

PSYCHEDELIC PSYCHIATRY

PSYCHEDELIC PSYCHIATRY:
LSD AND POST-WORLD WAR II
MEDICAL EXPERIMENTATION IN CANADA

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A Dissertation
Submitted to the School of Graduate Studies
In Partial Fulfilment of the Requirements
For the Degree
Doctor of Philosophy

McMaster University

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DOCTOR OF PHILOSOPHY (2005)

McMaster University

(History)

Hamilton, Ontario

TITLE: Psychedelic Psychiatry: LSD and Post-World War II Medical
Experimentation in Canada

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Saskatchewan)

SUPERVISOR: David Wright

NUMBER OF PAGES: vi, 327

Abstract

Many medical researchers in the post-WWII era explored LSD for its potential therapeutic value. Among these psychiatrists Humphry Osmond (in Weyburn) and Abram Hoffer (in Saskatoon) directed some of the most comprehensive trials in the Western world. These Saskatchewan-based medical researchers were first drawn to LSD because of its ability to produce a “model psychosis.” Their experiments with the drug—that Osmond was to famously describe as a “psychedelic”—led them to hypothesise, and promote, the biochemical constitution of Schizophrenia. Simulating psychotic symptoms through auto-experimentation, professionals also believed that the drug would help reform mental health accommodations by cultivating a sophisticated appreciation for the relationship between environment and health. This thesis examines the era of pre-criminal LSD experimentation. Drawing on hospital records, interviews with former research subjects, and the private papers of Hoffer and Osmond this dissertation will demonstrate that these LSD trials, far from fringe medical research, represented a fruitful and indeed encouraging branch of psychiatric research. Clinical LSD experiments in the 1950s played an influential role in defining theoretical and practical aims of the post-war psychiatric profession. Ultimately the experiments failed for two reasons, one scientific and the other cultural. The scientific parameters of clinical trials in medicine shifted in the 1950s and early 1960s so as to necessitate controlled trials (which the Saskatchewan researchers had failed to construct). Second, as LSD became increasingly associated with student riots, anti-war demonstrations and the counter culture, governments intervened to criminalise the drug, in effect terminating formal medical research with LSD. An historical examination of these LSD experiments provides insight into the changing complexion of psychiatry in the post-World War Two period, and the ways in which scientific medicine was shaped by social, cultural and political currents.

Acknowledgements

This dissertation has benefited tremendously from the generosity and expertise of my doctoral supervisor, David Wright. I am further indebted to my dissertation committee members, Ken Cruikshank and Stephen Heathorn, and examiners Marcel Martel and Louis Schmidt for their insightful questions and comments. Financial support from McMaster University, the History of Medicine Unit, the Social Sciences and Humanities Research Council, Associated Medical Services, and the Friends of the Centre for Addiction and Mental Health archives made much of this research possible. Everyone at the History Department and the History of Medicine Unit at McMaster University helped by providing advice and encouragement throughout the program, especially Virginia Aksan, Michael Gauvreau, John Weaver, David Barrett, Stephen Streeter, Dick Rempel, James Moran, Shelley McKellar, Geoff Hudson and Sasha Mullally. And, I wish to extend a special thanks to Wendy Benedetti and Barbara-Ann Bartlett, who both generously gave of their time and assistance. I have had the good fortune to work with an extremely talented group of friends and colleagues at McMaster: Angela Graham, Jessa Chupik, Greg Stott, Carrie Dickenson, Bill Campbell, Jingge Li, Heather Nelson, Tabitha Marshall, Nathan Flis, Mat Savelli and everyone from 434, 3N10 and 2D03. Angie, I could not have done it without you. Several members of the Canadian Society for the History of Medicine and of the American Association for the History of Medicine welcomed my participation at their annual meetings and provided inspiration. At various stages throughout this doctoral project I profited from the wisdom, expertise and encouragement of a number of people who took an interest in this historical study: Jennifer Keelan, Cara Pryor, Jennifer Milne, Laura McNaughton, Jason Kleinermanns, Patrick Barber, Peter Twohig, Maureen Lux, Arthur Allen, John Mills, John Smythies, Matthew Gambino, Bram Enning, Stephen Snelders, Geoffrey Reaume, David Courtwright, Bill Waiser, Valerie Korinek, Catherine Carstairs, Annmarie Adams, Harley Dickinson, and Suzanne Klausen. I am further indebted to Larry Stewart for fuelling the initial spark from which this research began, and to Cyril Greenland who devotedly fanned the flames. No historical examination could proceed without the help and expertise of archivists. In this regard I was most fortunate. Thank you especially to John Court at the Centre for Addiction and Mental Health archives, Nadine Charabin, Christie Wood and Wanda Jack at the Saskatchewan Archives Board, and Patrick Hayes at the University of Saskatchewan Archives who expertly and patiently tracked down my innumerable requests. In addition to archival records, this project was greatly enriched by recollections provided through oral interviews. I am grateful to everyone who shared their memories with me. This dissertation is better as a direct result of their candid contributions. Without a doubt, however, this work would not have come to fruition without the welcome distraction of many soccer games: thanks to everyone who added me to their rosters over the last four years. The support offered by my family has been tremendous. Susan, Alana, Noel, Vered, Ian, Sherry, Alicia, David, Gramma Erna and Grandpa Bill, your love and support sustained me throughout this process. Tristan, your incredible patience and boundless wisdom made this journey possible. Words cannot express the gratitude I feel towards my parents who courageously looked the other way

while I moved into the “abyss”. Penny and Philip, thank you for believing in me, even if I was in Toronto. Finally, though he passed away mid-way through my program at McMaster, I could not have dreamed my way through a PhD without my grandad’s love; thank you George Dyck.

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Introduction

In October 1966, Ken Kesey returned to San Francisco after spending several months avoiding detection by the FBI for distributing large quantities of acid to American youth. The California government had just passed legislation criminalising the possession of drugs such as LSD and psilocybin (magic mushrooms) only days before Kesey's triumphant return to the Bay area. His timely reappearance seemed to coincide with a ceremonial end to an era of psychedelic explorations. Kesey's return to California brought symbolic closure to two distinct images of psychedelic drug experimentation: medical and recreational.¹

Kesey had become an important icon of the psychedelic drug movement that promised psychological freedoms to those who embraced the drugs' chemically-inspired visions. For people who shared this philosophy, Kesey was a leader. In many respects, however, he simultaneously embodied a moral panic over youth drug use. At the outset of his academic career, Kesey was an athletic, talented, white, male student, full of promise. He conveyed the image of an average all-American middle-class youth. As a university student, however, he developed an insatiable love of drugs—psychedelic in particular—and promoted their use to his peers. Concerns that an entire generation of Kesey-like figures would become “turned on” by drugs, inspired fears among an adult generation that potential leaders would steer them into a dangerous future.

¹ Jay Stevens, *Storming Heaven: LSD and the American Dream* (New York: Grove Press, 1987), 320-324.

In addition to promoting drug use, Kesey challenged the status quo in another way. During his summers, he volunteered at a state psychiatric hospital, an experience which eventually inspired him to write *One Flew Over the Cuckoo's Nest* (1962). His book, which then became a theatrical production and later an award-winning movie, told the lurid story of Randall McMurphy. McMurphy (who was ultimately played by Jack Nicholson in the Oscar award-winning film) was a transfer from a state prison, a convicted rapist who was deemed to be (or becoming) insane. In the state psychiatric facility he was treated with a variety of invasive therapies including electro-convulsive therapy (ECT) and lobotomy. Kesey's famous story shed light on a dark chapter in the history of psychiatric institutionalisation by characterising psychiatric treatments as instruments of punishment and coercion. The popular film had an enduring resonance that has shaped cultural perceptions of psychiatry and its treatments to this day.²

Shortly after the publication of his book, Kesey himself participated in psychiatric experimentation. At Stanford University, as part of a CIA-funded program called MK-ULTRA, Kesey volunteered to take LSD.³ Although he was one of hundreds of student volunteers in the Bay area in the 1960s, Kesey's involvement differed from his peers. He embraced the consciousness-expanding experience as though it were a new personal

² For examples of this influence see: J.I. Davoli, "Still stuck in the Cuckoo's Nest: Why do Courts Continue to Rely on Antiquated Mental Illness Research?" *Tennessee Law Review* 69, 4 (2002): 987-1050; G. Walter, A. McDonald, J.M. Rey and A. Rosen, "Medical Student Knowledge and Attitudes Regarding ECT prior to and after viewing ECT scenes from movies," *Journal of ECT* 18, 2 (2002): 111; B.S. Arons, "Working in the 'Cuckoo's Nest': An Essay on Recent Changes in Mental Health Law and the Changing Role of Psychiatrists in Relation to Patient and Society," *University of Toledo Law Review* 9, 1 (1977): 73-93; G. Domino, "Impact of the Film, 'One Flew Over the Cuckoo's Nest,' on Attitudes Towards Mental Illness," *Psychological Reports* 53, 1 (1983): 179-182; and, D. Martindale, "Psychosurgery: Furor Over the Cuckoo's Nest," *New Physician* 26, 2 (1977): 22-25.

³ Peter Whitmer and Bruce Van Wyngarden, *Aquarius Revisited: Seven Who Created the Sixties Counterculture That Changed America* (New York: MacMillan Publishers, Co., 1987), 201; and, Kimberly Allyn Hewitt, "Psychedelics and Psychosis: LSD and Changing Ideas of Mental Illness, 1943-1966," (PhD dissertation, University of Texas at Austin, 2002), 62.

religion; he became its self-appointed evangelist. Kesey felt that the “mind-manifesting” experience triggered by LSD offered him an alternative perspective on the world and he wanted to introduce others to his new-found philosophy. During the mid-1960s he toured the United States distributing acid in a day-glow bus named *Furthur* and expanded minds with a loyal following of youth calling themselves the Merry Pranksters. Kesey and the Pranksters encouraged regular LSD consumption that went hand in hand with a rejection of authority, patriotism, and post-war middle-class values.⁴ By 1966, rightly or wrongly, Kesey personified LSD use.

The reception and popularisation of Kesey’s experiences illuminate the way that LSD has been subsequently conceptualised. His connection to psychedelic drugs suggested involvement of a malicious psychiatric profession. Even though Kesey *volunteered* for his initial LSD experiences, his popular novel amplified the stereotype that psychiatry existed as an inherently untrustworthy speciality operating on the fringes of medicine. Sheltered from society by the walls of the asylum, psychiatrists were easily portrayed as engaging in radical somatic and psychological experiments on vulnerable patients.

Following his exposure to the drug, Kesey allegedly rejected middle-class values and encouraged others to join him in doing so, thus fuelling a revolutionary fervour in the United States. The combination of his anti-psychiatry views and his promotion of psychedelic drug use for personal self-enlightenment contributed to the particular belief that LSD was both medically misguided and recreationally dangerous. Similarly, the subsequent history of LSD has been connected with dubious medical experiments and the

⁴ See Tom Wolfe, *The Electric Kool-Aid Acid Test* (New York: Farrar, Straus and Giroux, 1968).

dissent exhibited by a youth counter culture. Concentrating on the history of LSD through figures such as Ken Kesey, however, ignores the earlier period of the drug's history. It overlooks an entire set of debates surrounding its introduction into medicine. The following study explores this earlier important period, by using the criminalisation of LSD as the end point of its history. For over a decade, beginning in the early 1950s, medical experimentation in Saskatchewan revealed a very different picture.

LSD's Dangerousness

LSD is a powerful substance with a colourful history. In the short span of twenty-five years, from its first use in 1943 to its international criminalisation in 1968, the drug underwent a radical transformation from medical marvel to public pariah. At first, LSD appealed to a twentieth-century medical profession increasingly fascinated with pharmacotherapy—using pills to treat illnesses. LSD produced profound physical and psychological reactions, including hallucinations and delusions.⁵ The physiological responses to the drug suggested to medical researchers that they might have discovered a new way of understanding the pathogenesis of mental illness. If LSD chemically created symptoms described by patients suffering from severe mental illnesses, then researchers believed they could more discretely categorise major psychiatric disorders and determine their underlying bio-chemical causes. By the end of the 1950s scientists all over the world had conducted thousands of experiments with LSD.

In addition to medical interest, the powerful LSD reactions attracted the attention of military investigators. For example, in 1979 the historian John Marks uncovered an

⁵ A hallucination is the effect of perceiving something that is not there, or not perceiving something that is there. Delusions are fixed false beliefs that are incongruent with cultural norms.

illuminating set of records that documented the American military and the Central Intelligence Agency's (CIA) tests using LSD on prisoners and military personnel during the Cold War.⁶ In these cases, military researchers observed LSD's capacity as a "truth serum" or a tool for interrogating spies. Conversely, military personnel monitored test subjects in an attempt to learn how individuals might withstand counter-interrogation whilst under the influence of drugs. These kinds of trials had the effect of inspiring further conspiratorial fears that spies—notably Soviet communists—would use LSD as a form of biochemical warfare during the Cold War.⁷ This aspect of LSD experimentation became accessible to the public when Marks published his study, and it further reinforced the connection between LSD and conspiracy.⁸

News of the CIA's drug experiments also triggered reactions in Canada when it became clear that the CIA had been involved in similar activities north of the border. In 1988, former psychiatric patients and their families received a court settlement for treatments performed on them three decades earlier at the Allen Memorial Hospital in Montreal by psychiatrist Ewen Cameron.⁹ The investigation revealed that the CIA had funded Cameron to test LSD on patients without their knowledge or consent. Cameron began with an idea of "psychic driving" that exposed patients to repetitive images or phrases while taking LSD.¹⁰ One of Cameron's patients in the 1950s was Val Orlikow, who approached Cameron seeking therapy for post-partum depression. Orlikow was the

⁶ John Marks, *The Search for the 'Manchurian Candidate': The CIA and Mind Control* (New York: Times Books, 1979).

⁷ For example, the CIA grew concerned that the Soviet military would terrorise Americans by putting LSD in the water supplies. The CIA attempted to train personnel who could operate under these conditions.

⁸ For another similar version of this story see: Martin Lee and Bruce Shlain, *Acid Dreams: The CIA, LSD and the Sixties Rebellion* (New York: Grove Press, 1985).

⁹ Harvey Weinstein, *Father, Son and the CIA* (Halifax: Goodread Biographies, 1990), 278.

¹⁰ The experiments amounted to a kind of brainwashing. D.E. Cameron, "Psychic Driving," *American Journal of Psychiatry* 112, 7 (1956): 502-509.

wife of one of Manitoba's federal Members of Parliament, David Orlikow. The Orlikows became important figures in the Canadian media when the story about Cameron's brainwashing experiments came to light in the 1980s.¹¹ The highly publicised trials put human faces on the consequences of involuntary LSD research. Since then, the story became the subject of an historical novel and a full-length feature film.¹² These subversive and conspiratorial aspects of LSD's history attracted significant public attention and underscored fears that LSD constituted a dark chapter in the history of involuntary psychiatric research.

Along with a history of so-called mind-control experiments, LSD routinely conjures up images of unorthodox spiritual gurus, such as ex-Harvard professor Timothy Leary. Leary's indiscriminate promotion of hallucinogenic drugs in the mid-1960s went hand in hand with the development of a new religion—the League for Spiritual Discovery. Where Kesey promoted drug use among North American youth as a means of escaping from convention, Leary incorporated psychedelic drugs into his establishment of a pseudo-intellectual movement that aligned itself with developing inner freedoms. Mixing religious philosophies with LSD-inspired mind travel;¹³ Leary campaigned for

¹¹ A number of newspaper articles covered the Orlikow case. For example, "'Pile of money' could be made over CIA brainwashing suit," *Times-Colonist*, 10 June 1982, p. 22; Anne Beirne, "The Ghost of the Godfather," *Maclean's* (1982), p. 32; "MP's wife and hospital settle suit," *Globe and Mail*, 14 May 1981, p. 3; "Five suing US over CIA Drug Test," *Globe and Mail*, 18 December 1980, p. 13; "Treatment of MP's wife akin to Torture," *Globe and Mail*, 5 May 1981, p. 10; "Methods to Crack Spies Inflicted on MP's Wife, psychiatrist tells court," *Globe and Mail*, 6 May 1981, p. 9; "LSD guinea pig relives a nightmare," *Toronto Sun*, 6 May 1981 (no page number); and, "MP's wife can sue over 'experiments'," *The Colonist*, 17 November 1979, p. 39.

¹² Don Gilmour, *I Swear by Apollo* (Montreal: Eden Press, 1987); Harvey Weinstein, *Father, Son and the CIA* (Halifax: Goodread Biographies, 1990); J.D.M. Griffin, "Cameron's Search for a Cure," *Canadian Bulletin of Medical History* 8 (1991): 121-126; and, Anne Collins, *In the Sleep Room: The Story of the CIA Brainwashing Experiments in Canada* (Toronto: Key Porter Books, 1997). *The Sleep Room* is also the title of the feature film.

¹³ See: Timothy Leary, Ralph Metzner and Richard Alpert, *The Psychedelic Experience: A Manual Based on the Tibetan Book of the Dead* (New Hyde Park, NY: University Books, 1964).

inner peace through hallucinogens. Although Leary had many connections with the emerging youth culture of the 1960s, he also attracted a significant cohort of middle-class professionals to his LSD-inspired philosophy. His evangelising efforts gained him notoriety as an LSD guru and encouraged others to experiment with drugs.

By the early 1960s, black market versions of acid appeared in California and its famed euphoric high gained popular momentum, especially among college students.¹⁴ During this period, the baby-boomers came of age and flexed their political muscle as a demographically significant group of adolescents whose collective enfranchisement threatened to derail the political status quo. Political activism in the form of civil rights movements, feminism, American Indian movements, the Quebecois Quiet Revolution, and later anti-Vietnam war protests, offered proof that a younger generation of North Americans were agitating for change. The baby boomers also seemed to embrace these movements, particularly on university campuses. The cohort of youth seemed to have a penchant for drug use; indeed, taking drugs such as marijuana and LSD became an important badge of their collective identity.

As a consequence, LSD shed its early persona of the experimental psychopharmacological agent and was slowly transformed, in the public view, into acid, a revolutionary street drug. Along with the proliferation of acid came numerous reports of horrific experiences, undesirable side effects, and repeated unexpected reactions that alarmed the medical and political authorities. In the context of social and political tumult, one that pitched generation against generation, LSD ignited a moral panic.

¹⁴ For further discussion of psychedelic drugs in popular culture see: Michael Hicks, *Sixties Rock: Garage, Psychedelic, and Other Satisfactions* (Urbana: University of Illinois Press, 1999); Alan Bisbort, *Rhino's Psychedelic Trip* (San Francisco: Miller Freeman Books, 2000); and, Mark Buechler, *The Infinite Goof: Psychedelic Drugs and American Fiction of the 1960s* (PhD Dissertation, Indiana University, 1992).

Governments swiftly banned the substance and reclassified it as a narcotic,¹⁵ which carried stiff criminal sentences for possession. Medical research with the drug ground to a halt. The image of LSD by the late 1960s and early 1970s became conflated with dangerousness, delinquency, and abuse; media reports universally condemned medical research with psychedelics as unethical and misguided.

This path of the drug, from covert medical experimentation to generational revolt, reinforces the history of its dangerousness. This perspective on the history of LSD also reveals how historical accounts of the drug unfolded in the mainstream media.

Newspapers started putting LSD on the front page when Harvard University dismissed psychologist Timothy Leary in 1963. By 1966, the same papers reported that LSD unleashed radicalism among youth. Finally, by the late 1970s and 1980s the North American public learned the details of the CIA experiments. These stories made LSD an attractive candidate for a popular history of dangerousness that could be exported to other drugs and other situations. In short, LSD became the quintessentially dangerous drug.

