in nature of the world
- No matter how long the world has existed it is contingent or dependent upon something else for its existence
- that something is not dependent on anything else
- must be transcendent and the ultimate being, God

* * Popular Form

- interested in age of world
- impossible world has always existed
- there must be a beginning and the cause of time must be something transcendent and ultimate

* * Argument against no beginning

- it is impossible that the world has always existed because that would mean that an infinite number of years have gone by
- it is self-contradictory
- if the universe has always existed then it would have taken forever to reach this point but it could never reach this point, but we are here and now

* * Evidence for the beginning

- big bang theory - expanding universe argues for a big bang that happened 15-20 billion years ago
- second law of thermodynamics - the energy in the universe is being evenly and irreversibly distributed throughout - the big cool down - if it's cooling down, it must have been hot sometime

* * Teleological Argument

- the design argument, St. Thomas's fifth way

* * Paley's Watch Analogy

- if you stumbled upon a watch in a field, you would assume an intelligent designer
- much the same in looking at an eyeball, it calls out for an intelligent creator

* * Darwin and Watch Making

- Paley's believed in a special creation of the universe as it is now
- A long series of causes and effects
- Darwin did not argue existence of God, but how did God create the universe?

* * Theistic Evolution

- the belief in God causes natural evolutionary processes to bring about his desired effect

* * Narrow vs Wide Teleology

- F. R. Tennant - argues for a wide teleology that dwells on the natural processes and laws in order to create an intelligent universe
- focuses on the design of the whole rather than narrow teleology of Paley
- the world in particular vs. the world as a whole

* * The Nature of God

- What caused God?
- by definition, God can't be caused
- to be consistent & rational, you must believe or not.
- God is transcendent & absolute

* * Hume's Criticism

- our knowledge of the world is based on sense experience
- God's creation of the world is NOT a question of sense experience
- therefore, it is impossible to apply the already dubious idea of causality to it or to a transcendent God at all

* * Kant's Criticism

- causality is limited to the sensible world
- it can have no possible bearing on reality
- \therefore , causality can have no possible application to a transcendent God

God + the World

* * Theology

- Theos - Greek for "God"
- study of God

* * Natural Theology

- knowledge of God through natural intellect
- unaided by any supernatural input - nothing transcendent
- not the study of God through nature
- can have no direct bearing on how people live

* * Revealed Theology

- knowledge of God by means of special revelation
- the Torah, Bible, Moses, etc.
- if true, gives knowledge which impacts human salvation
- a philosophy which requires action - a religion

* * Differences In the Two

- in natural theology, people attempt to approach God through their nature faculties
- in revealed theology, God reveals himself to humans

* * Arguments for God

- a posteriori - cosmological, teleological
- a priori - ontological, moral

* * A priori Arguments for God

- ontological - deals with being
- moral - absolute moral law
- Ch. 13 stuff
- natural theology

* * A posteriori Arguments for God

- cosmological - the first-cause argument
- teleological - the design argument
- natural theology

* * Five Ways of St. Thomas

- motion - there must have been a first motion, God was cause, the first motion was effect
- something cannot be the cause of itself

* * The Third Way

- given enough time, all possible states of things become "not-be"
- we know that things exist, therefore there is something possible & necessary & must be transcendent in order for everything to exist

* * 4th & 5th Ways

- gradation - some things are more or better than others, so there must be something to cause this
- intelligence behind the universe, cause of physics, etc - teleological argument

* * Cosmological Argument

- all contingent (or caused) being depends for its existence on some uncaused being
- the cosmos is a contingent being
- \therefore the cosmos depends on its existence on some uncaused being

The Problem of Certainty

I'm sure I'm sure

* * A priori knowledge

- knowledge which comes prior to sense experience
- rationalist
- independent of sense experience

* * a posteriori knowledge

- empiricist
- dependent of senses
- knowledge that comes with senses

* * Analytic knowledge

- like there is "relation of ideas"
- true by definition, doesn't affect reality
- in analytic statement, the predicate is already contained in subject
- all barking dogs bark
- a bachelor is an unmarried male
- A is A

* * Dialectic

- thesis
- antithesis
- new idea - synthesis

* * Synthetic knowledge

- there is "matter of fact"
- not logically certain, but affects reality
- predicate adds to subjects and both are synthesized
- i.e. - dogs bark
- A is B

* * Brief Review

- rationalists & empiricists agree A is A with a priori certainty
- rationalists accept certain knowledge as a posteriori
- can you have knowledge that is certain but affects reality?

* * In Another Way

- is it possible to have real knowledge about what is ultimately really real and that knowledge cannot

* * Kant Copernican revolution

- he says "Yes"
- he argues that it is possible to have synthetic a priori knowledge
- he believed his ideas would have been as big as Copernicus

* * Synthetic a priori knowledge

- time, space, etc. is already there and frames itself to let us experience other things
- he had 12 categories of a priori knowledge

* * Immanuel Kant

- born in East Prussia
- never married, a daily walker, eccentric
- Critique of Pure Reason made him famous

* * How do we know if it's pure?

- pure knowledge has two aspects
- necessity - it has to be
- universally - it applies everywhere

* * How it comes about

- two groups that things are or can actually represent the things as they are
- it is the object alone that makes representation possible (Aristotle) or it is the ~~object~~ representation that makes the object possible
- in first case, the object is empirical and therefore not a priori possible

* * Is it all empirical

- no
- the mind could be a tabula rasa no more than a bathhouse of ideas can be ~~not made of~~ a computer
- experiences must be translated, or it'd be a mess

* * Where Locke was wrong

- There are universals, but beyond the sense experience

* * Where Hume was wrong

- universals were impossible to derive from sense experiences, but blame it when he said they are not necessary & universal

* * Kant's middle way

- claims that his theory takes the middle ground between Locke and Hume

* * The Noumenal World

- noumenon - in itself, purely intellectual perception, independent of perception
- what is really real?

* * The Phenomenal World

- phenomenon - that which appears to be real to the senses, regardless of underlying existence
- what appears to be real

* * The Problem of Kant

- we gain synthetic a priori knowledge, but we can have no knowledge of anything outside of senses
- no knowledge of anything beyond space and time
- he provides a solution

* * "Theoretical" Reason

- knowledge of noumenon
- synthetic a priori knowledge
- what we've been talking about

* * "Practical" Reason

- built on foundation of moral experience
- gives us knowledge of God, freedom, etc.
- categorical imperative
- don't ask... yet

no

CHAPTER IV

CULTIVATION OF THE MIND

65. VARIOUS plans of education have been drawn up by different people, in order to discover the best methods—a most praiseworthy undertaking. One among others suggests that children should be allowed to *learn everything as it were in play*. In an article in the 'Göttingen Magazine' Lichtenberg ridicules the folly of trying to make everything like play for boys, while they ought to be accustomed to serious business at an early period, since they must some time enter a business life. This is an utterly preposterous notion. A child must play, must have his hours of recreation; but he must also learn to work. It is a good thing, doubtless to exercise skill, as it is to cultivate the mind, but these two kinds of culture should have their separate hours. Moreover, it is a great misfortune for man that he is by nature so inclined to inaction. The longer a man gives way to this inclination, the more difficult will he find it to make up his mind to work.

66. In *work* the occupation is not pleasant in itself, but it is undertaken for the sake of the end in view. In *games*, on the other hand, the occupation is pleasant in itself without having any other end in view. When we go for a walk, we do so for the sake of the walk, and therefore the further we go the pleasanter it is; while when we go to a certain place, our object is the company which we shall find there, or something else, and therefore we shall naturally choose the shortest way. The same thing happens in card games. It is really extraordinary how reasonable men can sit by the hour and shuffle cards. It is not, it seems, so easy for men to leave off

being children. For how is this a better game than the children's game of ball? It is true that grown men do not care to ride hobby-horses, but they ride other hobbies.

67. It is of the greatest importance that children should learn to work. Man is the only animal who is obliged to work. He must go through a long apprenticeship before he can enjoy anything for his own sustenance. The question whether Heaven would not have shown us greater kindness by supplying all our wants without the necessity of work on our part must certainly be answered in the negative, for man needs occupation, even occupation that involves a certain amount of restraint. Just as false a notion is it that if Adam and Eve had only remained in Paradise they would have done nothing there but sit together singing pastoral songs and admiring the beauty of Nature. Were this so, they would have been tormented with *ennui*, just as much as other people in the same position.

Men ought to be occupied in such a way that, filled with the idea of the end which they have before their eyes, they are not conscious of themselves, and the best rest for them is the rest which follows work. In the same way a child must become accustomed to work, and where can the inclination to work be cultivated so well as at school? School is a place of compulsory culture. It is very bad for a child to learn to look upon everything as play. He must, it is true, have his time for recreation, but he must also have his time for work. Even though the child does not at once understand the use of this restraint, later in life he will recognise its value. It would be merely training the child to bad habits of inquisitiveness were one always to answer his question: 'What is the use of this?' or, 'What is the use of that?' Education must be compulsory, but it need not therefore be slavish.

68. With regard to the 'free' cultivation of the *mental*

faculties, we must remember that this cultivation is going on constantly. It really deals with the superior faculties. The inferior faculties must be cultivated along with them, but only with a view to the superior; for instance, the intelligence with a view to the understanding—the principal rule that we should follow being that no mental faculty is to be cultivated by itself, but always in relation to others; for instance, the imagination to the advantage of the understanding.

The inferior faculties have no value in themselves; for instance, a man who has a good memory, but no judgment. Such a man is merely a walking dictionary. These beasts of burden of Parnassus are of some use, however, for if they cannot do anything useful themselves they at least furnish material out of which others may produce something good. Intelligence divorced from judgment produces nothing but foolishness. Understanding is the knowledge of the general. Judgment is the application of the general to the particular. Reason is the power of understanding the connection between the general and the particular. This free culture runs its course from childhood onwards till the time that the young man is released from all education. When a young man, for instance, quotes a general rule, we may make him quote examples drawn from history or fable in which this rule is disguised, passages from the poets where it is expressed, and thus encourage him to exercise both his intelligence and his memory, &c.

69. The maxim *We know just so much as we remember* is quite true—hence it is very necessary to cultivate the memory. Things are so constituted that the understanding first follows the mental impression, and the memory must preserve this impression. So it is, for instance, in languages. We learn them either by the formal method of committing them to memory or by conversation—this last being the

best method for modern languages. The learning of words is really necessary, but the best plan is for the youth to learn words as he comes across them in the author he is reading. The youth should have a certain set task. In the same way geography is best learnt mechanically. What is learnt in a mechanical way is best retained by the memory, and in a great many cases this way is indeed very useful. The proper mechanism for the study of history has yet to be found. An attempt has been made in this direction consisting of a system of tables, but the result has not been very satisfactory. History, however, is an excellent means of exercising the understanding in judging rightly. Learning by heart is very necessary, but doing it merely for the sake of exercising the memory is of no use educationally—for instance, the learning of a speech by heart. At all events, it only serves to encourage forwardness. Besides this, declamation is only proper for grown-up men. The same may be said of all those things which we learn merely for some future examination or with a view to future forgetfulness. The memory should only be occupied with such things as are important to be retained, and which will be of service to us in real life. Novel-reading is the worst thing for children, since they can make no further use of it, and it merely affords them entertainment for the moment. Novel-reading weakens the memory. For it would be ridiculous to remember novels in order to relate them to others. Therefore all novels should be taken away from children. Whilst reading them they weave, as it were, an inner romance of their own, rearranging the circumstances for themselves; their fancy is thus imprisoned, but there is no exercise of thought.

Distractions must never be allowed, least of all in school, for the result will be a certain propensity in that direction which might soon grow into a habit. Even the finest talents

may be wasted when once a man is subject to distraction. Although children are inattentive at their games, they soon recall their attention. We may notice, however, that they are most distracted when they are thinking of some mischief, for then they are contriving either how to hide it, or else how to repair the evil done. They then only half hear anything, give wrong answers, and know nothing about what they are reading, &c.

70. The memory must be cultivated early, but we must be careful to cultivate the understanding at the same time.

The memory is cultivated (i) by learning the names which are met with in tales, (ii) by reading and writing. But as to reading, children should practise it with the head, without depending on the spelling. (iii) By languages, which children should first learn by hearing, before they read anything.

Then a well-constructed so-called *orbis pictus* will prove very useful. We might begin with botany, mineralogy, and natural history in general. In order to make sketches of these objects, drawing and modelling will have to be learned, and for this some knowledge of mathematics is necessary. The first lessons in science will most advantageously be directed to the study of geography, mathematical as well as physical. Tales of travel, illustrated by pictures and maps, will lead on to political geography. From the present condition of the earth's surface we go back to its earlier condition, and this leads us to ancient geography, ancient history, and so on.

But in teaching children we must seek insensibly to unite knowledge with the carrying out of that knowledge into practice. Of all the sciences, mathematics seems to be the one that best fulfils this. Further, knowledge and speech (ease in speaking, fluency, eloquence) must be united. The child, however, must learn also to distinguish clearly between

knowledge and mere opinion and belief. Thus we prepare the way for a right understanding, and a *right*—not a *refined* or *delicate*—taste. This taste must at first be that of the senses, especially the eyes, but ultimately of ideas.

71. It is necessary to have rules for everything which is intended to cultivate the understanding. It is very useful mentally to separate the rules, that the understanding may proceed not merely mechanically, but with the consciousness of following a rule.

It is also very useful to bring these rules into a set form, and thus commit them to memory. If we keep the rule in our memory, though we forget its application, we shall soon find our way again.

* Here the question arises whether the rules shall first be studied *in abstracto*, and whether they ought to be studied after they have been applied, or whether the rule and its application should be studied side by side. This last is the only advisable course; otherwise the application of the rule is very uncertain till the rule itself is learned.

