Exhibit P-46

## E.C.T., L.S.D. and the C.I.A.

On Tuesday January 17, there was a CBC account on TV of strange experiments conducted at McGill University's Department of Psychiatry at the Allan Memorial Institute. Several patients gave accounts of treatments which they saw as having caused 111 effects. The excessive use of E.C.T., repeated injection of L.S.D. and repeated play backs of recorded messages from tapes, were chiefly blamed - and the support and instigation of these brain washing techniques were said to be inspired by the C.I.A.

We cannot disentangle truth from accusations today but we can take a look at the environs and the chief actors in what has again blown up into a controversy and a suit against the C.I.A. for a million dollars a piece by 9 aggrieved former patients. By 1954 when the story begins, the A.M.I. has been propelled in a short 10 years into the leading institution for teaching and training of psychiatry in Canada. There were many forward looking innovations established in this new department - an open door policy, day hospital outpatient clinics and laboratories.

The chief of McGill's Allan Memorial Institute was D. Ewen Cameron - a dynamic vigorous man who advocatę in his book "Ob.jective and Experimental Psychiatry" in 1935, a scientific approach to mental illness. He was intolerant of protracted psychotherapy - though students were encouraged to try. His idealism is apparent in the introduction to this book, but more significantly he states the
case for what he sees as a scientific stance. "Whether we recognize 1t or not, the influence which most strongly beat upon those of us who passed into psychiatry... was the humanitarian. Sympathy, patience, insight, rapport - these were the magic words. They must remain so, but as a means to an end and not as an end in themselves. The more sceptical "tough-minded" worker, thrusting out from these enshrouding curtains to the harder realities of active treatment, found himself at once in a sad dilemma, where to find solid ground? So many of our concepts are mere traditions, so many of our entities were agglomerations held together by immense remifications of side issues and analogies. We are fatally entrapped by words and byilogic. An increasing number of us experience a feeling of growing distrust by purely descriptive and intuitive concepts of human behaviour and find it more and more difficult to content ourselves with facts of assertions save where they will withstand experimentation and will not fail us on prediction. Time has brought us so great a development of instrumentation and so much larger an understanding of experimental methods that we are now in a fair way to realize our dreams of analyzing human behaviour objectively".

The vision encompassed in the above words required a base for the implementation of scientific psychiatry. This was provided by the establishment of the new department of psychiatry at McGill in 1943 to which Cameron came as first professor and chairman. He ? early established good clinical facilities, a balanced teaching program for residents and undergradưates and resiearch laboratories in psychology, geriatrics and endocrinology. By the end of 10 years, achievements in these areas were substantial and might have satisfied a lesser man. Success also attended his activities in the larger world of politics as he became president of various associations including that of the
A.P.A. in 1953. His organizational gifts led also to the spawning of meetings in Montreal, a regional A.P.A. Conference; a first on psychopharmacology in 1955; an international meeting on depression shortly after the introduction of Imipramine by Geigy in 1958. The spectacularly successful world congress of psychiatry held in Montreal in 1961 set the stage for him to become president of that August body albeit with some sharp politicking. (William Sargant and F. Braceland)

All these successes did not put to rest his long espoused aim to apply experimental methods in the analysis and treatment of human behaviour. His personal scientific vision demanded expression but his endeavours in this realm (field) did not respond well to his entreprenurial skills so successful in his establishment of teaching, training and organizations.

It may profitable for a moment to pause and reflect on the long series of papers of Dr. Cameron's on clinical psychiatry. Many of these have a social context regarding old age, society, jobs, anxiety and schizophrenia. There is little evidence emerging in that he was interested in traditional scholarly investigation.

Let us now concern ourselves with Cameron's personal research efforts while at Worcester where he was involved in studies or observations on insulin coma; hardly earth-shaking but little else was in that field at the time. For real objective examination of this procedure did not come till the 1950 s when teams at the Boston Psychopathic and the Maudsly established that this procedure having a mortality of $1 \%$ was not specific and where successful was dependent on general procedures depended on the care of the patient. Strict scientific criteria were only gradually being applied in psychiatry.

Following an earlier movement, in this direction in medicine, this is essentially important for the study of schizophrenia. Amongst his other research interests prior to coming to Montreal, Cameron had a long time preoccupation with adrenalin administration for chronic tensional anxiety states. This continued afterwards. The outcome of these studies was equivocal for criteria of the outcome were either not applied or lacking to judge any effects. When I pointed out to Cameron that adrenalin activated the anterior pituitary ACTH system (long of Yale) he dismissed this with an airy comment (you never know what will happen Doc). He was not concerned with the physiological principles involved in what he was doing. This represented a lack of that fundamental curiosity which is an important force in research.

