## Modernization Theory and Technology/Media Diffusion



SCHOOLING THE WORLD THE WHITE MAN'S LAST BURDEN

The "Soft REVOLUTIONS" of Neo-Colonialism 1950s-Present Day

# **World Population Explosion**

1950--2.5 billion 1960--3.0 billion 1970--3.7 billion 1980--4.5 billion 1990--5.3 billion 2000-- 6.0 billion 2010--7.0 billion 2018-7.6 billion

2050 ~9-10 Billion?



## **Day-by-Day World Population Growth**

### Day-by-Day World Population Growth (U.S. Census Bureau)

	<u>Births</u>	<u>Deaths</u>	~Increase
Year	~131 mill	~54 mill	+76 mill
Day	359,002	148,654	+210,348
Hour	14,958	6,194	+8,764
Minute	249	103	+146
Second	4.2	1.7	+2.4

World Population Meter/Clock : http://www.worldometers.info/world-population/

### World Population (2018 and historical)

#### View the complete population historical table

Year (July 1)	Population	Yearly % Change	Yearly Change	Median Age	Fertility Rate	Density (P/Km²)	Urban Pop %	Urban Population	
2018	7,632,819,325	1.09 %	82,557,224	29.9	2.51	51	54.9 %	4,186,975,665	
2017	7,550,262,101	1.12 %	83,297,821	29.9	2.51	51	54.4 %	4,110,778,369	
2016	7,466,964,280	1.14 %	83,955,460	29.9	2.51	50	54.0 %	4,034,193,153	
2015	7,383,008,820	1.19 %	84,967,932	30	2.52	50	53.6 %	3,957,285,013	
2010	6,958,169,159	1.24 %	83,201,955	29	2.57	47	51.3 %	3,571,272,167	
2005	6,542,159,383	1.26 %	79,430,479	27	2.63	44	48.9 %	3,199,013,076	
2000	6,145,006,989	1.33 %	78,706,515	26	2.75	41	46.5 %	2,856,131,072	
1995	5,751,474,416	1.53 %	84,106,191	25	3.02	39	44.7 %	2,568,062,984	
1990	5,330,943,460	1.81 %	91,432,333	24	3.44	36	42.9 %	2,285,030,904	
1985	4,873,781,796	1.80 %	83,074,052	23	3.60	33	41.1 %	2,003,049,795	
1980	4,458,411,534	1.79 %	75,864,867	23	3.87	30	39.2 %	1,749,539,272	
1975	4,079,087,198	1.97 %	75,701,910	22	4.46	27	37.6 %	1,534,721,238	
1970	3,700,577,650	2.07 %	72,196,992	22	4.92	25	36.5 %	1,350,280,789	
1965	3,339,592,688	1.94 %	61,276,032	23	4.96	22	N.A.	N.A.	
1960	3,033,212,527	1.82 %	52,193,998	23	4.89	20	33.6 %	1,019,494,911	
1955	2,772,242,535	1.80 %	47,193,563	23	4.96	19	N.A.	N.A.	

## **World Population Concentrations**

Urbanization and the Move to Cities: World Population Densities--Red Dots signify population centers over 1 million people MAP



11.Seoul(10349312, South Korea) 16.Zhumadian(8263100, China)

12.Sao Paulo(10021295, Brazil) 17.New York City(8008278, US)

13.Lagos(9000000, Nigeria) 18.Taipei(7871900, Taiwan)

14. Jakarta (8540121, Indonesia) 19.Kinshasa(7785965, Congo (Kinshasa))

15.Tokyo(8336599, Japan) 20.Lima(7737002, Peru)

# World at Night



## **Highest consumption rates world-wide**



#### ECOLOGICAL FOOTPRINT BY COUNTRY



## Nations with largest current populations



## World Population Increases 1950-2016



#### Italy set to double child benefit to combat low birth rate

() 15 May 2016 Europe



There were fewer births in Italy in 2015 than in any year since the modern state was founded in 1861

Italy's health minister has outlined plans to double child benefit to combat what she described as an "apocalyptic" decline in the country's birth rate.

Beatrice Lorenzin said the monthly bonus for lower income families should be twice the current €80 (£60; \$90).

Ms Lorenzin also called for higher payments for second and subsequent children to encourage big families.

Just 488,000 babies were born in Italy in 2015, fewer than in any year since the modern state was founded in 1861.

Speaking to Italy's La Repubblica newspaper, Ms Lorenzin said: "If we carry on as we are and fail to reverse the trend, there will be fewer than 350,000 births a year in 10 years' time, 40% less than in 2010 - an apocalypse."

She added: "In five years we have lost more than 66,000 births (per year)... If we link this to the increasing number of old and chronically ill people, we have a picture of a moribund country."

The benefit payments, which were introduced last year, are available for babies born between 1 January 2015 and 31 December 2017 and payable up to their third birthdays.