But from time to time the rules must also be arranged in classes, for it is difficult to keep them in memory when they are not associated together. Consequently in learning languages the study of grammar must always, to a certain extent, come first.

72. We must now give a systematic idea of the whole aim of education, and the means of obtaining it.

I. *The general cultivation of the mental faculties, as distinguished from the cultivation of particular mental faculties.*—This aims at skill and perfection, and has not for its object the imparting of any particular knowledge, but the general strengthening of the mental faculties.

This culture is either (a) *physical*—here everything depends upon exercise and discipline, without the child needing

to learn any 'maxims'; it is passive for the pupil, who has only to follow the guidance of others—or (b) it is moral. This depends not upon discipline, but upon 'maxims.' All will be spoilt if moral training rests upon examples, threats, punishments, and so on. It would then be merely discipline. We must see that the child does right on account of his own 'maxims,' and not merely from habit; and not only that he does right, but that he does it because it is right. For the whole moral value of actions consists in 'maxims' concerning the good.

Physical education, then, is distinguished from moral in the former being passive, while the latter is active, for the child. He should always understand the principle of an action, and its relation to the idea of duty.

73. II. *The cultivation of particular mental faculties.*—This includes the cultivation of the faculty of cognition, of the senses, the imagination, memory, power of attention, and intelligence—in a word, the inferior powers of the understanding.

Of the cultivation of the senses—eyesight, for instance—we have already spoken. As to the cultivation of the imagination, the following is to be noticed:—Children generally have a very lively imagination, which does not need to be expanded or made more intense by the reading of fairy tales. It needs rather to be curbed and brought under rule, but at the same time should not be left quite unoccupied. There is something in maps which attracts everybody, even the smallest children. When they are tired of everything else, they will still learn something by means of maps. And this is a good amusement for children, for here their imagination is not allowed to rove, since it must, as it were, confine itself to certain figures. We might really begin with geography in teaching children. Figures of animals, plants, and so on,

might be added at the same time; these will make the study of geography more lively. History, however, would probably have to come later on.

With regard to the power of attention, we may remark that this faculty needs general strengthening. The power of rigidly fixing our thoughts upon one object is not so much a talent as a weakness of our mind, which in this case is inflexible, and does not allow itself to be applied at pleasure. But distraction is the enemy of all education. Memory depends upon our attention.

74. As regards the cultivation of the *superior mental faculties*, this includes the cultivation of the understanding, judgment, and reason. The understanding may at first be cultivated, in a certain way, passively also, either by quoting examples which prove the rules, or, on the contrary, by discovering rules for particular cases. The judgment shows us what use to make of the understanding. Understanding is necessary in order that we may understand what we learn or say, and that we may not repeat anything without understanding it. How many people hear and read things which they do not understand, though they believe them! Of that kind are both images and real things.

It is through reason that we get an insight into principles. But we must remember that we are speaking here of a reason which still needs guidance. Hence the child should not be encouraged to be always reasoning, nor should we indulge in reasoning in the presence of children, about things which surpass their conception.

We are not dealing here with speculative reason, but only with reflection upon actual occurrences, according to their causes and effects. It is in its arrangement and working a practical reason.

75. The best way of cultivating the mental faculties is

to *do ourselves* all that we wish to accomplish; for instance, by carrying out into practice the grammatical rule which we have learnt. We understand a map best when we are able to draw it out for ourselves. The best way to understand is to do. That which we learn most thoroughly, and remember the best, is what we have in a way taught ourselves. There are but few men, however, who are capable of doing this. They are called self-taught.

* 76. In the culture of *reason* we must proceed according to the Socratic method. Socrates, who called himself the midwife of his hearers' knowledge, gives examples in his dialogues, which Plato has in a manner preserved for us, of the way in which, even in the case of grown-up people, ideas may be drawn forth from their own individual reason. In many respects children need not exercise their reason. They must not be allowed to argue about everything. It is not necessary for them to know the principles of everything connected with their education; but when the question of duty arises, they should be made to understand those principles. But on the whole we should try to draw out their own ideas, founded on reason, rather than to introduce such ideas into their minds. The Socratic method should form, then, the rule for the catechetical method. True it is somewhat slow, and it is difficult to manage so that in drawing ideas out of one child the others shall also learn something. The mechanical method of catechising is also useful in some sciences; for instance, in the explanation of revealed religion. In universal religion, on the other hand, we must employ the Socratic method. As to what has to be learnt historically, the mechanical method of catechising is much to be commended.

EDUCATION

CHAPTER I

INTRODUCTION

1. MAN is the only being who needs education. For by education we must understand nurture (the tending and feeding of the child), discipline, and teaching, together with culture. According to this, man is in succession infant (requiring nursing), child (requiring discipline), and scholar (requiring teaching).

2. Animals use their powers, as soon as they are possessed of them, according to a regular plan—that is, in a way not harmful to themselves.

It is indeed wonderful, for instance, that young swallows, when newly hatched and still blind, are careful not to defile their nests.

Animals therefore need no nurture, but at the most, food, warmth, and guidance, or a kind of protection. It is true, most animals need feeding, but they do not require nurture. For by nurture we mean the tender care and attention which parents must bestow upon their children, so as to prevent them from using their powers in a way which would be harmful to themselves. For instance, should an animal cry when it comes into the world, as children do, it would surely become a prey to wolves and other wild animals, which would gather round, attracted by its cry.

3. Discipline changes animal nature into human nature. Animals are by their instinct all that they ever can be; some

other reason has provided everything for them at the outset. But man needs a reason of his own. Having no instinct, he has to work out a plan of conduct for himself. Since, however, he is not able to do this all at once, but comes into the world undeveloped, others have to do it for him.

4. All the natural endowments of mankind must be developed little by little out of man himself, through his own effort.

One generation educates the next. The first beginnings of this process of educating may be looked for either in a rude and unformed, or in a fully developed condition of man. If we assume the latter to have come first, man must at all events afterwards have degenerated and lapsed into barbarism.

It is discipline, which prevents man from being turned aside by his animal impulses from humanity, his appointed end. Discipline, for instance, must restrain him from venturing wildly and rashly into danger. Discipline, thus, is merely negative, its action being to counteract man's natural unruliness. The positive part of education is instruction.

Unruliness consists in independence of law. By discipline men are placed in subjection to the laws of mankind, and brought to feel their constraint. This, however, must be accomplished early. Children, for instance, are first sent to school, not so much with the object of their learning something, but rather that they may become used to sitting still and doing exactly as they are told. And this to the end that in later life they should not wish to put actually and instantly into practice anything that strikes them.

5. The love of freedom is naturally so strong in man, that when once he has grown accustomed to freedom, he will sacrifice everything for its sake. For this very reason discipline must be brought into play very early; for when this

has not been done, it is difficult to alter character later in life. Undisciplined men are apt to follow every caprice.

We see this also among savage nations, who, though they may discharge functions for some time like Europeans, yet can never become accustomed to European manners. With them, however, it is not the noble love of freedom which Rousseau and others imagine, but a kind of barbarism—the animal, so to speak, not having yet developed its human nature. Men should therefore accustom themselves early to yield to the commands of reason, for if a man be allowed to follow his own will in his youth, without opposition, a certain lawlessness will cling to him throughout his life. And it is no advantage to such a man that in his youth he has been spared through an over-abundance of motherly tenderness, for later on all the more will he have to face opposition from all sides, and constantly receive rebuffs, as soon as he enters into the business of the world.

It is a common mistake made in the education of those of high rank, that because they are hereafter to become rulers they must on that account receive no opposition in their youth. Owing to his natural love of freedom it is necessary that man should have his natural roughness smoothed down; with animals, their instinct renders this unnecessary.

6. Man needs nurture and culture. Culture includes discipline and *instruction*. These, as far as we know, no animal needs, for none of them learn anything from their elders, except birds, who are taught by them to sing; and it is a touching sight to watch the mother bird singing with all her might to her young ones, who, like children at school, stand round and try to produce the same tones out of their tiny throats. In order to convince ourselves that birds do not sing by instinct, but that they are actually taught to sing, it is worth while to make an experiment. Suppose we take away

half the eggs from a canary, and put sparrow's eggs in their place, or exchange young sparrows for young canaries; if the young birds are then brought into a room where they cannot hear the sparrows outside, they will learn the canary's song, and we thus get singing sparrows. It is, indeed, very wonderful that each species of bird has its own peculiar song, which is preserved unchanged through all its generations; and the tradition of the song is probably the most faithful in the world.

7. Man can only become man by education. He is merely what education makes of him. It is noticeable that man is only educated by man—that is, by men who have themselves been educated. Hence with some people it is want of discipline and instruction on their own part, which makes them in turn unfit educators of their pupils. Were some being of higher nature than man to undertake our education, we should then be able to see what man might become. It is, however, difficult for us accurately to estimate man's natural capabilities, since some things are imparted to man by education, while other things are only developed by education. Were it possible, by the help of those in high rank, and through the united forces of many people, to make an experiment on this question, we might even by this means be able to gain some information as to the degree of eminence which it is possible for man to attain. But it is as important to the speculative mind, as it is sad to one who loves his fellow-men, to see how those in high rank generally care only for their own concerns, and take no part in the important experiments of education, which bring our nature one step nearer to perfection.

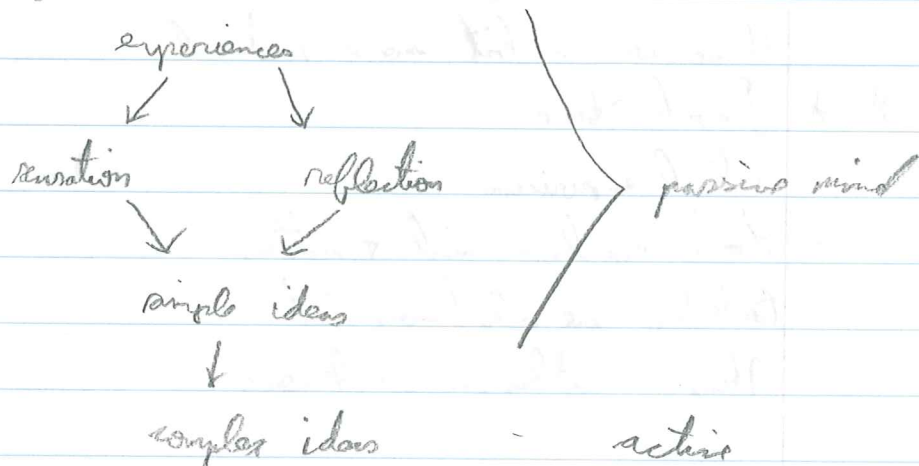
There is no one who, having been neglected in his youth, can come to years of discretion without knowing whether the defect lies in discipline or culture (for so we may call

instruction). The uncultivated man is crude, the undisciplined is unruly. Neglect of discipline is a greater evil than neglect of culture, for this last can be remedied later in life, but unruliness cannot be done away with, and a mistake in discipline can never be repaired. It may be that education will be constantly improved, and that each succeeding generation will advance one step towards the perfecting of mankind; for with education is involved the great secret of the perfection of human nature. It is only now that something may be done in this direction, since for the first time people have begun to judge rightly, and understand clearly, what actually belongs to a good education. It is delightful to realise that through education human nature will be continually improved, and brought to such a condition as is worthy of the nature of man. This opens out to us the prospect of a happier human race in the future. . . .

* * Passive & Active Mind

- passive mind - only the simple ideas of sensation and reflection
- active mind - combine simple ideas into more complex ones

* * Locke's Theory



* * Epistemologically Dualism

- two factors included
- the mind - does the knowing
- the ideas - which are known
- actually 3 factors

* * Representative Perception

- the third factor in knowing the external
- our ideas faithfully represent the objects in the external
- problem is...

* * The Egocentric Predicament

- if all we can know is ideas, then how do the ideas get out of our heads into the external world?
- we are forever trapped in our mind.
- this is a problem with correspondence - which Berkeley solved with idealism

* * The British Empiricists

- Locke → Berkeley → Hume
- The world of one built upon that of his predecessor
- Locke had problems with the ego-centric predicament which Berkeley solved with idealism
- Hume was a bit more radical

* * David Hume

- radical empiricism
- Locke - we know mind & matter
- Berkeley - we only know mind
- Hume - neither can be known

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appearance + reality

Empiricism

I've got to see it to believe it.

* * Empiricism

- all knowledge is delivered through the senses
- opposite of rationalism

* * The Empiricists

- Aristotle
- St. Thomas Aquinas
- John Locke
- David Hume

* * Classical Empiricism

- Aristotle & St. Thomas
- Greek roots
- not modern empiricism

* * Aristotle

- believed in forms, but they took part within the object and couldn't be without
- knowledge must come through sense experience

* * Universal Ideas

- knowledge of general things come from our experience from particular things
- but how do we get from particular to general?