The next topic of research interest of Cameron's was that of memory which emerged from his earlier clinical interest in senility. He wrote a monograph on memory while in Albany in the 30 s and only took the topic up again in the 50 s when he saw in RNA a chance to improve memory in the aged, particularly by the IV administration of suitable solutions. He remarked once that several Nobel prizes had been already won in the RNA research field. Presumably, he had similar visions. While specialists may pass judgement on the results of these experiments; I can only say that certain of the tests utilized have been harshy criticized by one of the participant investigators.
e was not, in aII these endeavours, any evidence of strict 1c technique or any single definitive technique which could plied broadly such as Penfield's special electrodes which allowed imulatic specific brain areas with observable results. Cameron issues which were fashionable and tried to apply them
to investigation on what he considered suitable patients. In exoneration of his apparent lack of originality, in the 30 s and 40 s , it should be said that there was not much in progress elsewhere in biological psychiatry. Psychoanalysis was in the ascendency and students flocked into this fashion in the post-World War period and progress in the biological approach only began when psychosomatic medicine saw in neurophysiology a possible link to psychiatry. A prime example of this is Paul MacLean's revived Papez's theory of emotion in the psychosomatic medicine in 1949. This and other efforts to bring psychiatry closer to medical thought were presented in books by Weiss and English in 143 , Grinker in ' 53 and Wittkower and my effort in 1954.

Whatever may be a final judgement on the RNA experiments, one interest of importance emerges, memory was a function playing a central role in Cameron's major study to take our attention now.

The progress in endocrinology in the 30 s and 40 s presented investigators with material that could be measured and so such studies became a part of stress investigations in mentally ill and controls. Adrenal studies in particular were investigated in Worcester in relationship to schizophrenia. Measurement was the With the revelation that cortisone and ACTH caused mental rrations, excitement abounded. Mirsky studied gastrointestinal nanges in relation to peptic ulcer and personality. Psychological measures for estimating anxiety emerged and were used by Grinker and his associates at Chicago. Finally, Chlorpromazine, the first
tranquililzer came out in 1954.
Therapy of psychotics was still non-specific. Insulin resulted in better care, ECT helped control depressions and severe psychotic states but fresh ideas about the mechanisms in manic depressive disorder and schizophrenia remained to be developed.

It was in this atmosphere of therapeutic inadequacy that Cameron made his frontal attack using the tools he had and the concepts he devised.

The first of these was what he called depatterning and in the early 50 s he began administering multiple ECTs each day in an endeavour to produce amnesia. His idea in applying the technique which got rid of memories was that a greater degree of amnesia occurred for pathological than for normal cerebral processes. This treatment was supplemented by the use of tranquillizers (Largactil) and barbituates until the subject regressed to a point where feeding, toileting and nursing care was obligatory. This was obviously time consuming and involved great difficulties for the staff.

The cases chosen for treatment were largely regarded as schizophrenic but $I$ believe that the criteria of schizophrenia in the 50 s was not as precise as it is today so that some cases with affective disorder and even severe psychoneuroses were included. Another basic aspect of this kind of treatment was the hope that once the pathological thinking has been wiped out, a period of retraining during recovery could be effected, in part oy the exposure of the patient to tapes that would play repetitiously for hours. The term "psychic implant" was used in this respect and $I$ am afraid is a rather distorted conception arising from the concept of imprinting in animals.

Another aspect of these treatments was the exposure of the patients to repeated LSD injections interspersed with the prolonged sleep and ECTs. It was not then apparent that there were hazards hatched (lurking) on the wards which were yet to come out of the shadows.

There was at that time on the ward where most of this work was done, a friend of ours, who will not have some words to comment on the whole situation, so we will hear from Peggy Edwards.

One person who made a protest ta Dr. Cameron about this type of treatment was Robin Hunter and he will have something to say at this point.

My involvement with this work was initially very little. I had other fish to fry and avoided involvement such as a study of the background of the rationale for this approach. It might be added that in 1957, I heard Sir Aubrey Lewis at a meeting in Zurich describe the technique of depatteriing Dr. Cameron had given in his paper as barbarous but since he and Cameron were long time enemies, some of the vehemence may draw nourishment from prejudice. I did not hear that he had attacked Cameron at this meeting for his presentation of the depatterning. This reminds me of the hands off policies exercised by Reagan and Margaret Thatcher. If you are inclined to regard this effort to cure schizophrenia as extreme, let me remind you that work was going on elsewhere which might be regarded as extreme intrusion of patients rights. For example, the professor of psychiatry at Tulane was implanting deep electrodes in the brain of schizophrenics in 1954. Some interesting EEG tracings resulted.

There were no violent protests or law suits to my knowledge.
In 1962, one of the staff member had taken up the depatterning technique so enthusiastically that Cameron was alarmed. He formed a committee to vet this man's cases and as a member we cut down the applicant to a very few. As a side commentary it might be said that this man was a troubled deviant and just before he left in 1964, Ca meron stripped him of his position in charge of Day Services.

On succeeding D.E.C. in September 1964, I set up a committee to investigate depatterning and the report was that it had no advantage and many handicaps compared to other less heroic forms of therapy. Then I set a rule that no more than 10 ECTs were to be given a patient in a course -min. 3 weeks. Cameron's deviant broke this rule in 1966 so he was not re-appointed. This led to litigation over 10 years till he was ruled against by the Supreme Court. That is background. Now in 1979 came the break by the muck raking journalist John Marks who is his book on the C.I.A. program - of which Cameron was a small part, led to much publicity. -See Saturday night June 1979. The Oriikows began a suit against Cameron and the R.V.H. It was settled out of court for $\$ 60,000$. This suit reactivated criticisms and gossip so that many of us were pursued to state evidence vs. Cameron. On such instance is on a tape which can be played. Tape.