There is an alternative history of LSD, however, that investigates a period of optimism surrounding LSD in psychiatry. Instead of taking cues from the popular media,

¹⁵ The term narcotic has a variety of meanings and connotations depending on its historical usage. Medical literature tends to use the term exclusively pertaining to depressant drugs (especially opiates). However, legal and political uses of the term narcotic generated confusion by applying the term more broadly to all drugs, including stimulants (ie. cocaine). Legislation such as the Harrison *Narcotic* Act of 1914 (United States) further reinforced the connection between the term narcotic and illegal drug. As a result, perhaps the most enduring connotation with the term narcotic suggests a legal infraction. Generally, I have avoided using the term throughout the dissertation for reasons of its historical ambiguity, except in cases where the term was explicitly applied historically. I am grateful to David Courtwright for generously providing me with an overview of the historical use of narcotic. The *Oxford English Dictionary* (2003) defines narcotic in three ways: 1) [medical]: a drug which when swallowed, inhaled, or injected into the system induces drowsiness, stupor or insensibility (esp. an opiate); 2) [in extended use]: something that produces torpor or boredom; and, 3) [US] a drug affecting mood or behaviour which is sold for non-medical purposes, especially one whose use is prohibited or under strict legal control but which tends nevertheless to be extensively used illegally.

this dissertation relies largely on evidence in medical literature and examines LSD in the context of drug experimentation in post-war psychiatry. By concentrating on a large set of LSD trials in Saskatchewan it also explores the degree to which LSD became an acceptable part of standard treatment methods. Local press reports, provincial government records and oral interviews with participants underscore the sense of local enthusiasm and support for LSD experimentation on the Canadian prairies. In the 1950s, the image of LSD in psychiatry involved a significantly different set of expectations that consequently affected its reception.

Beyond the published articles in medical journals, the correspondence records maintained by individual LSD investigators demonstrate the seriousness of their professional commitment to studying the drug. Once immersed in the personal records of one such psychiatrist it became clear that LSD studies were not marginal, unethical, or unprofessional. This psychiatrist practiced in Saskatchewan in the 1950s. Dr. Abram Hoffer's meticulously kept records housed at the Saskatchewan Archives Board in Saskatoon bear testimony to the serious intent of the LSD researchers of the 1950s. Over three hundred boxes of archived materials record the development of medical LSD studies through letters of correspondence with clinical drug researchers around the world. Provincial government records in Saskatchewan confirm political support for LSD experimentation and even illustrate how these clinical studies became integrated into larger plans for health care systems. Additionally, patients' case files and personal letters indicate a willingness to participate in LSD trials. Patients' perspectives on these experiments attest to the optimism engendered by a therapeutic regimen that many felt

offered tremendous potential.

Letters from patients, families of patients and community organisations display enthusiasm for LSD research. As the experiments in Saskatchewan widened to include alcoholism and mental health accommodations, leading psychiatrists Abram Hoffer and Humphry Osmond attracted significant sympathetic attention from social workers, psychiatric nurses, Alcoholics Anonymous (A.A.) members (and their families), temperance reformers, and politicians. Letters from such individuals and groups reveal a keen interest in LSD experimentation from perspectives outside the clinical setting. Local newspapers, political speeches, and organisational publications (such as the Bureau for Alcoholism newsletter) regularly applauded Hoffer and Osmond for their pioneering efforts in the field of mental health. This evidence suggests that the LSD experiments in Saskatchewan were widely regarded and routinely supported by existing mental health organisations.

Oral interviews conducted by the author with psychiatrists, nurses, government officials, and patients candidly revealed a remarkable enthusiasm for an historical inquiry aimed at reconciling the popular reputation of LSD experimentation with a conception of psychedelic drug research according to its prairie participants. Professionals involved in the LSD research of the 1950s regularly commented on the exciting research atmosphere that existed in Saskatchewan, which generated a feeling among them that novel or radical results could only be produced under such conditions. Nurses recalled, with pride, their attraction to a project that depended on their participation as professionals with a specialised expertise as close observers and confidantes of patients. Government officials

located the drug research within a wider matrix of political endeavours connected with an ambitious post-war regime desiring radical health reforms. Patients of LSD treatments freely and generously commented on their own experiences, as well as their reflections on the significance of the trials in Saskatchewan. Individuals treated with LSD for alcoholism claimed an enduring sobriety that continued to last forty years after the treatment session. They also explained the central role that patients played in these trials as the “real” experts of mental illness and addiction. In sum, patients described a history of the drug that had not yet been told. Together these oral testimonies provided valuable perspectives from the participants themselves and challenged the existing cultural and medical history of psychedelic drugs with the contention that LSD worked.

The following dissertation explores this fascinating period in the medical and cultural history of LSD. It begins by locating one of the largest and most influential sets of LSD trials conducted in North America on the rural Canadian prairies. While the site of research might not seem readily important, the small-town Saskatchewan setting was of vital significance to residents who welcomed doctors to under-serviced areas. The location also mattered to the newly-elected social democratic government that wanted to prove that a socialist region could support innovative medical research. Location, therefore, influenced professional decisions; with very few colleagues, psychiatrists practicing in Saskatchewan faced fewer dissenting opinions from fellow experts. The development and reception of psychedelic psychiatry took place in an environment that welcomed medical experimentation.

Chapter one thus examines the LSD trials within the context of Saskatchewan's post-Second World War history. When Saskatchewan elected the first socialist government in North America in 1944, the province became an ideological magnet. The idealised space became what sociologist Nick Crossley calls, a "working utopia," a place where "imaginative projections achieve some degree of concrete realisation."¹⁶ From 1944, Saskatchewan became that place where professionals committed to exploring new political and medical ideas converged and attempted to put theories into practice. Those who came to test their theories did not have to fight a conservative establishment; they were part of creating an alternative establishment.

Operating in a well-supported political environment, clinical researchers in Saskatchewan began seeking professional support for their LSD research from psychopharmacological investigators throughout North America. Edward Shorter has described this period in the history of psychiatry as the beginnings of "the second biological psychiatry." It was the time of psychiatry's reconciliation with biomedical science after a brief fascination with psychoanalysis.¹⁷ David Healy referred to the profound changes in treatment options arising out of psychopharmacological developments in the 1950s as a "therapeutic revolution."¹⁸ Additionally, Thomas Szasz mockingly referred to this decade as one that featured the introduction of the "therapeutic state," since he believed that psychiatry gained even greater control over its patients by

¹⁶ Nick Crossley, "Working Utopias and Social Movements: An Investigation Using Case Study Materials From Radical Mental Health Movements in Britain," *Sociology* 33, 4 (1999): 809-830. I am grateful to Matthew Gambino for drawing my attention to this article.

¹⁷ Edward Shorter, *A History of Psychiatry: From the Era of the Asylum to the Age of Prozac* (New York: John Wiley and Sons, 1997), chapter 7: 246-272.

¹⁸ David Healy, *The Anti-Depressant Era* (Cambridge: Harvard University Press, 1997), 1.

stimulating chemical dependence.¹⁹ These authors each described the place of drugs in post-war psychiatry in dramatic terms. Shorter explained the triumph of drug therapies as an advancement of technology and medical knowledge, an end to the psychoanalytical “hiatus” that dominated North American psychiatry during the first half of the twentieth century. Healy, by contrast, contended that the widespread endorsement of drug therapies merely laid the groundwork for an insidious relationship between psychiatry and commercial interests. This situation resulted in the development of a multi-billion dollar pharmaceutical industry that, in effect, stymied the psychiatric profession in its ability to offer effective clinical alternatives to psychopharmacology.²⁰ Szasz, best known for his anti-psychiatry views, explained that psychiatrists merely added psychopharmacological treatments to their arsenal of mechanisms employed to maintain social control.

Chapter two examines the early development of psychedelic therapies amidst a corresponding shift in professional orientation from psychoanalytic to psychopharmacological models. While LSD ultimately failed as a commercial pharmaceutical, its brief use in psychiatric treatments nonetheless underscores the enthusiasm for pharmacology in the 1950s. LSD differed from other, more successful, drugs in that it promised to provide users with an *experience* that would help patients overcome their disorders. In the 1950s, LSD experiments were part of mainstream psychiatry. LSD experiments contributed to deliberations over a biochemical model of

¹⁹ Thomas Szasz, *Ceremonial Chemistry: The Ritual Persecution of Drugs, Addicts, and Pushers*, revised edition (Syracuse University Press, 2003), 139.

²⁰ See also: David Healy, *The Creation of Psychopharmacology* (Cambridge: Cambridge University Press, 2002).

mental illness. The subsequent marginalisation of LSD in the 1960s raises questions about how mainstream medicine is defined and maintained.

Although investigators did not originally anticipate its use as a therapeutic agent, trials with “normals”²¹ revealed LSD’s capacity to produce feelings of self-reflection that suggested the drug had some therapeutic properties. These findings led certain Saskatchewan researchers to apply their biochemical theory of mental illness directly to alcoholism, which was itself being recast by the medical profession as a disease entity. Working closely with Alcoholics Anonymous, psychedelic psychiatrists treated alcoholics using LSD and claimed unprecedented rates of success. Their biochemical conceptualisation of alcoholism, in combination with their claims of efficacy, troubled a number of their medical colleagues. In particular, the idea that LSD *cured* alcoholics concerned members of the Addictions Research Foundation in Toronto, who consequently produced their own LSD trials that disputed the findings of the Saskatchewan studies.

The following chapter investigates LSD as a treatment modality for alcoholism and the subsequent scientific debates that erupted over the issue of controlled trials. Much like other areas of psychiatric research, the increased focus on drug treatments brought changes in therapeutic options and ushered in new theoretical explanations for the causation of disorder and disease, which extended into discussions over the medicalisation of addiction. The LSD treatments included alcoholism under the general

²¹ For the remainder of this dissertation I will not continue to refer to normals in quotation marks. The term is problematic and difficult to define. However, for the purposes of this study the term normals is used specifically in reference to non-patients. The term was regularly used in the reports of the clinical trials to refer to volunteer subjects who form part of the non-patient group. Generally the term does not extend to medical professionals who were also subjects in the trials, but whose experiences rarely (if ever) figure into the statistical reports. For further discussion of the trials and selection criteria see chapter 2.

rubric of mental disorders. Although the theory of alcoholism as a biochemical disease mirrored contemporary trends, especially those put forward by the renowned alcohol research group at Yale University, critics maintained that the proposed treatments with LSD did not pass the litmus test of controlled trials. As a result, critics contended that pronouncements of efficacy presented misleading information and often manipulated the context of experimentation in order to achieve better results.

Chapter four focuses on the influence of the LSD studies on mental health policies in Saskatchewan, with particular concern for how the psychedelic research led to an alternative to the community mental health centre model that was being promoted elsewhere in North America. Discussions in Saskatchewan were augmented by the conviction that LSD therapies would become part of standard treatment. Additionally, the Saskatchewan investigators believed that, by taking LSD themselves, they could better empathise with institutionalised patients and therefore construct mental health care facilities with greater consideration for the needs of patients. In 1957 they proposed a new architectural design for mental health care facilities. The subsequent “socio-petal” design concept blended professional expertise with normal and psychotic patient experiences.

Several historians have identified competing influences, particularly medical discourse and professional objectives, which historically influenced designs for hospitals and institutions.²² Scholarly attention has focused on the rise of the asylum in the

²² Adrian Forty, “The Modern Hospital in England and France: The Social and Medical Uses of Architecture,” in *Buildings and Society: Essays on the Social Development of the Built Environment* (ed) Anthony King, 61-93, (London: Routledge, 1980); Anthony King, “Hospital Planning: Revised Thoughts on the Origin of the Pavilion Principle in England,” *Medical History* 10 (1966): 360-373; Jeremy Taylor, *Hospital and Asylum Architecture in England, 1840-1814: Building for Health Care* (London: Mansell

nineteenth century followed by its dismantlement and the corresponding practice of deinstitutionalisation in the latter half of the twentieth century.²³ In Saskatchewan, psychedelic researchers proposed a different kind of institutional design that combated the negative stereotypes of the asylum as an instrument of social control or as a self-contained institutionalised culture, later called the “total institution” by sociologist Erving Goffman. The alternative design offered an institutionalised approach to mental health care that contradicted the emerging practice of moving patients out of institutional settings and into the community. This chapter draws attention to the concerted efforts made to incorporate patients’ perspectives into plans for modern accommodation.

By the time designers were ready to construct the novel institutional facility in the early 1960s, LSD’s reputation had begun to change. Recreational LSD experimentation increasingly took place outside the clinical context. University campuses in the United States and Canada, and elsewhere, became popular breeding grounds for revolutionary ideas; many college students experimented with recreational LSD. The proliferation of home-made acid on campuses coupled with the growing identification of youth with political activism gave rise to public panic. The conflation between political radicalism and LSD abuse fuelled a political campaign against psychedelics that targeted

Publishing Limited, 1991); Annmarie Adams, “Modernism and Medicine: The Hospitals of Stevens and Lee, 1916-1932,” *Journal of the Society of Architectural Historians* (1999): 42-61; Barry Edginton, “The Well-ordered Body: The Quest for Sanity Through Nineteenth-Century Asylum Architecture,” *Canadian Bulletin of Medical History* 11, 2 (1994): 375-386; and, Christine Stevenson, *Medicine and Magnificence: British Hospital and Asylum Architecture, 1660-1815* (New Haven: Yale University Press, 2000).

²³ See: Thomas E. Brown, “Dance of the Dialectic? Some Reflections (Polemic and Otherwise) on the present state of Nineteenth-Century Asylum Studies,” *Canadian Bulletin of Medical History* 11, 2 (1994): 267-295; Gerald Grob, *From Asylum to Community: Mental Health Policy in Modern America* (Princeton: Princeton University Press, 1991); Gerald Grob, *The Mad Among Us: A History of the Care of America’s Mentally Ill* (Cambridge: Harvard University Press, 1994); and, Kathleen Jones, *Asylums and After: A Revised History of the Mental Health Services: From the Early 18th Century to 1990s* (London: Athlone Press, 1993).

hallucinogenic drugs as unethical psychopharmacological agents and revolutionary narcotics. Chapter five examines the development of a moral panic over acid abuse stimulated by the North American media.

Several sociologists have contributed to the theoretical explanations of moral panics and their affect on the context of authority. Chapter five relies on these theoretical frameworks to define the parameters of the moral panic over LSD. North American youth emerged as the primary entrepreneurs of a social upheaval, and debates centred on a dichotomous view of North American social conflict divided along generational lines. Fuelled by media-generated images that further illustrated the different cultural values possessed by the two factions, psychedelic philosophies became an emblematic symbol of North American youth, albeit in stereotypical terms.

The final chapter of the dissertation examines how popular fears of the LSD menace diminished the capacity of psychedelic psychiatrists to sustain their professional credibility. The perceived connection between LSD use and dangerous behaviour influenced political and legal decisions concerning access to LSD and other hallucinogenic drugs for medical experimentation. Despite repeated protests from certified psychiatrists, governments throughout the Western world criminalised the drug. These decisions profoundly altered the image of psychedelics in popular and medical circles. This chapter traces the development of legal decisions and considers the selective use of testimony in political decision-making.

This final chapter in the dissertation considers the competing political, medical and cultural influences that shape perceptions of drugs and their users. Several other

drugs have experienced similar transitions from licit to illicit substances, with varying consequences for their users. Opium, cocaine, tobacco, and alcohol at one time fell into a medicinal category of substances, while at other times these same drugs have been associated with criminal behaviour, addiction, and vice. Alternatively, drugs such as Thalidomide belong to a slightly different tradition of drug histories; one that demands close scrutiny of the medico-industrial complex. The criminalisation of LSD in the late 1960s invokes familiar questions concerning the balance of interests involved in LSD's removal from legitimate medical research. The discontinuation of psychedelic psychiatry resulted from heavy media exposure emphasising particular images of LSD and the drug's capacity to corrupt cultural values. By the mid-1960s political debates in Canada over the legal use of LSD increasingly discounted testimony from individuals who had first-hand experiences with psychedelics. This measure excluded psychedelic psychiatrists from contributing to debates over the legal status of LSD and, instead, privileged perspectives offered by their critics. Consequently, psychedelic psychiatry appeared dangerous and unethical by both popular and legal accounts.

For over a decade, medical concerns over the efficacy of psychedelic approaches remained within the confines of professional debates surrounding methodology and theoretical frameworks. By the mid 1960s, however, this situation changed dramatically as LSD became inextricably connected with an image of youth radicalism along with more discrete concerns about physiological and psychological damage. The public perception of the drug by the late 1960s irreversibly altered the climate of medical experimentation with psychedelics. The media-generated view of LSD armed critics of

psychedelic psychiatry with new reasons for discrediting etiological theories of mental disorder offered by psychedelic practitioners. This dissertation examines the history of LSD experimentation in psychiatry, from its introduction to the drug's criminalisation, and traces the process by which its reputation was transformed from medical miracle to public pariah.

Chapter One: Plain Psychedelics

When asked why medical scientists in Saskatchewan were excited about their jobs, psychiatrist Abram Hoffer responded by claiming that the province offered optimal conditions for scientific research. He attributed this situation to a mixture of governmental support and a professional freedom to explore ideas. He boasted that in Saskatchewan researchers enjoyed an:

unusually fertile climate for research—not in terms of temperature or snow or wind, though Saskatchewan is prodigal with these—but a climate of freedom to devote full time to their projects; of financial and moral support from the provincial government, supplementing federal research grants; [and] of close co-operation from staff.¹

He added that the “unique” research environment in Saskatchewan would undoubtedly make the province a world leader in medical research through its capacity to attract top researchers and explore fresh ideas. Moreover, as the provincial government moved towards implementing a system of publicly-funded health care, medical researchers operated with the added “security of continued salaries and a resulting continuity in their work.”² Hoffer, who by the early 1960s had become an international leader in psychedelic drug research in psychiatry, benefited from this unique blend of political and medical enthusiasm for innovation in post-war Saskatchewan.

The research climate in which Hoffer operated in the 1950s profited from the political changes that had taken place at the end of the Second World War. In 1944, the

¹ Saskatchewan Archives Board, hereafter SAB, A207, III. 63, Correspondence with Mrs. M. Clements, Abram Hoffer, “Progress Report on Saskatchewan Psychiatric Research,” (unpublished) (c. 1955), p. 2.

² Ibid., p. 3.

province elected North America's first social democratic government. The ruling party, the Co-operative Commonwealth Federation (CCF) led by Tommy Douglas, campaigned as an activist government, committed to radical experimentation in public policy as well as in domains of science, medicine, agriculture, and technology. The party remained in power for five consecutive terms until 1964. Throughout its twenty-year mandate, the CCF government expressed a commitment to nurturing fresh ideas. In particular, this government became known throughout Canada as the first provincial jurisdiction to enact a program of publicly-funded healthcare, a system that the federal government eventually adopted in 1966.³ The CCF's commitment to reforming the province attracted professionals from around the world who contributed their enthusiasm for testing new theories and challenging old paradigms.

This unique political dynamic in post-war Saskatchewan has been examined by a number of scholars. Several authors have explored the development and legacy of the Saskatchewan CCF as a successful social democratic party in North America. The CCF's socialist ideology and rural manifestation represented a peculiar blend of agrarian socialism that made it an attractive subject for inquiry.⁴ Although it was not the only

³ Duane Mombourquette, "An Inalienable Right: The CCF and Rapid Health Care Reform, 1944-1948," *Saskatchewan History* 3 (1991): 101-116; Howard Shillington, *The Road to Medicare in Canada* (Toronto: Del Graphics Publishers, 1972); Edwin Tollefson, *Bitter Medicine: The Saskatchewan Medicare Feud* (Saskatoon: Modern Press, 1964); Aleck Ostry, "Prelude to Medicare: Institutional Change and Continuity in Saskatchewan, 1944-1962," *Prairie Forum* 20, 1 (1995): 87-105; Robin F. Badgley and Samuel Wolfe, *Doctors' Strike: Medical Care and Conflict in Saskatchewan* (Toronto: Macmillan of Canada, 1967); and Malcolm G. Taylor, *Health Insurance and Canadian Public Policy* (Montreal: McGill-Queen's Press, 1978); and, David Naylor, *Private Practice, Public Payment: Canadian Medicine and the Politics of Health Insurance, 1911-1966* (Montreal: McGill-Queen's University Press, 1986).

⁴ Seymour Lipset, *Agrarian Socialism: The Co-operative Commonwealth Federation in Saskatchewan: A Study in Political Sociology* (Berkeley: University of California Press, 1950); David Laycock, *Populism and Democratic Thought in the Canadian Prairies, 1910 to 1945* (Toronto: University of Toronto Press, 1990); Walter D. Young, *Democracy and Discontent: Progressivism, Socialism and Social Credit in the Canadian West* (Toronto: McGraw-Hill Ryerson Limited, 1969); Norman Penner, *From Protest to Power: Social Democracy in Canada, 1900-Present* (Toronto: J. Lorimer, 1992); Norman Ward and Duff Spafford

region that developed a new political party at this time,⁵ the popularity of the CCF nonetheless demonstrated the willingness with which Saskatchewan residents accepted new ideas in the post-war period.