* * Experience & Induction

- we see lots of different men until we conclude the universal idea of man
- like a retreating army
- Aristotle

* * St. Thomas Aquinas

- 13th century Christian philosophy
- "nothing in the intellect which was not first in the senses."
- he believed forms were within the thing
- the intellect is able to free these abstractions

* * Experience & Abstraction

- using experience of particular things the mind is able to abstract (remove something from something else) the universal idea
- this process is called abstraction

* * How Abstraction Works

1. Particular things for this world
2. Universal concept in the mind
3. Knowledge of the world using universal concept

* * John Locke

- founder of modern empiricism
- experience is the source of all ideas
- two kinds of experiences

* * Two Kinds of Experience

- sensation - external experiences that exist outside of our mind and enter into it - hot, cold
- reflection - internal experiences are the operations of our minds - thinking, doubt.
- these are the only ways to write on the blank slate of our minds

* * Perceptions

- impressions - vivid, lively sensations; the immediate raw data of experience
- ideas - copies of impressions which provide the material for thinking
- perceptions = ideas + impressions

* * Causality

- even though one event always seems to come before another, that does not mean that the first event causes the other
- it is a habit of mind, taught by experience, to assume that the second event would take place after the first
- can never prove causality between impressions
- contingency - the thought of one event causes the thought of another

* * Phenomenalism

- all we can know is the phenomena or appearances that are presented to us through perceptions
- as far as can be rationally known there are no substances - neither mental nor material - only bundles of perceptions

* * Two Bases of Knowledge

- only source of knowledge
- relations of ideas
- nothing of fact

* * Relation of Ideas

- ideas which are logically true by virtue of their meanings and relations but are irrelevant to / independent from the world of reality
- math stuff - the sum of the angles of a triangle equals 180°

* Matters of Fact

- ideas which we derive from our sense experiences in the world of reality but which can never be certain because they arise from specific experience

* The Problem With Hume

- our ideas are certain but uninformative
- our ideas are informative, but uncertain

O Brother, Where Art Thou?
Student Handout

- The scene where Ulysses, Pete and Delmar come upon the KKK meeting is a reference to the scene in Wizard of Oz, The (1939) when the Tin Man, Scarecrow and Lion sneak up on the Witch's castle. The chanting and formation marching of the Witch's guards are mimicked by the KKK members. Infiltration is achieved in both films by overpowering three guards and KKK members respectively and donning their garb.
- References to Homer's Odyssey:
 - The names of George Clooney and Holly Hunter's characters (Ulysses & Penelope)
 - one-eyed Big Dan as the Cyclops (blinded with a burning pole)
 - the three girls by the river as the Sirens
 - Ulysses' wife marrying someone else when he comes home
 - the old-man disguise
 - the changing of one of Ulysses' companions into an animal
 - the Baptists as the Lotus-eaters
 - the Ku Klux Klan has a rank of Grand (or Exalted) Cyclops
 - they catch a ride on a hand-pumped railcar that is being operated by a blind prophet, who tells them that they will not find the treasure they seek. The prophet character in the Odyssey was Teiresias, whom Odysseus consulted in the underworld when he needed information on how to get home again
 - Odysseus' first encounter upon reaching his home country is with seven sisters (though not his daughters).
 - the Ku Klux Klan rally as the trip through the Underworld.
 - Odysseus nearly drowned, but clings to a piece of wood.
 - Odysseus and Everett both reveal themselves by performing an act no one else could: Odysseus strings a special bow and fires it through seven rings; Everett sings "Man of Constant Sorrow" as only the leader of the Soggy Bottom Boys can.
 - "Pappy's" given name, Menelaus, is the same as the king who declared war on Troy in the first place.
 - the Latin equivalent of the Greek name Odysseus is Ulysses.
 - "Sing in me O Muse... ", the line at the beginning of the film, is the first line of the Odyssey.
 - the killing of the cattle of Helios by the "fools" in the Odyssey is mirrored by Baby Face Nelson shooting the cows.
 - every time Ulysses falls asleep something bad happens.
 - the song which plays throughout the movie is called "Man of Constant Sorrow", Odysseus means "man who is in constant pain and sorrow".
 - a man of constant sorrow is also a description of Odysseus.
 - Pappy's opposition for Governor's has the first name Homer.

- when Ulysses first meets Big Dan in the restaurant there is a statue of Homer in the background.
- The character of Tommy Johnson is based on famed blues guitarist of the same name who, according to folk legend, sold his soul to the Devil at the crossroads in exchange for his prodigious talent. Robert Johnson, another bluesman and a contemporary of Tommy's (but no relation), borrowed the legend and wrote a song about it (and so the soul-selling legend was subsequently, wrongly, attributed to Robert Johnson).
- The character of Sheriff Cooley fits Tommy Johnson's description of the Devil exactly: "He's white, as white as you folks, with empty eyes and a big hollow voice. He likes to travel around with a mean old hound."
- The character of Pappy O'Daniel is based on W. Lee (Pappy) O'Daniel who served as Governor of Texas (not Mississippi) from 1938-1942 and later as U.S. Senator. He was a flour baron with a radio show and sang with the Light Crust Doughboys. He was famous for refusing to vote in protest of the poll tax.
- The historical "Babyface Nelson" was a gangster named Lester M. Gillis (a.k.a. George Nelson, "Big George" Nelson, Lester Giles, Alex Gillis, etc.) who was known for his hot temper and itchy trigger finger. He was killed in Barrington, Illinois, in November of 1934 - three years before the setting of the film.
- Much like the KKK scene, Ulysses and his men hide from the Cyclops by dressing as sheep.
- In the Odyssey, Ulysses angers the god Poseidon with pride, and is thus sent on his journey. His travels come to an end when he shows humility. Everett similarly scoffs at the baptisms of Pete and Delmar, and soon finds many obstacles in his path homeward. His trek also ends when he humbles himself. Not ironically, water is involved at both points--the baptisms and the flooding--since Poseidon was the god of the waters.
- In addition to the KKK scene, there is another overt homage to The Wizard of Oz. Governor Pappy O'Daniel's pardon speech is reminiscent of the Wizard's farewell speech to Oz. The travelers' long winding journey has come to an end. The wise, portly ruler of the land decrees in front of a large audience that the travelers will help rule the land going forward.
- There is a bust of Homer in the restaurant behind Pappy O'Daniel.

29

Of the origin of ideas

David Hume

Where do all our thoughts originate? David Hume (1711–76) gave a clear answer to this question: in experience. He used the word 'impression' to refer to a direct sensory experience, such as what you see when you look at a cat. 'Idea', for him, like 'impression', is a technical term: it means a copy of an impression, as when you remember seeing your cat, you have an idea of the cat in his sense. His view that our thoughts originate in experience can then be rephrased as all our ideas are copies of impressions. In this extract from his *Enquiry Concerning Human Understanding* (an early version of which appeared in 1748) he explains this view and some of its consequences, including an apparent counter-example in the case of the missing shade of blue.

From David Hume, *Enquiry Concerning Human Understanding*

Of the origin of ideas

Every one will readily allow, that there is a considerable difference between the perceptions of the mind, when a man feels the pain of excessive heat, or the pleasure of moderate warmth, and when he afterwards recalls to his memory this sensation, or anticipates it by his imagination. These faculties may mimic or copy the perceptions of the senses; but they never can entirely reach the force and vivacity of the original sentiment. The utmost we say of them, even when they operate with greatest vigour, is, that they represent their object in so lively a manner, that we could *almost* say we feel or see it: But, except the mind be disordered by disease or madness, they never can arrive at such a pitch of vivacity, as to render these perceptions altogether undistinguishable. All the colours of poetry, however splendid, can never paint natural objects in such a manner as to make the description be taken for a real landskip. The most lively thought is still inferior to the dullest sensation.

We may observe a like distinction to run through all the other perceptions of the mind. A man in a fit of anger, is actuated in a very different manner from one who only thinks of that emotion. If you tell me, that any person is in love, I easily understand your meaning, and form a just conception of his situation; but never can mistake that conception for the real disorders and agitations of the passion. When we reflect on our past sentiments and affections, our thought is a faithful mirror, and copies its objects truly; but the colours which it employs are faint and dull, in comparison of those in which our original perceptions were clothed. It requires no nice discernment or metaphysical head to mark the distinction between them.

Here therefore we may divide all the perceptions of the mind into two classes or species, which are distinguished by their different degrees of force and vivacity. The less forcible and lively are commonly denominated *Thoughts* or *Ideas*. The other species want a name in our language, and in most others; I suppose, because it was not requisite for any, but philosophical purposes, to rank them under a general term or appellation. Let us, therefore, use a little freedom, and call them *Impressions*; employing that word in a sense somewhat different from the usual. By the term *impression*, then, I mean all our more lively perceptions, when we hear, or see, or feel, or love, or hate, or desire, or will. And impressions are distinguished from ideas, which are the less lively perceptions, of which we are conscious, when we reflect on any of those sensations or movements above mentioned.

Nothing, at first view, may seem more unbounded than the thought of man, which not only escapes all human power and authority, but is not even restrained within the limits of nature and reality. To form monsters, and join incongruous shapes and appearances, costs the imagination no more trouble than to conceive the most natural and familiar objects. And while the body is confined to one planet, along which it creeps with pain and difficulty; the thought can in an instant transport us into the most distant regions of the universe; or even beyond the universe, into the unbounded chaos, where nature is supposed to lie in total confusion. What never was seen, or heard of, may yet be conceived; nor in any thing beyond the power of thought, except what implies an absolute contradiction.

But though our thought seems to possess this unbounded liberty, we shall find, upon a nearer examination, that it is really confined within very narrow limits, and that all this creative power of the mind amounts to no more than the faculty of compounding, transposing, augmenting, or diminishing the materials afforded us by the senses and experience. When we think of a golden mountain, we only join two consistent ideas, *gold*, and *mountain*, with which we were formerly acquainted. A virtuous horse we can conceive; because, from our own feeling, we can conceive virtue; and this we may unite to the figure and shape of a horse, which is an animal

at the same time, resembling. Now if this be true of different colours, it must be no less so of the different shades of the same colour; and each shade produces a distinct idea, independent of the rest. For if this should be denied, it is possible, by the continual gradation of shades, to run a colour insensibly into what is most remote from it; and if you will not allow any of the means to be different, you cannot, without absurdity, deny the extremes to be the same. Suppose, therefore, a person to have enjoyed his sight for thirty years, and to have become perfectly acquainted with colours of all kinds except one particular shade of blue, for instance, which it never has been his fortune to meet with. Let all the different shades of that colour, except that single one, be placed before him, descending gradually from the deepest to the lightest; it is plain that he will perceive a blank, where that shade is wanting, and will be sensible that there is a greater distance in that place between the contiguous colours than in any other. Now I ask, whether it be possible for him, from his own imagination, to supply this deficiency, and raise up to himself the idea of that particular shade, though it had never been conveyed to him by his senses? I believe there are few but will be of opinion that he can: and this may serve as a proof that the simple ideas are not always, in every instance, derived from the correspondent impressions; though this instance is so singular, that it is scarcely worth our observing, and does not merit that for it alone we should alter our general maxim.

Here, therefore, is a proposition, which not only seems, in itself, simple and intelligible; but, if a proper use were made of it, might render every dispute equally intelligible, and banish all that jargon, which has so long taken possession of metaphysical reasonings, and drawn disgrace upon them. All ideas, especially abstract ones, are naturally faint and obscure: the mind has but a slender hold of them: they are apt to be confounded with other resembling ideas; and when we have often employed any term, though without a distinct meaning, we are apt to imagine it has a determinate idea annexed to it. On the contrary, all impressions, that is, all sensations, either outward or inward, are strong and vivid: the limits between them are more exactly determined: nor is it easy to fall into any error or mistake with regard to them. When we entertain, therefore, any suspicion that a philosophical term is employed without any meaning or idea (as is but too frequent), we need but enquire, *from what impression is that supposed idea derived?* And if it be impossible to assign any, this will serve to confirm our suspicion. By bringing ideas into so clear a light we may reasonably hope to remove all dispute, which may arise, concerning their nature and reality.

familiar to us. In short, all the materials of thinking are derived either from our outward or inward sentiment: the mixture and compositions of these belongs alone to the mind and will. Or, to express myself in philosophical language, all our ideas or more feeble perceptions are copies of our impressions or more lively ones.

To prove this, the two following arguments will, I hope, be sufficient. First, when we analyze our thoughts or ideas, however compounded or sublime, we always find that they resolve themselves into such simple ideas as were copied from a precedent feeling or sentiment. Even those ideas, which, at first view, seem the most wide of this origin, are found, upon a nearer scrutiny, to be derived from it. The idea of God, as meaning an infinitely intelligent, wise, and good Being, arises from reflecting on the operations of our own mind, and augmenting, without limit, those qualities of goodness and wisdom. We may prosecute this enquiry to what length we please; where we shall always find, that every idea which we examine is copied from a similar impression. Those who would assert that this position is not universally true nor without exception, have only one, and that an easy method of refuting it; by producing that idea, which, in their opinion, is not derived from this source. It will then be incumbent on us, if we would maintain our doctrine, to produce the impression, or lively perception, which corresponds to it.

Secondly. If it happen, from a defect of the organ, that a man is not susceptible of any species of sensation, we always find that he is as little susceptible of the correspondent ideas. A blind man can form no notion of colours; a deaf man of sounds. Restore either of them that sense in which he is deficient; by opening this new inlet for his sensations, you also open an inlet for the ideas; and he finds no difficulty in conceiving these objects. The case is the same, if the object, proper for exciting any sensation, has never been applied to the organ. A Laplander or Negro has no notion of the relish of wine. And though there are few or no instances of a like deficiency in the mind, where a person has never felt or is wholly incapable of a sentiment or passion that belongs to his species; yet we find the same observation to take place in a less degree. A man of mild manners can form no idea of inveterate revenge or cruelty; nor can a selfish heart easily conceive the heights of friendship and generosity. It is readily allowed, that other beings may possess many senses of which we can have no conception; because the ideas of them have never been introduced to us in the only manner by which an idea can have access to the mind, to wit, by the actual feeling and sensation.

There is, however, one contradictory phenomenon, which may prove that it is not absolutely impossible for ideas to arise, independent of their correspondent impressions. I believe it will readily be allowed, that the several distinct ideas of colour, which enter by the eye, or those of sound, which are conveyed by the ear, are really different from each other; though

The Way of Reason

Let's be rational about this.

