

OF THE WEEK

| | |
|--------------------------------------------|-----|
| Tracking clues to humanity's past | 132 |
| Proliferation-proof breeder proposed | 132 |
| Thermionics seeks recognition | 133 |
| "Musical genes" signal damage | 133 |
| Ft. Detrick DNA experimentation | 133 |
| Waterproof molecular sieve developed | 133 |
| Regulations set for behavioral research | 134 |
| Where the psychologists are | 134 |
| Measuring neurotransmitters <i>in vivo</i> | 135 |
| Potential victor against sickle cell | 135 |
| Flashlight fish kin comes to light | 135 |
| Increased cancer rates at Portsmouth | 135 |

RESEARCH NOTES

| | |
|----------------|-----|
| Zoology | 136 |
| Earth Sciences | 136 |
| Archaeology | 137 |
| Space Sciences | 137 |

ARTICLES

| | |
|----------------------------------|-----|
| Listening in on the earth | 138 |
| Holographic movies go commercial | 141 |

DEPARTMENTS

| | |
|---------|-----|
| Letters | 131 |
| Books | 142 |

COVER: At a radioastronomy facility on a hypothetical planet circling Barnard's star, a resident researcher monitors a chart recorder as the device displays earth's electromagnetic signature, primarily due to leakage from TV broadcasts. Peaks and valleys represent changes in signal strength as varying concentrations of TV stations come around the edge of the rotating earth. Can the researcher figure it out? See p. 138. (Painting for SN by Ron Miller)

| | |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------|
| Publisher | E. G. Sherburne Jr. |
| Editor | Robert J. Trotter |
| Senior Editor and Physical Sciences | Dietrick E. Thomsen |
| Behavioral Sciences | Joel Greenberg |
| Biomedicine | Joan Arehart-Treichel |
| Life Sciences | Julie Ann Miller |
| Policy/Technology | Janet Raloff |
| Space Sciences | Jonathan Eberhart |
| Contributing Editors | Lynn Arthur Steen (mathematics) Kendrick Frazier John H. Douglas Susan West Roberta Navickis |
| Science Writer Interns | Judy Klein Dale Appleman |
| Assistant Editor | Donald Harless |
| Art Director | Scherago Associates 1515 Broadway New York, N.Y. 10036 Fred W. Dieffenbach, Sales Director |
| Business Manager | |
| Advertising | |

Copyright © 1978 by Science Service, Inc., 1719 N St., N.W., Washington, D.C. 20036. Reproduction of any portion of SCIENCE NEWS without written permission of the publisher is prohibited.

Editorial and Business Offices
1719 N Street, N.W.
Washington, D.C. 20036

Subscription Department
231 West Center Street
Marion, Ohio 43302

Subscription rate: 1 yr., \$12.50; 2 yrs., \$22; 3 yrs., \$30. (Add \$2 a year for Canada and Mexico, \$3 for all other countries.) Change of address: Four to six weeks' notice is required. Please state exactly how magazine is to be addressed. Include zip code.

Printed in U.S.A. Second class postage paid at Washington, D.C. Title registered as trademark U.S. and Canadian Patent Offices.

Published every Saturday by SCIENCE SERVICE, Inc. 1719 N St., N.W., Washington, D.C. 20036. (202-785-2255) TWX 710-822-9433 SCIEN NEWS. ISSN 0036-8423

LETTERS

Counseling: Don't give up

Before one jumps to the conclusion that psychotherapy is ineffectual, or possibly even detrimental in the treatment of potentially delinquent children (Thirty-year follow up: Counseling fails (SN: 11/26/77, p. 357)), several factors must be considered:

1. Joan McCord's findings are not new. In 1968, Sheldon and Eleanor Glueck¹ reported the discouraging effects of counseling in the District of Columbia Taylor Elementary School Maximum-Benefits Project, involving 179 children (slightly more crimes were committed by the counseled group²). They remark, "It is strikingly obvious in our day that little progress can be made in the prevention of attitudes and practices involved in delinquency until family life is strengthened. . . ." And with their own longitudinal sample of 500 delinquents and 500 non-delinquents, the Gluecks found that the efforts of the sociolegal apparatus had little deterrent effect—hardly as much as "Mother Nature and Father Time."³ Nevertheless, they plead for more counseling, not less, but with an emphasis on the family.⁴

2. The fact that psychotherapy (especially those techniques derived from a Freudian framework) could encourage sociopathy, was anticipated by O. Hobard Mowrer in the early 60s.⁵ Differing with the teachings of Freud, he cites evidence to bolster his belief that the psychoneurotic is not oversocialized, but one who has more difficulty avoiding involvement in antisocial conduct than does the normal person, but then worries about it later. Mowrer, therefore, believes that therapies expressly designed to alleviate guilt may actually encourage antisocial misconduct. Since those therapies that focus on overt acts rather than internal feelings (the behavior therapies) were unknown thirty years ago, McCord's findings cannot reflect their potential effects.