Some authors have attributed the post-war reforms in Saskatchewan to Douglas' charisma, vision, and tenacity.⁶ A.W. Johnson added to this view and provided an insider's perspective on how Douglas realised some of his objectives by creating a powerful, sympathetic civil service. Johnson explored Douglas' social justice initiatives and "his provincial government's ability to turn a relatively isolated and poverty-stricken province into Canada's most important social policy laboratory."⁷ Civil servants trained in this "laboratory" formed what would later become part of the "Saskatchewan Mafia," a small but influential group of people who embraced the culture of political innovation before becoming part of the province's diaspora.⁸ Johnson examined a program of policy reforms in Saskatchewan that was much more haphazard than visionary, but he stressed that one of the defining features of the CCF government was its dedication to exploring new, untested ideas. Such enthusiasm infected the civil service. He recalled that "the hope inspired by the CCF in Saskatchewan and its willingness to reach out to new frontiers of public policy were unmistakeable."⁹ The political climate sustained by five

(eds) *Politics in Saskatchewan* (Don Mills, ON: Longmans Canada, 1968); and, A.W. Rasporich, "Utopia, Sect and Millennium in Western Canada, 1870-1940," *Prairie Forum* 12 (1987): 217-243.

⁵ Alvin Finkel, *The Social Credit Phenomenon in Alberta* (Toronto: University of Toronto Press, 1989); and, W.L. Morton, *The Progressive Party in Canada* (Toronto: University of Toronto Press, 1967).

⁶ Tommy McLeod and Ian McLeod, *Tommy Douglas: The Road to Jerusalem* (Edmonton: Hurtig, 1987); Walter Stewart, *The Life and Political Times of Tommy Douglas* (Toronto: McArthur and Company, 2003); and, Dave Margoshes, *Tommy Douglas: Building the New Society* (Montreal: XYZ Publication, 1999).

⁷ Gregory P. Marchildon, "Foreward" in A.W. Johnson, *Dream No Little Dreams: A Biography of the Douglas Government of Saskatchewan, 1944-1961* (Toronto: University of Toronto Press, 2004), xv.

⁸ A.W. Johnson, *Dream No Little Dreams: A Biography of the Douglas Government of Saskatchewan, 1944-1961* (Toronto: University of Toronto Press, 2004), xxii.

⁹ *Ibid.*, p. 5.

CCF electoral victories generated the reputation for a relatively cohesive political attitude within the region.

Although the impact of the CCF has dominated discussions of Saskatchewan's post-war history, the infectious enthusiasm for exploring untested theories extended beyond politics. Stuart Houston has argued that the election of the CCF merely buoyed political support for local medical innovations in areas of tuberculosis, psychiatry, and cancer treatment.¹⁰ Similarly, Harley Dickinson has demonstrated how the acceptance of new treatments in mental health led to corresponding modifications in mental health care provision in the province.¹¹ Both Houston and Dickinson acknowledged the important influence of the CCF, but maintained that additional social factors produced the prerequisite cultural disposition for accepting such changes. The combination of political support for experimentation and professional freedom, largely owing to the shortage of professionals in the province, created a unique environment for medical research.

Sociologist Nick Crossley has identified “place” as one of the most important factors affecting the way in which new medical theories take shape. He examined the experimental psychiatric research conducted by R.D. Laing and David Cooper in Britain in the post-Second World War period. Crossley suggested that Laing and Cooper's use of psychoactive drugs to explore “madness” became associated with anti-psychiatry.¹² Laing and Cooper actively worked to cultivate a “working utopia,”¹³ a place where they could conduct their research without dissention from unsupportive colleagues. In other

¹⁰ C. Stuart Houston, *Steps on the Road to Medicare: Why Saskatchewan Led the Way* (Montreal: McGill-Queen's University Press, 2002).

¹¹ Harley Dickinson, *The Two Psychiatries: The Transformation of Psychiatric Work in Saskatchewan, 1905-1984* (Regina: Canadian Plains Research Centre, University of Regina, 1989).

¹² Nick Crossley, “Working Utopias and Social Movements,” 810.

¹³ *Ibid.*, p. 810.

words, Laing and Cooper had to construct intellectual and political space for exploring new ideas about mental illness when their untested theories did not suit the dominant trends within the profession. Contrary to these circumstances in Britain, the political culture in Saskatchewan provided more of that space. When psychiatrists on the prairies used psychoactive substances to explore madness their investigations became part of the local culture of experimentation and did not contribute to the anti-psychiatry discourse.

Saskatchewan, however, was not the only place where medical experimentation flourished at mid century. Psychiatric experimentation formed part of the political activism in this period. Gerald Grob has examined some of the changes that occurred in American psychiatry after the Second World War. He argued that this period was one of intense social activism within the profession. Several psychiatrists witnessed new manifestations of mental illness that seemed to result from war-related experiences. Additionally, the profession became stimulated by international political developments. The Labour Party victory in Britain, the introduction of Roosevelt's Four Freedoms, and a growing interest in Keynesian Economics signalled a popular shift towards developing a welfare state. As a result, psychiatrists assumed a larger set of public responsibilities. Grob suggests that in the United States increased political attention and new clinical observations behoved psychiatrists to "question the very basis of American psychiatry, including its traditional association with mental hospitals and the prevailing somatic interpretations of mental disease."¹⁴ Grob contended that these dual forces of social

¹⁴ Gerald Grob, "Psychiatry and Social Activism: The Politics of a Speciality in Postwar America," *Bulletin of the History of Medicine* 60, 4 (1986), 477.

activism and theoretical curiosity motivated psychiatrists to engage in medical experimentation in the post-war period with added vigour.

Psychiatrists in Saskatchewan were similarly affected by a feeling of unrest within the profession. In the United States after the Second World War the leadership of the American Psychiatric Association embraced a seismic shift from somatic to psychodynamic theories; psychiatrists who did not subscribe to either approach became marginalised. In Saskatchewan psychedelic psychiatrists, who would have otherwise operated on the margins of the profession, retained professional credibility because they dominated the discipline locally. Unlike anti-psychiatrists in Britain, psychiatrists on the prairies benefited from the local political climate of experimentation that enabled them to explore new ideas without positioning themselves against established traditions. The professional freedom available in Saskatchewan allowed psychiatrists an opportunity to develop new theories without resistance from a cumbersome professional bureaucracy. The region attracted clinical researchers and allowed them to develop novel theories that endured longer because they enjoyed political support and professional freedom.

From Dustbowl to Drugs

Saskatchewan's population fluctuated rather significantly until the 1960s when it stabilised at a figure just under a million.¹⁵ Until the 1960s the majority of people

¹⁵ The region that became the province of Saskatchewan in 1905 had approximately 91,279 residents; by 1931 this figure increased to 921,785 then dropped to 895,992 during the Depression and climbed back to 931,729 before increasing slightly over the next several decades.

continued to live in rural areas.¹⁶ The shifts in population placed tremendous strains on local services and resources, particularly in rural communities. Throughout the first half of the century the provincial economy in Saskatchewan remained dominated by agriculture, and this sector consisted primarily of grain production. The provincial economy, therefore, was largely connected to variations in the grain market. Many of the urban communities in the province functioned predominantly as service centres for the larger rural areas.¹⁷ The two largest urban centres, Saskatoon and Regina, developed more diversified economies but remained intimately linked to the province's agricultural production. Without a strong and independent urban economy, Saskatchewan did not have a sizeable urban, professional class.

In October 1929, following the crash of the New York Stock Market, an economic depression spread across North America. In Saskatchewan, the crisis was combined with prolonged drought conditions that crippled the provincial economy, making it the hardest hit region in the country. For nearly a decade the agricultural sector of the province, the backbone of the regional economy, suffered under the dual effects of drought and depressed international staples prices. Political scientist David Smith contends that in Saskatchewan "individuals suffered a blow in the 1930s that permanently changed the province's view of itself and its society."¹⁸ The widespread economic depression in the

¹⁶ Harley Dickinson, *The Two Psychiatries: The Transformation of Psychiatric Work in Saskatchewan, 1905-1984* (Regina: Canadian Plains Research Centre, University of Regina, 1989), 306. Statistics taken from Canadian census data in Dickinson's study.

¹⁷ Paul Voisey, *Vulcan: The Making of a Prairie Community* (Toronto: University of Toronto Press, 1988). Although Voisey describes the situation in an Albertan service community, his analysis of a prairie service community is comparable with the situation in Saskatchewan. See also: Bill Brennan, *Regina: An Illustrated History* (Toronto: Lorimer, 1989); and, Don Kerr and Stan Hanson, *Saskatoon: The First Half-Century* (Edmonton: New West Publishers Ltd., 1982).

¹⁸ David E. Smith (ed.), *Building a Province: A History of Saskatchewan in Documents* (Saskatoon: Fifth House Publishers, 1992), 29.

1930 compounded existing shortcomings in Saskatchewan's mental health system, making it an area desperate for attention when the economy improved.

Until 1914, Saskatchewan residents seeking mental health care had to travel to Alberta or Manitoba for medical attention.¹⁹ The first provincial mental hospital in Saskatchewan opened in 1914 at North Battleford. Seven years later the second hospital opened in Weyburn. By the end of the Second World War each facility housed over 2,000 patients.²⁰ Both institutions experienced severe overcrowding and the Saskatchewan government planned to build a third facility in Saskatoon.²¹ Plans for this facility were stalled by poor economic conditions throughout the 1930s followed by a concentration on the war effort during the first half of the 1940s.

Saskatchewan was not the only region facing increases in patient populations after the Second World War. In 1950, the National Department of Health and Welfare reported that nearly 60,000 individuals resided in mental hospitals across Canada. This figure represented an increase of almost 4,000 patients from the previous year and represented a growing trend for over a decade. In addition to the rising need for institutional space that these increases in admissions created, the costs of maintaining patients within institutions also rose.²² This trend in mental health care showed no signs of reversing and, therefore, political and clinical attention began focusing instead on

¹⁹ Officially, the province maintained an agreement with the Brandon Hospital in Manitoba. See further discussion in this chapter on McKerracher's investigation of mental health services.

²⁰ Centre for Addiction and Mental Health Archives (hereafter CAMH Archives), Saskatchewan Psychiatry, general file: Shervert H. Frazier and Alex D. Pokorny, *Report of a Consultation to the Minister of Public Health on the Psychiatric Services of Saskatchewan* September-December, 1967, p. 3.

²¹ In 1946, the Department of National Health and Welfare stated that Saskatchewan "has no metropolitan area," suggesting that the location of its next mental health care facility need not be confined to Saskatoon or Regina. National Archives of Canada, (hereafter NA) RG 29 National Health and Welfare, Volume 321, File 435-7-11 "Report on Hospital Facilities for Psychiatric Patients in Canada," (unpublished) (1946).

²² NA, RG-29, Volume 321, File 435-7-11-143 National Health and Welfare, pamphlet "Mental Health in Canada: The Facts" March, 1952. Costs rose from \$1.80 per day in 1948 to \$1.98 in 1949

developing sustainable solutions that did not involve dependence on large-scale institutions. After the Second World War, rather than construct an additional mental health care facility, the Saskatchewan government embraced the opportunity to explore new options.

Figure 1
Figure 2a and Figure 2b

Less than three months after the provincial election that originally brought the CCF to power in Saskatchewan in 1944, Douglas arranged for a Health Services Survey to make recommendations for the establishment of a system of socialised medicine in the province, which included mental health care provisions. As proof of his dedication to this program, Douglas also took the unusual step of acting as his own Health Minister. He then invited the renowned physician and historian of medicine, Henry E. Sigerist, from Johns Hopkins University in Baltimore, to conduct the health survey. Sigerist was well known (and controversial) for his support of the Soviet Union's system of socialised medicine, and by 1944 he was a leading international advocate for compulsory health insurance.²³ According to Sigerist's diary, he welcomed the opportunity to play a leading role in the province's health reforms. He felt he had become a *persona non grata* in the United States where he was considered "a crackpot" for his socialist sympathies. In Saskatchewan he was regarded with respect.²⁴ Douglas' timing and choice of commissioners was deliberate. The swift action indicated the CCF's commitment to

²³ *Making Medical History: The Life and Times of Henry E. Sigerist* (eds) Elizabeth Fee and Theodore M. Brown (Baltimore: The Johns Hopkins University Press, 1997), 2.

²⁴ Elizabeth Fee, "The Pleasures and Perils of Prophetic Advocacy: Socialized Medicine and the Politics of American Medical Reform," in *Making Medical History: The Life and Times of Henry E. Sigerist*, (eds) Elizabeth Fee and Theodore M. Brown, 216, (Baltimore: Johns Hopkins University Press, 1997).

moving forward with its promises for reform, and Sigerist signified the CCF's dedication to establishing a form of socialised medicine.²⁵

Sigerist reported the results of the health services survey on October 4, 1944, offering prescriptions for immediate action.²⁶ His recommendations focused attention on collecting resources and swiftly planning for the coordination of community assessments and service implementation.²⁷ Douglas responded by identifying three prescient themes from Sigerist's report: 1) a critical shortage of trained personnel; 2) a scarcity of equipment and facilities; and 3) inadequate funds.²⁸ With a total population of 840,000 in 1944, Douglas determined that the province required an additional four hundred doctors to fulfil Sigerist's first recommendation.²⁹ Hospital facilities, including mental hospitals and tuberculosis sanatoria, already suffered from overcrowding, creating demands for additional facilities as well as repairs to existing buildings. To begin addressing these concerns Sigerist recommended the construction of two new mental health facilities, which would bring the provincial total to four. Funds for mental health, in general, were more difficult to secure, but with intentions to develop a strong program of research, money could be obtained, in part, through research grants available outside the province.

²⁵ Jacalyn Duffin and Leslie A. Falk, "Sigerist in Saskatchewan: The Quest for Balance in Social and Technical Medicine," *Bulletin for the History of Medicine* 70 (1996): 658-683.

²⁶ One of the critical recommendations involved dividing the province into health regions. Each region would service its community with a comprehensive team of health professionals. This concept was central to the Sigerist report and became integral to the way that the provincial health reforms developed. For further information on the health regions see: Joan Feather, "From Concept to Reality: Formation of the Swift Current Health Region," *Prairie Forum* 16, 1 (1991): 59-79 and Joan Feather, "Impact of the Swift Current Health Region: Experiment or Model?" *Prairie Forum* 16, 2 (1991): 225-245.

²⁷ *Building a Province: A History of Saskatchewan in Documents* (ed) David E. Smith, Document 91: Public Health, Health Services Survey Commission (Report of the Commissioner, Henry E. Sigerist, October 4, 1944), (1944), 14: 325-329.

²⁸ *Building a Province: A History of Saskatchewan in Documents* (ed) David E. Smith, Document 92, Public Health, Saskatchewan Plans for Health, (1945), 16, p. 329.

²⁹ *Ibid.*, p. 329.

These problems that Douglas sought to tackle were well known to people in the province. During the Depression some municipalities had tried to retain doctors by implementing an *ad hoc* community tax scheme in an effort to retain individuals with training in health care. The first example of this scheme took place in 1914 in Sarnia, Saskatchewan, and served as a model for similar initiatives in the 1930s. At the outbreak of the First World War, the municipal council in Sarnia was fearful of losing its only rural doctor and consequently collected money from local residents to offer the physician a \$1,500 annual retainer. By 1916 the provincial government created the Rural Municipality Act, granting municipalities the authority to collect funds for similar purposes. During the Depression, the Act was amended to allow for co-operation among neighbouring municipalities to raise funds collectively.³⁰ The evolution of this program highlighted the scarcity of professionals along with the willingness of local residents to co-operate in addressing a universal desire for access to health care.

A year after the Sigerist commission reported, the CCF established a physician placement service that borrowed ideas from the Sarnia model.³¹ The organisation accepted requests for doctors forwarded by Saskatchewan municipalities and matched these needs with doctors recruited from outside the province.³² Douglas stated:

Many of the young doctors who are in the Armed Forces of Canada have written to me or to the Planning Commission, saying that they are interested in what we have in mind...and there is nothing mercenary about these young men who have created

³⁰ Malcolm G. Taylor, *Health Insurance and Canadian Public Policy: The Seven Decisions that Created the Canadian Health Insurance System* (Montreal: McGill-Queen's University Press, 1978), 70.

³¹ In Britain these programs were called labour exchanges.

³² *Saskatchewan Legislative Journal* Session 1946, volume xlv, p. 198. Although I did not find copies of the advertisements, they were mentioned in the legislative journals and, in fact, the opposition later criticised the CCF for spending money on advertisements in New York and Britain, but were especially upset about placing ads in socialist nations. *Saskatchewan Legislative Journal* Session 1949, p. 30. In the first year the program increased the number of active doctors in the province from 401 to 464.

a great tradition of self-sacrifice and service; but they have a tremendous investment in their education; they have a long period of training.³³

With this level of interest, Douglas remained optimistic that the province would continue to attract well-trained physicians without depriving other areas of their physicians.³⁴

Without a medical school in Saskatchewan until 1950, the province depended on attracting health care professionals trained outside the province.³⁵ Critical shortages of professionals, however, encouraged the government to explore other options. For example, the provincial government empowered nurses in the health care system by expanding their authority in health services.³⁶ In addition, the CCF established a system of grants for nurse training in an effort to attract and retain more nurses in the province. Douglas also added a new category of professional psychiatric nurse training after identifying the critical shortages that existed within mental health facilities in particular. He further suggested that increased expenditure on wages for nurses was necessary before adding more services. Douglas contended that nurses deserved to be recognised as professionals, with qualifying examinations and responsibilities befitting their expertise.

³³ *Saskatchewan Legislative Journal* Session 1945, T.C. Douglas “Health Services” speech, vol. XLIV, p. 16.

³⁴ Many doctors were also recruited from the National Health Service (NHS) in Britain, though even greater numbers came from the NHS during the doctors’ strike in 1960.

³⁵ See Louis Horlick, *They Built Better than They Knew: Saskatchewan’s Royal University Hospital, a History, 1955-1992* (Saskatoon: Louis Horlick, 2001); C. Stuart Houston, *Steps on the Road to Medicare: How Saskatchewan Led the Way* (Montreal: McGill-Queen’s University Press, 2002). Some Saskatchewan doctors were Saskatchewan residents who left the province to receive training, most often in Toronto. After the CCF came into power, however, they actively recruited doctors to come and work in the province. They advertised across North America but were also very interested in attracting British doctors who had experience working in the NHS.

³⁶ See Harley Dickinson, *The Two Psychiatries: The Transformation of Psychiatric Work in Saskatchewan, 1905-1984* (Regina: Canadian Plains Research Centre, University of Regina, 1989), 59-66; and, Chris Dooley, “‘They Gave Their Care, but We Gave Loving Care’: Defining and Defending the Boundaries of Skill and Craft in the Nursing Service of a Manitoba Mental Hospital during the Great Depression,” *Canadian Bulletin of Medical History* 21, 2 (2004): 229-251. In his expanded study of nursing in Canada, Dooley suggests that the extension of authority to nurses in Saskatchewan seemed to be a novel innovation in Saskatchewan. (See forthcoming PhD dissertation from York University).

The augmentation of prestige, clinical responsibility and wages, made working in Saskatchewan an attractive destination for many nurses.³⁷ These measures gradually brought physicians and nurses in from outside the province and helped to fill critical weaknesses in the health care system.³⁸

The medical school opened in Saskatoon as part of the expansion of the University of Saskatchewan. The government hoped that an in-province education would help keep medical students in the region. Too many Saskatchewan-born students who received their medical degrees out of province did not return to practice in their home communities. In addition to these internal solutions to the shortage of health care professionals, the CCF government also continued to recruit professionals to the province from other parts of the country and from other Commonwealth countries. The situation facing personnel shortages in mental health services was further compounded by the social stigma surrounding mental illness, which extended to working conditions.

Douglas identified a pressing need to encourage a change in popular attitudes towards mental illness. He deplored the current tradition of placing individuals with mental illnesses in custodial institutions. He maintained that overcrowded and understaffed asylums produced terrible conditions for therapy. Moreover, where professionals were available they were often too busy attending day-to-day duties rather than engaging in medical research that might produce more satisfying alternatives to institutionalisation. Douglas subscribed to the idea that a hospital should be a place of last resort, and that care among relatives and within a familiar community was almost

³⁷ *Saskatchewan Legislative Journal* Session 1947, volume xlvi, "Douglas" response to Patterson after Budget Speech', no page numbers.