* * Empiricism

- outside-in philosophy
- sense things and inducing
- the mind is a tabula rasa - John Locke

* * Rationalism

- inside-out philosophy
- theory that some knowledge about actual existing things is delivered by reason alone rather than sense experience

* * Three approaches

- Plato
- Descartes
- René Descartes

* * Basics of Rationalism

- rationalists concede that sense experiences are necessary
- things can only be acquired through reason alone, important ones like justice, love, etc.
- at least some propositions about reality can only be known through reason - every event must have cause, it is morally wrong to kill for fun

* * Plato & Reasoning

- reason sets apart humans from animals - man is a rational animal
- human good & happiness lies in reason & knowledge

* * Body as distraction

- This body is distracted and gets in the way of knowledge

- philosophers should desire death in order to be able to attain true knowledge unencumbered by the body

* * Theory of Innate Ideas

- we are born with innate ideas (not instincts)
- where did we the idea of absolute equality? not from this world
- these ideas are hardwired in the mind
- but where did they come from?

* * Knowledge as Recollection

- we knew before, but trauma comes from birth and we forget
- we remember these absolute ideas as we come to experience things that are like them in the World of Becoming

* * Role of Senses

- senses are responsible for triggering the recollections of knowledge - at least initially - then reason takes over
- the senses are a blessing & curse

* * Descartes + Rationalism

- model of math - no philosophical distractions
- math or reason is the basis for philosophical reasoning

* * Geometrical Method

- philosophy should be like a series of geometrical proofs

* * Intuition -

- ideas are just there
- every event must have a cause

* * Intuitionism

- view that some ideas are universally true and is either of basis for knowledge or one of the bases

* * Deduction

- we can derive further ideas from intuitive truths
- certainty is not an issue, if you do the math, you are correct

* * Noam Chomsky

- linguist
- for 400 years rationalism had been dead, until he started philosophical linguistics
- language universals
- any language can be translated
- universals for grammar
- language is impossible without those structures
- babies learn to speak not by imitation and embraces a rational approach to language

* * Two questions about Chomsky

- How did we come to the structure - we didn't - no explanation
- what is the relation between innate intellectual structure and truth

*Epistemology naturalized –
nature know thyself*

Alex Orenstein

Willard van Orman Quine (1908–) has given a holistic account of our knowledge, emphasizing the interrelation of the parts of our conceptual framework. No belief is in principle immune from possible revision, and this includes beliefs acquired by observation. What makes one theory preferable to another is such aspects as its explanatory power, its parsimony, and precision. Here Alex Orenstein gives a brief overview of Quine's epistemology, bringing out the originality of his approach to the question of our relation to the external world.

From *Routledge Encyclopedia of Philosophy*, edited by Edward Craig

The problem of our knowledge of the external world is traditionally stated as one of how a self with private mental states can come to have knowledge of the external world. Quine's restatement is strikingly more naturalistic:

I am a physical object sitting in a physical world. Some of the forces of this physical world impinge on my surface. Light rays strike my retinas; molecules bombard my eardrums and fingertips. I strike back, emanating concentric air waves. These waves take the form of a torrent of discourse about tables, people, molecules, light rays, retinas, air waves, prime numbers, infinite classes, joy and sorrow, good and evil.

(1966: 215)

In its traditional statement the problem lies in how, starting with 'experience' in the form of immediately given impressions or sense-data, we justify our claims to know objects such as tables, chairs or molecules. This vantage point was that of a first philosophy, intended as providing a foundation of certainty for the sciences by standing outside of them

and legitimizing their accomplishments. Quine rejects this formulation. His naturalized epistemology rephrases the problem as one of how we learn to talk about or refer to objects (ordinary as well as scientific). What are the conditions that lead to reference? How is scientific discourse possible?

The traditional accounts of the linkage between 'experience' and our knowledge vary from mentalistic conceptions, like that of Hume, in which all our ideas are copies of sense impressions, to more neutral linguistic formulations, in which cognitive claims are to be translated into observation sentences. On Quine's holistic account, one cannot deal with the empirical content of sentences, much less of terms – the linguistic correlates of ideas – one by one, either via definition, translation or some other sort of linkage. To study the relation of knowledge and science to observation sentences is to trace the psychological and linguistic development of the knower, that is, the potential user of scientific language. Observation sentences serve as both the starting point in human language learning as well as the empirical grounds for science. The problem of knowledge now is how, starting with observation sentences, we can proceed to talk of tables, chairs, molecules, neutrinos, sets and numbers. One of the reasons for doing epistemology by studying the roots of reference is simply the failure of the traditional empiricists' programme mentioned above. Another is that it enables one to dispense with mentalistic notions such as 'experience' or 'observation'. One relies instead on two components which are already part of a naturalist's ontology: the physical happening at the nerve endings, the neural input or stimulus; and the linguistic entity, the observation sentence. These two serve as naturalistic surrogates for 'experience' and 'observation'. On Quine's empiricist and behaviourist account, observation sentences are those that can be learned purely by ostension and as such as causally most proximate to the stimulus. This account is not vulnerable to attacks on the notion of observation as dependent on the theories one holds, since observation sentences are precisely those which are learnable without any background information. Another point of difference with empiricists concerns the alleged certainty or incorrigibility of observation. Though Quine's observation sentences are assented to with a minimum of background information and are thus included among those sentences less likely to be revised, they are not in principle immune from revision.

Unlike traditional epistemology, then, Quine's epistemology is naturalistic: we cannot stand apart from our place as part of nature and make philosophical judgments. This is part of the theme that philosophy is continuous with science, science being the part of nature most suitable for knowing itself.

The naturalistic philosopher begins his reasoning within the inherited world theory as a going concern. He tentatively believes all of

it, but believes also that some unidentified portions are wrong. He tries to improve, clarify and understand the system from within.

(Quine 1981: 72)

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meditation

not in book

BABY TALK

Learning language, researchers are finding, is an astonishing act of brain computation—and it's performed by people too young to tie their shoes

BY SHANNON BROWNLEE

Inside a small, dark booth, 18-month-old Karly Horn sits on her mother Terry's lap. Karly's brown curls bounce each time she turns her head to listen to a woman's recorded voice coming from one side of the booth or the other. "At the bakery, workers will be baking bread," says the voice. Karly turns to her left and listens, her face intent. "On Tuesday morning, the people have going to work," says the voice. Karly turns her head away even before the statement is finished. The lights come on as graduate student Ruth Tincoff opens the door to the booth. She gives the child's curls a pat and says, "Nice work."

Karly and her mother are taking part in an experiment at Johns Hopkins University in Baltimore, run by psycholinguist Peter Jusczyk, who has spent 25 years probing the linguistic skills of children who have not yet begun to talk. Like most toddlers her age, Karly can utter a few dozen words at most and can string together the occasional two-word sentence, like "More juice" and "Up, Mommy." Yet as Jusczyk and his colleagues have found, she can already recognize that a sentence like "the people have going to work" is ungrammatical. By 18 months of age, most toddlers have somehow learned the rule requiring that any verb ending in

-ing must be preceded by the verb *to be*. "If you had asked me 10 years ago if kids this young could do this," says Jusczyk, "I would have said that's crazy."

Linguists these days are reconsidering a lot of ideas that once considered crazy. Recent findings like Jusczyk's are reshaping the prevailing model of how children acquire language. The dominant theory, put forth by Noam Chomsky, has been that children cannot possibly learn the full rules and structure of languages strictly by imitating what they hear. Instead, nature gives children a head start, wiring them from birth with the ability to acquire their parents' native tongue by fitting what they hear into a preexisting template for the basic structure shared by all languages. (Similarly, kittens are thought to be hard-wired to learn how to hunt.) Language, writes Massachusetts Institute of Technology linguist Steven Pinker, "is a distinctive piece of the biological makeup of our brains." Chomsky, a prominent linguist at MIT, hypothesized in the 1960s that children are endowed from birth with "universal grammar," the fundamental rules that are common to all languages, and the ability to apply these rules to the raw material of the speech they hear—without awaiting

ILLUSTRATIONS BY JOYCE HASSELBARTH FOR USN&WR

ness of their underlying logic.

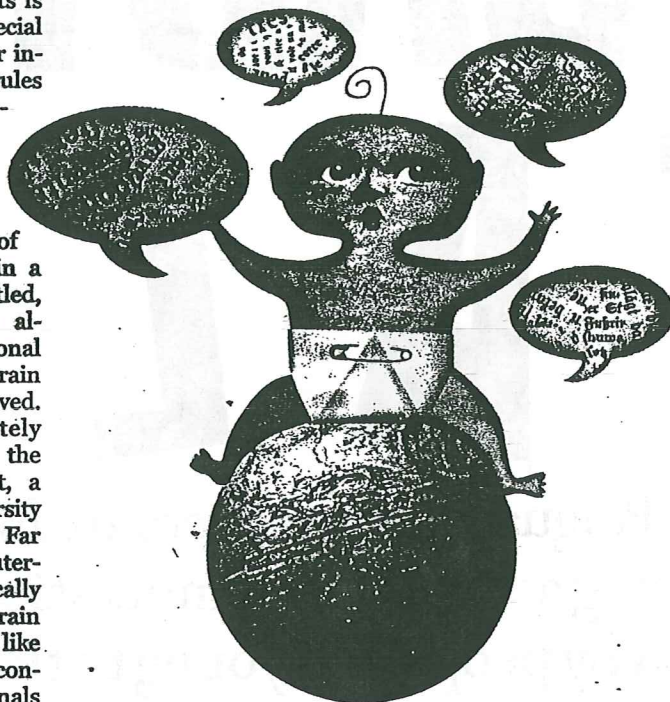
The average preschooler can't tell time, but he has already accumulated a vocabulary of thousands of words—plus (as Pinker writes in his book, *The Language Instinct*,) “a tacit knowledge of grammar more sophisticated than the thickest style manual.” Within a few months of birth, children have already begun memorizing words without knowing their meaning. The question that has absorbed—and sometimes divided—linguists is whether children need a special language faculty to do this or instead can infer the abstract rules of grammar from the sentences they hear, using the same mental skills that allow them to recognize faces or master arithmetic.

The debate over how much of language is already vested in a child at birth is far from settled, but new linguistic research already is transforming traditional views of how the human brain works and how language evolved. “This debate has completely changed the way we view the brain,” says Elissa Newport, a psycholinguist at the University of Rochester in New York. Far from being an orderly, computer-like machine that methodically calculates step by step, the brain is now seen as working more like a beehive, its swarm of interconnected neurons sending signals back and forth at lightning speed. An infant's brain, it turns out, is capable of taking in enormous amounts of information and finding the regular patterns contained within it. Geneticists and linguists recently have begun to challenge the common-sense assumption that intelligence and language are inextricably linked, through research on a rare genetic disorder called Williams syndrome, which can seriously impair cognition while leaving language nearly intact (box, Page 52). Increasingly sophisticated technologies such as magnetic resonance imaging are allowing researchers to watch the brain in action, revealing that language literally sculpts and reorganizes the connections within it as a child grows.

The path leading to language begins even before birth, when a developing fetus is bathed in the muffled sound of its mother's voice in the womb. Newborn babies prefer their mothers' voices over those of their fathers or other women, and researchers recently have found that

when very young babies hear a recording of their mothers' native language, they will suck more vigorously on a pacifier than when they hear a recording of another tongue.

At first, infants respond only to the prosody—the cadence, rhythm, and pitch—of their mothers' speech, not the words. But soon enough they home in on the actual sounds that are typical of their parents' language. Every language uses a



Little polyglots. An infant's brain can perceive every possible sound in every language. By 10 months, babies have learned to screen out foreign sounds and to focus on the sounds of their native language.

different assortment of sounds, called phonemes, which combine to make syllables. (In English, for example, the consonant sound “b” and the vowel sound “a” are both phonemes, which combine for the syllable *ba*, as in *banana*.) To an adult, simply perceiving, much less pronouncing, the phonemes of a foreign language can seem impossible. In English, the p of *pat* is “aspirated,” or produced with a puff of air; the p of *spot* or *tap* is unaspirated. In English, the two p's are considered the same; therefore it is hard for English speakers to recognize that in many other languages the two p's are two different phonemes. Japanese speakers

have trouble distinguishing between the “l” and “r” sounds of English, since in Japanese they don't count as separate sounds.

Polyglot tots. Infants can perceive the entire range of phonemes, according to Janet Werker and Richard Tees, psychologists at the University of British Columbia in Canada. Werker and Tees found that the brains of 4-month-old babies respond to every phoneme uttered in languages as diverse as Hindi and Nthlakampx, a Northwest American Indian language containing numerous consonant combinations that can sound to a nonnative speaker like a drop of water hitting an empty bucket. By the time babies are 10 months to a year old, however, they have begun to focus on the distinctions among phonemes of their native language and to ignore the differences among foreign sounds. Children don't lose the ability to distinguish the sounds of a foreign language; they simply don't pay attention to them. This allows them to learn more quickly the syllables and words of their native tongue.

An infant's next step is learning to fish out individual words from the nonstop stream of sound that makes up ordinary speech. Finding the boundaries between words is a daunting task, because

people don't pause ... between ... words ... when ... they speak. Yet children begin to note word boundaries by the time they are 8 months old, even though they have no concept of what most words mean. Last year, Jusczyk and his colleagues reported results of an experiment in which they let 8-month-old babies listen at home to recorded stories filled with unusual words, like *hornbill* and *python*. Two weeks later, the researchers tested the babies with two lists of words, one composed of words they had already heard in the stories, the other of new unusual words that weren't in the stories. The infants listened, on average, to the fa-

miliar list for a second longer than to the list of novel words.

