

Some Psychiatric Comments on "Long-Distance Travel"

Humphry Osmond, M.R.C.P., F.R.C.Psych.¹

This is a vivid, clearly written, and well-organized account of a brief but frightening schizophrenic episode precipitated by travelling in an automobile. It should be instructive for patients, their relatives, and professionals alike. Dr. MacHamm is a well-trained young social scientist with an ability to observe herself in a detached way, a talent for which her training and field experience make her narrative of special value.

So far as I know, this is the first published account of a schizophrenic relapse which appears to be directly linked to automobile travel. Since Dr. MacHamm told me of her strange adventure in the spring of 1976, I have discovered two similar cases. During the last half century tens of thousands of people have been killed and hundreds of thousands injured in and by automobiles every year. Automobiles play a large part in the commission of many kinds of crime, are a frequently used suicide weapon, and account for occasional murders, but their potential for precipitating schizophrenic episodes has not

been reported so far.

In 1906 (Cohn, 1976) a psychiatrist, accustomed to horses, could foresee that these novel vehicles, as they then were, might be dangerous for members of our species. He wrote:

Soon physicians will be called on for numerous cases of nervous symptoms traceable to excitement and nervous tension of rapid travelling with the emotional repression necessary to secure a reasonable feeling of enjoyment, while speeding rapidly with risks and dangers constantly at hand . . . Dr. Paul Magin considers that the indulgence in speed is not unlike in alcohol and tobacco . . . In 1901, Dr. Winslow Forbes, described as "a brain specialist," but in fact a well-known psychiatrist, was reported as saying, at a time when automobiles seldom went more than 20 miles per hour:

When these racing motor cars reach a speed of 80 miles per hour, they must drive themselves for no human brain is capable of dealing with all the emergencies that may arise should that rate be maintained for any period worth thinking of. The human animal is not designed to travel at 80 miles an hour; neither the

¹ Bryce Hospital, Station 3, Tuscaloosa, Alabama 35401.

human brain, nor the human eye can keep pace with it.

The human brain and eye proved to have functional reserves greater than those anticipated by the two psychiatrists, but by 1939 as the **Scientific American** for September of that year noted:

You may not have contributed to the nation's 32,400 deaths and 7,150,000 nonfatal injuries resulting from automotive mishaps last year, but that's no sign that you are sane. Crazy drivers crowd the highways and their insanity is easily demonstrable.

At the beginning of the 20th century the two physicians underestimated human adaptability not simply to speed, but for tolerance for deaths and casualties on a huge scale. Perhaps we can forgive their lack of foresight for in those unenlightened days before two World Wars, the atom bomb, the Jewish holocaust, and Stalin's death camps, it was easy to overestimate human squeamishness.

Yet Dr. MacHamm's story suggests that those early apprehensions may not have been quite as laughable as they at first seem. Yet if her case is not unique, and it is not, why have not similar cases been described long ago? Three quarters of a century have passed since Dr. Forbes' warning, yet automobile travel is not a widely known hazard for sufferers from schizophrenia.

Doctors, like most of us, are creatures of habit. The classic descriptions of dementia praecox, or as it was later called by Eugene Bleuler, the schizophrenias, were developed in Europe before World War I. Indeed the notable German and Swiss psychiatrists were direct contemporaries of Drs. Paul Magin and Winslow Forbes. At that time driving by automobile was a rich man's sport, the vehicles were slow and unreliable, while the roads made it impossible to drive 600 miles or more in a day. It is only during the last 20-30 years that roads and vehicles have made it feasible for many people, both drivers and passengers, to drive such distances. A generation has grown up and others are maturing who take it for granted that extensive travel by automobile is

an essential ingredient for the pursuit of happiness.