³⁸ See: Souris Valley History Book Committee, *Under the Dome: The Life and Times of Saskatchewan Hospital, Weyburn* (Weyburn: Souris Valley History Book Committee, 1986).

always preferable to long stays in a hospital. Psychiatric services, according to Douglas, should be provided in a comprehensive manner that emphasised preventative medicine and professional collaboration in the community. His strategy for accomplishing this objective involved a combination of increasing psychiatric research and initiating an aggressive public education program. Taking cues from Sigerist, Douglas recommended that physical and mental health be treated with equal concern and compassion. He stated:

Steps should be taken, however, to get at these people before they get to hospital; to provide for early diagnosis and treatment; to get the psychoneurotic and borderline cases in the early stages; to have people take a new attitude to mental disease; to get the public to know that there is no more disgrace for one member of the family to get mentally ill than there is for any other member of the family to take pneumonia.³⁹

This focus on non-institutional medical intervention set the agenda for mental health reforms in the province that emphasised innovative medical research and new conceptualisations of mental illnesses.

The attention given to health care reforms transformed the region into an attractive destination for conducting medical experimentation. The erosion of the region's professional class during the Depression had created a professional vacuum. Local residents readily embraced recommendations for new and replenished services in communities that had struggled to retain professionals during the Depression. The CCF government recruited doctors and medical researchers to fill senior positions in the rapid expansion of a provincial civil service. Enticed by research grants, professional autonomy, and an opportunity to participate in the formation of North America's first

³⁹ *Saskatchewan Legislative Journal*, Session 1945, vol. XLIV, p. 14.

program of socialised medicine, the once desperate region recast itself in the post-war period as an exciting, avant-garde, even cosmopolitan, place to be.

Several personal recollections underscored the importance of the cultural and political climate to the transformation of Saskatchewan's regional identity. The allure of this place involved a delicate and complicated set of historical and psychological factors that gave rise to a new vision for the region that, above all, created opportunities for experimentation. One interviewee, psychologist Arnie Funk, suggested that there was a high level of innovation and excitement in Saskatchewan, which he felt was influenced by the strong socialist orientation that attracted people who shared this ideological view.⁴⁰ In the late 1950s Funk was an American graduate student in psychology who had learned about Saskatchewan's plans to establish a publicly-funded health system. He came to the province with a desire to observe how the elimination of user fees influenced health outcomes. He received a bursary from the Saskatchewan government and subsequently spent two years pursuing graduate research at the hospital in Moose Jaw.

Like Funk, Robert Sommer came to Weyburn, Saskatchewan, in 1957 to participate in the political experiment taking place on the prairies. Sommer was the first PhD psychologist in the area. He and his family arrived in Weyburn, after driving from Kansas in their Volvo, and eagerly looked forward to living in the "socially progressive" region. Sommer also felt that the sparse professional population reduced the stifling influence of bureaucracy and tradition. He claimed that there was "a professional freedom for experimentation not found elsewhere."⁴¹ His colleague in Winnipeg further

⁴⁰ Funk, Arnie, psychologist. Interview with author, 16 August 2003, Saskatoon.

⁴¹ Robert Sommer, "Psychology in the Wilderness," *Canadian Psychologist* 2 (1961), 26.

explained that “Saskatchewan has the reputation for being a place where things happen. It has attracted within its borders a group of vigorous, independent, young psychologists whose style of work may set the pattern for the rest of Canada.”⁴² Rhodes’ scholar Allen Blakeney, who in 1944 was a Dalhousie law student, moved to Regina after completing his law degree because he “wanted to be part of the action.”⁴³ The region captivated his interests, and in 1968 Blakeney became premier of the province. The professional opportunities available in Saskatchewan had become a major attraction.

The province also appealed to individuals on a less partisan basis. One woman recalled in an oral interview that upon completing high school in British Columbia she set her sights on Saskatchewan. She had heard that the government paid tuition for women who wanted to go to nursing school. Sold on this idea, she moved from Vancouver to Weyburn and started nursing school. She remembered this as one of the “most exciting times in her life;” not only was she away from home but she met people from all over the world who brought with them their ideas, energy, and cosmopolitan influences; in Weyburn she was introduced to jazz.⁴⁴ Along with research and educational opportunities, the health reforms in the province created job alternatives for women, especially those interested in nursing and allied health professions. A provincial system of loans and bursaries opened doors for nurse training in the province.

Despite a blossoming optimism for Saskatchewan’s post-war potential, grim reminders of the previous decade made the province unappealing to anyone seeking an abundance of modern amenities or an urban environment. For many people, it remained

⁴² Morgan W. Wright, “Psychologists at Work,” *Canadian Psychologist* 2 (1961), 26.

⁴³ Blakeney, Allan, professor emeritus and former Saskatchewan premier. Interview with author, 16 June 2003, Saskatoon.

⁴⁴ Munn, Joyce, former psychiatric nurse. Interview with author, 29 June 2003, Vancouver Island.

a “backwoods,” rural region, disagreeable to well-established professional organisations or high culture traditions.⁴⁵ Until the late 1950s, much of the province remained in darkness, having only limited access to electricity and in many areas indoor plumbing remained a luxury. Saskatchewan’s economy, despite the many changes on the political front, remained dominated by agriculture. The development of the province’s professional class, even in urban areas, still paled in comparison with other regions in the country.

The optimism generated by the space, and the time secured by five consecutive CCF victories, however, made Saskatchewan an attractive destination for individuals interested in participating in a culture of experimentation. One observer remarked: “It was an age of bold experiments. ...The pioneering spirit went beyond art and medicare, though, it dared to explore the brain, the psyche and dimensions that passeth all understanding.”⁴⁶ In the 1940s the province busied itself establishing the groundwork for health reforms that would eventually make Saskatchewan a world leader in psychiatric experimentation. The region was transformed from a place where residents had very little control over their economic circumstances, to an area where experimental ideas could come to fruition. A new cultural disposition emerged after the Second World War that no longer believed in the protective powers of the federal government or the corrective trends of the market. Instead, people in this region more readily embraced untested ideas for their potential to exact an alternative to the status quo; they opposed a system that could induce a return to Depression conditions. This mentality showed itself

⁴⁵ See Robert Sommer, “Psychology in the Wilderness,” *Canadian Psychologists* 2 (1961): 26-29. He no longer agrees with this assessment. Allen Blakeney also recalled that his first accommodations in Regina were not equipped with indoor plumbing.

⁴⁶ James Labounty, “Dr Yes,” *Western Living* (2001), 43.

in popular support for a social democratic government and a corresponding willingness to tolerate activities that had the potential to permanently alter the political-economic fabric of the region.

Throughout the slow process of transformation, Premier Douglas reinforced the notion that co-operation and commitment to a new publicly-funded health care system was the linchpin that would reform the province. Conscripting the support of all levels of government, Douglas assured the people of Saskatchewan that major health care reforms would chart a new future for the region. He maintained that:

we are on the vanguard of public health on this continent, because we have a health conscious people who regard health as something beyond price, who are convinced that health is a public utility and the right of every individual in the nation. Having gone thus far we intend to stay in the vanguard, and to provide in Saskatchewan a health system that will provide adequate health services for all the people of the province irrespective of their ability to pay.⁴⁷

Douglas campaigned for a healthcare plan, one that provided access for all citizens and removed dependence on insurers, as a source of provincial pride and a program that distinguished Saskatchewan in the post-war period as a region capable of taking care of itself.

His approach seemed to work; support for health care reforms in Saskatchewan gained momentum. Despite accusations that a program of socialised medicine sounded similar to communist schemes—a point that was reinforced by Sigerist's admiration of the Soviet model—the program gained widespread support in the region. The CCF party in Alberta discussed similar plans, but without political opportunities in the neighbouring

⁴⁷ *Saskatchewan Legislative Journal* Session 1945, T.C. Douglas "Health Services" speech, vol. XLIV, p. 20.

province, Alberta CCF members exported their ideas to Saskatchewan.⁴⁸ The idea of a publicly-funded system of health care appealed as a pragmatic solution to many of the problems realised in the previous decade.

Psychiatric Services

Douglas had a long-standing interest in mental health issues. His Master's thesis from McMaster University's campus in Brandon, Manitoba, explored social problems associated with mental illness. The 1933 thesis recommended a variety of community endeavours for addressing what appeared to be increasing rates of mental illness in the twentieth century.⁴⁹ In this study, Douglas examined his home community of Weyburn, Saskatchewan, and recommended initiatives in public education, religious instruction, state-supported treatment facilities, and even sterilisation, to alleviate the mounting stresses of mental illness in the community.⁵⁰ Although his perspectives on addressing mental illness softened by the time he was elected premier, Douglas maintained a keen interest in mental health programs and ensured that psychiatric services were included in the discussions over plans for health care reforms.

⁴⁸ SAB, Regina, R-191, S-43, Letter from Clifford E. Lee to Captain Sheps, no date, p. 1

⁴⁹ T.C. Douglas, *The Problems of the Subnormal Family* (MA thesis, McMaster University, 1933).

⁵⁰ The section in Douglas MA thesis on eugenics is IV.I.c. (there are no page numbers). Douglas' eugenicist ideas have created an awkward subject for many of his biographers. The majority of these authors are sympathetic to Douglas' socialism and stress the post-1944 history of Douglas, allowing them to ignore this issue. Angus McLaren, in a study of eugenics in Canada explains Douglas' eugenicist approach as a relatively more popular perspective before World War II. The issue of Douglas' views on eugenics would benefit from more focused research, but it is clear that by the time Douglas was elected in Saskatchewan he no longer referred to programs that could be regarded as sympathetic to sterilisation. See: Angus McLaren, *Our Own Master Race: Eugenics in Canada, 1885-1945* (Toronto: McClelland and Stewart, Inc., 1990), introduction. For examples of Douglas biographies on this issue see: Thomas McLeod and Ian McLeod, *Tommy Douglas: The Road to Jerusalem* (Edmonton: Hurtig, 1987); and, Walter Stewart, *The Life and Political Times of Tommy Douglas* (Toronto: McArthur and Company, 2003).

In November 1946, Douglas appointed a Commissioner of Mental Services who also acted as Chief Psychiatrist for the province. D.G. (Griff) McKerracher came to Saskatchewan after working in the Ontario Health Department following his service as a medical doctor with the Canadian Army during the Second World War.⁵¹ He was another individual who was attracted to the CCF in Saskatchewan, and when McKerracher arrived in the province he seized upon the opportunity to effect changes in psychiatric services.⁵²

McKerracher sympathised with Douglas' perspectives on mental health and eventually formulated a program, called "The Saskatchewan Plan" (1957), that formally acknowledged a desire to treat mental illnesses in general hospitals. In addition to hiring McKerracher, psychiatric services also benefited from an increase in government funding for health initiatives in general. In 1946, the provincial funding for mental health care rose by \$600,000, while funding for health care, in general, increased from a sum of \$1,852,079 in 1943-4 to \$5,895,141 in 1946-7.⁵³ In 1947 the province passed a new Mental Hygiene Act, which enacted changes to the admissions policy by shifting authority over asylums from the Department of Public Works to the Department of Health while simultaneously widening admissions policies at general hospitals in order to incorporate psychiatric services.⁵⁴

Before developing the Saskatchewan Plan, McKerracher examined the history of psychiatric services in the province. He discovered that when Saskatchewan became a

⁵¹ Duane Mombourquette, "An Inalienable Right: The CCF and Rapid Health Care Reform, 1944-1948," *Saskatchewan History* 3 (1991), 109.

⁵² Coburn, Frank, psychiatrist. Interview with author, 21 August 2003, Saskatoon.

⁵³ *Saskatchewan Legislative Journal* (1946), 17-18.

⁵⁴ Mombourquette, "An Inalienable Right," 109.

province in 1905 it did not have its own facilities to house patients suffering from mental illness. Instead, patients were transferred to the nearest centres where care could be obtained, which often involved travelling long distances often over snow or bald prairie with no roads. A North-West Mounted Police report from 1903 highlighted some of the problems associated with this approach to care for the mentally ill:

He [Corporal Field] was informed that a man had gone violently insane at Hay River, three hundred and fifty miles from his post. He proceeded there with dog train, accompanied by an interpreter only, and brought the unfortunate man, who was a raving maniac, back to Fort Chipewyan, and thence escorted him to Fort Saskatchewan, travelling a total distance of thirteen hundred miles with dogs, and occupying forty-four days on the journey. This is not an isolated instance.⁵⁵

Corporal Field's report illustrated the critical lack of mental health services available in the region during the first part of the twentieth century. The distances and travelling conditions prohibited access to healthcare of any measure, suggesting that the cases transferred to either Alberta or Manitoba were likely severe. Many others may have suffered without opportunities for psychiatric care.

Despite considerations of regional access many patients were still required to travel great distances to receive psychiatric treatment. Moreover the numbers of individuals seeking care quickly outpaced provision. When the hospital in North Battleford opened, its superintendent Dr. J.W. MacNeill travelled by train for twenty-nine hours with three hundred and forty-six Saskatchewan patients who had been staying in an asylum in Brandon, Manitoba.⁵⁶ By the time the Weyburn Mental Hospital opened in 1921, Saskatchewan's Department of Public Health suddenly reported having over

⁵⁵ "Report of the North-West Mounted Police," in *The Institutional Care of the Insane in the United States and Canada* volume 4 (ed) Henry M. Hurd, (Baltimore: The Johns Hopkins Press, 1917), 2.

⁵⁶ Maurice Demay, "The Beginnings of Psychiatry in Saskatchewan," *Canada's Mental Health* (1973), 24.

1,500 individuals requiring institutional care.⁵⁷ Both hospitals in North Battleford and Weyburn admitted patients suffering from acute and chronic illnesses in addition to accommodating “mentally retarded” patients.⁵⁸ It appeared that as planners reduced the travel distances, the demand for admission rose dramatically.⁵⁹ It remained unclear, however, whether this situation resulted from an increase in available services, changing social attitudes to institutional care, or from changing diagnostic procedures.

Due to the severe and prolonged economic depression, the province was incapable of addressing issues involving any levels of public spending for two nearly decades following the construction of the hospital at Weyburn. As a result, the situation facing mental health services stagnated. Conditions for patients worsened and overcrowding in North Battleford and Weyburn reached staggering proportions; by 1946 North Battleford housed 2,000 patients and Weyburn accommodated another 2,600 patients.⁶⁰ Before McKerracher fully developed the Saskatchewan Plan in the 1950s, he determined that psychiatric services required drastic modernisation and expansion.

Similar to the problems encountered in general health services, the shortage of mental health professionals emerged as a primary obstacle. McKerracher believed that better co-operation among staff—including medical doctors, psychiatrists, psychologists and nurses—would improve working environments that would lead to advancements in

⁵⁷ “Patients on Register by Year from 1914 to 1944,” Saskatchewan Department of Public Health Annual Reports, in Harley Dickinson, *Two Psychiatries*, 38.

⁵⁸ CAMH Archives, Saskatchewan Psychiatry, general file: Shervert H. Frazier and Alex D. Pokorny, *Report of a Consultation to the Minister of Public Health on the Psychiatric Services of Saskatchewan* September-December, 1967, 3. “Mentally retarded” was the term used in this report.

⁵⁹ Gerald Grob makes a similar point about the effect of the asylum on expectations and familial responses to mental health accommodation in the United States. Gerald Grob, *The Mad Among Us: A History of the Care of America’s Mentally Ill* (Cambridge: Harvard University Press, 1994), 48.

⁶⁰ CAMH, Saskatchewan Psychiatry, general file: Shervert H. Frazier and Alex D. Pokorny, *Report of a Consultation to the Minister of Public Health on the Psychiatric Services of Saskatchewan* September-December, 1967, 3.

care for patients with mentally illnesses. Above all, he reasoned, patients should have more contact with nurses and, therefore, nurses should be empowered to make decisions about the patients with whom they communicate more than the doctors do.⁶¹ In addition, he proposed a formal collaboration between psychiatrists and general practitioners.

Collaboration was essential because McKerracher believed that patients reported more comfort from services offered by a family doctor, or general practitioner, and particularly when these options were available within their own community.⁶² These two ideas formed the basis of the subsequent administrative reforms embraced by McKerracher, which he proposed in the Saskatchewan Plan in 1957 and which the province legislated in 1961.⁶³

The second part of McKerracher's vision for psychiatric services in Saskatchewan involved recruiting psychiatrists to the region and facilitating the development of an active research program. He felt the criteria for reaching this objective in Saskatchewan's post-war political climate had to focus on research initiatives that involved patients and treated mental illnesses in general hospitals. One of his colleagues recalled McKerracher complaining that, "psychiatry suffered from being alienated from medicine. Medicine tended to be something you could see through a microscope and you can't see anything in psychiatry through a microscope. You can't lay hands on it, it is all

⁶¹ SAB, A207, III. Correspondence, 194.b. McKerracher file. Letters between Abram Hoffer and D.G. McKerracher, *passim*.

⁶² Colin Smith and D.G. McKerracher, "The Family Doctor in a Programme of Comprehensive Psychiatric Care," in *New Aspects of Mental Health Services* (eds) Hugh Freeman and James Farndale, 237-245, (Oxford: Pergamon Press, 1967).

⁶³ CAMH, Saskatchewan Psychiatry, general, "The Report of the Ad Hoc Committee of the Resettlement of Mental Hospital Patients," presented to the Minister of Public Health, 27 June 1966, p.10.

ideas.”⁶⁴ The absence of empirical measures in psychiatry made it a comparably more abstract medical subject and one that McKerracher felt dissuaded students from pursuing careers in that specialty. The fluid and subjective clinical definitions used to define mental disorders discouraged students from entering the psychiatric profession, which further contributed to a lack of trained personnel in the field. As a sub-discipline in medicine, McKerracher strongly urged a re-conceptualisation of mental health as an area indistinguishable from general medicine, meaning that its treatment would take place in a general hospital and general practitioners would play a more active role in mental health care. Rather than continue to provide health care in separate institutions, which reinforced professional divisions, McKerracher wanted psychiatric medicine to form an integral part of modern medicine, similar to many other medical sub-specialities. Accomplishing this goal required a change in professional and lay attitudes. McKerracher’s devotion to administrative and professional changes in Saskatchewan’s mental health system demonstrated that the shifting practices in post-war mental health accommodation relied on a multiplicity of factors, where scientific medicine played merely one part.⁶⁵

Part of the reason why McKerracher felt committed to merging mental and physical health care systems stemmed from his underlying belief that attitudes towards mental illnesses were too often shaped by misleading stereotypes. Psychiatric illnesses carried significant social stigmas, ones traditionally suggesting that disordered behaviours

⁶⁴ Coburn, Frank, psychiatrist. Interview with author, 21 August 2003, Saskatoon.

⁶⁵ For further assessment of this balance of influences in Saskatchewan, see: Hugh Lafave, Alex Stewart, and Frederic Grunberg, “Community Care of the Mentally Ill: Implementation of the Saskatchewan Plan,” *Community Mental Health Journal* 4, 1 (1968): 37-45.

resulted from weak characters or a dysfunctional upbringing.⁶⁶ The shortage of professionals in combination with social stigmatisation meant that mental health care had often languished as a medical specialty and remained a low priority for public spending. The enticement of major health care reforms in the province, Douglas' personal interest in mental health, McKerracher's commitment to administrative reforms, and the promise of new psychiatric research initiatives brought new optimism to the field. McKerracher thus took advantage of this political opportunity and began directing a program of research in psychiatric services that nurtured novel perspectives in mental health.⁶⁷

Psychedelic Pioneers

Figure 3

Within this climate of therapeutic optimism, Dr. Humphry Osmond arrived in Saskatchewan. Osmond was born in Surrey, England on July 1, 1917. His father worked in a local hospital as the paymaster captain and eventually moved the family to Devonshire before Humphry later settled with his aunt and uncle back in Surrey, where he completed the rest of his preparatory schooling. Rather than heading straight into the

⁶⁶ These same sentiments are found in a national survey of psychiatric services in Canada. *More for the Mind: A Study of Psychiatric Services in Canada* (eds) J. S. Tyhurst, F.C.R. Chalke, F.S. Lawson, B.H. McNeel, C.A. Roberts, G.C. Taylor, R.J. Weil and J.D. Griffin (Toronto: The Canadian Mental Health Association, 1963).