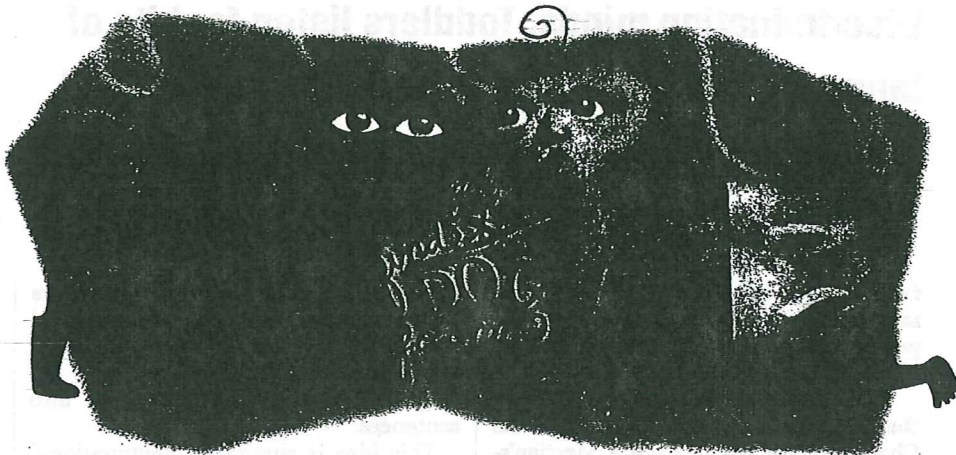
The cadence of language is a baby's first clue to word boundaries. In most English words, the first syllable is accented. This is especially noticeable in words known in poetry as trochees—two-syllable words stressed on the first syllable—which parents repeat to young children (BA-by, DOG-gie, MOM-my). At 6 months, American babies pay equal amounts of attention to words with different stress patterns, like gi-RAFFE or TI-ger. By 9 months, however, they have heard enough of the typical first-syllable-stress pattern of English to prefer listening to trochees, a predilection that will show up later, when they start uttering their first words and mispronouncing giraffe as *ruff* and banana as *nana*. At 30 months, children can easily repeat the phrase "TOM-my KISS-ed the MON-key," because it preserves the typical English pattern, but they will leave out the *the* when asked to repeat "Tommy patted the monkey." Researchers are now testing whether French babies prefer words with a second-syllable stress—words like *be-RET* or *ma-MAN*.

Decoding patterns. Most adults could not imagine making speedy progress toward memorizing words in a foreign language just by listening to somebody talk on the telephone. That is basically what 8-month-old babies can do, according to a provocative study published in 1996 by

the University of Rochester's Newport and her colleagues, Jenny Saffran and Richard Aslin. They reported that babies can remember words by listening for patterns of syllables that occur together with statistical regularity.

The researchers created a miniature artificial language, which consisted of a handful of three-syllable nonsense words constructed from 11 different syllables.

ing how often certain syllables were uttered together. When the researchers tested the babies a few minutes later, they found that the infants recognized pairs of syllables that had occurred together consistently on the recording, such as *bida*. They did not recognize a pair like *kupa*, which was a rarer combination that crossed the boundaries of two words. In the past, psychologists never imagined



The babies heard a computer-generated voice repeating these words in random order in a monotone for two minutes. What they heard went something like "bi-dakupadotigolabubidaku." *Bidaku*, in this case, is a word. With no cadence or pauses, the only way the babies could learn individual words was by remember-

that young infants had the mental capacity to make these sorts of inferences. "We were pretty surprised we could get this result with babies, and with only brief exposure," says Newport. "Real language, of course, is much more complicated, but the exposure is vast."

Learning words is one thing; learning

WILLIAMS SYNDROME

Rare disorder reveals split between language and thought

Kristen Aerts is only 9 years old, but she can work a room like a seasoned politician. She marches into the lab of cognitive neuroscientist Ursula Bellugi, at the Salk Institute for Biological Studies in La Jolla, Calif., and greets her with a cheery, "Good morning Dr. Bellugi. How are you today?" The youngster smiles at a visitor and says, "My name is Kristen. What's yours?" She looks people in the eye when she speaks and asks questions—social skills that many adults never seem to master, much less a third grader. Yet

for all her poise, Kristen has an IQ of about 79. She cannot write her address; she has trouble tying her shoes, drawing a simple picture of a bicycle, and subtracting 2 from 4; and she may never be able to live independently.

Kristen has Williams syndrome, a rare genetic disorder that affects both body and brain, giving those who have it a strange and incongruous jumble of deficits and strengths. They have diminished cognitive capacities and heart problems, and age prematurely, yet they show outgo-

ing personalities and a flair for language. "What makes Williams syndrome so fascinating," says Bellugi, "is it shows that the domains of cognition and language are quite separate."

Genetic gap. Williams syndrome, which was first described in 1961, results when a group of genes on one copy of chromosome 7 is deleted during embryonic development. Most people with Williams resemble each other more than they do their families, with wide-set hazel eyes, upturned noses, and wide mouths. They also share a peculiar set of mental impairments. Most stumble over the simplest spatial tasks, such as putting together a puzzle, and many cannot read or write beyond the

level of a first grader.

In spite of these deficits, Bellugi has found that children with the disorder are not merely competent at language but extraordinary. Ask normal kids to name as many animals as possible in 60 seconds, and a string of barnyard and pet-store examples will tumble out. Ask children with Williams, and you'll get a menagerie of rare creatures, such as ibex, newt, yak, and weasel. People with Williams have the gift of gab, telling elaborate stories with unabashed verve and incorporating audience teasers such as, "Gadzooks!" and "Lo and behold!"

This unlikely suite of skills and inadequacies initially led Bellugi to surmise that Williams might damage the right

the abstract rules of grammar is another. When Noam Chomsky first voiced his idea that language is hard-wired in the brain, he didn't have the benefit of the current revolution in cognitive science, which has begun to pry open the human mind with sophisticated psychological experiments and new computer models. Until recently, linguists could only parse languages and marvel at how quickly children master

phrases to be moved around in a sentence to form questions, relative clauses, and passive constructions.

Statistical wizards. Chomsky posited that children were born knowing these and a handful of other basic laws of language and that they learn their parents' native tongue with the help of a "language acquisition device," preprogrammed circuits in the brain. Findings like New-

properties with the brain and that can accomplish some linguistic feats that real children perform. For example, a neural network can make general categories out of a jumble of words coming in, just as a child learns that certain kinds of words refer to objects while others refer to actions. Nobody has to teach kids that words like *dog* and *telephone* are nouns, while *go* and *jump* are verbs; the way they use such words in sentences demonstrates that they know the difference. Neural networks also can learn some aspects of the meaning of words, and they can infer some rules of syntax, or word order. Therefore, a computer that was fed English sentences would be able to produce a phrase like "Johnny ate fish," rather than "Johnny fish ate," which is correct in Japanese. These computer models even make some

Discriminating minds. Toddlers listen for bits of language like *the*, which signals that a noun will follow. Most 2-year-olds can understand "Find the dog," but they are stumped by "Find gub dog."

their abstract rules, which give every human being who can speak (or sign) the power to express an infinite number of ideas from a finite number of words.

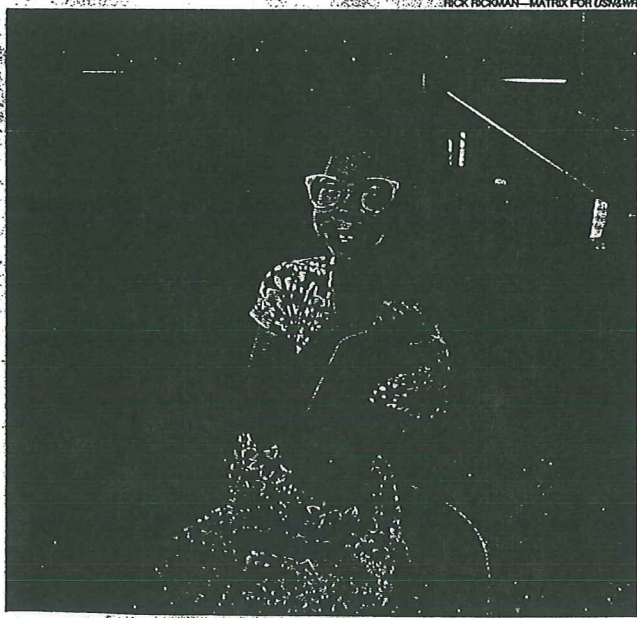
There also are a finite number of ways that languages construct sentences. As Chomsky once put it, from a Martian's-eye view, everybody on Earth speaks a single tongue that has thousands of mutually unintelligible dialects. For instance, all people make sentences from noun phrases, like "The quick brown fox," and verb phrases, like "jumped over the fence." And virtually all of the world's 6,000 or so languages allow

port's are suggesting to some researchers that perhaps children can use statistical regularities to extract not only individual words from what they hear but also the rules for cobbling words together into sentences.

This idea is shared by computational linguists, who have designed computer models called artificial neural networks that are very simplified versions of the brain and that can "learn" some aspects of language. Artificial neural networks mimic the way that nerve cells, or neurons, inside a brain are hooked up. The result is a device that shares some basic

of the same mistakes that real children do, says Mark Seidenberg, a computational linguist at the University of Southern California. A neural network designed by a student of Seidenberg's to learn to conjugate verbs sometimes issued sentences like "He jumped me the ball," which any parent will recognize as the kind of error that could have come from the mouths of babes.

But neural networks have yet to come close to the computation power of a toddler. Ninety percent of the sentences uttered by the average 3-year-old are grammatically correct. The mistakes they do



Kristen Aerts, 9, has the gift of gab but struggles with math.

hemisphere of the brain, where spatial tasks are processed, while leaving language in the left hemisphere intact. That has not turned out to be true. People with Williams excel at recognizing faces, a job that enlists the visual and spatial-processing skills of the right hemisphere. Using functional brain imaging, a technique that shows the brain in action, Bellugi has found that both hemispheres of the brains of people with Williams are shouldering the tasks of processing language.

Bellugi and other researchers are now trying to link the outward characteristics of people with Williams to the genes they are missing and to changes in brain tissue. They have begun concentrating on

the neocerebellum, a part of the brain that is enlarged in people with Williams and that may hold clues to their engaging personalities and to the evolution of language. The neocerebellum is among the brain's newest parts, appearing in human ancestors about the same time as the enlargement of the frontal cortex, the place where researchers believe rational thoughts are formulated. The neocerebellum is significantly smaller in people with autism, who are generally antisocial and poor at language, the reverse of people with Williams. This part of the brain helps make semantic connections between words, such as *sit* and *chair*, suggesting that it was needed for language to evolve.

make are rarely random but rather the result of following the rules of grammar with excessive zeal. There is no logical reason for being able to say "I batted the ball" but not "I holded the rabbit," except that about 180 of the most commonly used English verbs are conjugated irregularly.

Yet for all of grammar's seeming illogic, toddlers' brains may be able to spot clues in the sentences they hear that help them learn grammatical rules, just as they use statistical regularities to find word boundaries. One such clue is the little bits of language called grammatical morphemes, which among other things tell a listener whether a word is being used as noun or as a verb. *The*, for instance, signals that a noun will soon follow, while the suffix *ion* also identifies a word as a noun, as in vibration. Psycholinguist LouAnn Gerken of the University of Arizona recently reported that toddlers know what grammatical morphemes signify before they actually use them. She tested this by asking 2-year-olds a series of questions in which the grammatical morphemes were replaced with other words. When asked to "Find the dog for me," for example, 85 percent of children in her study could point to the right animal in a picture. But when the question was "Find *was* dog for me," they pointed to the dog 55 percent of the time. "Find *gub* dog for me," and it dropped to 40 percent.

Fast mapping. Children may be noticing grammatical morphemes when they are as young as 10 months and have just begun making connections between words and their definitions. Gerken recently found that infants' brain waves change when they are listening to stories in which grammatical morphemes are replaced with other words, suggesting they begin picking up grammar even before they know what sentences mean.

Such linguistic leaps come as a baby's brain is humming with activity. Within the first few months of life, a baby's neurons will forge 1,000 trillion connections, an increase of 20-fold from birth. Neurobiologists once assumed that the wiring in a baby's brain was set at birth. After that, the brain, like legs and noses, just grew bigger. That view has been demolished, says Anne Fernald, a psycholin-

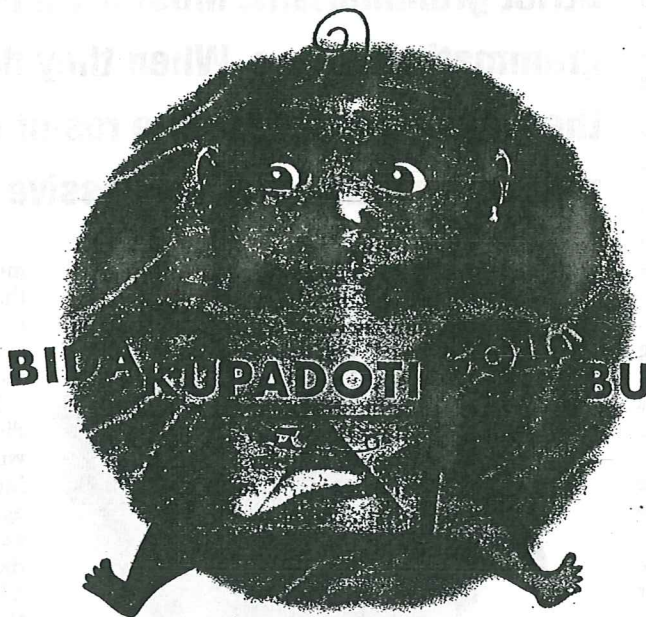
guist at Stanford University, "now that we can eavesdrop on the brain." Images made using the brain-scanning technique positron emission tomography have revealed, for instance, that when a baby is 8 or 9 months old, the part of the brain that stores and indexes many kinds of memory becomes fully functional. This is precisely when babies appear to be able to attach meaning to words.