Ms Lorenzin, an influential member of Prime Minister Matteo Renzi's government,

## Germany passes Japan to have world's lowest birth rate - study

() 29 May 2015 Europe

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#### A study says Germany's birth rate has slumped to the lowest in the world, prompting fears labour market shortages will damage the economy.

Germany has dropped below Japan to have not just the lowest birth rate across Europe but also globally, according to the report by Germany-based analysts.

Its authors warned of the effects of a shrinking working-age population.

They said women's participation in the workforce would be key to the country's economic future.

In Germany, an average of 8.2 children were born per 1,000 inhabitants over the past five years, according to the study by German auditing firm BDO with the Hamburg Institute of International Economics (HWWI).

It said Japan saw 8.4 children born per 1,000 inhabitants over the same time period.

## Cold War Political Alignments/Divisions: 1945-2000

### The WEST

NATO Countries (North Atlantic Treaty Organization)--U.S., Britain, Canada, France, West Germany, Italy, Turkey...

### <u>The EAST</u>

WARSAW PACT Countires--Soviet Union, Romania, Bulgaria, Poland, East Germany, Czechoslovakia...

### The NON-Aligned Nations

Non-Aligned Countries--Countries which were either no invited to be part of NATO or the WARSAW Pact or which had decided not to become affiliated with the either NATO or WARSAW nations.

Non-Aligned Countries include over 80 countries and account for nearly 70% of the world's population. India, Indonesia, Nigeria, Colombia, Thailand, Egypt...



### The Cultural Power Politics of <u>Identity Development</u>: Dates of African Independence



## **ASIA--NATIONAL INDEPENDENCE**



## **Daniel Lerner--**

### Books by Daniel Lerner:

- 1. Psychological Warfare against Nazi Germany (1949)
- 2. The Passing of Traditional Society: Modernizing the Middle East (1958)
- <u>PRIMARY Research Concept</u>: Defining a "Modern Man" and a "Modernized Society."
  - QUESTION: What are the <u>essential criteria</u> of "<u>MODERN DEMOCRATIC SOCIETIES</u>"?
  - QUESTION: WHAT are the <u>essential</u> characteristics of "Traditional" societies.
- <u>Secondary Focus</u>: Evaluating the EFFECTIVENESS of AMERICAN "MESSAGES" ABROAD.
  - Conducted over 1,000 Audience Surveys related to "popular" opinions about radio broadcasts in Turkey, Lebanon, Egypt, Syria, Jordan, Iran, and Iraq (The oil consortium)
- OVERARCHING GOAL: MODERNIZE ("westernize") global culture





Psychological Warfare against Nazi Germany The Sykewar Campaign, D-Day to VE-Day

Daniel Lerner



# **B.F. SKNNER**

- Modern Social Psychology
- Behaviorism
- Complex Behavior can be controlled and manufactured
- Operant Conditioning
- Media





## **Daniel Learner**

### The Necessities of Modernization

Major Arguments: Modern ("westernized")

# 1. Time allocation and TIME management

- Efficiency trumps all other concerns
- Busy-Doing-Working-Playing HARD
- FUTURE DIRECTED. Ultimate belief in upward mobility and PROGRESS!
- Time = \$\$\$

# 2. Individualistic within a "TEAM PLAYER"→EGO driven/Optimistic

- Entrepreneurial/Promotional
- COMPETITIVE!

### 3. CORPORATE→Industrial→Urban →TECHNOLOGICAL

### 4. Rational-Scientific-Technical-

**Education** (quantitative, math, science, and linear logic)

## 5. "Psychic Mobility"

> Empathy--Psychological Projection of one's self onto another

> Urban, Industrialized, and Cosmopolitan-->Future Looking

> UPWARD Linear Passage from traditional to modernized

















#### What the Media IMPLICITLY tells us about being a "MODERN MAN"



#### What the Media tells us about being A "MODERN WOMAN"



STOCKMARKET

PROFIT

Happy Healthy Inspirational ideas

Tattoos Healing Power

Breast cancer survivors turn scars into art

#### Pre-Baby Bucket List

\* Sled down a volcano \* Jump off a cliff \* Chase gators **+MORE** 



The campaign is being sponsored by Warner Bros and DC Entertainment who are supporting the UN and Unice's year-long campaign for gender equality and women's empowerment.

The UN has itself **come under some criticism for having a lack of gender parity in senior roles**. Despite campaigns there has never been a female Secretary General and **one analysis found** that in 2015 nine of 10 senior leadership jobs went to men.