⁶⁷ For a brief description of the program's research aims and a corresponding list of publications its publications in 1955, see: SAB,A207, III. 194.a. McKerracher, Letter from Abram Hoffer to D.G. McKerracher, 25 May 1955. For example (selections), Roland Fischer and Neil Agnew, "On Drug-produced Experimental Psychoses," *Die Naturwissenschaften* 18 (1954): 431; Roland Fischer, "Factors Involved in Drug-Produced Model Psychoses," *Journal of Mental Science* 100 (1954): 623; Humphry Osmond, "Inspiration and Method in Schizophrenia Research," *Disorders of the Nervous System* 16, 4 (1955), 1-12; John Lucy, "Histamine Tolerance in Schizophrenia," *American Medical Association Archives of Neurology and Psychiatry* 71 (1954): 629; A. Hoffer and S. Parsons, "Histamine Therapy for Schizophrenia: A Follow-up Study," *Canadian Medical Association Journal* 72 (1955): 352; Abram Hoffer, Humphry Osmond, and John Smythies, "Schizophrenia: A New Approach II: Result of a Year's Research," *Journal of Mental Science* 100 (1954): 29; Abram Hoffer and Neil Agnew, "Nicotinic Acid Modified Lysergic Acid Diethylamide Psychosis," *Journal of Mental Science* 101 (1955): 12; and, John Smythies, "The Experience and Description of the Human body," *Brain* 76 (1953): 132.

study of medicine at university, Osmond took a more circuitous route, beginning with theatre writing and a brief flirtation with banking. He credited Hector Cameron, a physician and historian of medicine, with introducing him to the wide variety of possibilities within medicine that eventually captured his academic interests.⁶⁸

By the outbreak of the Second World War in 1939, Osmond had completed his clinical training, but the war interrupted his regular hospital ward practicum and forced him to engage in intermittent fieldwork. In 1940 he returned to Guy's Hospital in London only to experience the horrors of the German bombs that rained down on the city, destroying much of the area but miraculously leaving the hospital more or less intact. For the next several months Osmond and a few medical school colleagues ran a makeshift morgue. Several years later, he recalled the profound influence this period had upon him; “as a Socialist (sic)...it wasn't enough to say this is the inevitable process of history.”⁶⁹ Furthermore, it impressed upon him the tremendous courage of “inarticulate people;” he recalled rather pompously that:

the whole war brought out to me [a] great respect for inarticulate people. Being fairly articulate myself I had often, I think, fallen into the error of supposing that because I could put my thoughts into words, it didn't mean that other people's feelings [that] they couldn't put into words weren't just as varied and just as good.⁷⁰

Despite qualifying for medicine in July 1942, his plans were again interrupted by the war with a call to serve in the Army in November that same year.⁷¹

Instead of serving in the Army he joined the British Navy and spent Christmas in 1942 at the barracks in Portsmouth. Later serving on a destroyer that moved back and

⁶⁸ SAB, C128, Osmond – McEnaney interview, 1960, transcript, p. 5.

⁶⁹ Ibid., p. 11.

⁷⁰ Ibid., p. 11-12.

⁷¹ Ibid., p. 1-12.

forth across the Atlantic Ocean, he quickly became acquainted with another part of the war. Amidst dodging torpedoes from German submarines, the ship filled with men requiring medical attention while Osmond struggled with limited practical experience and meagre medical supplies. At sea, however, he also learned that the psychiatric emergencies were often quite severe and potentially more damaging than surgical crises.⁷² Through his work with the Navy, Osmond met Surgeon Captain Desmond Curran, head of psychiatry in the British Navy, who helped Osmond develop his interests in psychiatry (while his medical colleagues chastised him for abandoning surgery).⁷³

After the war Osmond took a position as a Senior Registrar at the psychiatric unit at St. George's Hospital in London. There he worked closely with colleague John Smythies, and cultivated a keen interest in chemically-induced reactions in the human body. Smythies and Osmond, with the aid of organic chemist John Harley-Mason, examined, in particular, the chemical properties of mescaline, which is the active agent in the peyote cactus. Nearly two years of research led them to conclude that mescaline produced reactions in volunteers that resembled the symptoms of schizophrenia,⁷⁴ a chronic "disease marked by disordered thinking, hallucinations, social withdrawal, and,

⁷² *Ibid.*, p. 19.

⁷³ NA, RG 28, I 165, Canadian Psychiatric Association, Membership Applications: Dr. Osmond's membership application, 3 January 1955. He had some initial experience in psychiatry as an intern at Guy's Hospital in London in 1942. In 1944, after meeting Curran, he worked as a psychiatrist trainee at the Royal Naval Auxiliary Hospital in Burrow Gurney, Bristol, England, followed by a second Navy assignment in Cholmundely Castle at Cheshire. Following the war (1945-1947) he worked first as a specialist in neuropsychiatry in Bighi, Malta, then as Command Psychiatrist in the 90th Military Hospital in Malta. In 1948 he returned to Guy's Hospital as an assistant in the Department of Neurology before becoming First Assistant in the Department of Psychological Medicine at St. George's Hospital at Hyde Park Corner, London.

⁷⁴ Excerpt from John Smythies' auto-biography, unpublished (2004). I am grateful to John Smythies for sharing his unpublished manuscript with me.

in severe cases, a deterioration in the capacity to lead a rewarding life.”⁷⁵ Further interrogation suggested that mescaline’s chemical structure was remarkably similar to adrenaline. These findings led to their theory that schizophrenia resulted from a biochemical “imbalance” in the sufferer. Furthermore, they believed that the imbalance might be caused by a dysfunction in the process of metabolising adrenaline, which in turn created a new substance that chemically resembled mescaline.⁷⁶ This tantalizing hypothesis captivated Osmond’s interests for the next two decades and inspired him to embark on a variety of drug experiments.

Osmond’s and Smythies’ colleagues at St. George’s Hospital were not particularly interested in this biochemical research, but Osmond was intent on continuing this work. One of his colleagues recalled that Osmond wanted to leave Britain where “he had received no encouragement in a largely psychoanalytic environment.”⁷⁷ After responding to an advertisement in *The Lancet* for a deputy director of psychiatry at the Saskatchewan Mental Hospital, Weyburn, Osmond and his family moved to Saskatchewan in October 1951. In Saskatchewan, he enthusiastically established a research program centring on biochemical experimentation.

Figure 4

Within a year after arriving on the prairies Osmond met Abram Hoffer. Hoffer was also born in 1917, but far from cosmopolitan London and the intensity of the world wars. Hoffer grew up in a small farming community in Saskatchewan named after his

⁷⁵ Sheldon Gelman, *Medicating Schizophrenia: A History* (New Brunswick, NJ: Rutgers University Press, 1999), 1.

⁷⁶ Smythies, unpublished autobiography. Smythies contends that this was the first biochemical theory of schizophrenia.

⁷⁷ Abram Hoffer, “Humphry Osmond Obituary: Doctor who helped discover the hallucinogenic cause of schizophrenia,” *The Guardian Weekly* March 4-10, 2004, p. 23.

father, Israel Hoffer.⁷⁸ He also took a different path into medicine. Abram Hoffer graduated from the provincial university in Saskatoon with a bachelor of sciences degree in agricultural chemistry in 1937. Three years later he completed a Masters' degree in Agriculture, whereupon he received an award allowing him to spend a year at the University of Minnesota conducting research on cereal chemistry. Enamoured with this subject, he continued in this field and in 1944 graduated with a PhD in Agriculture and a dissertation that examined B Vitamins. His doctoral research introduced him to the study of vitamins and their effects on the human body. The area intrigued him and, after developing a strong background in agricultural chemistry, Hoffer began studying biochemistry as it pertained to medicine.

Hoffer began his medical training in Saskatchewan then completed his Medical Doctorate at the University of Toronto in 1949.⁷⁹ By this time he had developed a particular interest in psychiatric disorders through his medical training. On July 1, 1950 Hoffer was hired by the Saskatchewan Department of Public Health to establish a research program in psychiatry for the province.⁸⁰ His combined areas of expertise in chemical studies and medical practice made Hoffer an attractive candidate for establishing this program.

Hoffer and Osmond soon joined forces and began collaborating on their mutual research interests in biochemical experimentation. Osmond's curiosity with mescaline

⁷⁸ For further information on Hoffer, Saskatchewan see: Clara Hoffer and Fannie Kahan, *Land of Hope* (Saskatoon: Modern Press, 1960). As Hoffer and Kahan make clear, Abram's father came to Saskatchewan as part of a Jewish agricultural relocation program. Hoffer sr. was sent to Saskatchewan to establish an agricultural community that would absorb Jewish immigrants. Although the program was not very successful, it is likely that Abram developed an interest in agriculture in this context.

⁷⁹ At this time the University of Saskatchewan did not have a full medical program available and therefore medical students were obliged to complete their degrees elsewhere.

⁸⁰ SAB, A207, Correspondence, McKerracher, Letter from A. Hoffer to D.G. McKerracher, 20 April 1950, p. 1.

soon introduced him to d-lysergic acid diethylamide (LSD), which he discovered produced similar reactions to those observed with mescaline, but LSD was a much more powerful drug. Initial research with LSD also fit neatly into McKerracher's vision for mental health reforms in the province. Early trials indicated that the drug had the potential to improve mental health care by advancing a theory of mental illness that promoted a biochemical model of mental illness. Hoffer, Smythies and Osmond explained mental illness as a manifestation of metabolic dysfunction. This assertion pointed to the possibility that mental illness was in fact a biological entity and, thus, could be studied (and ultimately treated) using modern medical technology. It suggested that, similar to physical illnesses, mental illnesses might ultimately and literally be observable under a microscope. Harkening back to McKerracher's frustration that a lack of observable pathogens generated a stigmatisation of mental illness, he welcomed this new and exciting research agenda.

The research possibilities generated by Hoffer and Osmond's theories attracted other individuals to the province where they eagerly contributed to the expansion of biochemical studies. Osmond, in particular, gained a reputation for attracting graduate students from all over North America to come and study with him in Weyburn. He purportedly injected a flare of adventure and cosmopolitanism into the small rural community and subsequently fascinated others with his "bright ideas."⁸¹ Although Hoffer did not generate quite the same draw for students, his superior administration

⁸¹ These sentiments were revealed in a number of oral interviews with author, including those with psychologist Robert Sommer, 29 May 2003, Toronto-San Diego; (psychiatrist and graduate student) Neil Agnew, 1 November 2003, King City; and, (nurse) Joyce Munn, 29 June 2003, Vancouver Island. These feelings also match with collegial recollections of Ben Stefaniuk who worked closely with Osmond as a graduate student.

skills prevailed in securing research grants for their work. In addition, Hoffer's association with the provincial university gave him regular access to medical students for teaching and research purposes. The psychiatric research program thus fulfilled two important objectives outlined by Douglas and refined by McKerracher: 1) the biochemical experimentation advanced a theory of mental illness that satisfied McKerracher's vision for a research-intensive program that would eventually transform the image of mental health care in the province; and 2) the allure of the research program attracted more researchers to the region and helped address the critical shortages of health care professionals.

Not everyone expressed enthusiasm for the attention directed towards drug experimentation in the province. Some of Hoffer and Osmond's colleagues felt that this course of research received too much support and, as a result, other areas of study fell behind.⁸² The concentration on an experimental theory went against mainstream thinking in psychiatry and placed the province at the risk of endorsing fruitless research endeavours.⁸³ At the outset, however, LSD experimentation appealed to several psychiatrists and government officials alike as a legitimate scientific endeavour that could lead to major breakthroughs in mental health treatments.

In post-war Saskatchewan, LSD experimentation received significant support as a viable medical technology. As clinical investigations progressed, many believed that studies with LSD offered demonstrable proof that mental illnesses existed and that mental health care should be equal to that available for physical ailments. The stimulation of

⁸² Russell, Terry, psychiatrist. Interview with author, 28 June 2003, Victoria, British Columbia; and, Macdonald, Ian, psychiatrist. Interview with author, 29 August 2003, Saskatoon.

⁸³ Twenty years later, these concerns resonated in a department that had focused most of its energies on developing biochemical research, much of which involved LSD experimentation.

theories about mental health captivated interests in this region that was politically committed to reshaping attitudes towards health. Consequently, support for LSD experimentation became part of a regional commitment to health reforms.

Hoffer and Osmond used their LSD experiments to bolster a biochemical theory of mental illness, while psychiatrists in other regions employed LSD for different theoretical aims. While they were not the only psychiatrists experimenting with LSD during the 1950s, their work benefited from the local support they received. The political and cultural encouragement allowed them to investigate LSD with sustained attention. Because their experiments formed part of the contemporaneous health care reforms, their research also had immediate practical applications. Their close relationship with the provincial government provided opportunities to test their theories that did not exist elsewhere. For these reasons the location of the experiments facilitated their international recognition as leaders within the field.

Chapter Two: Psychedelic Therapy

While Saskatchewan offered individuals such as Hoffer and Osmond a supportive environment to conduct experimental investigations, psychiatric research in other jurisdictions of the world also began developing new psychedelic theories. The ideological context shaped the research program in Saskatchewan as well as its local reception, but that did not mean that their theories were necessarily inconsistent with broader developments in the field of mental health research. As successive historians have pointed out, the use of drugs in psychiatry had a revolutionary influence on mental health treatments in the second half of the twentieth century, and this trend relied, to a large extent, on changes in the theory and practice of psychiatry.¹

Historians of twentieth-century psychiatry have often concentrated on the paradigmatic shift from psychoanalytical to psychopharmacological approaches to the treatment of mental disorders. Edward Shorter, for example, argued that the relatively brief ascendancy of psychoanalytical therapies in the early part of the century (the “psychoanalytical hiatus”) was merely an interruption in a much longer tradition of biomedical advances, of which psychopharmacology was an important part. He contended that biological psychiatry achieved resurgence in the post-war period as it

¹ David Healy, *The Creation of Psychopharmacology* (Cambridge: Cambridge University Press, 2002); Edward Shorter, *A History of Psychiatry: From the Era of the Asylum to the Age of Prozac* (New York: John Wiley and Sons, 1997); Joanne Moncrieff, “An Investigation into the Precedents of Modern Drug Treatment in Psychiatry,” *History of Psychiatry* 10 (1999): 475-490; and, Elliot Valenstein, *Blaming the Brain: The Truth About Drugs and Mental Health* (New York: Free Press, 1998).

reclaimed its dominant position in the profession, due to successful improvements in scientific research.² Similarly, David Healy has examined the historical development of psychopharmacology and suggested that the widespread popularity of drug treatments, in particular the introduction of the first anti-psychotic medication (Chlorpromazine) in the early 1950s, garnered public, professional and political support for psychopharmacological treatments.³ Shorter and Healy both identified scientific advances as the engine of change in post-war psychiatry.

Other historians have looked to the internal dynamics within the psychiatric profession to explain the re-emergence of the biomedical paradigm in the second half of the century. E.M. Tansey, for example, has argued that the shift to biological psychiatry emerged not only from a combination of advances in neurochemistry and neuropharmacology but also from changes in the professionalisation of psychiatry.⁴ The professional acceptance of drug treatments, she contended, had a lot to do with the timing of its inception, which in the 1950s was heavily influenced by the readiness of industry to engage in large-scale pharmaceutical production.⁵ Similarly, a number of authors have located the impetus for the paradigmatic shift in the diversification of the profession. In the American case, psychoanalytic theories endured into the 1960s because psychoanalysts dominated the American Psychiatric Association (APA) throughout the 1950s; nonetheless, a decade later this situation began to change as the APA came under

² See Edward Shorter, *A History of Psychiatry: From the Era of the Asylum to the Age of Prozac* (New York: John Wiley and Sons, 1997), 246-272.

³ David Healy, *The Creation of Psychopharmacology*.

⁴ E.M. Tansey, "They Used to Call it Psychiatry": Aspects of the Development and Impact of Psychopharmacology," in *Cultures of Psychiatry and Mental Health Care in Postwar Britain and the Netherlands* (eds) Marijke Gijswijt-Hofstra and Roy Porter, 79-80, (Amsterdam – Atlanta, GA: Editions Rodopi B. V., 1998).

⁵ Tansey, "They Use to Call it Psychiatry," 79-80.

the direction of clinicians with neuropharmacological sympathies and interests.⁶ The transition from psychoanalytical to biomedical models then had more to do with changes in the complexion of the American Psychiatric Association than with scientific discoveries and innovations.

More outspoken critics of psychiatry argued that scientific research, in fact, had nothing to do with the shift in psychiatric approaches. Instead, scholars such as Thomas Szasz, the famous Hungarian-born psychiatrist turned anti-psychiatrist, contended that the post-war changes simply demonstrated the concerted efforts of psychiatrists to maintain their social control over deviance. In the post-war setting, psychiatrists linked their moral authority to scientific models of mental illness and, thus, endorsed a chemical revolution that rested on a pseudo-scientific understanding of mental disorder.⁷ Although Szasz's main concern focused on the abuse of power wielded by psychiatrists, his condemnation of psychopharmacology was one component of his critique of the profession, stemming from his fundamental assertion that mental illness does not exist.⁸

In addition to this critique of the profession, other scholars have more recently pointed out that drug treatments were not a panacea for psychiatry;

⁶ See: *American Psychiatry after World War II (1944-1994)* (eds) Roy W. Menninger and John C. Nemiah (Washington: American Psychiatric Press, 2000); Michael Sheperd, "Neuroleptics and the Psychopharmacological Revolution: Myth and Reality," *History of Psychiatry* 5 (1994): 89-96; Andrew Scull, "Somatic Treatments and the Historiography of Psychiatry," *History of Psychiatry* 5 (1994): 1-12; and, Gerald Grob, "Psychiatry and Social Activism: The Politics of a Speciality in Postwar America," *Bulletin of the History of Medicine* 60, 4 (1986): 477-501. Grob suggests that these transformations in theoretical orientation stemmed primarily from changes in the executive body of the American Psychiatric Association. However, efforts to modify the structure of the organisation were motivated by feelings of disillusionment from its members. Therefore, changes in administration reflected the profession's fluctuation between theoretical models of mental illness. For an indepth analysis of the changing composition of the profession in the 1940s, see Jack Pressman, *Last Resort: Psychosurgery and the Limits of Medicine* (Cambridge: Cambridge University Press, 1998).

⁷ Thomas Szasz, *Ceremonial Chemistry: The Ritual Persecution of Drugs, Addicts and Pushers* (Garden City, NY: Anchor Press, 1974).

⁸ Thomas Szasz, *The Myth of Mental Illness: Foundations of a Theory of Personal Conduct* (New York: Harper and Row, 1974).

psychopharmacological research did not produce a cure for mental disorders. In fact, the number of individuals suffering from mental disorders increased at a faster rate than that of the general population. Psychologist Elliot Vallenstein argued that the continued faith in biological psychiatry amounted to a waste of time and financial resources, with support for a treatment program that simply endorsed a scientific system that had yet to prove its worthiness.⁹ Unlike Szasz, however, Vallenstein did not blame psychiatrists for this situation, but rather questioned a more general cultural disposition that maintained faith in technological progress despite a lack of immediate rewards.

Historians of psychiatry have consequently established a dichotomous model of psychiatric practice at mid-century. Institutionally-based practitioners relied on somatic interventions that seemed outdated or problematic; community-based psychoanalysts used approaches that did not seem to work and lacked a biological foundation. This duality proposed by Shorter and Healy falls apart in a closer examination of psychedelic psychiatrists. The psychedelic therapies do not fit neatly into histories of psychiatry that subscribe to a dichotomous view of twentieth-century psychiatry, rigidly defined by psychoanalytic and biological paradigms.

In examinations of twentieth-century psychiatry, as well as other fields in the history of science and medicine, theories that did not work scientifically or failed to garner sufficient support professionally have often been overlooked. Some historians have argued that psychiatric approaches that did not fall into either psychopharmacological or psychoanalytical models at mid-century have fallen to the

⁹ Elliot Valenstein, *Blaming the Brain: The Truth About Drugs and Mental Health* (New York: Free Press, 1998).

margins of history.¹⁰ An historical analysis of the LSD trials conducted in Saskatchewan offers an exploration of the introduction, and ultimate rejection, of a new therapy during this tumultuous period in the history of psychiatry. Psychedelic therapies relied both on a biochemical model of mental illness and the scientific observation of a subjective experience. By combining these two elements in one practice, Hoffer and Osmond presented their model as a new theory and also an approach that merged philosophical and psychological traditions with biomedical advances. Importantly, they distinguished their approach from that of psychoanalysts, whom they regarded as dogmatic therapists largely concerned with treating middle-class patients, or the worried well. They also differed from psychopharmacologists, who they felt were equally obsessed with the collection of data without consideration for the deeper meanings of personal experience. Armed with their own delicate mixture of biomedical and philosophical influences, Hoffer and Osmond promoted an alternative to psychopharmacology and psychoanalysis with an approach that incorporated the use of psychedelics as a means for bridging some of the theoretical distance between these two models.