Other leaps in a child's linguistic prowess also coincide with remarkable changes in the brain. For instance, an

able *bay* has been uttered.

Fast mapping takes off at the same moment as a dramatic reorganization of the child's brain, in which language-related operations, particularly grammar, shift from both sides of the brain into the left hemisphere. Most adult brains are lopsided when it comes to language, processing grammar almost entirely in the left temporal lobe, just over the left ear. Infants and toddlers, however, treat language in both hemispheres, according to Debra Mills, at the University of California-San Diego, and Helen Neville, at the University of Oregon. Mills and Neville stuck electrodes to toddlers' heads to find that processing of words that serve special grammatical functions, such as prepositions, conjunctions, and articles, begins to shift into the left side around the end of the third year.

From then on, the two hemispheres assume different job descriptions. The right temporal lobe continues to perform spatial tasks, such as following the trajectory of a baseball and predicting where it will land. It also pays attention to the emotional information contained in the cadence and pitch of speech. Both hemispheres know the meanings of many words, but the left temporal lobe holds the key to grammar.



Masters of pattern. Researchers played strings of three-syllable nonsense words to 8-month-old babies for two minutes. The babies learned them by remembering how often syllables occurred together.

adult listener can recognize *eleph* as *elephant* within about 400 milliseconds, an ability called "fast mapping" that demands that the brain process speech sounds with phenomenal speed. "To understand strings of words, you have to identify individual words rapidly," says Fernald. She and her colleagues have found that around 15 months of age, a child needs more than a second to recognize even a familiar word, like *baby*. At 18 months, the child can get the picture slightly before the word is ending. At 24 months, she knows the word in a mere 600 milliseconds, as soon as the syl-

This division is maintained even when the language is signed, not spoken. Ursula Bellugi and Edward Klima, a wife and husband team at the Salk Institute for Biological Studies in La Jolla, Calif., recently demonstrated this fact by studying deaf people who were lifelong signers of American Sign Language and who also had suffered a stroke in specific areas of the brain. The researchers found, predictably, that signers with damage to the right hemisphere had great difficulty with tasks involving spatial perception, such as copying a drawing of a geometric pattern. What was surprising was that right hemi-

sphere damage did not hinder their fluency in ASL, which relies on movements of the hands and body in space. It was signers with damage to the left hemisphere who found they could no longer express themselves in ASL or understand it. Some had trouble producing the specific facial expressions that convey grammatical information in ASL. It is not just speech that's being processed in the left hemisphere, says MIT's Pinker, "or movements of the mouth, but abstract language."

Nobody knows why the left hemisphere got the job of processing language, but linguists are beginning to surmise that languages are constructed the way they are in part because the human brain is not infinitely capable of all kinds of computation. "We are starting to see how the universals among languages could arise out of constraints on how the brain computes and how children learn," says Johns Hopkins linguist Paul Smolensky. For instance, the vast majority of the world's languages favor syllables that end in a vowel, though English is an exception. (Think of a native Italian speaking English and adding vowels where there are none.) That's because it is easier for the auditory centers of the brain to perceive differences between consonants when they come before a vowel than when they come after. Human brains can easily recognize *pad*, *bad*, and *dad* as three different words; it is much harder to distinguish *tab*, *tap*, and *tad*. As languages around the world were evolving, they were pulled along paths that minimize ambiguity among sounds.

Birth of a language. Linguists have never had the chance to study a spoken language as it is being constructed, but they have been given the opportunity to observe a new sign language in the making in Nicaragua. When the Sandinistas came to power in 1979, they established schools where deaf people came together for the first time. Many of the pupils had never met another deaf person, and their only means of communication at first was the expressive but largely unstructured pantomime each had invented at home with their hearing families. Soon the pupils began to pool their makeshift gestures into a system that is similar to spoken pidgin, the form of communication that springs up in places where people speaking mutually unintelligible tongues come together. The next generation of deaf Nicaraguan children, says Judy Kegl, a psycholinguist at

Rutgers University, in Newark, N.J., has done it one better, transforming the pidgin sign into a full-blown language complete with regular grammar. The birth of Nicaraguan sign, many linguists believe, mirrors the evolution of all languages. Without conscious effort, deaf Nicaraguan children have created a sign that is now fluid and compact, and which contains standardized rules that allow them to express abstract ideas without circumlocutions. It can indicate past and future, denote whether an action was performed

much their mothers talk to them. At 20 months, according to a study by Janellen Huttenlocher of the University of Chicago, the children of talkative mothers had 131 more words in their vocabularies than children whose mothers were more taciturn. By age 2, the gap had widened to 295 words.

In other words, children need input and they need it early, says Newport. Parking a toddler in front of the television won't improve vocabulary, probably because kids need real human interaction to attach

Strict grammarians. Most 3-year-olds rarely make grammatical errors. When they do, the mistakes they make usually are the result of following the rules of grammar with excessive zeal.



meaning to words. Hearing more than one language in infancy makes it easier for a child to hear the distinctions between phonemes of more than one language later on.

Newport and other linguists have discovered in recent years that the window of opportunity for acquiring language begins to close around age 6, and the gap narrows with each additional candle on the birthday cake. Children who do not learn a language by puberty will never be fluent in any tongue. That means that profoundly deaf children should be exposed to sign language as early as possible, says Newport. If their parents are hearing, they should learn to sign. And schools might rethink the practice of waiting to teach foreign languages until kids are nearly grown and the window on native command of a second language is almost shut.

once or repeatedly, and show who did what to whom, allowing its users to joke, recite poetry, and tell their life stories.

Linguists have a long road ahead of them before they can say exactly how a child goes from babbling to banter, or what the very first languages might have been like, or how the brain transforms vague thoughts into concrete words that sometimes fly out of our mouths before we can stop them. But already, some practical conclusions are falling out of the new research. For example, two recent studies show that the size of toddlers' vocabularies depends in large measure on how

Linguists don't yet know how much of grammar children are able to absorb simply by listening. And they have only begun to parse the genes or accidents of brain wiring that might give rise, as Pinker puts it, to the poet, the raconteur, or an Alexander Haig, a Mrs. Malaprop. What is certain is that language is one of the great wonders of the natural world, and linguists are still being astonished by its complexity and its power to shape the brain. Human beings, says Kegl, "show an incredible enthusiasm for discourse." Maybe what is most innate about language is the passion to communicate. ■

Brain Check

Scientists are mapping the pathways that link emotion to health. The challenge for the rest of us is to put the discoveries to work

By Herbert Benson, M.D., Julie Corliss and Geoffrey Cowley
Newsweek

Sept. 27 issue - Imagine you're allergic to the oil of the Japanese lacquer tree—so allergic that the brush of a leaf against your skin provokes an angry rash. Strapping a blindfold over your eyes, a scientist tells you she's going to rub your right arm with lacquer leaf and your left arm with the innocuous leaf of a chestnut tree. The rubbing commences, and before long your right arm is covered with burning, itchy welts. Your left side feels fine. No surprise, until you learn that your left arm—not the right—is the one that got lacquered. Or imagine that Parkinson's disease has reduced your walk to a shuffle and left your hands too shaky to grasp a pencil. You enroll in a study and receive an experimental surgical treatment, which dramatically improves both your gait and your grip. You're ready to declare it a miracle of modern medicine, when you discover that the operation was a sham. The surgeons merely drilled a small hole in your skull and then patched it.

That thoughts and feelings can affect our health is hardly news. In the span of a few decades, mind-body medicine has evolved from heresy into something approaching cliché. So why is NEWSWEEK devoting this Health for Life report to the mind-body connection? Because the relationship between emotion and health is turning out to be more interesting, and more important, than most of us could have imagined. Viewed through the lens of 21st-century science, anxiety, alienation and hopelessness are not just feelings. Neither are love, serenity and optimism. All are physiological states that affect our health just as clearly as obesity or physical fitness. And the brain, as the source of such states, offers a potential gateway to countless other tissues and organs—from the heart and blood vessels to the gut and the immune system. The challenge is to map the pathways linking mental states to medical ones, and learn how to travel them at will.

That effort is now burgeoning. The federal government's five-year-old Integrated Neural Immune Program will spend \$16 million on mind-body research next year, and private foundations will spend millions more. At least one leading managed-care organization, HIP USA, has started to cover mind-body practices, and Medicare now reimburses for certain relaxation techniques administered by psychologists. Hospitals, for their part, are opening mind-body clinics—and yoga classes are spreading from health clubs into shopping malls. According to a recent government survey, nearly half of all Americans used mind-body interventions in 2002. The respondents embraced practices ranging from deep breathing and progressive muscle relaxation to meditation, hypnosis and guided imagery. Close to half of them also said they prayed—perhaps the oldest and most basic form of mind-body medicine.

They had plenty to pray for. Modern life is rife with potential stressors, and there is now little question that uncontrolled stress can kill. Harvard physiologist Walter Cannon recognized 90 years ago that when confronted by a threat—physical or emotional, real or imagined—the body responds with a rise in blood pressure, heart rate, muscle tension and breathing rate. We now know that this physiological "stress response" involves hormones and inflammatory chemicals that, while valuable in measured bursts, can foster everything from headaches to heart attacks in overdose. Cannon verified that people who believed they'd been hexed by voodoo witch doctors could drop dead from a sudden and massive stress response. We now know that chronic stress, though not always fatal, can disrupt the digestive system, worsen symptoms of menopause and interfere with fertility. Indeed, experts now believe that 60 to 90 percent of all doctor visits involve stress-related complaints.

As researchers chart the health effects of hostility and hopelessness, they're also gaining unprecedented insights into the mind's power to heal. The "placebo response" has been widely recognized since the 1950s, when Harvard's Dr. Henry Beecher described the phenomenon. Until recently, most experts dismissed it as a feat of self-deception, in which people who remain sick (or never were) convince themselves they're better. But we're now discovering that expectations can directly alter a disease process. Consider those Parkinson's sufferers who improved with sham surgery. Using PET scans, researchers compared their brains with those of patients who received an active treatment. As expected, the active intervention caused a significant rise in dopamine, the neurotransmitter that people with Parkinson's lack. But the patients who improved on placebo experienced a similar dopamine surge. A related study found that fake analgesics could boost the brain's own pain-fighting mechanisms. In both cases, the placebo response was not an imaginary lessening of symptoms but an objective, measurable change in brain chemistry.

Placebos are just the beginning. Mounting evidence suggests that any number of soothing emotional experiences can improve our physical health. At Duke University, researchers have found that religious observance is associated with lower rates of illness and hospitalization. In studies of HIV-positive men, researchers at UCLA have found that optimism is associated with stronger immune-cell function. And research at Harvard suggests that the "relaxation response"—the deep sense of calm we can achieve through yoga, prayer or simple deep-breathing exercises—can help counter the effects of chronic stress. We now believe that the body produces more nitric oxide when deeply relaxed, and that this molecule acts as an antidote to cortisol and other potentially toxic stress hormones.

Can we teach ourselves to be healthier? That is the central question of mind-body medicine, and the answer is not an unqualified yes. Stressful life circumstances are sometimes inescapable (no one chooses poverty or discrimination). Heredity and temperament leave some of us more stress-prone than others. And prayer is clearly no substitute for penicillin or a decent diet. Yet mind-body techniques can improve almost anyone's quality of life. Meditation may not cure cancer, but by alleviating fear and softening the side effects of treatment, it leaves many patients feeling less victimized. Stress-related illness often defies conventional remedies, and when we persist with high-tech pills and procedures, the costs of treatment can easily outweigh the benefits. Mind-body medicine offers a saner starting place. If it fulfills half its promise, it could reduce medical costs while improving our health and our lives. And whatever its limitations, it has the advantage of doing no harm.

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* * Richard Rorty

- metaphilosophy - a philosophy of philosophy

* Historicism

- to put values in historical context to understand them
+ see if they help us

- leads to denial of foundationalism

- for example, making truth the Truth serves no purpose but to confuse

* Pluralism

- you can't be neutral when judging a philosophy

- every philosophical position is a genuine option

- for example, no neutral position for an idealist & a materialist

- everything is up for grabs

* Edifying philosophy

- don't stop the debate

- don't let philosophy become into one particular set of rules

- there should be no orthodoxy

* * Problems

- is an attack on foundationalism relevant? Just because
in the future there might be need to deal with, say,
determiners... doesn't mean

- seems to define necessary truths of his own as he destroys
others

Skepticism
I doubt it.

* * Skepticism

- absolute knowledge is impossible, & that inquiry must be a process of doubting in order to approximate or obtain relative certainty

* * Types of Skepticism

- commonsense skepticism
- philosophical skepticism - absolute knowledge is impossible
- absolute skepticism - "I can't know anything."

* * Commonsense

- keep you from being glib, superstitious, & prejudiced
- combats personal intellectual arrogance and presumption -
Smartness Principle

* * Philosophical

- not a particular philosophical, but a tendency by some to deny or doubt some of the most basic philosophical claims
- doubt causality, God, underlying substances, & the external world as we perceive it

* * Absolute

- doubt possibility of knowledge itself
- some go as far to say they can know nothing at all

* * Pyrrho of Elis (around B.C.)

- nothing exists
- if it did, you couldn't know it
- if you knew something existed, you could not express.
- bottom line - Nothing is certain.