3. Since family factors are so important in predisposing a child to become delinquent, working only with the child is probably a mistake. It seems that preparing high-risk families for parenthood should become a national priority. We have known for years that delinquents disproportionately come from broken homes, homes where at least one parent was alcoholic, and from homes our society labels "disadvantaged."⁶

Further, we are now realizing that family violence, particularly the physical mistreatment of children, is one of the most significant family factors of all, and the acceptance of corporal punishment in both the home and school should no longer occur in the clinical community.^{7, 8, 9, 10} (SN: 5/15/76, p. 315 and SN: 6/19/76, p. 387). The recent Supreme Court decisions sanc-

tioning its use in the schools are hard to comprehend.

If a carefully controlled, large-scale program of counseling oriented toward better parenting for parents of pre-delinquent youngsters (based on the newest techniques of behavior modification) could be set up and the children followed longitudinally, then the counseling issue might be settled. If the parent counseling still was found to be ineffective, counseling might then have to be abandoned as a crime-preventive procedure for potentially delinquent youth—but let's not be hasty in condemning counseling outright until we know.

Ralph S. Welsh, Ph.D.
Danbury, Conn.

References:

1. Glueck, S. and Glueck, E., *Delinquents and non-delinquents in perspective*, Cambridge: Harvard University Press, 1968, p. 187.
2. Report of the President's Commission on Crime in the District of Columbia, pp. 756-757 (circa 1958).
3. Glueck and Glueck, p. 166.
4. Glueck and Glueck, p. 187.
5. Mowrer, O. H., *The New Group Therapy*, Princeton: D. Van Nostrand, 1964, and Mowrer, O. H., *The Crisis in Psychiatry and Religion*, Princeton: D. Van Nostrand, 1961.
6. Glueck and Glueck, p. 186.
7. Trotter, R. J., East Side, West Side: Growing up in Manhattan, SCIENCE NEWS: 109, 6/19/76, p. 387.
8. Punitive Parenting, Letters column, SCIENCE NEWS: 109, 6/19/76, p. 387.
9. Welsh, R. S., Severe Parental Punishment and Delinquency: A Developmental Theory, JOURNAL OF CLINICAL CHILD PSYCHOLOGY, 1, Winter/Spring, 1976, pp. 66-71.
10. Delinquent Child's Anger Reflects Violent Rearing, CLINICAL PSYCHIATRY NEWS: 3, pp. 8-9.

Joan McCord's comment, "It's possible that people became too dependent on counselors, and therefore they do not acquire the skills of those who do not have therapy," sounds like another classic example of blaming the victim. There are probably as many different kinds of therapies as there are therapists, and many treatment paradigms are sadly lacking in any solid methodology. It is simply not good science to blame the results on the problem. One should perhaps question the conceptual schema for the more fundamental flaws.

Fred Monaco
Lynwood, Calif.

Correction:

Statements of liver damage and fetal death associated with chloramphenicol (SN: 11/12/77, p. 309) were in error. Liver damage should have been attributed to tetracycline, not chloramphenicol; fetal death has not been linked to chloramphenicol despite more than 25 years of use in pregnant women. Rare illness or death associated with chloramphenicol administration to prematures and newborns, on the other hand, is widely recognized as the "Gray syndrome," and results from the inadvertent administration of excessive doses.

Institution for the public understanding of science founded 1921; a nonprofit corporation.

SCIENCE SERVICE

Board of Trustees—Nominated by the AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE: **Deborah P. Wolfe**, Queens College of City University of New York; **Bowen C. Dees**, The Franklin Institute; **Athelstan Spilhaus**, National Oceanic and Atmospheric Administration. Nominated by the NATIONAL ACADEMY OF SCIENCES: **Gerald F. Tape** (Vice President), Associated Universities; **Allen V. Astin**, Bethesda, Md.; **Glenn T. Seaborg** (President), University of California, Berkeley. Nominated by the NATIONAL RESEARCH COUNCIL: **Gerald Holton**, Harvard University; **Joseph W. Berg Jr.**, National Research Council; **Aaron Rosenthal**, Washington, D.C. Nominated by the JOURNALISTIC PROFESSION: **Edward Bliss Jr.**, Newburyport, Mass.; **Julius Duscha**, Washington Journalism Center; **O. W. Riegel** (Secretary), Glasgow, Va. Nominated by E. W. SCRIPPS TRUST: **Milton Harris** (Treasurer), Washington, D.C.; **Edward Scripps II** (Vice President and Chairman of the Executive Committee); Edward W. Scripps Trust; **John Troan**, Pittsburgh Press.

Director: E. G. Sherburne Jr.; Assistant Director: Dorothy Schriver; Business Manager: Donald R. Harless; Things of Science: Ruby Yoshioka.