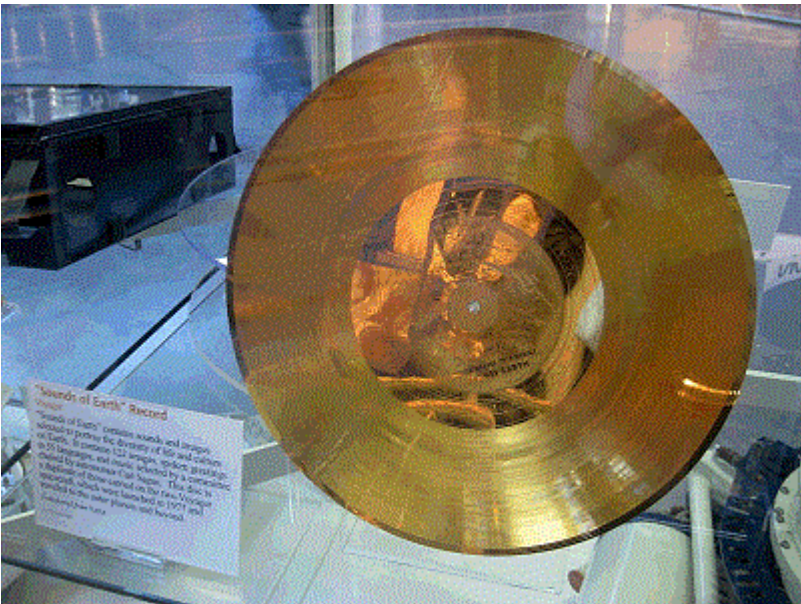


# Voyager Golden Record

From: Wikipedia ♦ The contents of the Voyager Golden Record is a collection of 116 images and a variety of natural sounds, such as those made by surf, wind, and thunder, and animal sounds, including the songs of birds and whales. To this they added musical selections from different cultures and eras, spoken greetings in fifty-nine languages, and printed messages from President Jimmy Carter and U.N. Secretary-General Kurt Waldheim. The items were selected for NASA by a committee chaired by Carl Sagan of Cornell University.

After NASA had received criticism over the nudity on the Pioneer plaque (line drawings of a naked man and woman), the agency chose not to allow Sagan and his colleagues to include a photograph of a nude man and woman on the record. Instead, only a silhouette of the couple was included.

Below is President Carter's official statement placed on the Voyager spacecraft for its trip outside our solar system, June 16, 1977:



A copy of the record on display at the Udvar-Hazy Center in Washington Dulles International Airport

*This Voyager spacecraft was constructed by the United States of America. We are a community of 240 million human beings among the more than 4 billion who inhabit the planet Earth. We human beings are still divided into nation states, but these states are rapidly becoming a single global civilization.*

*We cast this message into the cosmos. It is likely to survive a billion years unto our future, when our civilization is profoundly altered and the surface of the Earth may be vastly changed. Of the 200 billion stars in five Milky Way galaxy, some — perhaps many — may have inhabited planets and spacefaring civilizations. If one such civilization intercepts Voyager and can understand these recorded contents, here is our message:*

*This is a present from a small distant world, a token of our sounds, our science, our images, our music, our thoughts and our feelings. We are attempting to survive our time so we may live into yours. We hope someday, having solved the problems we face, to join a community of galactic civilizations. This record represents our hope and our determination, and our good will in a vast and awesome universe.*

Jimmy Carter, President of the United States of America

The other official message carried by Voyager was from U.N. Secretary General Kurt Waldheim's message:

*As the Secretary General of the United Nations, an organization of 147 member states who represent almost all of the human inhabitants of the planet Earth, I send greetings on behalf of the people of our planet. We step out of our solar system into the universe seeking only peace and friendship, to teach if we are called upon, to be taught if we are fortunate. We know full well that our Planet and all its inhabitants are but a small part of the immense universe that surrounds us and it is with humility and hope that we take this step.*

## Voyager Golden Record: Greetings

The first audio section contains a spoken greeting in English from the Secretary General of the U.N., Kurt Waldheim.

The second audio section ("Greetings in 55 Languages") contains spoken greetings in 55 languages, including four Chinese dialects (marked with \*\*), 12 South Asian languages (marked #) and five ancient languages (marked §), listed here in alphabetical order:

Below is a list of the recorded greetings as they appear on the tracks.

Track	Time	Language	Original	English translation
2	0:00:00	Sumerian	□□□□□ <i>silim-ma hé-me-en</i>	May all be well
2	0:00:04	Ancient Greek	Οἶπινές ποτ'ἔστε χαίρετε! Εἰρηνικῶς πρὸς φίλους ἐληλύθαμεν φίλοι.	(somewhat loose translation;as per NASA) Greetings to you, whoever you are. We come in friendship to those who are friends
2	0:00:11	Portuguese	Paz e felicidade a todos	Peace and happiness to everyone
2	0:00:14	Cantonese	各位好嗎？祝各位平安健康快樂。	How's everyone? Wish you peace, health and happiness
2	0:00:19	Akkadian		May all be very well
2	0:00:22	Russian	Здравствуйте! Приветствую Вас!	Greetings! I Welcome You!
2	0:00:25	Thai	สวัสดีค่ะ สหายในธรณีโพ้น พวกเราในธรณีนี้ออส่งมิตร จิตมาถึงท่านทุกคน	Hello friends from farland. We in this land have sent you warm greeting to you all
2	0:00:32	Arabic	تحياتنا للأصدقاء في النجوم. يا ليت يجمعنا الزمان <i>Taḥiyyātunā lil-'aṣḍiqā'</i> <i>fil-nujūm. Yā laytā</i> <i>yajma`unā al-zamān.</i>	Greetings to our friends in the stars. May time bring us together
2	0:00:38	Romanian	Salutări la toată lumea	Regards to everyone
2	0:00:42	French	Bonjour tout le monde	Hello to everyone
2	0:00:45	Burmese	□□□□□□□□□□□□□□ [nè káun bà ðəlá]	Are you well

Track	Time	Language	Original	English translation
2	0:00:48	Hebrew	שלום <i>Shalom</i>	Hello (literally "peace")
2	0:00:50	Spanish	Hola y saludos a todos	Hello and greetings to everyone
2	0:00:54	Indonesian	Selamat malam hadirin sekalian, selamat berpisah dan sampai bertemu lagi dilain waktu	Good evening, ladies and gentlemen. Goodbye and see you next time
2	0:00:59	Kechua (Quechua)		Hello to everybody from this Earth, in Kechua language
2	0:01:04	Punjabi		Welcome home. It is a pleasure to receive you
2	0:01:07	Hittite		Hail
2	0:01:08	Bengali	namaskar, bishwer shanti hok	Hello! Let there be peace everywhere
2	0:01:11	Latin	Salvete quicumque estis; bonam ergo vos voluntatem habemus, et pacem per astra ferimus	Greetings to you, whoever you are; we have good will towards you and bring peace across space
2	0:01:19	Aramaic	ܫܠܡ or שלום or سلام <i>Šelām</i>	Hello (literally "peace")
2	0:01:22	Dutch	Hartelijke groeten aan iedereen	Dear/sincere greetings to everyone
2	0:01:24	German	Herzliche Grüße an alle	Warm greetings to everyone
2	0:01:27	Urdu	اسلام و علیکم - ہم زمین کے رہنے والوں کی طرف سے آپ کو خوش آمدید کہتے ہیں	Peace on you. We the inhabitants of this earth send our greetings to you
2	0:01:37	Vietnamese	Chân thành gửi tới các bạn lời chào thân hữu	Sincere greetings to you



Track	Time	Language	Original	English translation
2	0:01:40	Turkish	Sayın Türkçe bilen arkadaşlarımız, sabah şerifleriniz hayrolsun	Dear Turkish-speaking friends, may the honors of the morning be upon your heads
2	0:01:45	Japanese	こんにちは。お元気ですか? <i>Konnichiwa. O genki desu ka?</i>	Hello. How are you?
2	0:01:48	Hindi	धरती के वासियों की ओर से नमस्कार	Greetings from the inhabitants of this world
2	0:01:51	Welsh	Iechyd da i chiwi yn awr, ac yn oesoedd	Good health to you now and forever
2	0:01:54	Italian	Tanti auguri e saluti	Many greetings and wishes
2	0:01:57	Sinhalese	ආයුබෝවන්	(you may) Long live
2	0:02:00	Nguni (Zulu)		We greet you, great ones. We wish you longevity
2	0:02:05	Sotho (Sesotho)		We greet you, O great ones
2	0:02:08	Wu		Best wishes to you all
2	0:02:12	Armenian <sup>[5]</sup>	Բոլոր անոնց, որ կգտնվին տիեզերգի փիզամածությունեն անդին ողջույններ	To all those who exist in the universe, greetings
2	0:02:19	Korean	안녕하세요	How are you?
2	0:02:22	Polish	Witajcie, istoty z zaświatów.	Welcome, beings from beyond the world.
2	0:02:25	Nepali	प्रिथ्वी वासीहरु बाट शान्ति मय भविष्य को शुभकामना	Wishing you a peaceful future from the earthlings



Track	Time	Language	Original	English translation
2	0:02:29	Mandarin Chinese	各位都好吧？我们都很想念你们，有空请到这来玩。	How's everyone? We all very much wish to meet you, if you're free please come and visit
2	0:02:35	Ila (Zambia)		We wish all of you well
2	0:02:38	Swedish	Hälsningar från en dataprogrammerare i den lilla universitetsstaden Ithaca på planeten Jorden	Greetings from a computer programmer in the small university town of Ithaca on (the) planet Earth
2	0:02:45	Nyanja		How are all you people of other planets?
2	0:02:48	Gujarati		Greetings from a human being of the Earth. Please contact
2	0:03:03	Ukrainian	Пересилаємо привіт із нашого світу, бажаємо щастя, здоров'я і многая літа	We are sending greetings from our world, wishing you happiness, goodness, good health and many years
2	0:03:09	Persian	درود بر ساکنین مایورای آسمانها	Hello to the residents of far skies
2	0:03:22	Serbian	Желимо вам све најлепше са наше планете	We wish you all the best, from our planet
2	0:03:25	Oriya		Greetings to the inhabitants of the universe from the third planet Earth of the star Sun
2	0:03:34	Ganda (Luanda)		Greetings to all peoples of the universe. God give you peace always

Track	Time	Language	Original	English translation
2	0:03:38	Marathi	नमस्कार. ह्या पृथ्वीतील लोक तुम्हाला त्यांचे शुभविचार पाठवतात आणि त्यांची इच्छा आहे की तुम्ही ह्या जन्मी धन्य व्हा.	Greetings. The people of the Earth send their good wishes
2	0:03:47	Amoy (Min dialect)		Friends of space, how are you all? Have you eaten yet? Come visit us if you have time
2	0:03:55	Hungarian (Magyar)	Üdvözetet küldünk magyar nyelven minden békét szerető lénynek a Világegyetemen	We are sending greetings in the Hungarian language to all peace-loving beings on the Universe
2	0:04:01	Telugu	నమస్తే, తెలుగుమాట్లాడే జనముననించిమా శుభాకాంక్షలు.	Greetings. Best wishes from Telugu-speaking people
2	0:04:05	Czech	Milí přátelé, přejeme vám vše nejlepší	Dear Friends, we wish you the best
2	0:04:08	Kannada (Kanarese)	ನಮಸ್ತೆ, ಕನ್ನಡಿಗರೊಳಿರುವವಾಗಿ ಶುಭಾಪಯಗಳು.	Greetings. On behalf of Kannada-speaking people, 'good wishes'
2	0:04:12	Rajasthani		Hello to everyone. We are happy here and you be happy there
2	0:04:18	English	Hello from the children of planet Earth	Hello from the children of planet Earth
3	0:02:16	Esperanto	Ni strebas vivi en paco kun la popoloj de la tuta mondo, de la tuta kosmo.	We strive to live in peace with the peoples of the whole world, of the whole cosmos.