¹⁰ Mark Micale, "Henri F. Ellenberger: The History of Psychiatry as the History of the Unconscious," in *Discovering the History of Psychiatry* (eds) Mark S. Micale and Roy Porter, 112-134 (Oxford: Oxford University Press, 1994). For examples of historical examinations of LSD in Psychiatry: Stephen Snelders, "LSD and the Dualism between Medical and Social Theories of Mental Illness," in *Cultures of Psychiatry and Mental Health Care in Postwar Britain and the Netherlands* (eds) Marijke Gijswijt-Hofstra and Roy Porter, 103-120 (Amsterdam – Atlanta, GA: Editions Rodopi B. V., 1998); Stephen Snelders and Charles Kaplan "LSD in Dutch Psychiatry: Changing Socio-Political Settings and Medical Sets," *Medical History* 46, 2 (2002): 221-40; Steven Novak, "LSD Before Leary: Sidney Cohen's Critique of 1950s Psychedelic Research," *Isis* 88, 1 (1997): 87-110; Bram Enning, "The Success of Jan Bastiaans," (forthcoming PhD dissertation, University of Maastricht); Kimberly Allyn Hewitt, "Psychedelics and Psychosis: LSD and Changing Ideas of Mental Illness, 1943-1966," (PhD dissertation, University of Texas at Austin, 2002); and, Patrick Barber, "Chemical Revolutionaries-Saskatchewan's Psychedelic Drug Experiments and the Theories of Drs. Abram Hoffer, Humphry Osmond and Duncan Blewett," (forthcoming MA thesis, University of Regina).

Despite a long tradition of using drugs in psychiatry, during the post-war period the number of psychopharmacological agents increased substantially.¹¹ Although somatic treatments or bodily therapies, such as malaria therapy, insulin-coma therapy and electro-convulsive therapy, largely dominated American psychiatry before the Second World War, their declining use in the 1950s corresponded with an increase in psychopharmacological treatments.¹² Lobotomies and shock therapies increasingly elicited popular concerns over the ethical implications of their use as well as generated apprehensions for the growing margin of risk associated with invasive and irreversible treatments.¹³ The relative failure of somatic therapies, when compared with psychopharmacological treatments, suggests that perhaps it was not only the technology and theories that had been altered in the post-war period but that the cultural climate surrounding the reception of psychiatric medicine had also experienced significant changes. Somatic therapies, particularly electro-convulsive therapies and lobotomies, gained popular reputations for being dangerous, irreversible, and painful. Drugs, by contrast, seemed to offer a relatively safer, and easier form of treatment that was more readily acceptable by patients and their families.

¹¹ Joanne Collin, "Entre Discours et Pratiques les Médecins Montréalais Face à la Thérapeutique, 1869-1890," *Revue d'Histoire de l'Amérique Française* 53(1) 1999: 61-89; and, Joanne Montcrieff, "An Investigation into the Precedents of Modern Drug Treatment in Psychiatry," *History of Psychiatry* 10 (1999): 475-490. As these authors point out, drugs had been used in psychiatry throughout the nineteenth century. However, as David Healy illustrates in *The Creation of Psychopharmacology* (Cambridge: Harvard University Press, 2002), 77-78, the development of anti-psychotic medications in the early 1950s dramatically altered drug-taking regimens in psychiatry. Instead of relying on drugs, such as tranquilizers, to calm patients in order to proceed with a therapy the drugs themselves now became the main therapeutic agent.

¹² Jack Pressman, *Last Resort: Psychosurgery and the Limits of Medicine* (Cambridge: Cambridge University Press, 1998), and Joel Braslow, *Mental Ills and Bodily Cures: Psychiatric Treatment in the First half of the Century* (Berkeley: University of California Press, 1997).

¹³ See Philip Fennell, *Treatment without Consent: Law, Psychiatry and the Treatment of Mentally Disordered People since 1845* (New York: Routledge Press, 1996), chapter 9, pp. 129-150.

Psychopharmacology, in addition to eclipsing somatic therapies, also succeeded in overtaking psychoanalysis in the second half of the twentieth century. The introduction of drugs did not initially threaten to overhaul psychoanalysis. For example, psychoanalysts justified the use of some drugs that helped patients ease into and out of therapy sessions, whether the drugs were tranquilizers, anti-depressants, or even psychedelics. Psychoanalysts believed these substances assisted in speeding up the critical development of a doctor-patient relationship necessary for therapeutic breakthroughs. As drug treatments increasingly relied on biological theories of mental disorder, however, the assertion that the illness derived from a heretofore-unidentified brain lesion or neurochemical disruption challenged psychoanalytical theories that proposed that mental disorders arose from subconscious conflicts. Gradually the increased dependence on drug treatments in psychiatry eroded psychoanalytic paradigms and implicitly endorsed a psychopharmacological regimen that relied on a biomedical theory of mental illness.

The introduction of biochemical theories in psychiatry had a significant influence on the development of the profession in the post-war period. In the second half of the twentieth century the biomedical model of mental illness became the dominant framework for understanding mental disorders. Although several different approaches to treating mental illnesses existed at mid-century, by the end of the 1950s psychopharmacological treatments began to emerge as the dominant paradigm. While remnants of psychoanalysis and somatic therapies endured into the twenty-first century, their use was significantly reduced at a time when drug therapies grew exponentially.

The kinds of drugs, and the theories underpinning their use, depended on vastly different understandings of the causation of mental disorder. The psychedelic treatments endorsed by Hoffer and Osmond, in addition to advancing medical concepts, incorporated philosophical theories concerned with attempts to understand the cultural meanings of mental illness in western society. This mixture of science and philosophy underlining psychedelic psychiatry forced debates in the profession over the appropriate models of mental disorder. Hoffer and Osmond's psychedelic theories were enhanced by LSD experimentation, which superficially placed their work within the advancing field of psychopharmacology. The results of their experiments and their subsequent rationalisation, nonetheless, also drew from studies that fell outside the biological paradigm.

Drugs provided psychiatrists with new tools for studying human behaviour and its potential bio-chemical causes. Chemical research in the 1950s led to the introduction of new antibiotics, diuretics, antihypertensives, and hypoglycaemic agents,¹⁴ encouraging clinical researchers to continue exploring the potential uses for chemical agents in other areas of health. LSD research in Saskatchewan fit into these broader developments in post-World War II psychiatry and pharmacology. Ideas arising out of the LSD trials suggested that mental illness had biological *and* social precedents and thus required treatments tailored to both sets of needs. LSD offered individuals a conscious *experience* that initially seemed to support theories from both biochemists and psychoanalysts. Hoffer and Osmond developed a psychedelic therapy that used chemicals to trigger new perceptions of self. The psychedelic experience affected individuals differently; some

¹⁴ David Healy, *The Anti-Depressant Era*, 21.

approached it philosophically, others insisted that the experience invoked changes in spirituality, and still others felt it modified their epistemological worldview. Regardless of the interpretation of treatments' subjective meaning, individuals regularly believed that the LSD experience fundamentally modified their being. In this way LSD treatments differed from most other psychopharmacological therapies devised to treat a particular disorder. In short, psychedelic psychiatry promised a consciousness-raising, identity-changing therapy within a medically-sanctioned and scientifically-rigorous environment.

Early Experiments

In April, 1943, Dr. Albert Hofmann, a Swiss biochemist, dissolved an infinitesimal amount of a newly-synthesised drug, LSD, in a glass of water and drank it. Three quarters of an hour later he recorded a growing dizziness, some visual disturbance, and a marked desire to laugh. After about an hour he asked his assistant to call a doctor and accompany him home from his research laboratory at the Sandoz Pharmaceutical Company in Zurich. He climbed onto his bicycle and went on a surreal journey. In Hofmann's mind he was not on the familiar boulevard that led home, but rather a street painted by Salvador Dali, a funhouse roller coaster where the buildings yawned and rippled. But even stranger was the sense that although his legs were pumping steadily, he was not getting anywhere. He tried to communicate the predicament to his assistant, but found that he had no voice. Reaching home he encountered a neighbour, whom Hofmann thought had become a witch. When a doctor reached Hofmann he found him physically fine, but mentally in a distraught state. Hofmann later wondered if he had permanently

damaged his mind.¹⁵

Hofmann's serendipitous discovery of the chemical compound LSD introduced a new drug that subsequently inspired a flurry of interest. He had first synthesised LSD in 1938, but without physical contact with the substance until 1943 he remained unaware of its dramatic effects. It was not until some spilled on his hand, in 1943, that he discovered that he might have produced something worth further investigation. Following his initial reaction to the drug Hofmann published his account of the LSD discovery and shortly afterwards the Sandoz Pharmaceutical Company made the drug widely available to scientific researchers around the world.¹⁶

One of the remarkable aspects of the drug was that it required extremely small quantities to produce very powerful reactions. LSD was measured in micrograms (mcg), and as few as twenty-five to fifty mcg could cause an individual to hallucinate. Pain relief from Aspirin, by comparison, required a dose of 300,000 mcg of the drug for observable effects. This powerful chemical was a colourless, odourless substance that, in minute quantities, could cause an individual to believe that he or she had become psychotic. LSD immediately appealed to medical researchers as a drug that might help explain the origins of mental disorders, particularly those involving involuntary psychoses.

¹⁵ Jay Stevens, *Storming Heaven: LSD and the American Dream*, (New York: Grove Press, 1987), 4-5; Edward M. Brecher, *Licit and Illicit Drugs: The Consumers Union Report on Narcotics, Stimulants, Depressants, Inhalants, Hallucinogens, and Marijuana—including Caffeine, Nicotine, and Alcohol* (Boston: Little, Brown and Company, 1972), 346-347; and, Albert Hofmann, *LSD: My Problem Child* (McGraw-Hill, New York, 1980).

¹⁶ Albert Hofmann, "Partialsynthese von Alkaloiden vom Typus des Ergobasins," [Synthesis of d-lysergic acid diethylamide, LSD] *Helvetica Chimica Acta* 26 (1943): 944-965; see also: Albert Hofmann, "Discovery of d-lysergic acid diethylamide LSD," *Sandoz Excerpta* 12, 1 (1955), 1.

One of North America's early psychopharmacologists, Thomas Ban, commented that in the 1950s drug research (psychopharmacology) into mental disorders was responsible for "dragging psychiatry into the modern world."¹⁷ Psychopharmacological research in the 1950s received two Nobel Prizes; one awarded to Daniel Bovet for work on antihistamines and another to James Black for his identification of histamine receptors. In fact, in an investigation of the history of psychopharmacology, David Healy argued that nearly all of the antidepressants, including selective serotonin reuptake inhibitors (SSRIs), and anti-psychotics developed out of the drug research that took place during that decade.¹⁸ These contemporaneous developments inspired confidence in the medical contention that psychopharmacological treatments would not only modernise psychiatry but would also pave the way for dramatic reforms in mental health care in the post-war period.

In 1952, for example, the advent of anti-psychotics (drugs that ameliorate the incidence or severity of psychotic episodes) began with French surgeon Henri Laborit's discovery of chlorpromazine.¹⁹ Over the next three decades this drug, known by the trade names Thorazine or Largactil, seemed largely responsible for emptying asylums throughout North America and Europe. Chlorpromazine purportedly reduced positive psychiatric symptoms²⁰ in patients in a manner that helped improve the potential for care in the community, or removal from the institution. The subsequent dismantling of

¹⁷ Tom Ban as quoted in E.M. Tansey, "They Used to Call it Psychiatry," 79.

¹⁸ David Healy, *The Creation of Psychopharmacology*, 77-78.

¹⁹ David Healy, *The Anti-Depressant Era* (Cambridge: Harvard University Press, 1997), 43-45.

²⁰ Positive symptoms refer to behaviours, thoughts, or feelings that exist where they should not. Hallucinations and delusions are examples of positive symptoms.

psychiatric institutions had a revolutionary effect on mental health care.²¹ Although, the balance of scholarship does not accept that deinstitutionalisation was a mono-causal event, the increased reliance on drugs in psychiatry demonstrated their enormous capacity to change the course of mental health care policy.²²

Experimentation with LSD began in earnest in the 1950s alongside studies with anti-depressants and anti-psychotics, and thus, amidst optimism that drug research, including that with LSD, would improve psychiatry. Indeed, some trials involved the same investigators who participated in original experiments with chlorpromazine.²³ LSD was introduced in this environment, with medical faith that biochemistry provided the discrete tools that would eventually unlock the mysteries of the mind. The results of LSD trials were published in medical journals and contributed to mainstream psychiatry. For example, by 1951 over a hundred articles on LSD appeared in medical journals. By 1961, the number increased to over a thousand. While the majority of articles were published in English, studies also existed in Japanese, German, Polish, Danish, Dutch, French, Italian, Spanish, Portuguese, Hungarian, Russian, Swedish, Slovene, and

²¹ For examples of literature on deinstitutionalisation see: Simon Goodwin, *Comparative Mental Health Policy: From Institutional to Community Care* (London: Sage Publications, 1997); *The Principle of Normalization in Human Services*, (eds) Wolf Wolfensberger, Bengt Nirje et al. (Toronto: National Institute on Mental Retardation, 1972); Kathleen Jones, *Asylums and After: A Revised History of the Mental Health Services: From the Early 18th Century to 1990s* (London: Athlone Press, 1993); and, Gerald Grob, *From Asylum to Community: Mental Health Policy in Modern America* (Princeton: Princeton University Press, 1991).

²² Gerald Grob argues that new psychopharmaceutical drugs were one of several causes of deinstitutionalisation in Grob, "American Psychiatry: From Hospital to Community in Modern America," *Caduceus* 12, 3 (1996), 50. However, some authors contend that drugs were of "paramount importance" for deinstitutionalisation. For example, see *Biographies of Remedies: Drugs and Contraceptives in Dutch and Anglo-American Healing Cultures* (eds) M. Gijswijt-Hofstra, G.M. Van Heteren, and E.M. Tansey (Amsterdam: Editions Rodopi B.V., 2002), 4.

²³ For example, see: K.F. Killam, "Studies of LSD and Chlorpromazine," *Psychiatric Research Report* 6 (1956): 35; H.A. Abramson, A. Rolo, "Lysergic Acid Diethylamide (LSD-25) Antagonists: Chlorpromazine," *Journal of Neuropsychiatry* 1 (1960): 307-310; and, D.B. Sankar, D.V. Siva, E. Gold and E. Phipps, "Effects of BOL, LSD and Chlorpromazine on Serotonin Levels," *Federation Proceedings [American Physiological Society]* 20 (1961), 344.

Bulgarian indicating that LSD experimentation was not confined to particular nations. Although some authors investigating the history of LSD have pointed to the American military investigations as evidence that examiners employed covert tactics for measuring reactions,²⁴ or that its extensive clinical experimentation in the United States made it available to a distinctively American youth culture,²⁵ the variety of studies represented in the medical literature does not support these claims.

Access to LSD attracted medical researchers with a variety of approaches to drug experimentation. Some tested its physiological effects on animals, others involved human subjects to report on the drug's capacity to bring the unconscious to the conscious, and others still explored the drug's intimate reaction through self-experimentation. Given its range of applications, LSD appealed to mental health researchers across paradigmatic approaches. For psychoanalysts, the drug released hitherto suppressed memories; for psychotherapists, it brought patients to new levels of self-awareness; and for psychopharmacologists, LSD reactions supported their contentions that mental disorders had chemical origins. For approximately fifteen years, beginning in the 1950s, medical research with LSD proceeded with relatively few interruptions.

In the early 1950s, while working at St. George's Hospital in London, John Smythies developed a keen curiosity about substance-induced hallucinations. He discovered that the topic attracted interest in the late nineteenth century from individuals

²⁴ See John Marks, *The Search for the 'Manchurian Candidate': The CIA and Mind Control* (New York: Times Books, 1979). Anne Collins, *In the Sleep Room: The Story of the CIA Brain-washing Experiments in Canada* (Toronto: Key Porter Books, 1997).

²⁵ Martin Lee and Bruce Shlain, *Acid Dreams: The CIA, LSD and the Sixties Rebellion* (New York: Grove Press, 1985). Erich Goode and Nachman Ben-Yehuda, *Moral Panics: The Social Construction of Deviance* (Cambridge: Blackwell, 1994).

such as William James, Havelock Ellis and S. Weir Mitchell,²⁶ but that enthusiasm for studies of hallucinations trailed off at the turn of the century. He then identified another collection of articles, which appeared in the 1920s and 1930s, by authors including Karl Beringer, Alexander Rouhier and Heinrich Klüver²⁷ and then, again, found that clinical interest in hallucinations disappeared.²⁸ Klüver's book, *Mescal*, piqued Smythies' curiosity with a description of a chemically-induced hallucination, using the active ingredient in the peyote cactus (later called mescaline) traditionally used in some Native North American and Mexican spiritual ceremonies.²⁹ Smythies' showed the results of his study to some of his colleagues, among them, Humphry Osmond. Osmond immediately developed an interest in learning more about the relationship between the mescaline reaction and hallucinations. After consulting with a medical student, Julian Redmill, and

²⁶ William Sanger, "Mescaline, LSD, Psilocybin and Personality Change," *Psychiatry: Journal for the Study of Interpersonal Processes* 26, 2 (1963): footnotes 1 and 2; and, Charles Grob, "Psychiatric Research with Hallucinogens: What have we Learned?" *The Heffter Review of Psychedelic Research* 1 (1998): 8-20. See also: William James, *The Varieties of Religious Experience* (New York: Modern Library, 1902); S. Weir Mitchell, "The Effects of Anhelonium Lewinii (the Mescal Button)," *British Medical Journal* (1896) 2:1625-1629; and Havelock Ellis, "Mescal, a New Artificial Paradise," *Annual Reports Smithsonian Institution* 1897: 537-548.

²⁷ Karl Beringer, *Der Meskalinrausch* [The Mescaline Intoxication] (Berlin: Verlag Julius Springer, 1927); Alexander Rouhier, *La Peyotl: La Plante qui fait les yeux émerveillés* (Paris, 1927); and, Heinrich Klüver, *Mescal: The Divine Plant and its Psychological Effects* (1928). For an historical analysis of these earlier studies see: John Smythies, "The Mescaline Phenomena," *British Journal of Philosophical Science* (1953): 339-347; John Smythies, "Hallucinogenic Drugs," in *Modern Trends in Neurology* 3rd edition (ed) Dennis Williams, chapter 18 (London: Butterworth and Company, 1951); and, Lester Grinspoon and James Bakalar, "Psychedelic Drugs Reconsidered," in *Psychedelic Drugs in the Twentieth Century* (eds) Lester Grinspoon and James Bakalar (New York: Basic Books, 1979), chapter 3.

²⁸ John Smythies, (unpublished autobiography), no page numbers; and, Humphry Osmond and Abram Hoffer, "A Small Research in Schizophrenia," *Canadian Medical Association Journal* 80 (1959), 92.