* * The Argument for Skepticism

- if even commonly "known" things (like how a rose smells) cannot be agreed upon, then how can we agree on emotion & intellect?
- all this relativity and these differences leads to suspension of judgement concerning everything

* * Problems of Absolute Skepticism

- is it impractical?
- is it possible?
- if it is true, then it is false
- we cannot know anything
- we cannot know that we cannot know anything
- etc

* * Self-Refuting Proposition

- The sentence in this box is false.
- if something refutes itself

* * Post-Modernism

- Holistic approach - seeks to see similarities in fields, culture, etc
- practical over theoretical - "What good is it to me?"
- tends to stress relativity of words, & historical periods & traditions
- facts are not neutral, you color everything you observe.

~~* * Richard Rorty~~

Am I an idealist?

Define the meaning of "dog." Four legs, fluffy, and a tail is not the definition. Sure the dog has those qualities, but what is a dog? Is the definition of a dog a certain number of chromosomes which make the genetic makeup of a dog? No, that is a quality also, similar to saying a desk is made of atoms. Clearly, a dog, or anything else, cannot be defined, only described. If a description of something is an idea and all things cannot be defined, but only described, then can we conclude that all things are ideas? Logically, yes, but where do the ideas come from? From something to perceive it. If nothing is around to perceive a falling tree, then not only does it not make a sound, the tree does not exist until something perceives it. Yes, I am an idealist in a sense. If I am not thinking about something, to me, it does not exist, but to someone perceiving it, it does exist to them. In a sense, it is a mass solipsist view. In nothing perceives it, it doesn't exist until something perceives it.

NOT BAD
95

How is mind + matter related?

Mind and matter are related in the fact that mind cannot exist without matter, and though mind is composed of matter, it is not perceived to be made of matter. To my analogy of the computer, the hardware is matter and the software is the mind. - NICE ANALOGY

With no hardware, there is no software. The software that runs on a computer is electricity running through the hardware. The current can run because the hardware components have been arranged to allow an efficient current to run through it. The software is electricity in different forms, one form to calculate numbers, another form to store data, and another form to output light on the monitor so that a user can see what he/she is doing. Although mind is composed of matter, it is Gestalt, meaning the whole is greater than the sum of its parts. VERY GOOD

Though a river is composed of many water molecules, it is not perceived in that way normally, but can be perceived as a source of water or a raging flood if a storm comes. In conclusion, mind and matter are related in that mind is composed of matter, but is not perceived as matter as a whole.

CHAPTER THREE

The Dynamics of Personality

In the previous chapter we took up the organization of personality and described some of the prominent processes and functions of its three provinces, the id, the ego, and the superego. In this chapter our purpose is to show how these three systems operate and how they interact with one another and with the environment.

I. PSYCHIC ENERGY

The human organism is a complicated energy system, deriving its energy from the food it eats and expending it for such purposes as circulation, respiration, digestion, nervous conduction, muscular activity, perceiving, remembering, and thinking. There is no reason to believe that the energy which runs the organism is essentially any different from the energy which runs the universe. Energy takes many forms—mechanical, thermal, electrical, and chemical—and is capable of being transformed from one form into another. The form of energy which operates the three systems of personality is called *psychic energy*. There is nothing mystical, vitalistic, or supernatural about the concept of psychic energy. It performs work or is capable of performing work as does any form of energy. Psychic energy performs psychological work—e.g., thinking, perceiving, and remembering—just as mechanical energy performs mechanical work.

One can speak of the transformation of bodily energy into psychic energy as well as the transformation of

Have we
reached
a topic—
it is not
noted.
when I
should put
attention again.

psychic energy into bodily energy. These transformations are continually taking place. We think (psychic energy) and then we act (muscular energy), or we are stimulated by a pattern of sound waves (mechanical energy) and we hear (psychic energy) someone talking. Just how these transformations take place is not known.

II. INSTINCT

All of the energy used for performing the work of the personality is obtained from the *instincts*. An instinct is defined as an inborn condition which imparts direction to psychological processes. The sex instinct, for example, directs the psychological processes of perceiving, remembering, and thinking toward the goal of sexual consummation. An instinct is like a river that flows along a particular waterway.

An instinct has a *source*, an *aim*, an *object*, and an *impetus*. The principal sources of instinctual energy are bodily needs or impulses. A need or impulse is an excitatory process in some tissue or organ of the body which releases energy that is stored in the body. For example, the physical condition of hunger activates the hunger instinct by providing it with energy. This instinctual energy then imparts goal-direction to the psychological processes of perception, memory, and thought. One looks for food, tries to remember where food has been found on previous occasions, or plans a course of action by which food can be obtained.

The final aim of an instinct is the removal of a bodily need. The aim of the instinct of hunger, for example, is to remove the physical condition of hunger. When this is done, no more bodily energy is released, the hunger instinct disappears, and the individual returns to a state of physiological and psychological quiescence. Stated in another way, the aim of an instinct is to eliminate the source of that instinct.

In addition to the final aim of quiescence, Freud observed that there are also subordinate aims that have to be fulfilled before the final aim can be reached. Before hunger can be appeased it is necessary to find food and

take it into one's mouth. The finding and eating of food are subordinate to the elimination of hunger. Freud called the final goal of an instinct its *internal aim*, and the subordinate goals of an instinct its *external aims*.

An instinct is said to be *conservative* because its goal is to return a person to the quiescent state which existed prior to disturbance by an excitatory process. The course of an instinct is always from a state of tension to a state of relaxation. In some instances, notably in the satisfaction of the sex impulse, there is a mounting of tension prior to the final discharge. This in no way refutes the general principle of instinct functioning, because the ultimate aim of the sex drive is relief from excitation no matter how much tension may be generated prior to the final discharge. In fact, people learn to build up a lot of tension because the sudden release of large quantities of tension is very pleasurable.

In other words, an instinct always tries to bring about a *regression* to an earlier condition. This tendency of an instinct to repeat over and over again the cycle from excitation to repose is called the *repetition compulsion*. There are numerous examples of repetition compulsion in everyday life. The periodic and regular phases of waking activity followed by sleep is one example. Three meals a day is another. Sexual desire followed by sexual gratification is still another.

In summary, then, the aim of an instinct is characterized by being conservative, regressive, and repetitive.

The object of an instinct is the object or means by which the aim is accomplished. The object of the hunger instinct is eating food; of the sex instinct, copulation; and of the aggressive instinct, fighting. The object or means is the most variable feature of an instinct, since many different objects and activities can take the place of one another. As we shall see in Chapter 4 on the development of personality, the elaboration of the means by which instincts reach their goal of tension-reduction constitutes one of the principal avenues of personality development.

The impetus of an instinct is its strength or force,

which is determined by the amount of energy that it possesses. Strong hunger exerts a greater impulsion upon the psychological processes than weak hunger does. When a person is very hungry, his mind dwells upon food to the exclusion of practically everything else. Similarly, when a person is very much in love, it is hard for him to think about anything else.

The seat of the instincts is the id. Since the instincts constitute the total amount of psychic energy, the id is said to be the original reservoir of psychic energy. In order to form the ego and superego, energy is withdrawn from this pool. How this withdrawal takes place is the subject of the next section.

* * More Objections

- functionalist argument - isn't it possible to perceive pain in more than just the human way?
- wouldn't a robot who looks, acts, etc, just like a human have a different way to perceive pain?
- \therefore mind is not just a human brain

* * Behavior

- school of psychology which emphasizes observable behavior at the proper object of psychological behavior

* * Soft vs. Hard Behaviorism

- soft - limits itself to the description of observable behavior
- hard - extends itself beyond the task of describing behavior to the claim that there is nothing beyond behavior

* * B. F. Skinner

- Beyond Freedom & Dignity
- every action is reducible to physical states
- on that foundation he builds...

* * Technology of Behavior

- a manipulation of human behavior and transformation of values is accordance with the progress and ideas of evolutionary process
- within this he...
- denies free will & all human transcendental
- reinterprets values as dependent on social conditions
- argues for the abolition of man as he is traditionally conceived for betterment of the species

* * Casualty vs. Determinism

- every event has a cause (casualty)
- the next logical (?) step says that every event is causally determined - it couldn't have happened otherwise

* * Determinism & Morality

- if an action can't happen any other way, what is the point of choosing?
- what about free will?
- what about ought?
- what about morality?

* * Determinism & Thinking

- we're told to think, analyse, judge, etc. but that puts intellect at difference from & ∴ higher than the thing it judges
- to the determinist, even determinism is causally determined

* * Transcendence

- Do you believe that your total experience, especially intellect and morality are simply materialistic?
- Do you believe that there is anything about you that is different than any

* How many people can read hex if only you and dead people read hex? $3\frac{1}{2}$ 57006

Materialism

* * Naturalism

- the belief that all that exists can be investigated scientifically
- denounces forms of the supernatural
- no transcendent reality
- materialism is a form of naturalism

* * Materialism

- the metaphysical doctrine that matter with all its motions and qualities is the ultimate reality
- in our definitions, not the popular meaning is which all you think about is acquiring more stuff
- to a philosopher, materialism != consumerism

* * Solves Mind - Body Dualism

- just like idealism is that it solves the mind-body duality problem in the opposite way
- there is no mind, only matter

* * Mechanicalistic Materialism

- the universe & everything in it is a machine
- something whose motions are completely determined by universal laws
- man is a machine
- all thoughts, emotions, ~~consequence~~^{consciousness}, is reducible to workings of the organs, nerves, impulses, etc.

* * Determinism

- every event, act, & decision is the inevitable consequence of antecedents, such as physical, psychological, or environmental

conditions that are independent of human will
- predestination without God

* * "Denaturalization" of Matter

- Matter is not as we once imagined it to be - at the subatomic level \therefore all levels
- matter can perhaps no longer be viewed objectively at the subatomic level but subjectively because of the influence of observer

* * The Identity Thesis

- I. J. C. Dummett
- mental states are identical with brain states
- an emotion is a series of psycho-neurological responses to a given set of circumstances
- says, it is impossible for a physical entity to evolve into a nonphysical state, so it must be physical

* * Objections

- mental states & brain states are too different to be explained by science
- I can be religious, but can my body be religious?
- if body & self are one then both their states must be one at all times
- if I believe today is Feb. 21, then I am in the state of having a false belief, but how can my body be in a false physical state?
- how can psychologist determine difference between false & true physical state?

What is the nature of reality?

Prove it!

To include philosophy from The Matrix, which where many of philosophical bases come from, the nature of reality is a mix of objective and subjective reality. The objective reality is "hidden" or at least "there" while we perceive the objective reality in different forms, creating a subjective reality. If reality is defined by the real, and real is defined by what you sense, then reality is only electrochemical impulses within the brain. This means whether you are asleep or awake, you can be in reality. The question depends upon whether or not which reality matters. To be in a dream, if you couldn't awake from the dream, how would you know the difference between the dream world and the real world? Though the real world is one reality, the dream world becomes another reality. In theory, there could be an infinite number of realities. To say a dream cannot be real because of non-rational events would be close-minded because possibly the reality consists of different physical principles or only normal physical principles being bended.

In conclusion, a reality is objective with people creating subjective realities from it. Our mind derives pictures and those electrochemical impulses create more realities because the one we are in simply has not much to do.

YEAH
BUT WOULD
MOST PEOPLE
ACCEPT DREAMS
AS BEING AS
REAL AS THE
WAKING
WORLD?
WHY NOT
DO YOU
THINK?

VERY GOOD 98

What do Forms?

The answer of form is that there is no world of being because something cannot be outside of time and non-changing. Using Ockham's razor, eliminating the world of being leaves the world of becoming or the present reality and eliminate complication. If everything has forms, then the forms would need forms and the cycle would continue infinitely. Our perception of a particular thing is not a form in the world of being, but a human created symbol for the particular thing. The hierarchy of forms can be applied to this societal view and still be very relative. True knowledge would be better than reason and so on. The idea of forms are a good explanation and the Judeo-Christian faith would support this idea because the form of all forms would be God, but God would need a higher form, also. In short, forms exist by only how we learn and perceive them.

VERY GOOD

99

* Solipsism

- one reality, all things depend on existence of perceivers
- don't make be/bo mad!
- Berkeley wasn't one
- passivity of perception - you just see something, you don't imagine it

* The problem

- all things exist in minds only as ideas
- but things do exist outside of our minds

* God

- big proof for existence of God
- everything exist as ideas in our minds and independent of us in the mind of God - Reality is all mind

* the syllogism

- the sensible world exists, if it is perceived by the mind
- the sensible world exists unperceived by human minds
- The sensible world must be perceived by a non-human mind

* What are the objections?

- psychological vs. philosophical
- he denies sensible things
- misuses ordinary meaning of words
- no distinction between real things & ideas of them
- makes God the author of evil

* these more problems

- we can conceive things we can't experience, so ideas may not be just sensations
- mind is a mental substance, not just a bundle of ideas
- speaking of mind as a substance can be a category mistake

* The Syllogism

- ideas only exist in minds
- all things are ideas
- all things exist only in minds

* The Discontinuity of Idealism

- solves dualism problem
- no matter, only mind
- epistemology - what you perceive is what is real; can't be deceived by senses

* Matter as a Concept

- What is matter?
- all you will describe is qualities, not matter itself
- idealism solves problem of matter because there is no matter

* The Unexperienced as Inconceivable

- once you think of an experience, you've experienced it
- when you experience, you give it qualities, thus you perceive it

* Inseparability of Primary & Secondary Qualities

- can't imagine a ball without a color
- since you can't imagine a ball without color, the qualities are the same; primary qualities are subjective.