## Voyager Golden Record: Sounds of Earth

The next audio section is devoted to the "sounds of Earth" that include:

- "Music of the Spheres" – Johannes Kepler's "Harmonices Mundi"
  - Volcanoes, Earthquake, Thunder
  - Mud Pots
  - Wind, Rain, Surf
  - Crickets, Frogs
  - Birds, Hyena, Elephant
  - Chimpanzee
  - Wild Dog
  - Footsteps, Heartbeat, Laughter
  - The First Tools
- Tame Dog
  - Herding Sheep, Blacksmith, Sawing
  - Tractor, Riveter
  - Morse Code, Ships (precisely, a ship's horn)
  - Horse and Cart
  - Train
  - Tractor, Bus, Auto
  - F-111 Flyby, Saturn V Lift-off
  - Kiss, Mother and Child
  - Life Signs, Pulsar

Included within the *Sounds of Earth* audio portion of the Golden Record is a track containing the inspirational message *per aspera ad astra* in Morse Code. Translated from Latin, it means, *through hardships to the stars*.

## Voyager Golden Record: Music

Following the section on the sounds of Earth, there is an eclectic 90-minute selection of music from many cultures, including Eastern and Western classics. The selections include:

- Johann Sebastian Bach is the most represented artist, appearing three times.
- Sagan had originally asked for permission to include "Here Comes the Sun" from the Beatles' album Abbey Road. While the Beatles favoured it, EMI opposed it and the song was not included.

Country	Piece	Author	Performer(s)	Recorded or collected by	Genre of music	Length
Australia	"Morning Star" and "Devil Bird"			Sandra LeBrun Holmes	Aboriginal songs	1:26
Austria	Die Zauberflöte, Queen of the Night aria No. 14 Der Hölle Rache kocht in meinem Herzen	Wolfgang Amadeus Mozart	Edda Moser (soprano) from the Bavarian State Opera, conducted by Wolfgang Sawallisch		Classical opera	2:55
Azerbaijan SSR, Soviet Union	"Mugam"			Radio Moscow	Balaban	2:30
Bulgaria	"Излел е Делю хайдутин" ("Izlel je Delyo Hajdutin")		Valya Balkanska	Ethel Rain and Martin Koenig	Bulgarian folk	4:59
China	"Liu Shui" 《流水》 ("Flowing Streams")	Bo Ya	Kuan P'ing-hu		Guqin	7:37

Country	Piece	Author	Performer(s)	Recorded or collected by	Genre of music	Length
Georgian SSR, Soviet Union	"Tchakrulo"	Traditional		Radio Moscow	Choral folk music	2:18
Germany	Brandenburg Concerto No. 2 in F. First Movement	J. S. Bach	Munich Bach Orchestra conducted by Karl Richter		Baroque chamber music	4:40
Germany	"Gavotte en rondeaux" from the Partita No. 3 in E major for Violin	J. S. Bach	Arthur Grumiaux	Baroque solo	Violin	2:55
Germany	The Well-Tempered Clavier, Book 2, Prelude and Fugue No.1 in C major	J.S. Bach	Glenn Gould	Kevin Doyle	Baroque piano étude	4:48
Germany	Fifth Symphony, First Movement	Beethoven	Philharmonia Orchestra conducted by Otto Klemperer		Romantic symphony	7:20



Country	Piece	Author	Performer(s)	Recorded or collected by	Genre of music	Length
Germany	Cavatina from the String Quartet No. 13 in B flat, Opus 130	Beethoven	Budapest String Quartet		Romantic String Quartet	6:37
India	"Jaat Kahan Ho"		Kesarbai Kerkar		Raga Bhairavi	3:30
Indonesia	"Puspawarna" ("Kinds of Flowers")	Mangkunegara IV	Court gamelan of Pura Paku Alaman directed by K.R.T. Wasitodipuro	Robert E. Brown	Gamelan	4:43
Japan	"Tsuru No Sugomori" 《鶴の巣籠り》 ("Crane's Nest")		Goro Yamaguchi		Shakuhachi	4:51
Mexico	"El Cascabel"	Lorenzo Barcelata	Antonio Maciel y Las Aguilillas with El Mariachi México de Pepe Villa		Mariachi	3:14
New Guinea	Men's house song			Robert MacLennan		1:20

Country	Piece	Author	Performer(s)	Recorded or collected by	Genre of music	Length
Peru	El Cóndor Pasa	Daniel Alomía Robles		Casa de la Cultura, Lima	Panpipes and drum	0:52
Peru	Wedding song			John Cohen		0:38
Russia/France/United States	The Rite of Spring, Sacrificial Dance	Stravinsky	Columbia Symphony Orchestra conducted by Igor Stravinsky		Modernist classical ballet	4:35
Senegal	Senegalese percussion			Charles Duvelle	Percussion	2:08
Solomon Islands				Solomon Islands Broadcasting Service	Panpipes	1:12
United Kingdom	"The Faerie Round" from Pavans, Galliards, Almains and Other Short Aeirs	Anthony Holborne	David Munrow and the Early Music Consort of London		English consort music	1:17
United States	"Johnny B. Goode"	Chuck Berry	Chuck Berry		Rock and roll	2:03
United States	"Melancholy Blues"	Marty Bloom, Walter Meirose	Louis Armstrong and his Hot Seven		Jazz	3:05
United States	Night Chant	Navajo Tribe		Willard Rhodes	Navajo chanting	0:57
United States	"Dark Was the Night, Cold Was the Ground"	Blind Willie Johnson	Blind Willie Johnson		Blues	3:15
Zaire	Pygmy girls' initiation song			Colin Turnbull		0:56

## Voyager Golden Record: Brainwaves

The Golden Records also carried an hour long recording of the brainwaves of Ann Druyan, who would later marry Carl Sagan. In the Epilogue of the book Billions and Billions, she describes the experience:

*Earlier I had asked Carl if those putative extraterrestrials of a billion years from now could conceivably interpret the brain waves of a meditator. Who knows? A billion years is a long, long time, was his reply. On the chance that it might be possible why don't we give it a try? Two days after our life-changing phone call, I entered a laboratory at Bellevue Hospital in New York City and was hooked up to a computer that turned all the data from my brain and heart into sound. I had a one-hour mental itinerary of the information I wished to convey. I began by thinking about the history of Earth and the life it sustains. To the best of my abilities I tried to think something of the history of ideas and human social organization. I thought about the predicament that our civilization finds itself in and about the violence and poverty that make this planet a hell for so many of its inhabitants. Toward the end I permitted myself a personal statement of what it was like to fall in love.*

On February 12, 2010, an interview with Ann Druyan was aired on National Public Radio (NPR) during which the above was explained in more detail.

## Voyager Golden Record: Images

Along with the audio, the record contains a collection of 116 pictures (one of which is for calibration) detailing but not limited to human life on Earth and the planet itself. Many pictures are annotated with one or many indications of scales of time, size or mass. Some images also contain indications of chemical composition. All measures used on the pictures are first defined in the first few images using physical references.

Below is a list of all the images contained in the Voyager Golden Record together with the actual image, a description of the nature of the image and photo credits for the images.

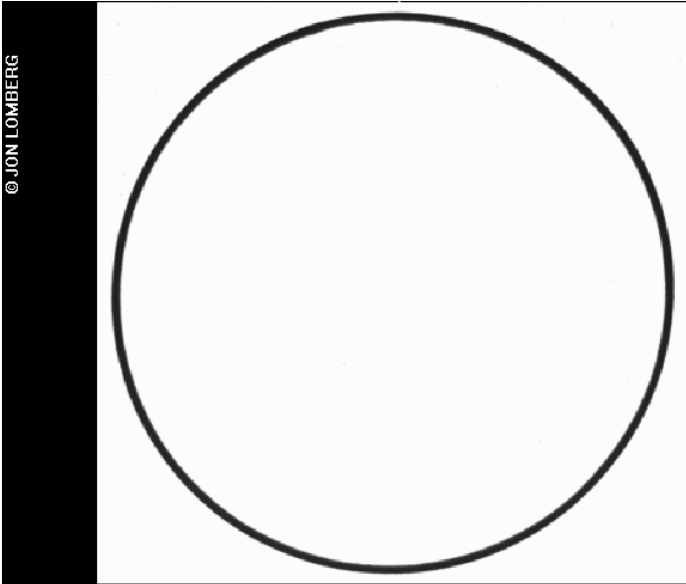


Figure 1: Calibration circle – Jon Lomberg

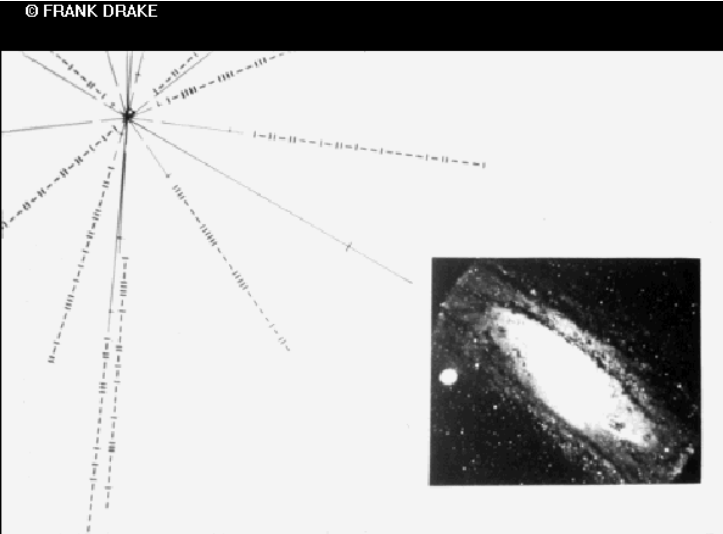


Figure 2: Solar location map – Dr. Frank Drake

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• =   = 1	-- = 12
•• =  - = 2	--- = 24
••• =    = 3	-- -- = 100 = 10 <sup>2</sup>
•••• =  -- = 4	--- = 1000 = 10 <sup>3</sup>
••••• =  -  = 5	2+3=5
•••••• =   - = 6	8+17=25    5+ $\frac{2}{3}$ = 5 $\frac{2}{3}$
= 7	$\frac{1}{2} + \frac{1}{3} = \frac{5}{6}$ 2 x 3 = 6
--- = 8	$\frac{1}{3} + \frac{1}{5} = \frac{8}{15}$ 13 x 28 = 364
--  = 9	
- - = 10	

Figure 3: Mathematical definitions – Dr. Frank Drake

© FRANK DRAKE

$1 \frac{42}{100} \times 10^9 \underline{t} = 1 \underline{s}$	$\frac{1}{21} \underline{L} = 1 \underline{cm}$
$86400 \underline{s} = 1 \underline{d}$	$1 \underline{L} = 21 \times 10^8 \underline{a}$
$365 \underline{d} = 1 \underline{y}$	$10^2 \underline{cm} = 1 \underline{m}$
$6 \times 10^{23} \underline{M} = 1 \underline{g}$	$1000 \underline{m} = 1 \underline{km}$
$1000 \underline{g} = 1 \underline{kg}$	
$6 \times 10^{27} \underline{g} = 1 \underline{e}$	