²⁹ As part of his interest in peyote, Osmond participated in a traditional ceremony with a band of Cree Indians at the Red Pheasant Reserve in Saskatchewan. A description of his experience can be found in SAB, XII. 13. F.H. Kahan, "The Native American Church of North America," (unpublished manuscript, 1963) and Humphry Osmond, "Peyote Night," *Tomorrow Magazine* 9, 2 (1961): 112. See also, William I.C. Wuttunee, "Peyote Ceremony," *Beaver* 299 (1969): 22-25. For comment on the connections between the ceremonious use of peyote and LSD experimentation see: Benjamin F. Simmons, "Implications of Court Decisions on Peyote for the Users of LSD," *Journal of Church and State* 11, 1 (1969): 83-91. For information on the peyote ceremony more generally, see: Robert L. Hall, *An Archaeology of the Soul: North American Indian Belief and Ritual* (Urbana: University of Illinois Press, 1997); Weston La Barre, *The Peyote Cult* (Norman: University of Oklahoma Press, 1989); and, Edward F. Anderson, *Peyote: The Divine Cactus* (Tucson: University of Arizona Press, 1996).

an organic chemist, John Harley-Mason, they determined that mescaline had a chemical makeup that was very similar to adrenaline. They postulated that adrenaline might be metabolised in some people in a manner that produces a mescaline-like substance, a substance which, in turn, was then responsible for causing hallucinations.³⁰

This hypothesis encouraged Smythies and Osmond to publish the first known biochemical theory of the archetypal psychotic disorder—schizophrenia.³¹ In their original publication on the subject, the authors argued that schizophrenia was caused by a metabolic failure, producing an as-yet-undiscovered substance. They suggested that the unknown substance (M-substance) resembled mescaline. Although mescaline had been studied medically, and had been used in religious ceremonies, Osmond and Smythies contended that the possible similarities between mescaline reactions and schizophrenic psychosis had never been explored scientifically. After investigating the drug and its effects on themselves, they identified patterns of biochemical dysfunction in the adrenaline system. They contended that this new finding shed light on the causation and manifestation of schizophrenia.

Contemporary medical research on mental illness, Osmond lamented, had been misguided by prevailing scientific theories. For example, Eugene Bleuler's popular theory of schizophrenia concentrated on interpretations of problems affecting the psyche.³² According to Osmond, this perspective led clinicians astray by focusing on

³⁰ John Smythies, (unpublished auto-biography).

³¹ SAB, A207, Box 47, 122.233. A: "Mexcaline," (sic); and, Humphry Osmond and John Smythies, "Schizophrenia: A New Approach." Later published as: Osmond and Smythies, "Schizophrenia: A New Approach," *Journal of Mental Sciences* 98, 411 (1952): 309-315.

³² Franz G. Alexander and Sheldon T. Selesnick, *The History of Psychiatry: An Evaluation of Psychiatric Thought and Practice from Prehistoric Times to the Present* (New York: Harper and Row Publishers, 1966), 253-254.

psychological symptoms alone without investigating underlying biochemical or metabolic symptoms. In contrast, other clinicians had developed theories after examining only physiological responses. As a result, they developed somatic treatments with little concern for the psychological component of mental illness. For example, Osmond and Smythies commented on the efficacy of electro-convulsive therapy and suggested that it: “received some measure of general approval, but even here there is no agreement as to how it works and even some uncertainty about whether it works.”³³ Smythies and Osmond indicated that a more satisfying and comprehensive theory of schizophrenia must prevail before investing in medical technology that was not supported with rigorous scientific theory that took both the psychological and the biological symptoms into account. In the absence of such theories, they complained that mental health therapies relied on chance as much as science.

Early in 1951 Smythies and Osmond embarked on a research program that investigated the biochemical and psychological basis of schizophrenia. First, they devised a research protocol based on human experimentation with mescaline and LSD.³⁴ They described their new approach by commenting: “suppose that we start with the signs and symptoms and natural history of schizophrenia and ask ourselves how these could be produced, refusing to be diverted by the existing schools of thought.”³⁵ They envisioned a two-part program. First they would identify the biochemical and metabolic processes;

³³ SAB, A207, Box 47, 122.233A: “Mexcaline” (sic); and, Humphry Osmond and John Smythies, “Schizophrenia: A New Approach,” 2.

³⁴ Included in their first publication, was a note about the similar reactions produced by LSD, despite the chemical differences between LSD and mescaline. Recognising LSD’s increased capacity to produce profound reactions, however, they recommended further trials using the drug to develop a better understanding of its relationship with adrenaline.

³⁵ SAB, A207, Box 47, 122.233A: “Mexcaline” (sic); and, Humphry Osmond and John Smythies, “Schizophrenia: A New Approach,” 3.

second they would collect experiences from subjects under the influence of mescaline or LSD.

Even before their new approach was published, it became clear to Smythies and Osmond that their colleagues at St. George's Hospital were uninterested in supporting this program of research. Partly as a result of his frustration, Osmond moved to Weyburn, Saskatchewan in October 1951. Having relocated to the Canadian prairies, he wasted no time launching his research anew from his position as clinical director of the Saskatchewan Mental Hospital. Within a week of his arrival, Osmond met Abram Hoffer, who then worked in Regina at the Munroe Wing (psychiatric unit) of the General Hospital. These two individuals quickly established a pattern of regular correspondence that endured for the next forty years. John Smythies, meanwhile, continued to participate in the unfolding biochemical research and mescaline experiments from various locations throughout the next two decades, but only spent a short a time in Saskatchewan.³⁶

Immediately after arriving in Saskatchewan, Osmond immersed himself in preparation for the research program. He sought support from colleagues, began assembling a multi-disciplinary research team, and secured funding for the project. In one of his earliest letters to Hoffer, Osmond described the kernel of his research agenda. He claimed that:

³⁶ For a short time Smythies joined Osmond in Weyburn until he received an invitation from Bill Gibson, head of the Neurological Institute at the University of British Columbia, to work in Vancouver. A few years later he returned to London, England. In 1961, Smythies moved again. This time he went to Edinburgh to work as editor of the *International Review of Neurobiology* and as a Senior Lecturer at the University of Edinburgh. During his stay in Scotland, Smythies also acted as a consultant to the World Health Organisation on psychopharmacological matters. By 1968 he took yet another appointment, which brought him back across the Atlantic to participate in a newly developed Neuroscience Research program at the Massachusetts Institute of Technology in Boston. This information comes courtesy of John Smythies who generously shared selections of his unpublished autobiographical manuscript with me.

I am interested in the people who are unaffected by mescaline (sic) or rather who develop severe somatic signs before the psychological ones develop. They are clearly an important group and may well give us some further clues about the relationship of Schizophrenia and conceivably some psychosomatic condition, but at the moment we know far too little about it to guess what it may mean, and without biochemical information it really isn't worth guessing.³⁷

Hoffer immediately showed enthusiasm for this project, which allowed him to combine his interests in biochemistry and medicine. Hoffer's background in biochemistry also excited Osmond as he searched for research colleagues who could bring different skills to the venture.

By mid-November Hoffer and Osmond searched for funding. They met colleagues in Ottawa and pitched their research program. Despite a marked level of enthusiasm from the Ontario doctors they met, Hoffer and Osmond returned to Saskatchewan discouraged by fruitless results.³⁸ Mescaline supplies were already on route to Weyburn but the project had no capacity to hire researchers. Before long, however, Griff McKerracher, director of Psychiatric Services in the province, delivered encouraging news that the Saskatchewan government itself would support the research program and provide the necessary start-up funds.³⁹

With limited resources and uncertainty about the effects of the drug, Osmond volunteered to take the first mescaline samples himself, in the familiar surroundings of his home. Osmond's reaction confirmed his belief that, with mescaline-induced

³⁷ SAB, A207, Hoffer, XVIII. Hoffer-Osmond Correspondence, 1951-1992, 1.a. "October 12, 1951-December 31, 1951," Letter from A.R. Coulter and Humphry Osmond to Abram Hoffer, 8 November 1951.

³⁸ SAB, A207, Hoffer, XVIII. Hoffer-Osmond Correspondence, 1951-1992, 1.a. "October 12, 1951-December 31, 1951," 14 November 1951, record of a meeting between Dr. Devries and Dr. Young (Ottawa) and Dr. Hoffer and Dr. Osmond.

³⁹ SAB, A207, Hoffer, XVIII. Hoffer-Osmond Correspondence, 1951-1992, 1.a. "October 12, 1951-December 31, 1951," Letter Abram Hoffer to Humphry Osmond, 14 December 1951.

experiences, doctors could learn to appreciate distortions in perception. On Osmond's inaugural experiment, his body's reaction to the mescaline gave him first-hand experience of perceptual disturbances. As the drug took effect, he went for a walk with his wife Jane where he felt paranoid and frightened by familiar stimuli. An excerpt from his report stated:

One house took my attention. It had a sinister quality, since from behind its drawn shades, people seemed to be looking out and their gaze was unfriendly. We met no people for the first few hundred yards, then we came to a window in which a child was standing and as we drew nearer its face became pig-like. I noticed two passers-by, who, as they drew nearer, seemed hump-backed and twisted and their faces were covered.... The wide spaces of the streets were dangerous, the houses threatening, and the sun burned me.⁴⁰

Astounded by the drug's capacity to suspend his sense of logic, reality, and comfort, Osmond grew more determined than ever to collect others' experiences.

Osmond expanded the research program, and started using LSD instead of mescaline. Self-experimentation with LSD convinced him that the drug produced similar reactions to those observed with mescaline, but LSD was more readily available from the Canadian branch of the Sandoz Pharmaceutical Company, located in Quebec. Moreover, LSD produced a more powerful reaction; minute doses of LSD generated responses from subjects that required much higher doses of mescaline. For a research program seeking a massive inventory of drug-induced experiences, LSD offered a more suitable choice.

Before embarking on experimentation with normal subjects, however, Hoffer and Osmond needed to become more familiar with LSD themselves. In addition to conducting biochemical research on its relationship with the adrenaline system, they also

⁴⁰ Humphry Osmond, "On Being Mad," *Saskatchewan Psychiatric Services Journal* 1, 2 (1952), 4. See also, Humphry Osmond and John Smythies, "Schizophrenia: A New Approach," *The Journal of Mental Science* 98, 114 (1952): 309-315.

continued exploring their own reactions to the drug and began introducing it to close friends and relatives. Graduate students, colleagues, family friends and the wives of doctors were some of the first volunteers for the early trials. For example, Humphry and Jane Osmond joined Abram and Rose Hoffer in an evening visit enlivened by taking LSD. A few days later Osmond wrote to Hoffer inquiring after Rose's experience. He stated: "that stuff carries a punch like a mule kick—the various responses are fascinating. Rose was clearly depressed in the technical sense. Be sure to record it. I know it sounds detached to record every bit of information about this monster [but it] is valuable—gold."⁴¹ Although some of these initial home experiments appeared unsophisticated, unscientific, and perhaps even recreational, Hoffer and Osmond analysed the results very seriously in an effort to become better acquainted with the often indescribable experiences generated by LSD.

Rose and Jane repeatedly participated in the LSD experiments.⁴² As the circle of experimenters widened, wives often accompanied their husbands on these exploratory missions. In addition to providing each other with companionship during the often bizarre experience, the joint participation also had practical advantages for experimental research. Amy Izumi, wife of architect Kiyoshi Izumi (whose contributions are discussed in chapter four), recalled that she and her husband regularly discussed challenges associated with his work. As taking LSD became an important part of his job, Amy felt

⁴¹ SAB, A207, Hoffer, XVIII. Hoffer-Osmond Correspondence, 1951-1992, 1.a. "October 12, 1951-December 31, 1951," Letter from Humphry Osmond to Abram Hoffer, 15 February 1953. [handwritten: best interpretation]

⁴² Although I was unable to locate written records confirming this point (if such records exist), oral interviews regularly revealed that doctors' partners played an integral role in the early trials. Conversations with husbands and wives who participated in these experiments also emphasised both the regularity and importance of these joint experiences. [Rose and Abe Hoffer, Jane and Humphry Osmond, Neil and Mary Agnew, Amy and Kyo Izumi, Duncan and June Blewett, Laura and Aldous Huxley].

that she too needed to have an LSD experience in order to understand how it affected his perspective.⁴³ Additionally, individuals often complained that the experience was highly individualistic and difficult to describe. Sharing the experience with a trusted partner helped to maintain a level of comfort during the experiment and facilitated the composition of a follow-up report, as the two individuals helped each other compare experiences. The involvement of wives in the early experiments also helped side step some of the ethical and practical issues associated with recruiting volunteers. Wives and friends did not receive remuneration.

Figure 5

In the spring of 1953 Osmond travelled to Los Angeles and introduced author Aldous Huxley to mescaline. Huxley had introduced a fictitious drug, *soma*, in his 1932 novel *Brave New World*.⁴⁴ Upon learning about Osmond's experiments in Saskatchewan, Huxley volunteered to take part in the early trials with mescaline. Although Huxley identified himself as a willing participant, Osmond nervously confided to Hoffer that he did not "relish the possibility, however remote, of finding a small but discreditable niche in literary history as the man who drove Aldous Huxley mad."⁴⁵

⁴³ Izumi, Amy, widow of Kyoshi Izumi (architect). Interview with author, 10 October 2003, Scarborough, Ontario.

⁴⁴ Aldous Huxley, *Brave New World* (London: Chatto and Windus, 1932).

⁴⁵ Abram Hoffer, "Obituary: Humphry Osmond: Doctor who helped to discover the hallucinogenic cause of schizophrenia," *Guardian Weekly* March 4-10, 2004, p. 23. And, SAB, A207, Hoffer, XVIII. Hoffer-Osmond Correspondence, 1951-1992, 1.a. "October 12, 1951-December 31, 1951," Letter from Humphry Osmond to Abram Hoffer, 29 May 1953.

Huxley's reaction during the experiment inspired him to write *The Doors of Perception* the following year.⁴⁶ In this novel he described his mescaline experience. In one excerpt he recalled taking the drug at eleven o'clock in the morning, after carefully taking stock of the familiar setting of his home and fixating on a small vase containing three flowers. Returning to this scene after ingesting the drug, he stated that:

At breakfast that morning I had been struck by the lively dissonance of its [the vase of flowers'] colours. But that was no longer the point. I was not looking now at an unusual flower arrangement. I was seeing what Adam had seen on the morning of his creation—the miracle, moment by moment, of naked existence.⁴⁷

Huxley detailed his thoughts and feelings about the experience in a well-crafted literary prose dotted with references to philosophy, poetry, and religion. He indicated that his response to the drug permitted him to reflect on both simple and complex matters from a clear perspective that encouraged contemplation about the deeper and subjective meaning of life. He described a mescaline reaction that the Saskatchewan researchers would later classify as a psychedelic experience; although, it was several years still before Osmond's correspondence with Huxley led him to propose the term.⁴⁸

Huxley's participation in the early trials was not only personally rewarding, but it also stimulated the LSD research project in Saskatchewan. Gradually the circulation of his novel introduced others to the work being done on the Canadian prairies. Huxley's compelling account of the experiment added to the literature on the subject. Additionally,

⁴⁶ Aldous Huxley, *The Doors of Perception*, (London: Chatto and Windus, 1954).

⁴⁷ *Ibid.*, p. 17.

⁴⁸ SAB, A207, Hoffer, XVIII. Hoffer-Osmond Correspondence, 1951-1992, 20.a. Hoffer-Osmond Correspondence, September 1-December 31, 1965, Osmond recalled this exchange in a Letter to Dr. Harriet Mann, re: The Psychedelic Experience, 12 October 1965.

and somewhat ironically, Huxley eloquently put into words a description of a hallucinogenic reaction for which many people felt was an indescribable experience. As a result, researchers could now point to Huxley's composition as a depiction of the experience for which patients, volunteers, and clinicians alike had difficulty expressing.

Osmond and Huxley developed a close relationship and continued to correspond for many years. In 1956, they engaged in a friendly competition to create a term describing the mescaline or LSD experience. Previously they had exchanged terms such as psychomimetic (madness mimicking), or hallucinogen, or phantastica, but neither felt that these words conveyed the appropriate sensations. After serious deliberation, Huxley forwarded his suggestion to Osmond in a clever couplet:

To make this mundane world sublime
Just half a gram of panerotheyme.⁴⁹

Osmond responded with his own rhyming couplet:

To fall in Hell or soar Angelic
You'll need a pinch of psychedelic.⁵⁰

He fixed upon this term, *psychedelic*, in which he relied on the Greek expressions *psyche*—meaning mind, and *delis*—meaning manifest. Together Osmond deemed that, *psychedelic* denoted mind manifesting. He preferred this simpler term to Huxley's *panerotheyme*, which he feared would elicit confusion. More importantly, he enjoyed *psychedelic* because, he contended that it “had no particular connotation of madness,

⁴⁹ SAB, A207, XVIII, Hoffer-Osmond Correspondence, 1951-1992, 20.a. September 1-December 31, 1965, Osmond recalled this exchange in: Letter from Humphry Osmond to Dr. Harriet Mann, re: The Psychedelic Experience, 12 October 1965.

⁵⁰ Ibid.

crazyness, or ecstasy, but suggested an enlargement and expansion of mind.”⁵¹ In 1957, Osmond presented some of his research findings to the New York Academy of Sciences, in which he explained the term psychedelic. The subsequent publication of his paper introduced the term into the English lexicon.⁵²

Prior to defining the experience, Huxley’s admiration for Osmond’s experiments helped garner support for the research program in Saskatchewan. By 1953, Hoffer reported that the biochemical studies with LSD were progressing. The biochemists determined that the LSD molecule contained nicotinic acid, which seemed to antagonise, and perhaps even block, the metabolism of specific enzymes. This organic process appeared to cause “changes in perception; changes in affect; and, changes in thinking.”⁵³ By adjusting the levels of nicotinic acid in the body, Hoffer demonstrated that it was possible to control the perceptual reactions to LSD.⁵⁴ He thus concluded that he could create an experimental schizophrenia, or a model psychosis, which would theoretically assist in the further identification of discrete organic chemical processes causing the illness.

Osmond reported his results with the preliminary inventory of LSD experiences and enthusiastically considered the experiments a success. The early trials had effectively familiarised the research group with the effects of LSD and mescaline.

⁵¹ Ibid. See also SAB, A207, XVIII, Hoffer-Osmond Correspondence, 1951-1992, 3.a. Letter from Humphry Osmond to Abram Hoffer, 5 April 1956. In this letter Osmond revealed his intention to create a specific word for the LSD or mescaline experience; he preferred *psychodelic* or *psychedelic* although he considered *psychorhexic* but feared that it sounded too much like one of Adolf Meyer’s words for the “phrenias” and he wanted to avoid the connotation with illness.

⁵² Humphry Osmond, “A Review of the Clinical Effects of Psychotomimetic Agents,” *Annals of the New York Academy of Sciences* 66, 3 (1957): 418-434.

⁵³ SAB, A207, XVIII. Hoffer-Osmond Correspondence, 1951-1992, 1.b., Letter Abram Hoffer to Humphry Osmond, 7 April 1953, p. 1.

⁵⁴ Ibid., This experiment was done with research psychologist Neil Agnew.

Repeat experiments gave them an opportunity to adjust the doses and determine the optimum quantities. They discovered that most subjects had a profound experience after ingesting a dose of LSD that ranged from one hundred to two hundred micrograms.⁵⁵ Generally, subjects mixed the liquefied drug into a glass of water and drank the mixture (although, Osmond discovered that the same effects occurred when LSD was absorbed by the skin or injected into the body directly). Normally, the effects of the drug lasted from six to eight hours, while some individuals remarked that they had an enduring sense of clarity that persisted for several days following the experiment. Osmond was satisfied that these results showed promise that the drug was safe and an invaluable tool for evaluating psychoses. He remained convinced that schizophrenia was primarily a disorder of perception, which stemmed from a combination of biological dysfunction and a corresponding abnormal distortion in perception. Osmond believed that further LSD trials would present the evidence necessary to more fully investigate the origins and consequences of distorted perceptions.

Model Psychoses

The promising results of nearly two years of experimentation with mescaline and LSD convinced Hoffer and Osmond that they were on the cutting edge of psychiatric research. If they could prove their biochemical theory of schizophrenia and identify a chemical process capable of reversing the reaction, they could ostensibly cure

⁵⁵ SAB, A207, XVIII. Hoffer-Osmond Correspondence, 1951-1992, 1.b., "Dr. Osmond's Report," November 1952, p. 3. These doses are minute measurements when compared with the use of other drugs but, when compared with LSD sold in the black market, these doses were "mega-hits." According to the American Department of Justice on-line descriptions of "street acid," seized sources contain an average of five to ten micrograms of LSD. Canadian sources indicated that a "usual dose" of LSD sold for between five and ten dollars in the black market. Wilfrid R. Clement, Lionel P. Solursh, Brian C. Chapman, "Hallucinogenic Drug Abuse—Socio-Medical Factors," *Canadian Family Physician* April (1968), 31.

schizophrenia. The implications of their research program were extremely significant. Confident that they were operating under progressive theoretical conditions, Hoffer and Osmond prepared to enlarge the study.