When I first suggested to Dr. Mac-Hamm that excessive, injudicious travel might have precipitated her severe and sudden relapse, she was incredulous. Had I indicated that her relationship to her parents, siblings, husband, or even her recently born child had been at the root of the trouble, this would have seemed more plausible and have been more acceptable. Those same cultural blinkers which allow North Americans to accept 50-60,000 automobile deaths and a million or more other casualties annually, make it hard to credit that such benevolent objects could disturb the highest level of mental functioning. Even though Dr. MacHamm is a well-trained social scientist, who had been lecturing her students on the antiquity of the human brain, developed for hunting and gathering societies, she took some time to accept this culturally alien explanation for her illness. It was as if a young cannibal had been told that human meat was dangerous and might cause illness. Such information would be hard to accept but also distressing for if something so familiar could be harmful, in what could one put one's trust?

Her narrative shows that after only a few hundred miles her brain was already beginning to have difficulty in coping with the torrents of information sluicing through it. When the sun came out, greatly increasing the intensity of the experience, things became steadily worse as she herself notes:

Then suddenly the sun burst forth from behind a cloud, electrifying the whole countryside. I blinked at the brightness. The day was going to be dazzling.

"Look at that farm," my husband said. "How would you like to have a place like that?"

I quickly glanced out of the window. A bright green meadow flew by followed by a house, a pond, a barn, and then another pasture. A continuous panorama of

greens and browns and blues flowed past my eyes. I sat glued to the window, my mind mesmerized by the kaleidoscope of constantly shifting shapes and colors. Four hours and several hundred miles later we finally stopped. It was nearly 1 p.m., I was hungry, and my husband looked weary. He parked the truck in front of a restaurant which advertised "Tennessee Country Cooking." As the journey continued, overstimulation, excessive coffee drinking, neglect of her regimen and medications, fatigue, but above all her increasingly unstable perceptions made her anxious and fearful. It appears that we had failed utterly in our attempts to teach her how to be a responsible patient, even though she possessed just those qualities of intelligence, professional training, an open and inquiring mind, with a capacity to describe what is happening which should make her ideal for this role. She was not suspicious or distrustful, quite the reverse. She was anxious to learn about her illness and eager to avoid its recurrence.

Where then had we erred, for the error was not hers? We had not been explicit. Perhaps we too have some of that culturally induced awe of the automobile which makes us unsure about giving specific information about the dangers of driving and being driven. Perhaps too the cult of indirection which has dominated psychiatry for much of the last 40 years exerted a covert influence.

The omission was not due to ignorance for following a cataract operation in 1971 I had reported these experiences (1974) which made me very exhausted after driving in an automobile. I found this mysterious—then I realized why:

After spending something like three to five years progressively receiving less and less visual information as the cataracts became more and more opaque, my brain was suddenly receiving an extraordinary quantity of visual information through my cleaned eyes and . . .

. . . Perceptually, my experience was like that of

someone recovering from schizophrenia, but in reverse. The schizophrenic person is bombarded with perceptual in-put—much of it distorted, irrelevant, and internally generated. As he becomes well the input decreases. He experiences more relevant information, surely, but there is less and less information, over all, to deal with. By contrast, the person recovering from cataracts must put up with a great increase in visual in-put. The degree of difficulty in adjusting to a "new" post-cataract environment depends upon how closely the new images in the incoming information correspond to the engram [or coded representations of the images of observed objects) that are stored in the brain and represent the familiar world. Her narrative shows that although Dr. MacHamm observed with growing apprehension a number of disturbing changes in perception, she did not realize that these were warnings to initiate protective moves, but did her best to ignore her sensory disturbances. Since this soon proved to be impossible she became increasingly worried, frightened, and panicky.

The HOD (Hoffer et al., 1975) test done retrospectively when she was emerging from her rejaipse shows what had happened. It confirms that two long days driving had managed to harm her in a way that pregnancy, delivery, and nursing her baby had been unable to do. When first seen after her return she had a HOD Score of 38, higher than one would like, but much better than the score of 103 which she recalled 10 days previously. At this time she had a depression score of 17 out of 18, a perceptual score of 28, and a paranoid score of 7 out of 15. In the Depression Score which is very high there are such items as: 20 The world is dim 53 Days go by slowly 102 Very tired
105 Feel alone and sad at a party
106 Usually feel miserable and blue
107 Life seems entirely hopeless However this severe depression occurred in a context of many perceptual

disturbances affecting visual, auditory, self-perception, perception of others and time, but did not damage olfactory or taste perception to the same extent.