Figure 4: Physical unit definitions – Dr. Frank Drake

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$139 \times 10^4 \underline{km}$	$4840 \underline{km}$	12400	12760	6800
	$58 \times 10^6 \underline{km}$	108	150	228
333000 <u>e</u>	$\frac{1}{19} \underline{e}$	$\frac{82}{100}$	1	$\frac{11}{100}$
25 <u>d</u>	57 <u>d</u>	243	1	$1 \frac{3}{100}$

Figure 5: Solar system parameters – Dr. Frank Drake

© FRANK DRAKE

$142 \times 10^3 \underline{km}$	$121 \times 10^3$	47600	44600	14000
$778 \times 10^6 \underline{km}$	1428	2872	4498	591
318 <u>e</u>	95	$14 \frac{6}{10}$	$17 \frac{2}{10}$	$\frac{9}{10}$
$\frac{41}{100} \underline{d}$	$\frac{43}{100}$	$\frac{45}{100}$	$\frac{65}{100}$	$\frac{7}{10}$

Figure 6: Solar system parameters – Dr. Frank Drake

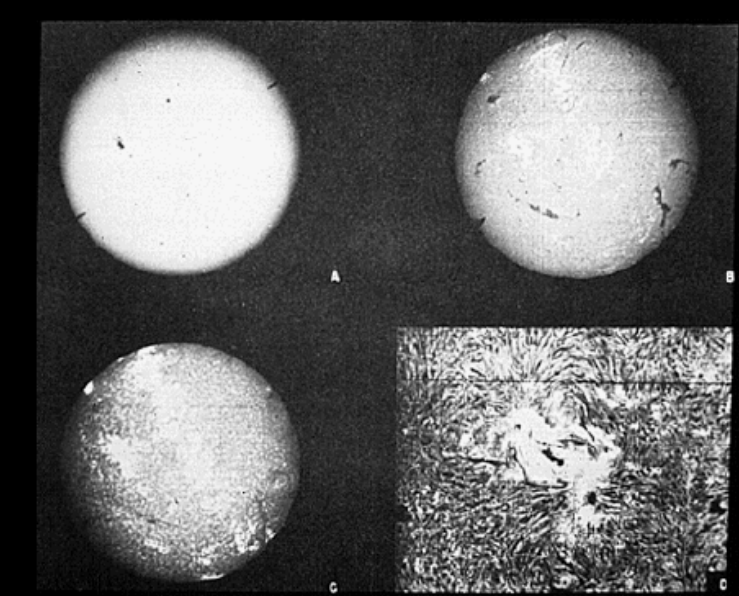


Figure 7: The Sun – Hale observatories

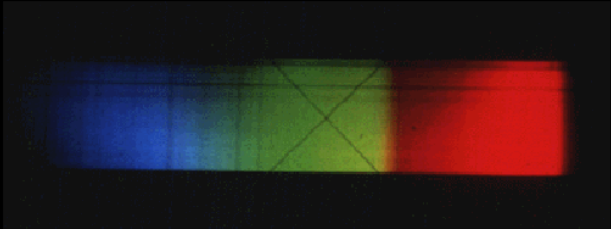


Figure 8: Solar spectrum – H. Ecklemann

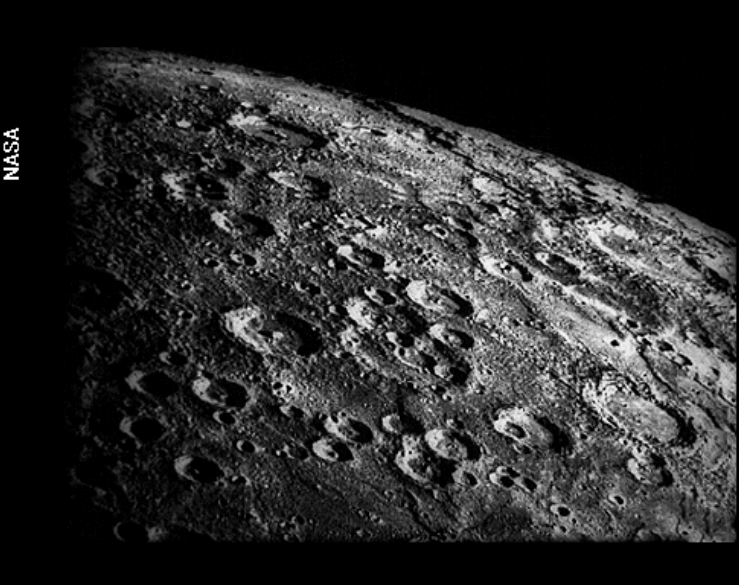


Figure 9: Mercury – NASA



Figure 10: Mars – NASA



Figure 11: Jupiter – NASA

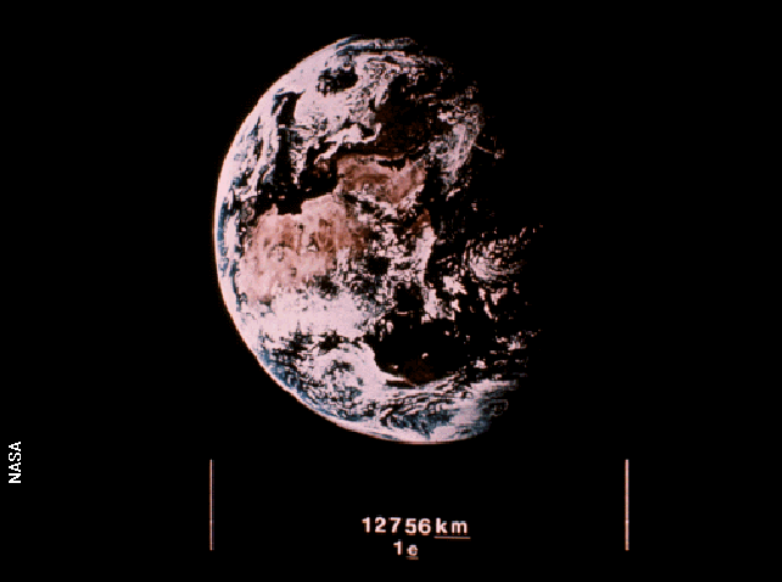


Figure 12: Earth – NASA



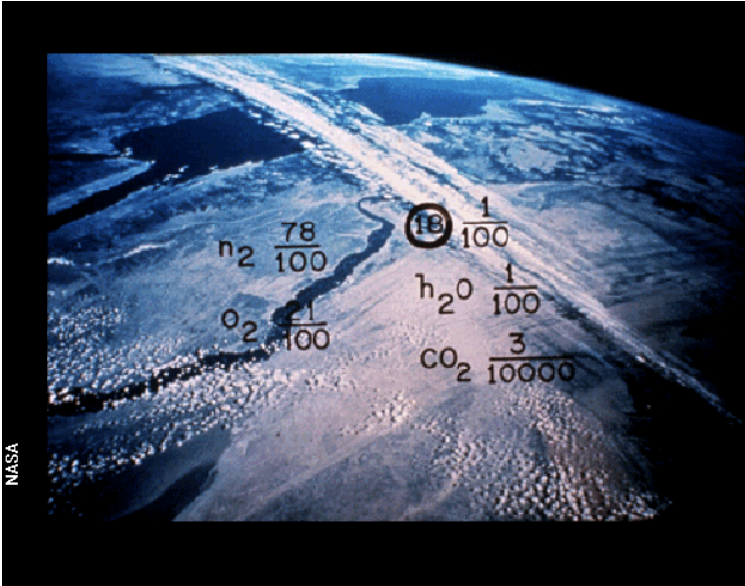


Figure 13: Egypt, Red Sea, Sinai Peninsula and the Nile – NASA

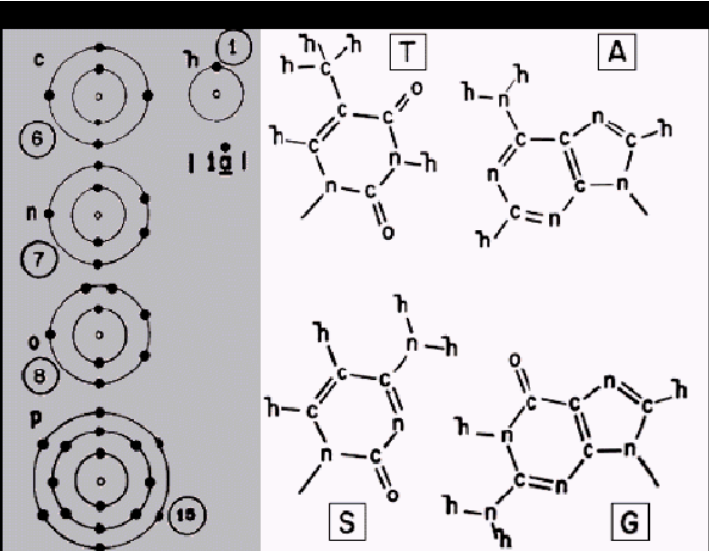


Figure 14: Chemical definitions – Dr. Frank Drake

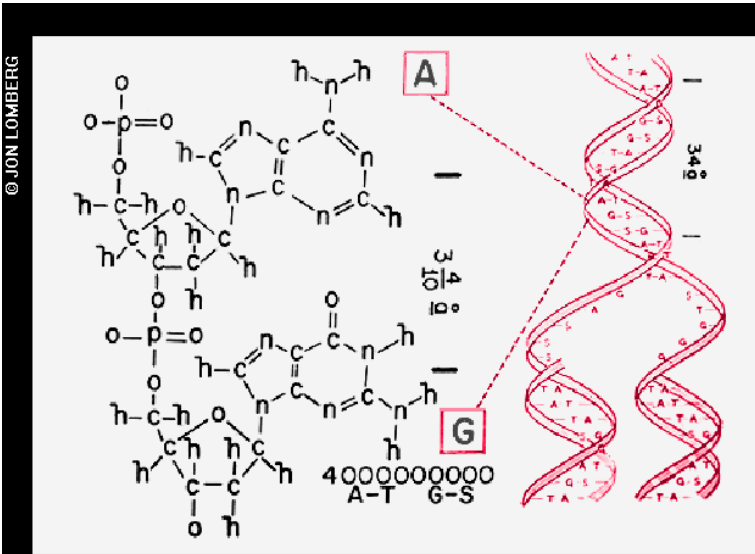


