

TO: SCIENCE STAFF  
FR: MICHAEL AMBROSINO  
RE: TOPICS UNDER CONSIDERATION  
DT: JUNE 14, 1973

The following topics are for discussion as we determine which should undergo preliminary research.

1. BIRD NAVIGATION - An examination of the search by American and German scientists to discover how birds navigate by studying the homing strategies of pigeons.
2. THE TESTING AND SAFETY OF DRUGS - An analysis of the chemical, animal and human testing procedures engaged in to certify a new drug for U.S. sale . We would also deal with the ethical questions of human testing, and equate the need for safety and the equally urgent need for efficient drug distribution.
3. THE NEW PLANETOLOGY - An examination of the current hypotheses concerning our inner planets and the challenges to them introduced by new data from manned and unmanned explorations of Earth, the Moon, Mars and Mercury.
4. THE EFFECTS OF STRESS ON DISEASE - People fall prey to serious attack at the time of grief, separation and failure. We will examine the role of stress on physical and mental illness.
5. 70 THOUSAND YEAR OLD MAN IN AMERICA - A recent archeological discovery in Cobleskill, New York, has unearthed artifacts of stone age man dating to 70,000 B.C.E. These challenge the existing theory which sets the date of man's arrival in North America across the Bering Land mass about 30,000 B.C.E.

6. THE COLORADO RIVER - is a useful model to examine the problems of water management in the United States. We make rain at its northern head water, draw it off for irrigation and urban use, drain back in with phosphates, salts, DDT and sewage leaving little at the southern U.S. border for the farmers of Mexico.
7. THE TECHNOLOGY OF NEW INTERNAL COMBUSTION ENGINES - 1976 U.S. emission standards are rather strict. To design engines and associated devices that meet them and not waste gasoline will be a major technological search in the mid 70's. In addition we plan to analyze the very feasibility of those standards.
8. ASBESTOS - Long blamed as an industrial killer for residents of Manville, N.J., home of John Mansville, Abestos provides a useful model of "technology assessment" - attempting to discover all the benefits and deficits of a new production process.
9. ROSETO, PENN. - We examine a large group of Italian-Americans, living on an extremely high cholesterol intake which has been under extensive medical research since 1961, when University of Texas researchers discovered very few deaths due to heart attack or stroke. The life style however has changed, the city has been "Americanized". Although the heavy diet remains, the cholesterol associated illnesses has zoomed to meet the U.S. standard in the new stressful environment.
10. BART - An analysis of the Bay Area Rapid Transit system, the nation's boldest attempt to substitute mass transit for the individual private motor car. We examine the design, use of new technology, and effect on San Francisco as BART celebrates its first anniversary.

11. AGING - An examination of the body functions in healthy young people as compared to aged persons. A look at the ethical considerations of creating better health and prolonging life.
12. THE LAST MOUSE IS DEAD - The famous 1968 Calhoun experiment allowed eight mice to breed in an enclosed space in optimum conditions. The population grew to 2200 with frightful physical, psychological and social effects resulting in the rapid decline and eventual destruction of the population. Many implications have been drawn with comparison to humans - are they valid?
13. TOBACCO - continues to be used in increasing amounts despite repeated warnings by U.S. health authorities. We examine the physical and statistical evidence and the social and commercial pressures which have affected the individual smoker.
14. NEW TECHNOLOGY AND ARMS CONTROL - An examination of the weapons which make up the balance of power and the new generation of weapons which threaten to make arms control even more difficult.
15. The effects of CAPTIVITY in a long range program which would follow the attempts by the U.S. armed forces to monitor and aid returned war prisoners.
16. DRUG THERAPY - has revolutionized the treatment of mental illness by chemically modifying behaviour. We examine this as an introduction to the expanding theory of chemical causes for mental illness.
17. THE ANT - We examine the ant as a social insect, as portrayed in E. O. Wilson's famous book. To film this program we would need to establish a small biological laboratory in Boston over a six month period.

18. RACE AND INTELLIGENCE - An analysis of the present methods of determining intelligence, the limitations of I.Q. measurement and the controversy raging concerning the statistical methodology of social science.
19. HIGH-RISE - The technology of new high-rise construction and an analysis of the physical and social effects of working and living in tall structures.
20. THE IMMUNE REACTION - As the efforts to lower the body's reaction to transplanted tissue improves, the statistics of related death by cancer points to the immunological defenses of the body as the main cause leading us to an investigation of immunology, the basic weapon of the healthy body.
21. LANGUAGE - The hand language of the deaf sign, is being studied as an example of the early acquisition of language by Ursula Belugi of the Salk Institute. We study that visual and the more normal oral method in an examination of language development.
22. DDT - Labeled a blessing and a curse, DDT, once thought of as a useful weapon for insect control now appears to be a constant danger to our environment. How was it developed, what was its effect, its side effects, its future?
23. ASPIRIN - is in many ways a wonder drug - we examine the history of aspirin, from the ancient use of willow bark to the present interest in its new curative claims.
24. THE BIG DIG AT SARDIS - is a description of the efforts to reconstruct Sardis by the Harvard University team. We would use film made over the early years of the Dig together with the now nearly finished site.

25. LEAKEY AND THE DAWN OF MAN - Shortly before he died, Louis Leakey recorded several hours of his views on the life of early man. David Seltzer, writer-producer of the Hellstrom Chronicle is preparing an outline for a new film using this material.
26. BABOON SOCIETY - Thousands of hours of original uncut negative exist of the Washburn-Devore EDC study on primate behaviour. This material is available for a popular adult treatment.
27. OIL - An examination of the exploration, collection, transportation and the uses of oil, followed by a study of oil's impact upon our energy needs and its economic and political consequences.
28. AGNES - A reconstruction of the most destructive hurricane to hit the east coast of the U.S. allows us to examine the nature of hurricanes and storms.

The following films have been viewed and are included in my list of acceptable for purchase:

1. The Crab Nebula
2. The Insect War
3. Are you doing this for me, Doctor, or am I doing this for you?
4. Hospital 1922
5. Survival of the Meakest
6. The tree that turned the clock back

The following films are to be viewed:

Shadows of Bliss

The Billion Dollar Marsh

The following topics are in production by WNET/13:

CANCER

HEART DISEASE

GENETIC DEFECTS

PULMONARY DISEASE

TRAUMA

I would appreciate your specific comments on these topics to help begin the orderly process of program choice.

We still need a series title...think of active verbs rather than passive nouns! The following are a few suggested to us:

SCIENCE INCORPORATED

THE SCIENCE OF MAN

MAN AND HIS WORLD

SCIENTIFIC MAN

SCIENCE

HORIZON

SCIENTIFIC MAN

MAN AND THE UNIVERSE

THE SEEKERS

SEARCH

SCIENCE UNLIMITED

MAN AND SCIENCE

QUEST

YOU AND THE UNIVERSE

*Michael*

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