Looking at some of the sensory items, it is not surprising that Dr. MacHamm was low spirited.

1 Faces pulsate 4 People watch me more

12 World seems unreal

14 Table and chairs strange

15 People look strange

16 People look like someone else

19 World very bright

20 World very dim

23 Shut off by a mist or fog

24 Objects pulsate

117 Hands or feet far away

Her world is unsteady, much less predictable, and she cannot rely on it or the people in it. It is not only the world and the people in it, but her own self which has become unpredictable.

13 She feels unreal

18 Own body out of proportion 27 Hands or feet too large

29 Often leaves own body

117 Hands and feet far away

131 I feel as if I am dead

145 I am not sure who I am

Her self-perception had been heavily damaged. Time perception, too, has been altered with such items as:

73 Feels new situation a repeat of old one

127 World has become timeless

144 Past, present, and future all muddled

Her auditory perceptions were a little less distorted than her visual, self, and time perceptions, but nevertheless:

30 Hearing (is) more sensitive

121 Hear thoughts inside head

123 Hear own thoughts like a voice In other words tiresome auditory phenomena which could culminate in auditory hallucinations are beginning.

The Paranoid Score shows that her usual wary trustfulness had been eroded by her strange perceptions. Items such as:

69 A plot against me 81 People watching me

141 Can't trust anyone now

143 Most people hate me all show that her world has become hostile and threatening and she is responding with fear and growing suspicion.

The five special cards

106 Usually feel miserable and blue

107 Life seems entirely hopeless 131 I feel as if I am dead

143 Most people hate me

145 I am not sure who I am were all positive, but so, luckily, was card 76—"I know I am sick"—showing that insight had not been lost. This meant that she perceived herself in the sick role and was a little further from despair and terror than had she thought she was well.

From Dr. MacHamm's narrative and my talks with her it is evident that, although the long-distance driving began to erode her perceptual stability, this process was sustained and aggravated by her having to meet many unfamiliar people in strange surroundings. Since neither she nor her husband had received any explicit instructions about the hazards of long-distance driving, they had to depend upon such information as they had gleaned during the previous year. This as her story shows was insufficient. My colleagues and I had no prior knowledge of the expedition, but then we had never indicated that travel might be an insidious danger. We had little routine information for patients. Because of this breakdown in communication, Dr. MacHamm and her husband had a very uncomfortable month during which she teetered on the edge of a psychotic break.

A combination of reassurance, instruction, and explanation with increased amounts of megavitamins, since she is intolerant of phenothiazines which muddle her, quickly stabilized her. Her response to this simple regimen was gratifying.

It was natural that she, her husband, and her therapists viewed her next long journey with apprehension, something quite unusual for her. - To allay this justified worry, as soon as the clinical and the HOD data were analyzed, a

strategy was developed to make it possible for her to travel yet stay sane. The strategic formulation was prepared in memo form (Osmond, 1976), and she received a copy for her consideration. These are some extracts from that memo. *The automobile is particularly hazardous because it is an invisible cultural artifact —most of us cannot imagine being without it and cannot believe that something so familiar could be harmful. . .*

. . . It is not only the length of the journey, but the time of year which is important. Strong sunshine and highly reflective surfaces result in a much greater bombardment of eye and skin and so overstimulation of the brain. Spring is especially dangerous in this respect, because, due to winter darkness, the brain adjusts to a lower level of stimulation and is consequently more vulnerable to the much stronger sunshine and longer days. Spring often combines, sometimes simultaneously, two maximal sources of reflected light, snow and the very early green leaves.

The memo then discussed some hazards likely to be encountered.