Figure 15: DNA Structure – Jon Lomberg

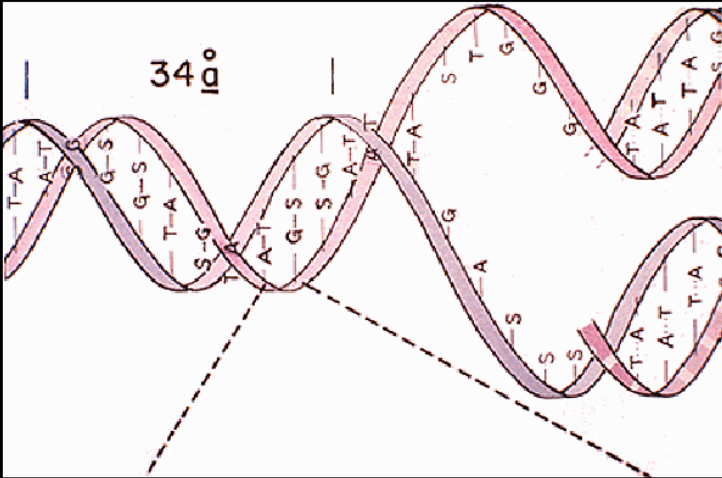


Figure 16: DNA Structure magnified, light hit – Jon Lomberg

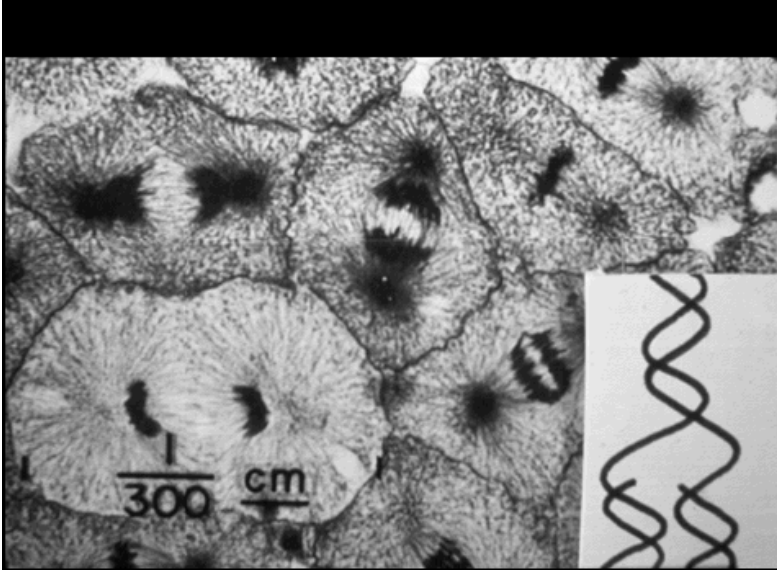


Figure 17: Cells and cell division – Turtox/Cambosco



Figure 18: Anatomy 1 (Skeleton front) – Field Enterprises Educational Corp. and Row, Peterson Co.

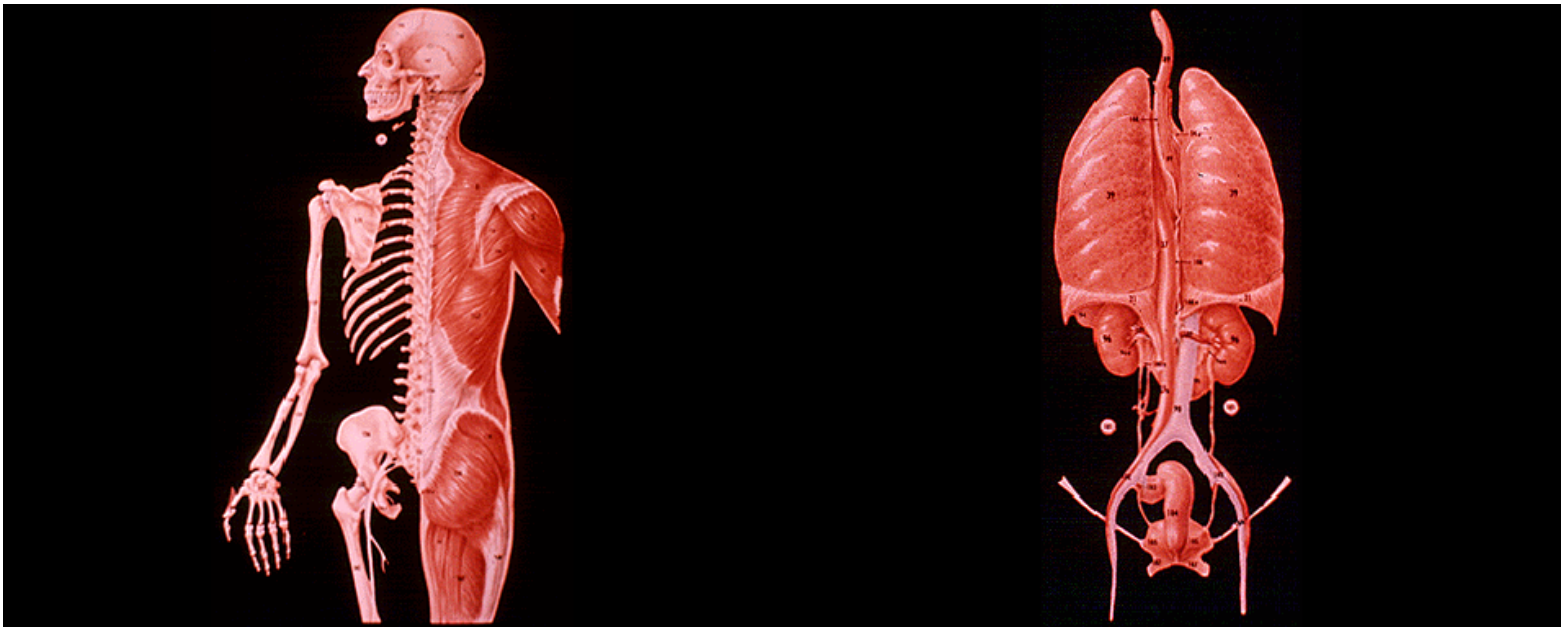


Figure 19: Anatomy 2 (Internal organs front) – Field Enterprises Educational Corp. and Row, Peterson Co.

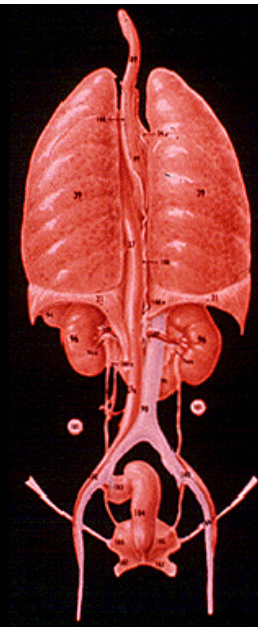


Figure 20: Anatomy 3 (Skeleton and muscles back) – Field Enterprises Educational Corp. and Row, Peterson Co.

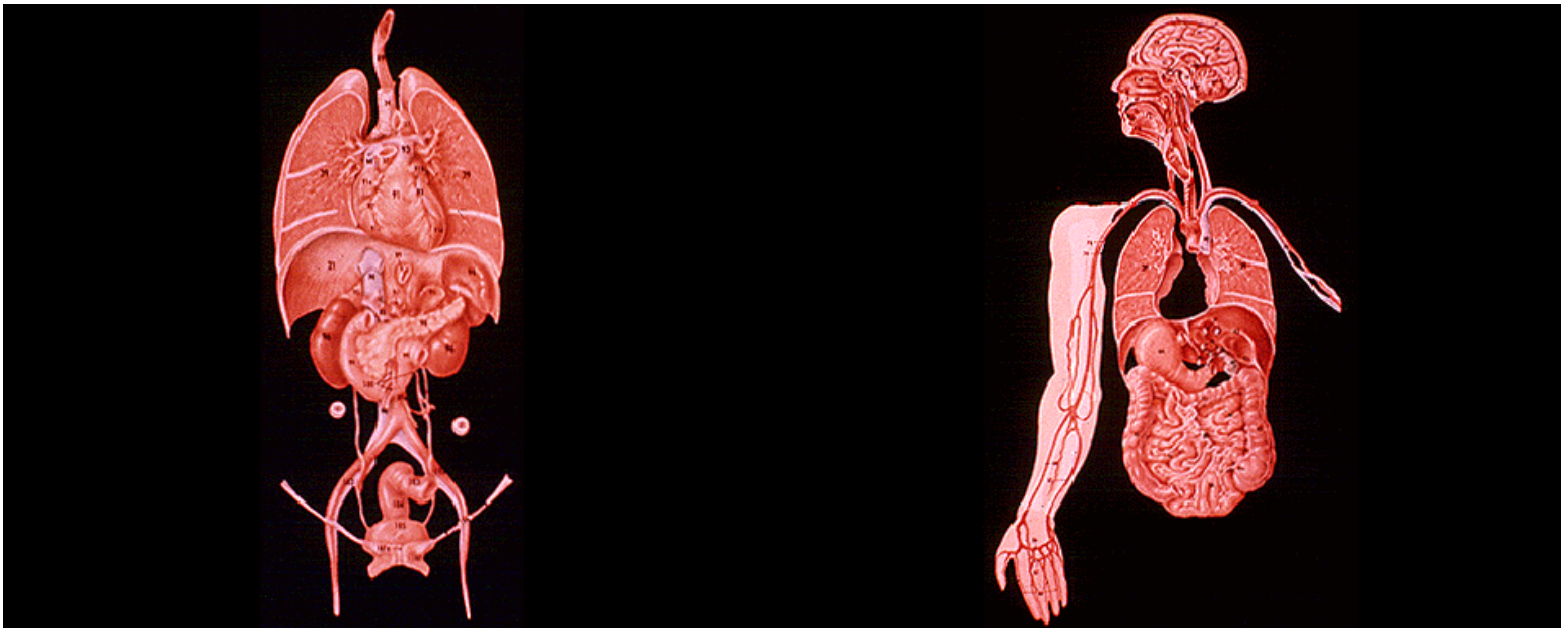


Figure 21: Anatomy 4 (Internal organs back) – Field Enterprises Educational Corp. and Row, Peterson Co.

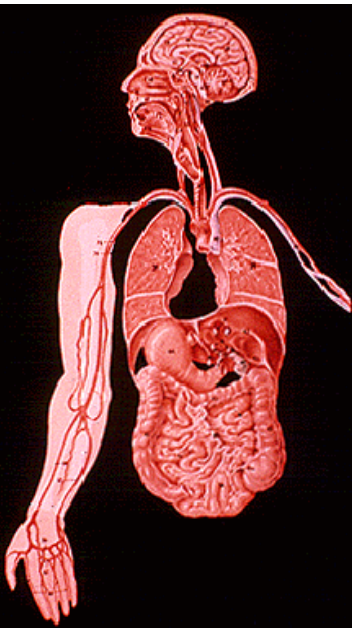


Figure 22: Anatomy 5 (Ribcage) – Field Enterprises Educational Corp. and Row, Peterson Co.



Figure 23: Anatomy 6 (Muscles front) – Field Enterprises Educational Corp. and Row, Peterson Co.

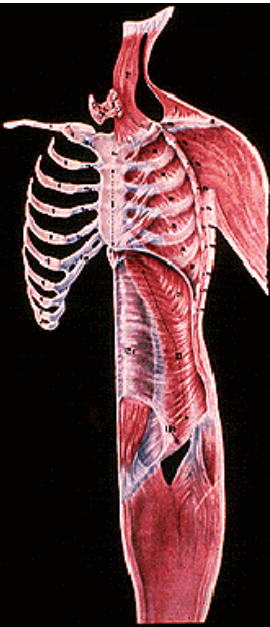


Figure 24: Anatomy 7 (Heart, lungs, kidneys and main blood vessels back) – Field Enterprises Educational Corp. and Row, Peterson Co.



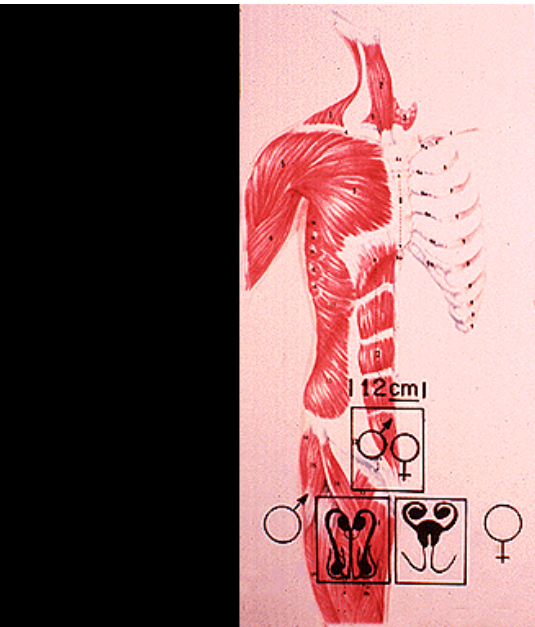


Figure 25: Anatomy 8 (Heart, lungs, kidneys and main blood vessels front) – Field Enterprises Educational Corp. and Row, Peterson Co.