* Relativity of All Qualities

- not only are primary qualities subjective, they're relative
- it may look like a rectangle, but what do you really perceive?
- all qualities are relative to the perceiver

Idealism

* * Idealism

- it's all in your head
- the monist view is composed of mind

* Objective

- made of mind & ideas, but they exist without our participation
- independent from us

* Subjective Idealist

- all things are ideas but cannot exist without us
- if all perceivers cease to exist, all objects cease to exist

* John Locke

- mind-matter dualist - supported by substantism
- ideas are objects of knowledge
- the knower has ideas in his head
- the idea is what is important
- matter has primary & secondary qualities

* Primary & Secondary Qualities

- independent of perceivers (~~idea~~, size, shape) objective qualities
- secondary - depend on perceivers (color, sound, texture)

* George Berkeley

- reacting to Locke and Descartes
- Irish Anglican churchman and eventually bishop
- "Esse est percipi. To be is to be perceived."
- the falling tree is the forest... does it exist?

Mind & Matter

* What is a mind?

- is it the same thing as a brain?
- how are they related?
- is there substance to your mind or only substance to your brain?
- when your brain ceases to function, what happens to your mind?

* Dualism

- the metaphysical view that all things are reducible to two different realities
- mind-matter dualism - the two basic realities are mind & matter

* Rene Descartes

- Mathematician, scientist, the father of modern philosophy
- new approach to knowledge "revealed" to him in a series of dreams
- divine revelation

* New Approach

- forget senses
- turned to what could be known with certainty, using reason alone - "inside-out" philosophy

* The Geometrical Method

- one big geometric proof
- intuition - the way to know certain basic, undoubted truths
- deduction - the way to build on these truths
- thus a whole system of philosophy could be constructed

- his first step was to doubt
- doubt anything & everything
- he hoped to find at least one undeniable truth from which he could build his entire philosophy
- systematic doubt

* He Doubted Everything

- senses - thus the world of sense experiences
- reasoning - people often make mistakes in simple reasoning
- dreams - which is more real, dreaming or waking
- math - an "evil genius" could be deceiving us about mathematical beliefs

* the only left was him

- if I am thinking, then I must be in existence
- "cogito ergo sum"
- I think therefore I am

* What is "I am"?

- spirit? mind? soul?
- yes, but more, "a substance the whole essence or nature of which is to think"
- a "thinking substance"

* Thinking Substance

- thinking - intellectual operations
- substance - the thing that does the thinking, but not a physical substance
- the nature of the mind is to think
- you can't have thinking without a thinking substance

* Deduction of God

- Eidological Argument for God
- the "idea" argument for God
- Ontological Argument for God
- the "being" argument for God

* Eidological Argument for God

- if I have an idea of perfection, there must be a perfect being as its cause
- I have an idea of perfection
- Therefore, there must actually exist a perfect being

* Ontological Argument for God

- being with the idea of the most perfect being
- the concept of God implies his existence
- the concept of God means a supremely perfect being who possesses the sum of all possible perfections
- he must have all the omni's - omnipotent
- if you get a hold of a God, then you can hold of his existence

* Matter

- without God we cannot know for sure that matter exists - we could be deceived
- God allows us to posit matter
- everything from God is clear, distinct, and good
- it has to exist, we can't be deceived because of God

* Matter & Mistakes

- our ideas can become confused from things below.
Never from God because he only imparted in us good, true thoughts, ideas, etc. - he cannot do otherwise
- if you think the sky is plaid, it's not God's fault, it is yours; you've overstepped the limits of clear ideas, from ideas

* Material World

- independent of our will, things we sense
- if there is a substance that upholds the intellect then there must be one for the material world
- the substance is matter - it occupies space and has dimensions

* How He Reasoned

- systematic doubt - cogito - mind - God - matter

* Some Objections

- Why get rid of senses? some philosophers use only their senses
- Does thinking require thinking?
- Descartes uses some circular reasoning
- equivocations - using word two different ways incorrectly

* The Big Objection

- the Mind Body problem - if they are both different substances, how are they connected?
- Descartes' solution - interactionism - there is a kind of interaction between mind & matter

- interaction takes place in the pineal gland. (pigment color, sexual maturity, and biorhythms)
- not easy to explain a causal relationship between two unlike substances

* Other solutions

- occasionalism - when an event occurs, God creates the appropriate idea and response in the mind
- preestablished harmony - God preordained that body & mind will be in sync at all times
- double aspect theory - there is only 1 reality, but we only call it 2
- idealism - no matter, only mind
- materialism - no mind, only matter

* Analytical Approach

- Gilbert Ryle - equivocation - incorrectly using a word and messing up reason
- mind is a substance without matter
- category mistake - Descartes put the concept of mind in the matter category
- accuses Descartes of thinking of the mental world in terms of physical
- shouldn't use thing-language to try to explain the world of the mind
- Too much separation of the mind from our physical status - facial expressions, etc.

* His Solution

- functionalism - it doesn't matter what the mind is made of, but what is its function?
- mental states are defined by the causal relationships they bear to effects on the body, other types of mental states, bodily behavior
- tied to the field of cybernetics, AI, etc.

The Idea of Form

* * Plato - Aristotle

- first philosophical system - fundamental theories covering existence
- reaction to sophists - sophistry; professional philosophers of trickery
- appearance vs. reality - what it looks like vs. what it is
- objective world vs. transcendent world

* * Transcendent

* reaction to relativism / subjectivism

- Protagorist - "Man is measure of all things" (Plato thinks sophistry)
- objective as far as outside of our minds
- independent - doesn't depend on something else for existence
- absolute - unchanging & timeless

* reaction to Heraclitus

- "You can't step into the same river twice."
- true knowledge is of what is and not what is not
- what is must be one & unchanging
- a difference & change involves degrees & therefore sorts of non-being
- b something cannot be and not be at same time - Law of Non-Contradiction
- c something that is cannot involve change or multiplicity
- therefore, true knowledge is one & unchanging
- therefore, there must be a World of Being, in addition to a world of Becoming

* * Form

- essence or nature; essential structure
- not something that can be taken in with the senses

* Forms are ...

- objective - exist outside of us
- transcendent - outside of space & time

- intelligible - only grasped by the intellect
- eternal - forever
- archetypal - models/forms of everything that does or could exist
- perfect - include all of the features (absolutely & perfectly) of that which they model

* 2 Ways Form Gives Essence To Particular Things

- particular is a copy/imitation of the form
- particular thing participates in its form

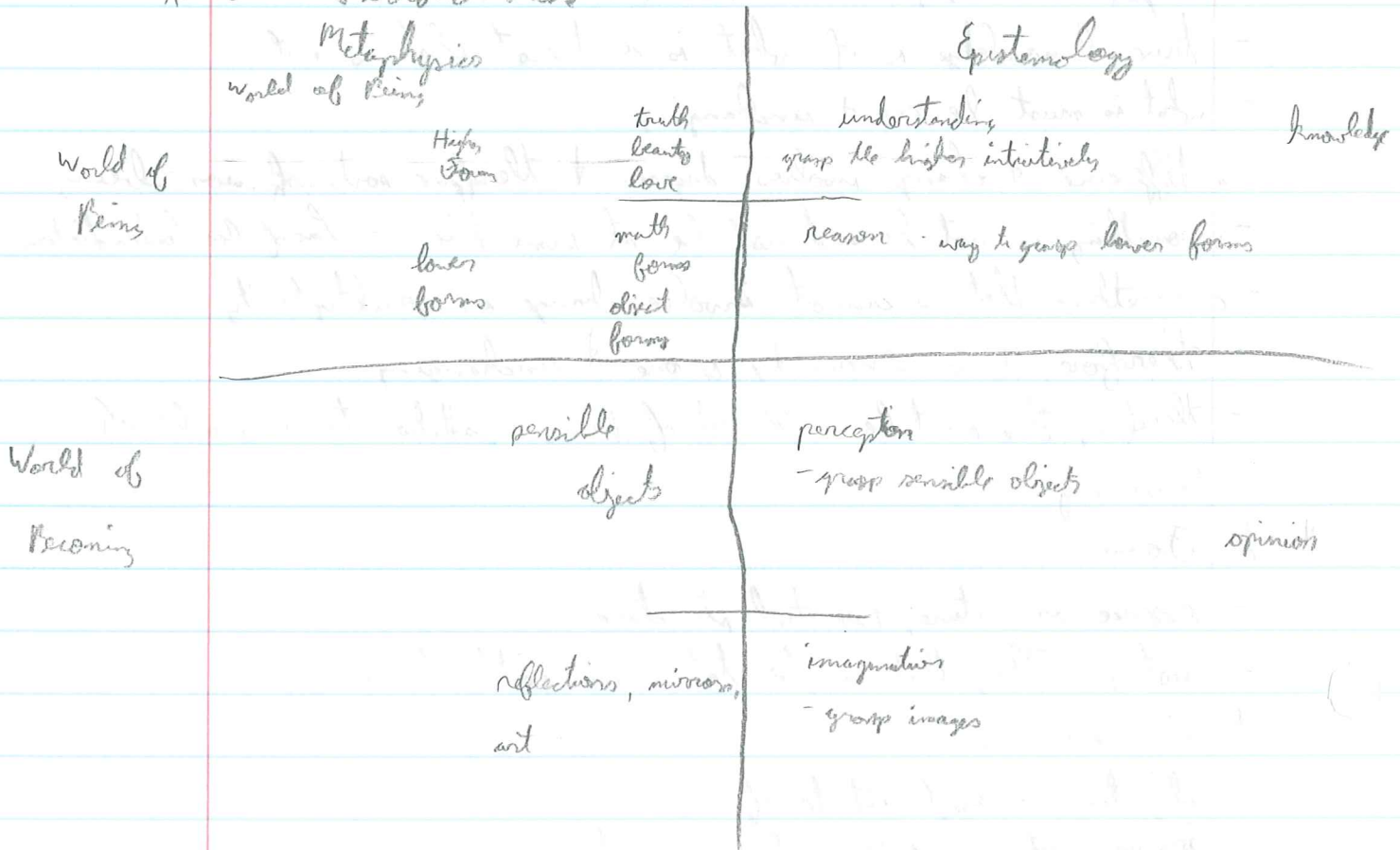
* Blending of Forms

- combination of forms to create the particular

* accidental features

- features that can be interchanged

* The Divided Line



* Essential Form of the Good

- like the sun

* # Problems

* Aristotle's objections

- third-man argument - similarities are never explained
- problem of separation (chorismos)
- how can the forms cause/nature of the thing without being in them?
- how do the forms cause the particular things to come into being & then move/change?

* Immanent Forms

- the form participates in the particular thing
- a form + matter = what is real
- God - God is pure form, unmoved mover, the first cause

* Teleology

- study of evidences of design in nature
- the study of principles that give rise to the order⁺ that pervades all reality (brackets)

* 4 Causes

- material cause - the stuff
- formal cause - it's form
- efficient cause - causes it to be
- final cause - purpose of the things

* 1 + 2, 3, 4 = Particular Thing

* substantial forms vs. accidental forms

- dog vs. color of dog

* Realism - Plato & Aristotle

- reality is identified with its forms

* Nominalism

- forms don't exist, just names for groups of things that are similar

* Conceptualism

- universal forms exist, but are made by man

Metaphysics

* What is the nature of reality?

* Pre-Socrates - before are pre-socratics

- They rejected mythology, top-down answers and made their own
- they have had an impact on philosophy today

Where, Who, & When?

- Miletus in Ionia
- Thales around 600 B.C.
- he is influenced by astronomy, Egyptian geometry
- no surviving work of his exist
- considered first of seven wise men

What Did He Think?

- What is the ultimate reality?
- he decided the ultimate reality is One thing
- How is everything else (the Many) related to the One?
- He and his followers are known as Monists

* Monism

- "one-ism" "mono" from the Greek word "one"
- belief that reality is one nature essence
- everything is an expression of one thing
- Why not?

* What is the One Thing?

- water is the One thing

* You Think He's Wrong?

- general - similar cases
- based on observation

- not an appeal of supernatural forces
- necessary for all living things
- present in most things
- it is everywhere in nature
- alot of it in the ocean
- can exist in different forms

* Other Pre-Socratic Groups

- the Ionians
- the Italians
- the Phuracians

* the Ionians

- all agreed that the substance had to be objective/possible

* Anaximander

- something can't be hot + cold at the same time
- substance is the same, we describe different
- it is infinite + which everything is made from
- his theory about earth, wind, + fire rule for dominance

* Anaximander

- the Greeks hate me
- the substance is air
- the soul is air, fire is this, water is dense air and denser is earth and more is stone
- death is loss of air

* Xenophanes

- earth & air
- he was first to make arguments against local gods

* Heraclitus - 500 B.C.

- fire is One thing
- embodiment of logos "break for word"
- life is fire: change
- fire represents balance: all same & all different

* * The Italians

- agreed to everything is numbers
- numbers instead sensible

* Pythagoras

- regarded numbers specially (point, line, plane, space, time)
- all bodies exist in space and taken together constitute a number
- two points make a line

* Parmenides

- used deductive reasoning in preference with senses
- if reality exist, it must be One only, if it isn't, then it can only be separated by what's not (impossible)
- timeless, motionless, homogenous mass (a black sphere)
- the multiple changing world is an illusion of our senses
- if One thing changes, it becomes something else

* * The Pluralists

- made of plurality of substances while maintaining that each is a Being and thus one and immutably

* Empedocles

- first to list earth, air, fire, & water
- can't be made or destroyed, only changed
- love brings elements together, strife drives them apart
- love is good; strife is bad & painful

* Anaxagoras (ca. 520 - 428 B.C.)

- everything is made up of a mixture of an ∞ # of ∞ divisible particles or "seeds"
- portion of every substance in other substances
- outside physical world "Mind" controls everything

* Leucippus / Democritus - first atomic theory

- infinite number of atoms
- no other quality
- solid & impenetrable

* Cosmos

- greek word for world
- ordered & rational rules that make sense

* The Discovery of Form

-  