The prevention of future occurrences depends upon learning from this mini-disaster* for that is the great importance of mini-disasters, they should be a source of education.

(a) She must acquire a greater awareness of sensory overloading, especially visual and auditory. This must then be reduced by the best means available. In this particular episode dark glasses, opaque eye pads, regular resting in the back of the car with eyes covered might have sufficed.

(b) Social overloading must receive equal attention. She must learn to estimate her tolerance for social interaction and live within it. Clearly a combination of (a) and (b) is likely to be

* A mini-disaster is an event which has all the ingredients of a catastrophe, but by good luck the worst is avoided. This should be an admirable occasion for preventing similar misfortunes which might end as mega-disasters. It is unusual for this approach to be taken with mini-disasters. They are usually hushed up and are only recalled when a mega-disaster occurs.

especially harmful, and ironically it is likely to damage those who are conscientious as regards social relations even more than those who are more offhand. Social input must be limited in quality and quantity. This may require family or spouse to assist in helping the patient resist the tendency which is particularly likely to occur on vacations to overindulge socially.

(c) Simple fatigue may be produced by (a) and (b), but may also be the result of such mundane things as unfamiliar beds, unusual noises, and similar annoyances of travel. It may be prudent to use a simple hypnotic should this occur. But adequate rest, the use of bathing and showering to assist relaxation combined with exercise and relaxation may make a hypnotic unnecessary. It is often forgotten that modern travel consists of movement without much muscular exercise. This is likely to result in tension building up and not being dissipated by exercise.

(d) Dietary indiscretions associated with travel as this case shows are likely to occur unless they can be recognized and prevented ahead of time. Coffee drinking is a special hazard on long trips as this story shows.

(e) Climatic changes which can easily include marked alterations in altitude and temperature can play a part in disturbing one's psychophysiology.

I made a special note that in Dr. MacHamm's case Transcendental Meditation, which she had used in desperation when greatly over-stimulated, did not seem to help her and may have made her worse. I therefore advised progressive relaxation, while using her notable capacity for visual and auditory imagery to encourage tranquility and reduce tension.

There are a great variety of psychosocial ordeals to which patients are attracted. These may, indeed from their popularity must, help some people, but for others they impose a serious unnecessary stress. This seems to be particularly true for the schizophrenic and affective illnesses and some cases of

alcoholism. It is prudent to discuss these and similar hazards with patients giving them simple examples and illustrations, showing why and how to recognize dangers.

Group activities present two main hazards for those who suffer from schizophrenia and the affective illnesses. The first is that they may result in interaction of an overstimulating kind, and the second that many of these activities are prolonged and result in exhaustion. As Dr. MacHamm's narrative shows, she and her husband learned quickly so that the second expedition which had worried them both passed off without incident: Indeed since then they have travelled hundreds of miles to their new university after packing up their home. Dr. MacHamm coped very well and did a full share of driving.

Although the nightmare journey to New England and back was anguishing for both the MacHamm's, it has served a useful purpose. When she saw the HOD test results and had discussed them, she realized for the first time how vulnerable she is. By facing her vulnerability, learning about it and coming to terms with it, she has found ways to protect herself. Using these protective measures adroitly she ceased to be a helpless victim of illness and has had the satisfaction of participating in its treatment and beginning to master a treacherous enemy. Setbacks of the kind she describes so vividly here can be used to protect patients against worse misfortunes:

Virginia Woolf (Bell, 1974), the famous author, suffered from an illness not very unlike that described here by Anna MacHamm, during her most productive years when she wrote her greatest books. She and her husband Leonard never knew the technical name of her illness, even though they were Freud's English publishers. They used to call the affliction "Virginia's Madness." It took them a number of years to learn the importance of avoiding overstimulation, being particularly alert to exhaustion, and getting adequate rest. They do not seem to have had much information about nutrition, and the drugs available were not very

helpful. However, so skillfully did they deploy their small stock of knowledge that for over a quarter of a century she led a happy and wonderfully productive life. They discovered by trial and error that finishing a book left her especially liable to overstimulation, and knowing this they could guard against dangers which would have otherwise gone unnoticed. It might seem to be a natural thing to celebrate the completion of a book with a party, but Virginia could seldom do this.