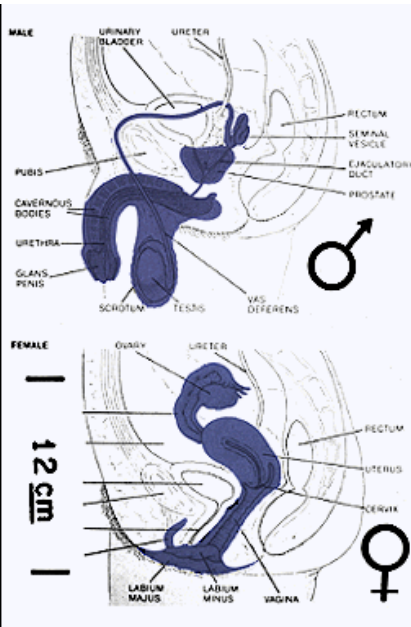


Figure 26: Human sex organs – Sinauer Associates, Inc.

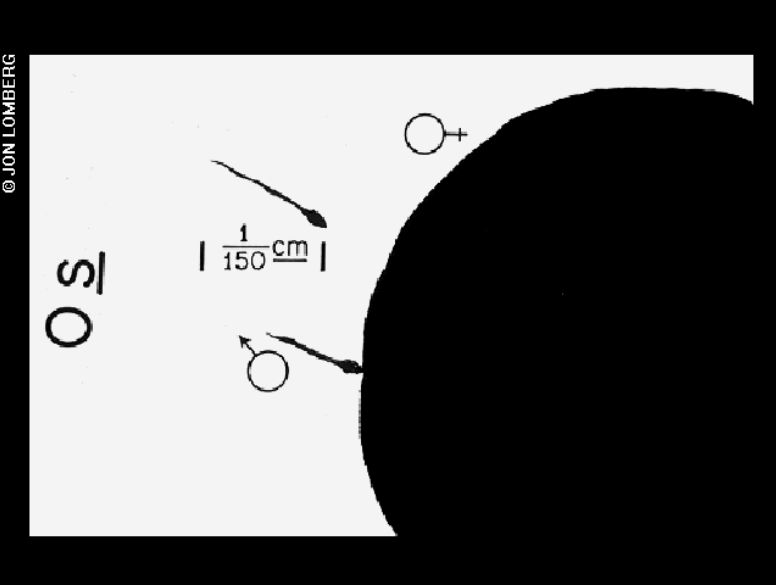


Figure 27: Diagram of conception – Jon Lomborg

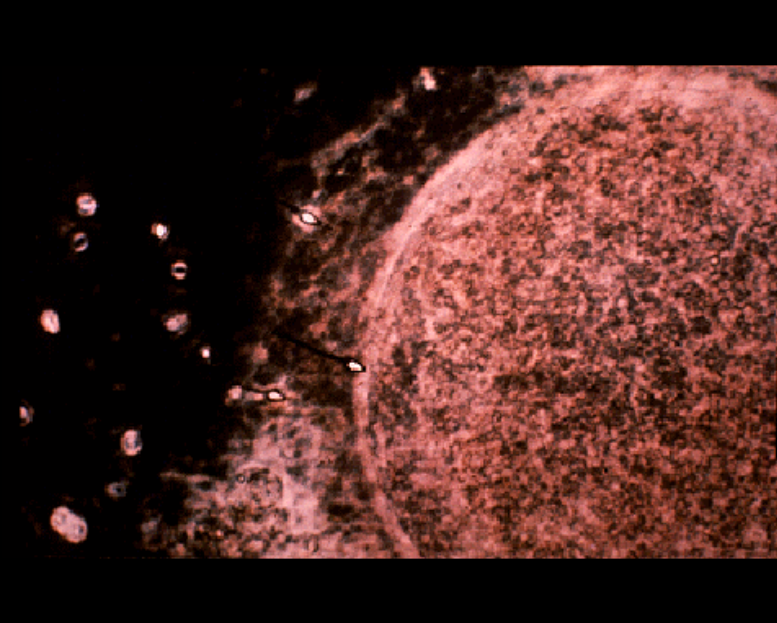


Figure 28: Conception – Albert Bonniers; Forlag, Stockholm

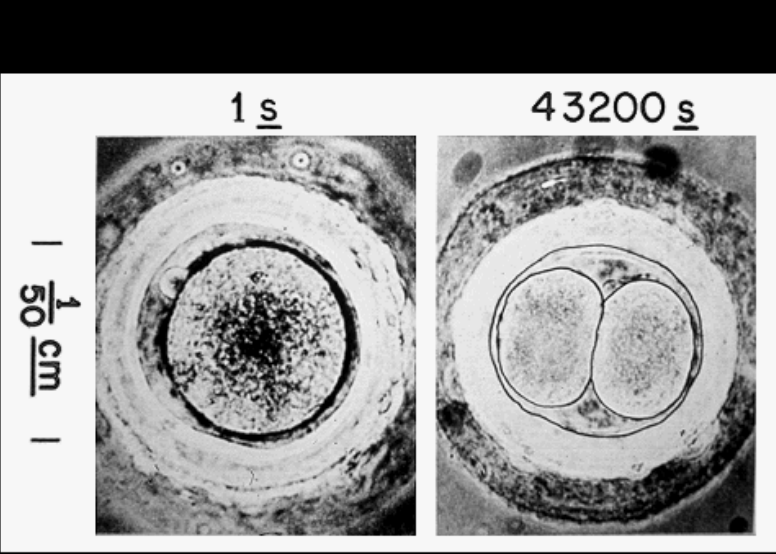


Figure 29: Fertilized ovum – Albert Bonniers; Forlag, Stockholm

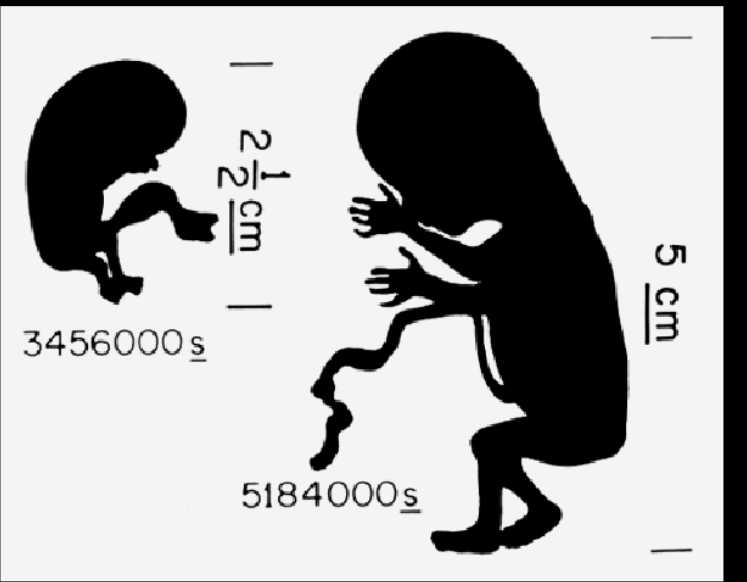


Figure 30: Fetus diagram – Jon Lomborg





Figure 31: Fetus – Dr. Frank Allan

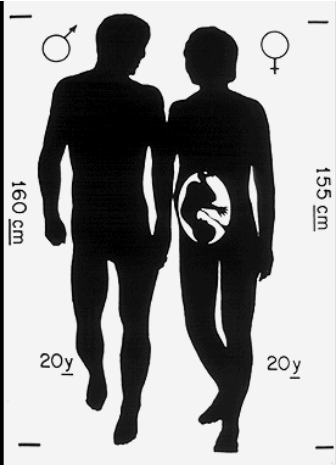


Figure 32: Diagram of male and female – Jon Lomberg



Figure 33: Birth – Wayne Miller



Figure 34: Nursing mother – UN



Figure 35: Father and daughter (Malaysia)  
– David Harvey



Figure 36: Group of children – Ruby Mera, UNICEF



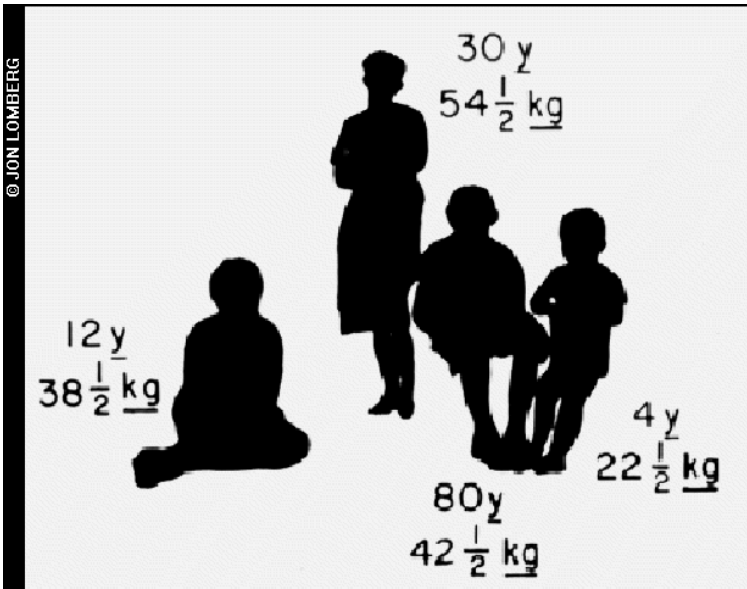


Figure 37: Diagram of family ages – Jon Lomberg



Figure 38: Family portrait – Nina Leen, Time, Inc.