Comics site The Mary Sue welcomed the announcement. "Wonder Woman is a



## **Traditional People/Society**

- **1. Entrenched in Past/Tradition**
- 2. Conservative/dogmatic
- 3. Unchanging→fatalistic
- 4. Value Nature over Technology
- 5. Inefficient (Time/approach)→ Slow
- 6. Non-scientific → nontechnical/rational "Backward"
- 7. Irrational→FEARFUL





# **MT'S Political-Economic FORMULA**



## The POWER BROKERS

Institutions of "Modernization" & Supporting Soft POWER WAR for Hearts and Minds

## 1. The USA Government

#### Massive Foreign Aid: LOAN\$\$→ For TECHNOLOGICAL DEVELOPMENT



Marshall Plann (Pres. Truman) Ties to the State Department (U.S. Foreign Policy)

- US State Dept.
- USAID
- USIA--United States Information Agency
- The Peace Corps
- Embassies, Consulates, American Organizations/Unions
- Department of Defense (DOD)
- Intelligence Community: CIA, NSA, FBI Voice of America

## 2. World Banking Trinity

- i. World Bank
- *ii. International Monetary Fund*
- iii.World Trade Organization



WTO, IMF, & World Bank

3. <u>The United Nations and</u> <u>associated I-NGOs</u>

-UNICEF

-UNDP

-(UNESCO)--Internationalized Efforts for World-wide Development

### 4. Educational Institutions

**Research Universities:** MIT, Harvard, Oxford, Cambridge, Princeton, Yale, UPenn, Stanford, CalTech

### 5. <u>Private CORPORATIONS-</u> <u>Media-PR-Marketing CorpS &</u> <u>Lobbying Groups</u>

General Electric, IBM, AT&T, Facebook, Google, Coke/Pepsi, Procter and Gamble, Exxon/Mobil/Gulf Oil Ford, GM, Chrysler, Microsoft, Dow Chemical, Monsanto, The World Press Freedom Committee The Inter-American Press Assoc. Brookings Inst., The Heritage Foundation The McArthur Foundation The Ford Foundation, etc.



## Modernization and Media-Communication-Technology

### The Primary Practitioners/Theorists: (1960s→Present (After Lerner)

### 1.Wilbur Schramm –

- Iowa School of Journalism
- Stanford Behavioral Science Mass Media and National Development (1964)

2. Ithiel de Sola Pool (MIT) "The role of communication in the process of modernization and technological change." (1963); <u>Technologies of Freedom</u> (1984)

### 3.Everett Rogers -- Diffusion Theory (1980)

- University of Michigan
- Stanford
- Annenberg School of Communications USC

### 4.Nicholas Negroponte (MIT Media Lab) One Laptop Per Child



# I-NGOs and Glocal SOCIAL Politics Global + Local = GLOcal

 60 Minutes Piece on Basel Action Network (BAN)



## Technological Diffusion → Information Flows

Proponents of a "smooth" vision of social and cultural change

### Everett Rogers→(Iowa→Stanford University Media/Technology Researcher)





**Background:** Rogers background was in AGRICULTURE. Many of his initial ideas revolved around spreading industrial agricultural techniques & technologies to increase food yields.

#### **Evolution of Focus:**

- I. How can countries of the Global South "leapfrog" from "developing" nations into first world status through COMMUNICATION TECHNOLOGIES... and the
- **II. DIFFUSION** of mass technologies and mass media.

## Idealized Information Flows: More

Media → More Free Flow of Information → More Freedom (But is this really true?)







# Rogers's Unerlying Approaches & Perspectives

- Ideological Corporate Capitalistic Perspective: Media Control must be in the hands of private companies and individuals (i.e. NOT collective communities or governments).
  - IBM, Apple, Cisco, Disney, 20<sup>th</sup> Century Fox, Gannett, Intel, NBC, CBS, etc.

 Approach: Persuade/Make people use mass media technologies across an entire population! INSTILL THE NOTION THAT MEDIA = PERSONAL or INDIVIDUAL FREEDOMS.

> Major media: Radio, Television, Phones, Newspapers, Film



# Media/Technology Adoption :

- Media Adoption Cycle/Formula:
  - (1) Innovators  $\rightarrow$
  - (2) Early Adopters  $\rightarrow$
  - (3) Opinion Leaders  $\rightarrow$
  - (4) Mass Adopters →
  - (5) Late Adopters →
  - (6) Laggards/Non conformists  $\rightarrow$



## **U.S. Tech Adoption of Different Media**



# Innovation/Technology Adoption

### **5 Stages of Innovation Adoption**

- 1. Awareness→Initial interest
- 2. Evaluation → Self Needs/Expectations
- 3. Purchase →Trial/Learning Curve
- 4. Adoption
- 5. Habitual Life Ritual

**Perceived characteristics of innovations.** How likely those potential adopters are to move from *awareness* to *adoption*.

- relative advantage (the 'degree to which an innovation is perceived as being better than the idea it supersedes);
  - compatibility (the degree to which an innovation is perceived to be consistent with the existing values, past experiences and needs of potential adopters);
  - complexity ('the degree to which an innovation is perceived as difficult to use');

**4.** *trialability* ('the opportunity to experiment with the innovation on a limited basis'); and

**5. observability** ('the degree to which the results of an innovation are visible to others').

# Another Way of Looking at it...