We are far better pleased to give useful advice than were the doctors of 60 years ago, but that advice as this story shows must be explicit if it is to be effective. Patients and their relatives are encouraged to be told that others before for whom much less information was available have coped successfully with these great illnesses.

Anna MacHamm shows us here that as a responsible patient she can do more for others affected with this illness than Virginia Woolf was able to do. In her novel **Mrs. Dalloway**, Virginia Woolf gives a vivid account of the many distressing malperceptions experienced by Septimus Smith. These are very similar to those which she herself endured. What she could not do, and what I do not doubt she would have been delighted to do, was to tell of illness avoided by exact analysis and careful planning, which is what Anna MacHamm and her husband succeeded in doing.

As it happens Virginia Woolf, too, was a devotee of the automobile, but she lived at a time and in a place where it would have been difficult to travel far enough and fast enough to produce a relapse. Anna MacHamm is unshaken in her allegiance to the motor car, whose advent Drs. Paul Magin and Winslow Forbes viewed with such concern at the beginning of our century. However, she no longer takes this potent cultural artifact for granted; like so many other things that humans have made, it has shaped its shapers. She now uses her own

anthropological lectures to remind herself that the human brain, her own in particular, did not evolve for the speeds that can be attained by, or the distances that can be traversed in, the horseless carriage of three quarters of a century ago. Perhaps others will learn from her painful experience caused by a cultural artifact which is located inside our guard.

What clinical lessons can we learn from Anna MacHamm's perilous journey? First of all we must be as explicit as possible about the likely effect upon the patient of the perceptual instabilities and anomalies shown by the HOD test and the Experiential World Inventory (El-Meligi and Osmond, 1970). Orthomolecular psychiatry concerns itself with both the patient's metabolism and his experience, believing the two to be closely linked.

From the patient's viewpoint few things are of greater importance than those experiences which so far as he or she is concerned constitute the illness. When such experiences receive careful attention, thoughtful consideration, and where possible, rational explanation, this renders them much less threatening. A patient who is much less anxious and puzzled can better cooperate with the restrictions imposed on everyday living by regimen, diet, and medication necessary for speeding recovery and guarding against relapse. A capacity to recognize potentially dangerous symptoms early makes it possible to prevent them occurring or reduces their impact. Every success obtained by heeding medical advice breeds a prudent self-confidence.

Anna MacHamm's excellent article serves not only to help others, but will help her too. It provides her with a means of avoiding future difficulties and dealing with them if they arise. It reminds her that, distressing and frightening as her illness can sometimes be, she has ceased to be a passive victim and has become an active participant in the struggle against it. In other words, she has become a responsible patient, an honorable estate, though one still attained too infrequently both in psychiatry and the rest of medicine. It is our duty as Orthomolecular psychiatrists to help and encourage those who wish to achieve this status. Anna MacHamm is well on the way to being, in W. E. Henley's words, captain of her soul, even though not always master of her fate—but who is?

REFERENCES

- COHN, D. L.: "The Good Old Days." Arno Press, New York, 1976.
- OSMOND, H., OSMUNDSON, J. A., and AGEL, J.: "Understanding Understanding." Bantam Books, New York, 1974.
- HOFFER, A., KELM, H., and OSMOND, H.: The Hoffer-Osmond Diagnostic Test. Robert E. Krieger, Huntington, N.Y., 1975.
- OSMOND, H.: "Anatomy of a Psychiatric Mini-Disaster." Memo UA-1214, 26 March, 1976.
- BELL, Q.: Virginia Woolf: a Biography. Harvest Books, New York, 1974.
- EL-MELIGI, A. M., and OSMOND, H.: "EWI: Manual for the Clinical Use of the Experiential World Inventory." Mens Sana Publishing Inc., New York, 1970.