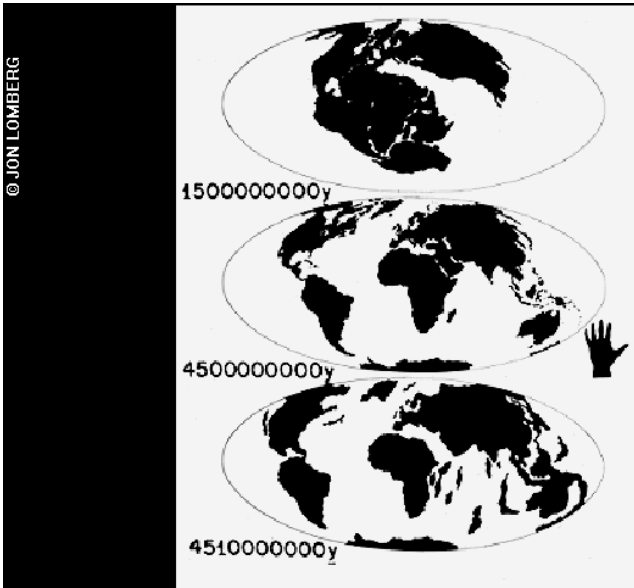


Figure 39: Diagram of continental drift – Jon Lomberg

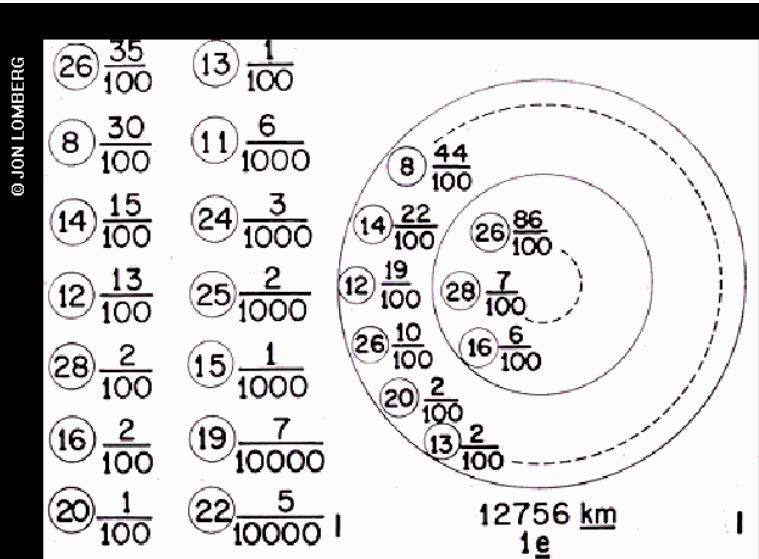


Figure 40: Structure of the Earth – Jon Lomberg



Figure 41: Heron Island (Great Barrier Reef of Australia) – Dr. Jay M. Pasachoff



Figure 42: Snake River and Grand Tetons – Ansel Adams





*Figure 43: Seashore – Dick Smith*



*Figure 44: Sand dunes – George Mobley*



*Figure 45: Monument Valley – Shostal Associates, Inc.*



*Figure 46: Forest scene with mushrooms – Bruce Dale*



*Figure 47: Leaf – Arthur Herrick*



*Figure 48: Autumn Fallen leaves – Jodi Cobb*





Figure 49: Snowflakes over Sequoia  
– Josef Muench, R. Sisson



Figure 50: Tree with daffodils – Gardens of Winterthur



Figure 51: Flying insect with flowers  
– Borne on the Wind, Stephen Dalton

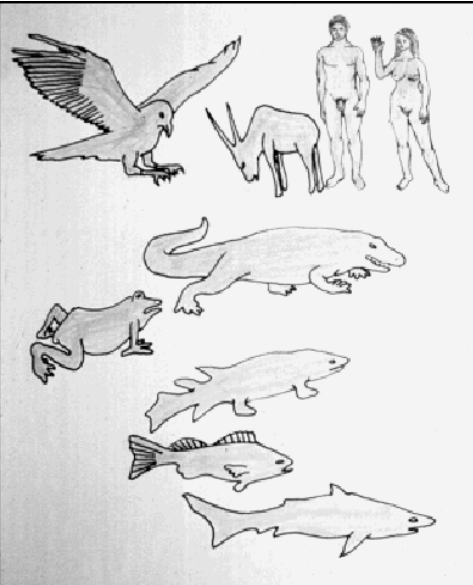


Figure 52: Diagram of vertebrate evolution – Jon Lomberg

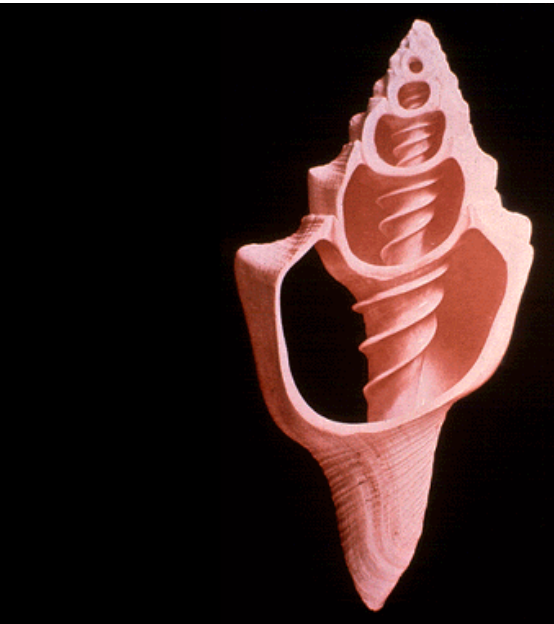
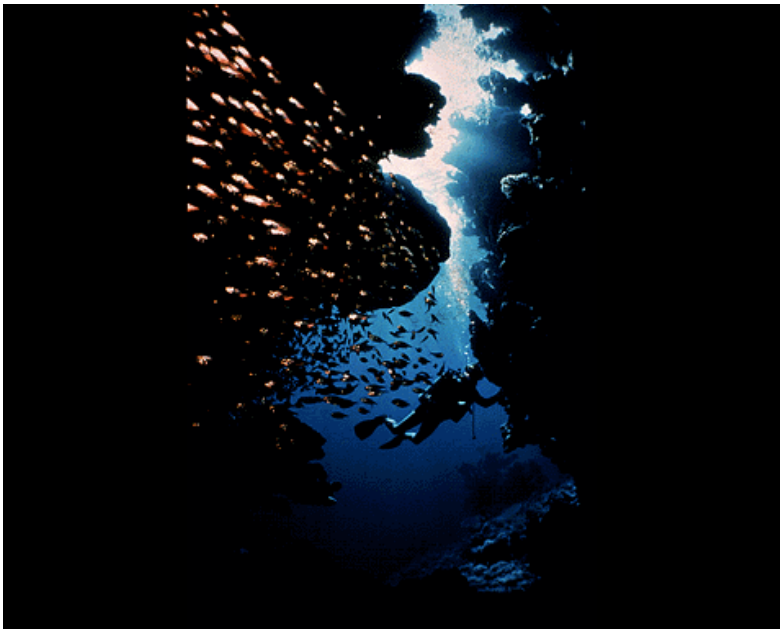


Figure 53: Seashell (Xancidae) – Harry N. Abrams, Inc.



Figure 54: Dolphins – Thomas Nebbia

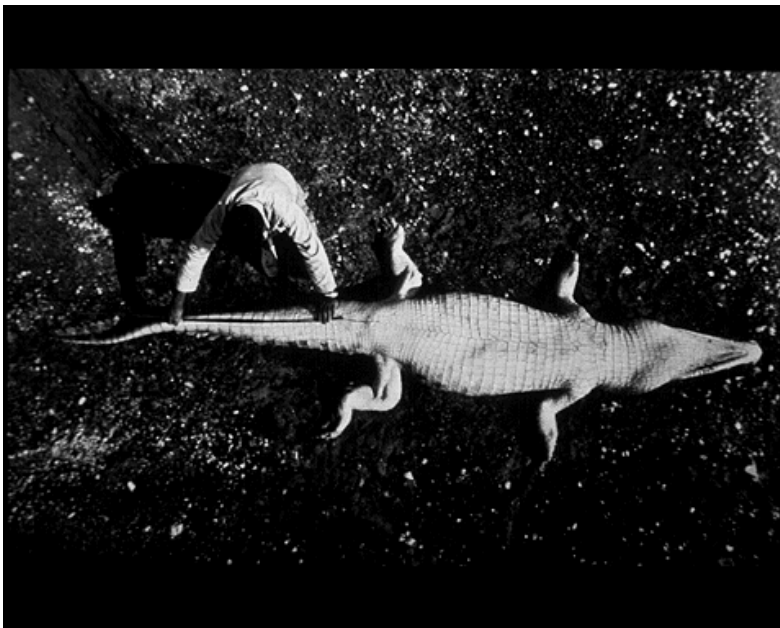




*Figure 55: School of fish – David Doubilet*



*Figure 56: Tree toad – Dave Wickstro*



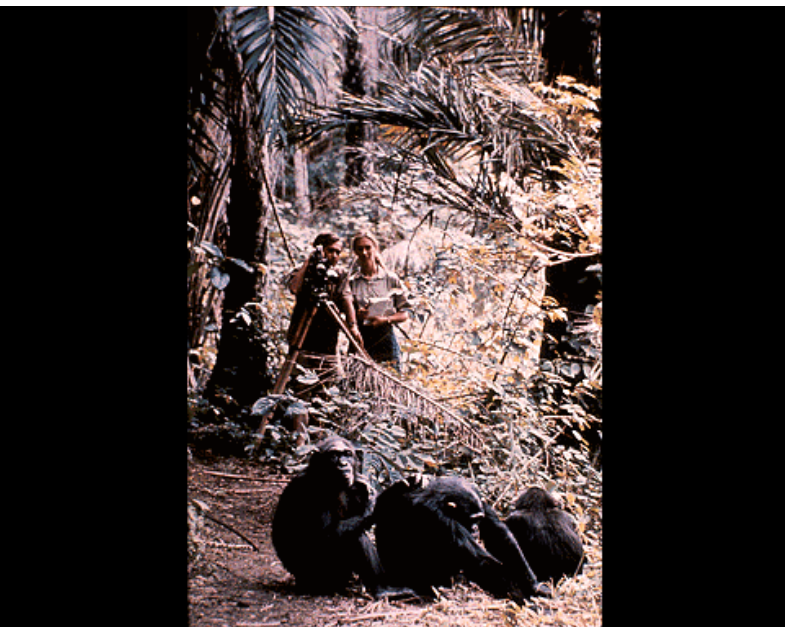
*Figure 57: Crocodile – Peter Beard*



*Figure 58: Eagle – Taplinger Publishing Co.*



*Figure 59: Waterhole – South African Tourist Corp.*



*Figure 60: Jane Goodall and chimps  
– Vanne Morris-Goodall*



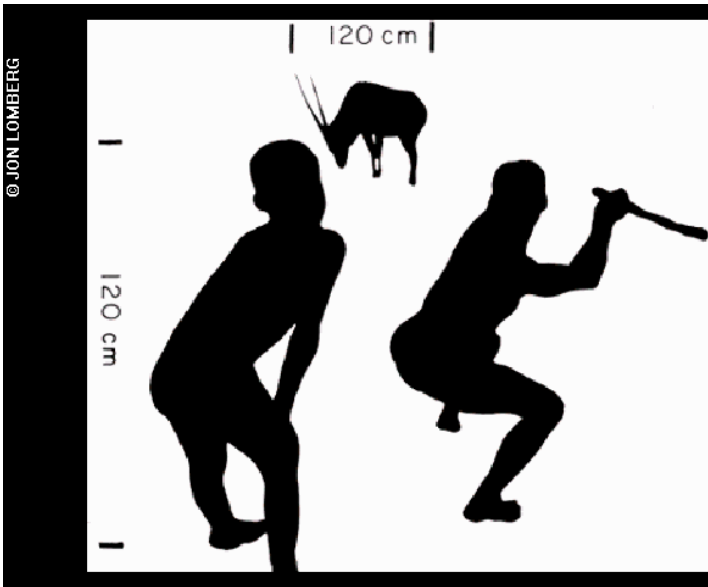


Figure 61: Sketch of bushmen – Jon Lomberg



Figure 62: Bushmen hunters – R. Farbman, Time, Inc.



Figure 63: Man from Guatemala – UN



Figure 64: Dancer from Bali – Donna Grosvenor



Figure 65: Andean girls – Joseph Scherschel



Figure 66: Thailand master craftsman – Dean Conger





Figure 67: Elephant – Peter Kunstadter



Figure 68: Old man with beard and glasses (Turkey)  
– Bruce Baumann



Figure 69: Leo Kenton Coleman with dog and flowers  
– Jonathon Blair



Figure 70: Mountain climber – Gaston Rebuffat



Figure 71: Gymnast (Cathy Rigby)  
– Philip Leonian, Sports Illustrated



Figure 72: Sprinters (Valeriy Borzov of the U.S.S.R. in lead)  
– The History of the Olympics





Figure 73: Schoolroom – UN



Figure 74: Children with globe – UN



Figure 75: Cotton harvest – Howell Walker



Figure 76: Grape picker – David Moore



Figure 77: Supermarket – H. Eckelmann



Figure 78: Underwater scene with diver and fish – Jerry Greenberg





Figure 79: Fishing boat with nets – UN



Figure 80: Cooking fish  
– Cooking of Spain and Portugal, Time-Life Books



Figure 81: Chinese dinner party  
– Michael Rougier, Time-Life Books



Figure 82: Demonstration of licking, eating and drinking  
– H. Eckelmann



Figure 83: Great Wall of China – H. Edward Kim



Figure 84: House construction (African) – UN



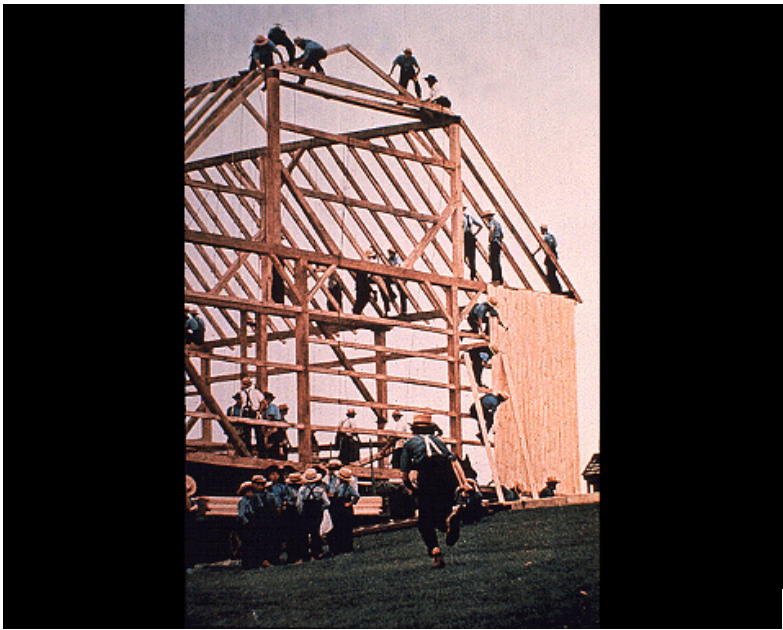


Figure 85: Construction scene (Amish country)  
– William Albert Allard



Figure 86: House (Africa) – UN



Figure 87: House (New England) – Robert Sisson



Figure 88: Modern house (Cloudcroft, New Mexico)  
– Dr. Frank Drake



Figure 89: House interior with artist and fire  
(Jim Gray & his wife) – Jim Amos

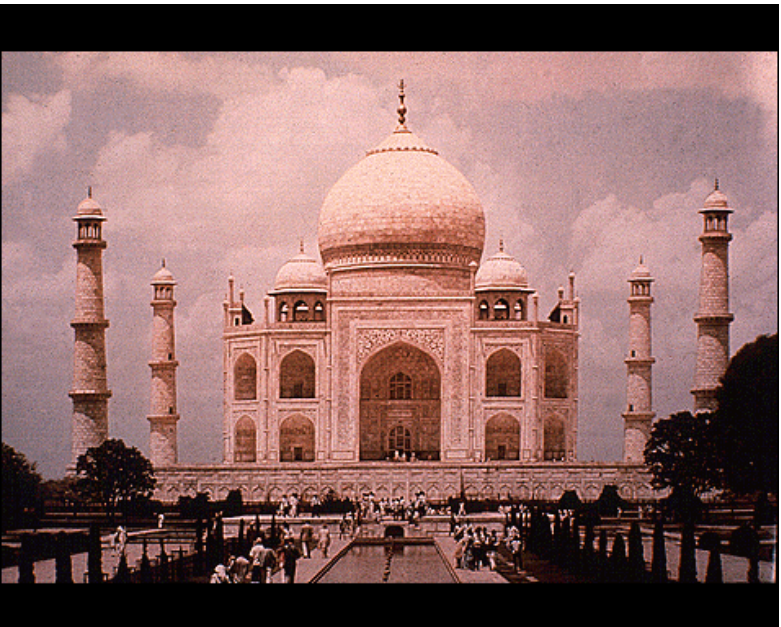


Figure 90: Taj Mahal – David Carroll





Figure 91: English city (Oxford) – C.S. Lewis, *Images of His World*, William B. Eerdmans Publishing Co,



Figure 92: Boston – Ted Spiegel

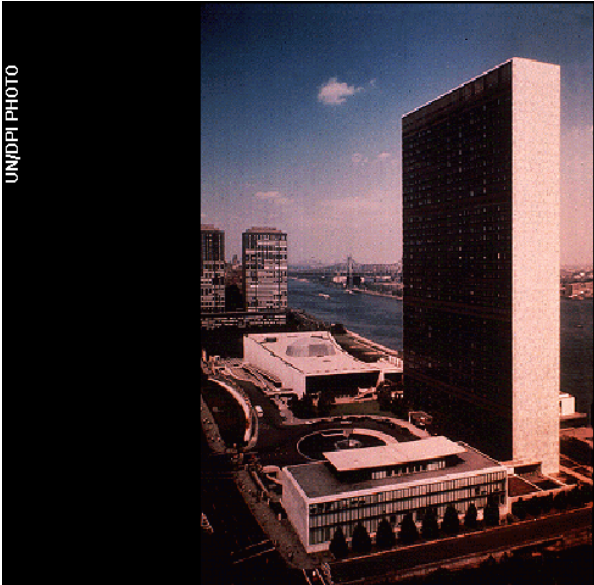


Figure 93: UN Building Day – UN

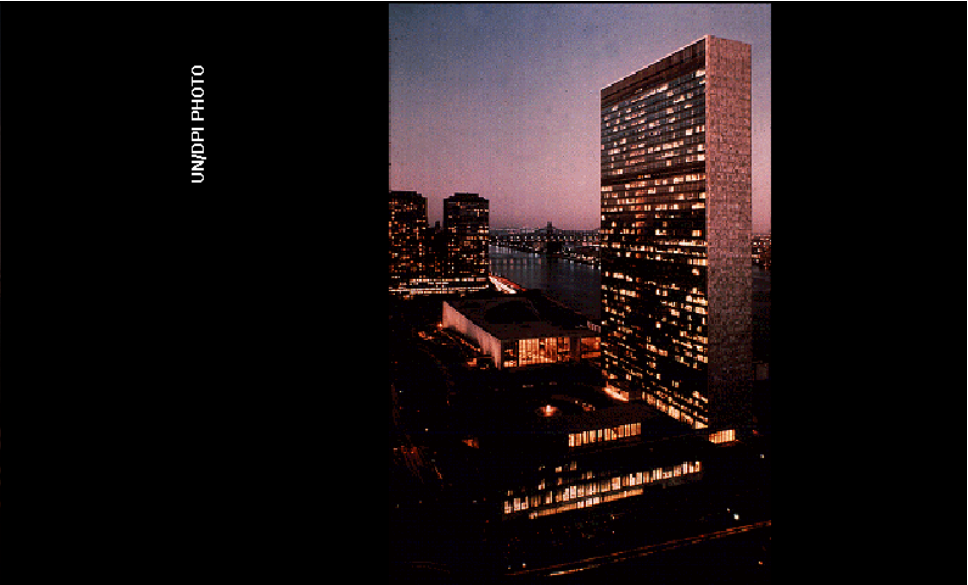


Figure 94: UN Building Night – UN



Figure 95: Sydney Opera House – Mike Long



Figure 96: Artisan with drill – Frank Hewlett



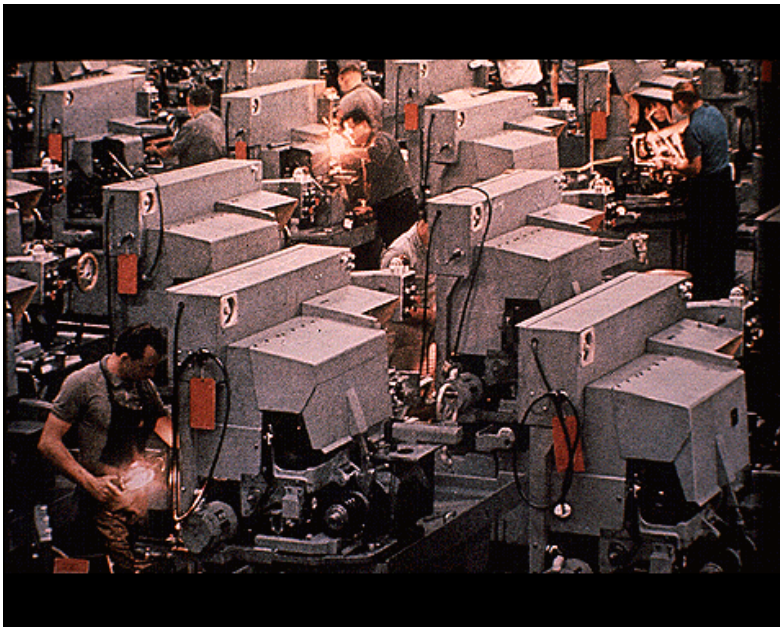


Figure 97: Factory interior – Fred Ward



Figure 98: Museum – David Cupp



Figure 99: X-ray of hand – H. Eckelmann



Figure 100: Woman with microscope – UN



Figure 101: Street scene, Asia (Pakistan) – UN



Figure 102: Rush hour traffic, Thailand – UN





Figure 103: Modern highway (Ithaca, NY) – H. Eckelmann

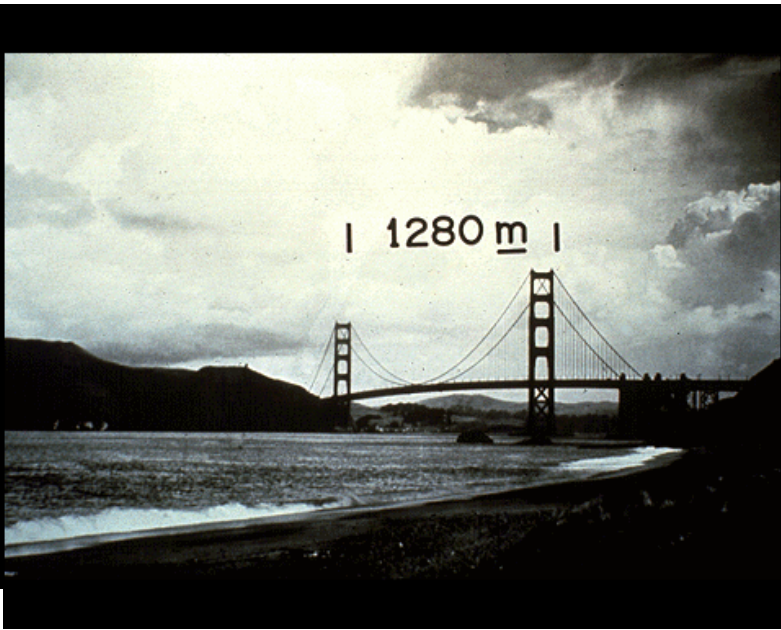


Figure 104: Golden Gate Bridge – Ansel Adams



Figure 105: Train – Gordon Gahan



Figure 106: Airplane in flight – Dr. Frank Drake



Figure 107: Airport (Toronto) – George Hunter

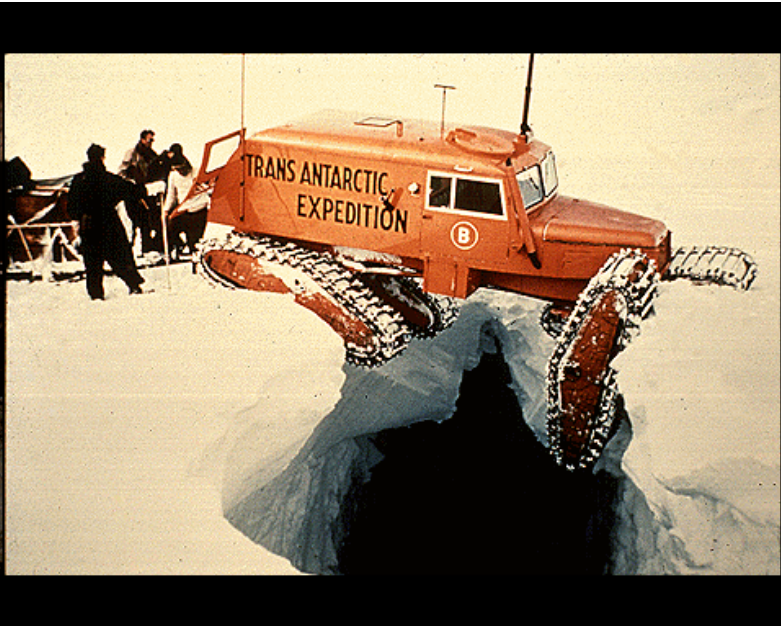


Figure 108: Antarctic Expedition  
– Great Adventures with the National Geographic





Figure 109: Radio telescope (Westerbork, Netherlands)  
– James Blair

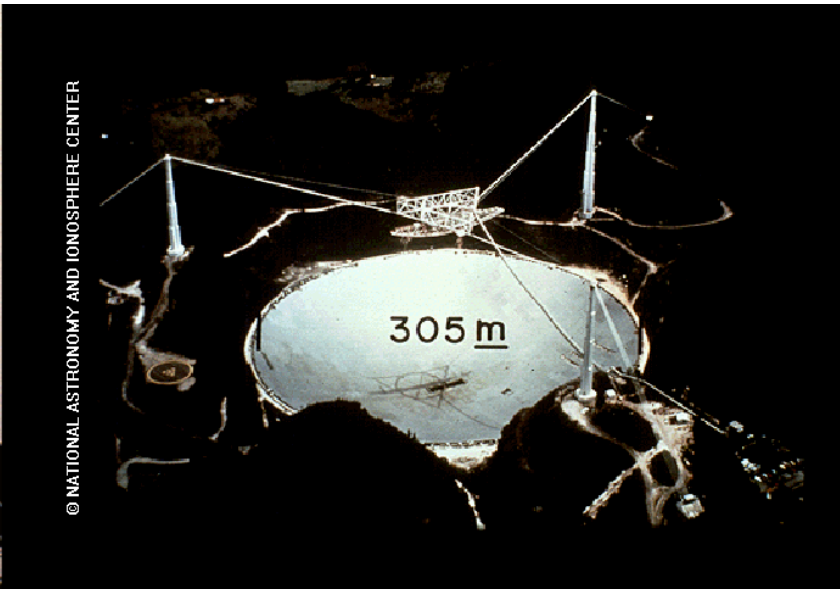


Figure 110: Radio telescope (Arecibo) – H. Eckelmann

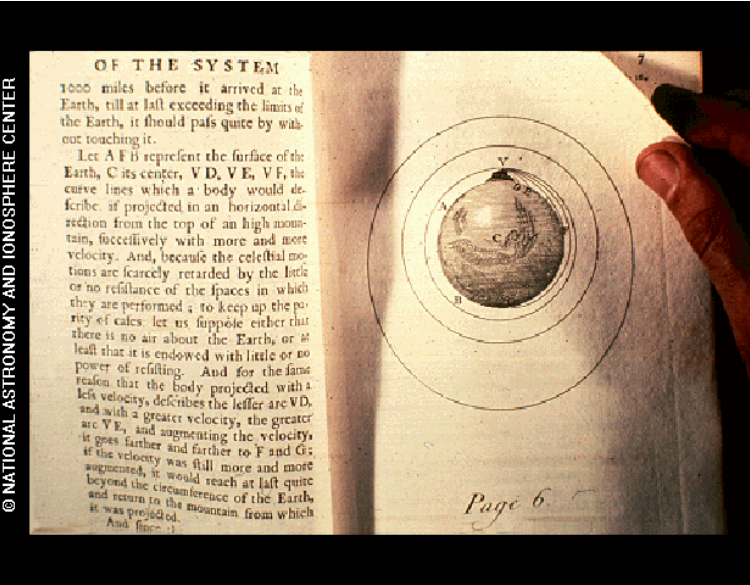


Figure 111: Page of book (Newton, System of the World)

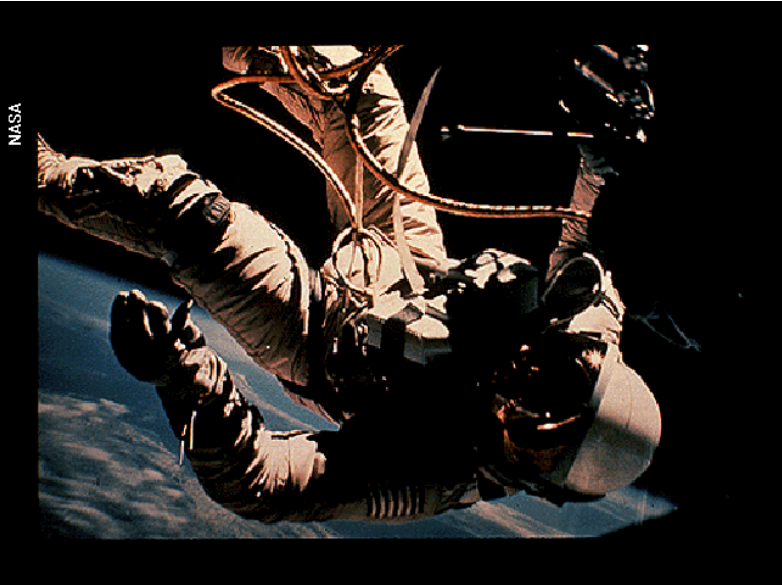


Figure 112: Astronaut in space – NASA

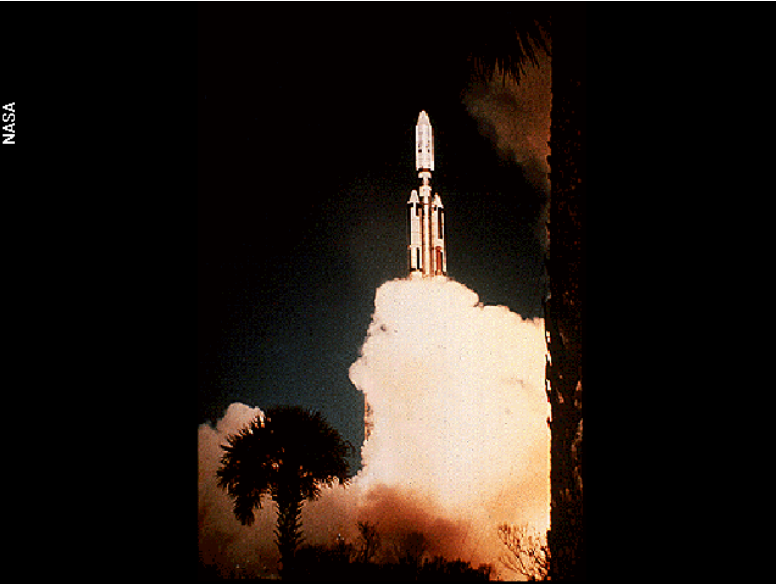


Figure 113: Titan Centaur launch – NASA

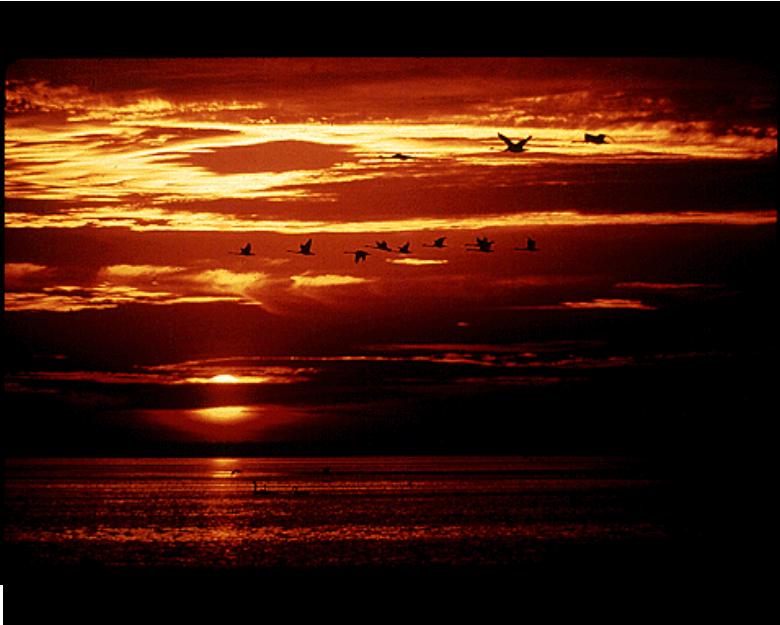


Figure 114: Sunset with birds – David Harvey





Figure 115: String Quartet (Quartetto Italiano)  
– Phillips Recordings

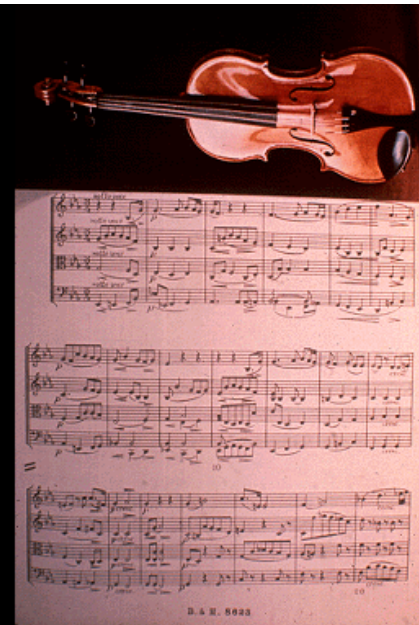


Figure 116: Violin with music score (Cavatina)

#### STATEMENT

This Voyager spacecraft was constructed by the United States of America. We are a community of 240 million human beings among the more than 4 billion who inhabit the planet Earth. We human beings are still divided into nation states, but these states are rapidly becoming a single global civilization.

We cast this message into the cosmos. It is likely to survive a billion years into our future, when our civilization is profoundly altered and the surface of the Earth may be vastly changed. Of the 200 billion stars in the Milky Way galaxy, some -- perhaps many -- may have inhabited planets and spacefaring civilizations.

If one such civilization intercepts Voyager and can understand these recorded contents, here is our message:

This is a present from a small distant world, a token of our sounds, our science, our images, our music, our thoughts and our feelings. We are attempting to survive our time so we may live into yours. We hope someday, having solved the problems we face, to join a community of galactic civilizations. This record represents our hope and our determination, and our good will in a vast and awesome universe.

*Jimmy Carter*  
President of the United States  
of America

THE WHITE HOUSE,  
June 16, 1977

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