During this phase of the research Hoffer and Osmond actively publicised their news about their LSD experiments and recruited local volunteers to take part in the trials. They needed to amass a collection of LSD reactions from normal subjects in order to draw comparisons with schizophrenic patients' perspectives. The second inventory, involving actual patients' perspectives, demanded a different approach that came later. Building upon expertise gained from the early trials, Hoffer and Osmond began seeking volunteers.

The LSD trials adopted a twofold approach to recruitment: Hoffer, who operated out of the University of Saskatchewan, appealed to students and members of the surrounding community in Saskatoon. Osmond drew volunteers from the pool of mental health workers in Weyburn. Their recruitment strategies also served as a means of distributing information about their research program in the province. In addition to these centres for experimentation, research psychologists Duncan Blewett and Nick Chwelos also joined the program and conducted trials in Regina. Over the next decade a number of psychologists and psychiatrists (ie. Colin Smith, Neil Agnew, Sven Jensen and Ray Denson) took part in the experiments and contributed to the growing catalogue of experiences.⁵⁶ The collection of psychedelic experiences derived from thousands of LSD experiments conducted at various locations throughout Saskatchewan. As news of this

⁵⁶ For example, Colin Smith, Neil Agnew, Ray Denson, J. Ramsay, and Marg Callbeck began conducting LSD experiments and expanding Hoffer and Osmond's catalogue of experiences.

program spread across North America, however, their study was supplemented by reports sent in from other research centres in British Columbia and from various locations throughout the United States and Great Britain.

At the outset of the clinical trials, Hoffer and Osmond were uncertain about how they might recruit volunteers, but were pleasantly surprised by the overwhelming numbers of willing participants. In 1953 Hoffer addressed a Mental Health section of the Junior Chamber of Commerce in Regina where he made his first call for volunteers. In a room of twenty attendees, eighteen eagerly volunteered and became the first subjects in the trial.⁵⁷ Hoffer and Agnew scrutinised each volunteer by inquiring about their medical history and their knowledge of psychiatry, before subjecting them to a physical examination and a Rorschach test.⁵⁸ Anyone with a history of liver problems was excluded from the exercise.⁵⁹ This trial with normals confirmed Hoffer's suspicion that nicotinic acid, whether administered before or during the LSD reaction affected the intensity of the hallucinogenic experience.

Meanwhile in Weyburn, Osmond concentrated on evaluating the perceptual experiences described by LSD experimenters. His own LSD reactions made him believe

⁵⁷ SAB, A207, X. Subject Files, 17. LSD, 1966-70, Letter from Abram Hoffer to Ray Denson, 13 May 1968. These volunteers were later featured in a report of this first trial: Abram Hoffer and Neil Agnew, "Nicotonic Acid Modified Lysergic Acid Diethylamide Psychosis," *Journal of Mental Science* 10, 422 (1955): 1-16.

⁵⁸ Hermann Rorschach developed the Rorschach Test in 1921 for clinical psychology and psychoanalytical psychiatry. It involved a series of ink blots (originally based on 10 ink blots), which patients or subjects interpreted. During the 1940s and 1950s clinicians frequently used the Rorschach Test, but by the 1960s its overly "subjective" nature no longer appealed to the medical community. For further information on the history of the Rorschach Test see: Peter Hegarty, "Homosexual Signs and Heterosexual Silences: Rorschach Research on Male Sexuality From 1921 to 1969," *Journal of the History of Sexuality* 12, 3 (2003): 400-423; and, Walter Klopfer, "The Short History of Projective Techniques," *Journal of the History of Behavioural Sciences* 9, 1 (1973): 60-65.

⁵⁹ Abram Hoffer and Neil Agnew, "Nicotonic Acid Modified Lysergic Acid Diethylamide Psychosis," *Journal of Mental Science* 101, 422 (1955), 3. They initially excluded individuals with potential liver problems because they remained uncertain as to how the body metabolised the drug and did not want to unnecessarily antagonise an underlying liver problem. They knew that the liver processed other drugs.

that individuals working in the field of mental health benefited from cultivating deeper insights into mental illness, readily available by taking LSD. He stated:

I think we will soon have an excellent case for asking Psychiatrists in training to take mescaline, LSD, etc. The analysts say that before one can analyse one must know one's personal components and have an experience in analysis oneself. If this is true, it would seem equally justifiable to ask the Psychiatrists to take mescaline or LSD.⁶⁰

Osmond felt that an LSD experience offered mental health workers an improved understanding of the patients' view of the environment. Consequently, he encouraged doctors, nurses, social workers and other health care professionals to experience LSD in a clinical setting in an effort to offer more empathetic care to patients. He took the same precautions that Hoffer used to screen suitable subjects for his trials. These measures were continuously refined as they learned more about the drugs.

Psychedelic drugs, according to Osmond, helped generate empathy towards patients with psychotic symptoms by presenting experimenters with an experience that distorted their perceptions and challenged them to think carefully about the ways that patients acted or the things they said. Osmond claimed that:

[E]ven the best written book must fail to transmit an experience in which many claim is uncommunicable, and the doctor often wishes that he could enter the illness and see with a madman's eyes, hear with his ears, and feel with his skin. This might seem an unlikely privilege, but it is available to anyone who is prepared to take a small quantity of the alkaloid mescaline, or a minute amount of the ergot-like substance, Lysergic acid [LSD].⁶¹

⁶⁰ SAB, A207, XVIII. Hoffer-Osmond Correspondence, 1951-1992, 1.b. Letter from Humphry Osmond to Abram Hoffer, 21 July 1953, p. 2.

⁶¹ CAMH Archives, Arthur Allen file, Humphry Osmond, "On Being Mad," *Saskatchewan Psychiatric Services Journal* 1952(1), 2. See also Humphry Osmond and John Smythies, "Schizophrenia: A New Approach," *The Journal of Mental Science* 1952(98): 309-15.

By appealing to a sense of duty and commitment to patients, Osmond recruited nurses, social workers, psychologists and psychiatrists from the Weyburn region to participate in the LSD experiments.

Figure 6

Figure 7

Figure 8

Figure 9

Generally, experiments were scheduled for an eight-hour period. To qualify for the exercise, subjects needed to first pass a medical examination, which included specific measures outlined in Hoffer's first trial. A presiding psychiatrist administered the screening tests before each experiment. The trial often began at nine o'clock in the morning and took place in a hospital office or a private room in a ward. Subjects were encouraged to arrive after breakfast with an open mind and a relaxed attitude. They received some briefing; this frequently involved an explanation of the anticipated effects as observed in the early trials (though, due to the individualistic nature of the experience doctors complained that it was difficult to present too much information about the drug's effects without running the risk of making the subject susceptible to the powers of suggestion). Before ingesting the LSD, doctors required all subjects to sign a consent form, which released the investigators and institutions from any legal responsibility for untoward effects arising out of the trials.⁶² With doctors and nurses present at all times, the subjects received a dose of LSD between one hundred and two hundred micrograms and waited for a reaction.

⁶² SAB, A207, AII. 41 "Volunteers," 1957-58. "consent form."

Transcripts from these trials indicated that subjects had a variety of experiences, ranging from intense but generally pleasant hallucinations and spiritual journeys, to moderate reactions producing unjustifiable bouts of laughter, and even to more nightmarish hallucinations involving disturbing distortions of reality. Very few subjects reported that they experienced no effects at all.⁶³ Although reactions to the drug differed, participants most often deemed the experience beneficial. For example, one volunteer reported that “the experience was a very profound one for me. Reading this account will not produce the intense feelings I experienced.”⁶⁴ In most cases the trial was documented with an audio-recorder and the doctor or nurse present took notes based on his or her observations of the subject’s reaction. On some occasions the doctor or nurse present joined the experiment and took a dose of LSD.⁶⁵ This activity arguably made subjects more comfortable in the trial and often led to open discussions about the drug’s reactions during the experiment, where previously subjects had often remained largely withdrawn.

Following the trials, psychiatrists encouraged subjects to write their own descriptions of their experience and reflect upon its value. One psychiatric nurse reported that: “the social graces are difficult to perform; may be forgotten and not remembered till later. One feels rather ‘boorish’ and is aware and sorry for this, but is unable to do much about it.”⁶⁶ Others emphasised an appreciation for visual distortions produced by the drug. A nursing student reported after returning from a bathroom on the ward: “‘I hate it in here. It’s so dark and I feel so closed in’ [She] said later that she was actually afraid,

⁶³ SAB, A207, AII. 1 and AII. 2, “Subject Files.”

⁶⁴ SAB, A207, A.II. 2. Hallucinogens—Normals—A-C, 1957-63, “volunteer report”

⁶⁵ Blewett, Duncan, psychologist. Interview with author, 28 June 2003, Gabriola Island, British Columbia.

⁶⁶ SAB, A207, AII. 1 and AII. 2, “Subject Files,” “Report of a volunteer” (no date).

and that sick people, especially schizophrenics, shouldn't use that bathroom.”⁶⁷ Another report indicated a growing feeling of paranoia directed at the presence of the psychiatrists in the room. Although the subject recognised that his fears were part of his reaction to the drug, he nonetheless became keenly aware of the power relationships in the situation, as he increasingly felt vulnerable to suggestions from authority figures.⁶⁸ Commonly, observers indicated an inability to judge time or distances; most subjects reported difficulty organizing and communicating their thoughts. This was felt most acutely during the experiment, but due to the bizarre nature of the experience the follow-up reports also identified this obstacle.

Some subjects reported experiences that held spiritual meaning for them. One student, for example, identified himself as agnostic and yet described his LSD reaction as overwhelmingly spiritual. He summarised his feelings about the experience and stated: “the visual hallucinations played a relatively small part, that it was mainly a ‘mystical’, ‘religious’, and ‘spiritual’ experience. The feelings of intense bliss, freedom, of being at one with God, created an enormous psychological impact on me.”⁶⁹ These comments frequently reinforced the complaint that experiences were difficult to describe with words, but rather involved a complex, and often overpowering, assault on the senses that stripped subjects of their sense of logic or reason.

Observations from LSD trials led to a belief that LSD was capable of producing a “transcendental feeling of being united with the world.”⁷⁰ It had a mind-manifesting

⁶⁷ SAB, A207, AII. 1 and AII. 2, “Subject Files,” 5 May 1966, “Report of a volunteer” (nurse).

⁶⁸ SAB, A207, A.II. 1. “Hallucinogens, Normals, 1957-63,” “Report of a Volunteer.”

⁶⁹ SAB, A207, A.II. 2. Hallucinogens, Normals, 1957-63, “Report of a Volunteer.”

⁷⁰ SAB, A207, Box 37, 233-A. LSD, Gustav R. Schmiede, “The Current Status of LSD as a Therapeutic Tool,” (unpublished), 5.

effect that led to personal insight, transcendence, or spiritual enlightenment. These kinds of interpretations confirmed Hoffer and Osmond's supposition that LSD led to greater insights into the distortion of perception and that these conditions could cause subjects to behave in manners that seemed odd or irrational, relative to social customs.

The experiments with normals generated further evidence that LSD created perceptual disturbances, which manifested themselves differently and seemed to be based on the individual's personality, values, and expectations from the trial. The volunteer reports presented first-hand descriptions and clearly identified the difficulty individuals had in qualifying, measuring or merely explaining the experience. The observers' reports illuminated the disjuncture between the subject's experience and the observer's analysis. In most cases, the subjects remained withdrawn, sometimes appeared frightened, or even depressed. Yet, overwhelmingly, subjects reported that these labels did not match their own impressions of the experience. These conclusions, however difficult to measure, convinced Hoffer and Osmond that they needed some method of comparing the experiences described here by normal subjects with patients' accounts of schizophrenia.

Patients' Perspectives

In 1957, a PhD psychologist from the University of Kansas had finished his first summer of teaching in Sweden, and came to Weyburn the following year to begin work studying patient populations.⁷¹ Robert Sommer had a keen interest in understanding individuals' spatial perceptions and how these conceptions affected behaviour. After arriving in Weyburn, Sommer initiated studies of institutionalised patients' perceptions of

⁷¹ Robert Sommer, "Psychology in the Wilderness," *Canadian Psychologist* 2 (1961): 26-29.

space.⁷² In 1958, he worked closely with Osmond and observed the relationships among patients living in the Weyburn institution with their family members and individuals in the surrounding community. By implementing a letter-writing campaign, Sommer encouraged patients and community members to correspond. He determined that the perception of social distance declined as patients felt connected with the community outside the hospital. He also found, however, that the longer patients remained in the institution the less interest they had in communicating.⁷³

This study piqued Sommer's interest in the effects of institutionalisation (which is covered in greater detail in chapter four) but also made him a good candidate for establishing criteria for measuring patients' perceptual disturbances. Both Osmond and Sommer were keen to devise a method for evaluating patients' perceptions, but they were also aware that this research plan required careful consideration concerning the research criteria. The context in which patients provided their perspectives was often in the presence of their doctors, which Osmond and Sommer determined could easily influence a patient's manner of communication. Furthermore, the importance of studying patients' written descriptions of their disorders had often been dismissed by other doctors as "tiresome vapourings of paranoid and disgruntled people whose embittered stories would not, we feel, be typical."⁷⁴ If these assumptions persisted, then patients' perspectives filtered through their doctors would not satisfy their requirement. Further, Sommer

⁷² T.E. Weckowicz, Robert Sommer and R.H. Hall, "Distance Constancy in Schizophrenic Patients," *Journal of Mental Science* 104 (1958): 1174-1182.

⁷³ Robert Sommer, "Letter-Writing in a Mental Hospital," *American Journal of Psychiatry* 115, 6 (1958): 514-517.

⁷⁴ Robert Sommer and Humphry Osmond, "Autobiographies of Former Mental Patients," *Journal of Mental Science* 107 (1960), 648.

feared that despite any assertions to the contrary in the interview setting, patients might feel that they are being examined or judged.

Eventually, Osmond and Sommer settled on an approach that involved a thorough investigation and categorisation of former mental patients' autobiographies. After collecting hundreds of writing samples they established the criteria for selecting the most appropriate data. They excluded all works of fiction, second-hand accounts other than those composed by a dedicated scribe (as opposed to a biographer who might have added interpretive analysis), descriptions that did not include reference to hospitalisation, autobiographies unconcerned with perceptions of illness, brief or unpublished compositions, and non-English language reports.⁷⁵ The resulting collection for the study included: accounts from patients who had been hospitalised; "frank" autobiographies; and descriptions overtly focused on illustrating mental illness or institutionalisation.⁷⁶ These selections admittedly meant discarding some classic texts, including *The Snakepit* and *Shutter of Snow*,⁷⁷ but Osmond and Sommer remained convinced that their methodological choices provided them with reasonably fair accounts of patients' perspectives.⁷⁸

⁷⁵ Ibid., p. 649-650.

⁷⁶ Ibid., p. 650.

⁷⁷ Mary Jane Ward, *The Snakepit* (New York: Random House, 1946), told the fictitious story of Virginia Cunningham, a character who suffered a nervous breakdown resulting in hospitalisation. The novel describes the illness and its treatment through the eyes of a patient. The book also became an award-winning film, directed by Anatole Livak (1948). Emily Holmes Coleman, *The Shutter of Snow* (London: Routledge Press, 1930), portrays the life of a woman Marthe Gail (loosely based on her own personal experience) who suffered from post-partum depression after the birth of her son. The story of Gail's experiences in a state institution illustrates a terrifying and gloomy depiction of psychiatric treatment.

⁷⁸ Sommer and Osmond, "Autobiographies of Former Mental Patients," 650.

The resulting collection consisted of thirty-seven titles, involving twenty-five male authors and twelve female.⁷⁹ A group comprised of lay and professional participants examined the material and subsequently constructed an analysis of patients' perceptions. The investigators commonly found that authors' described a desire to suppress or ignore sensory data that seemed incongruent with cultural norms. They also discovered that these authors often revealed a sophisticated understanding of the psychological theories explaining their illness, while some patients even offered their own interpretations. Overall, Sommer and Osmond concluded that this kind of study presented mental health professionals with a rich, untapped resource for investigating the subjective experience of mental illness.⁸⁰

The examination of patients' autobiographies also presented evidence confirming Osmond's assumptions about the similarities between LSD reactions and patients' experiences. He and Sommer reported that:

the reader receives the impression that each author considers his experiences unique and beyond the realm of comparison. This is a similar attitude to many of those who have taken mescaline or LSD. They do not see how one experience can validly be compared with another.⁸¹

The results of this literary analysis persuaded Osmond to continue exploring the two sets of experiences in tandem. He felt that the remarkable consistencies among the experiences shed further light on the progression of illness. Moreover, a concentration on perceptual disturbances provided psychiatrists with alternative methods for observing the onset of mental illness.

⁷⁹ Ibid., p. 652. They used the patients' descriptions or diagnoses to categorise them according to type of illness, which gave them an over-representation of alcoholics and paranoids with relatively fewer non-paranoid schizophrenics.

⁸⁰ Ibid., p. 660.

⁸¹ Ibid., p. 658.

The next phase of the research program involved analysing the results of the autobiographical study in combination with the LSD experiences of normals, and finally, administering LSD to recovered patients who volunteered to compare the two experiences (their own natural psychosis and the LSD-precipitated model psychosis). The on-going LSD experiments in Regina, Weyburn and Saskatoon already seemed to support Hoffer and Osmond's position that the experiences were generally similar. Sommer and Osmond's study appeared to offer reasonable evidence to strengthen their conviction. In the late 1950s they began selecting patient volunteers for the express purpose of comparing experiences.⁸² Patients underwent a screening process that was similar to the one used for normals but had to meet the additional criterion of having recovered from schizophrenia.⁸³

Patients' reports following their LSD trials confirmed suspicions that the two experiences were virtually interchangeable. Indeed, some subjects commented that the simple realisation that LSD was triggering distortions in their perception made the experience more comfortable, particularly because they could accept the disturbances in perception and anticipate the termination of the experience. Several subjects felt that the LSD reaction allowed them to reflect upon their past illness with greater insight and

⁸² This was not the first time that patients were given LSD as part of the Saskatchewan research program (a point that will be discussed in greater detail in chapter three), but by the late 1950s the evidence emerging from the study of autobiographies made further comparison necessary.

⁸³ Although this description appears in their notes, the way in which "recovery" was determined is not clear. It seems to be based on a minimum of two elements: the patient had been released from hospitalisation and declared "recovered" by his or her doctor, and the patient had to convince the presiding experimenter that he or she *felt* "recovered" (free from symptoms of illness for a reasonable duration) before participating in the trial. Consent forms accompanied each record.

clarity; in sum, the reminiscent feelings had some therapeutic effect.⁸⁴ These critical perspectives assisted in cementing local support for Hoffer and Osmond's research program, as they now had reasonable evidence to link the various projects together and begin circulating their theories more widely.

By combining the results of the autobiographical study with the province-wide collection of normals' reactions to LSD and Hoffer's biochemical investigations, the research program in Saskatchewan appeared to make significant clinical advancements. Although their initial hypotheses had been tentative, the results after nearly a decade of enquiry on these three fronts gave them greater confidence. Convinced that they were on the verge of a major breakthrough in psychiatric, and indeed medical, research, Hoffer and Osmond decided to advertise their theories more aggressively. By continuing to refine the model psychosis in combination with collecting patients' perspectives, Hoffer and Osmond felt they had developed a satisfying and valid methodology for incorporating patients' perspectives in psychiatric research. They also believed they had added valuable new theoretical and practical resources to the discipline, and hoped that their colleagues outside Saskatchewan would welcome these contributions.

Professional Challenges

By the late 1950s, Hoffer and Osmond began presenting their research results more confidently. They stimulated medical debates with the provocative assertion that schizophrenia was a biochemical illness that produced a primary disturbance in

⁸⁴ SAB, A207, A.II. 5. Hallucinogens—Patients' Notes "Clinical Files;" and, A207, A.II.61-2 "'30' Project Follow Up." (This section is a synthesis of various reports, but in an effort to maintain subjects' privacy and anonymity I did not use specific excerpts.)

perception. Their theory stood in contrast to psychoanalytic and psychosomatic approaches, though both of these more established schools of thought carried significant professional currency. News about the Saskatchewan research program disseminated through North American psychiatry and mental health organisations. By the end of the 1950s, Hoffer and Osmond found themselves forced to defend their research to a medical community that remained unconvinced of their findings.

Despite an insistence that their biochemical theory had significant potential, the majority of their colleagues ignored their work. Originally, Hoffer considered that this situation was due to their relatively isolated research environment; more established research units in urban centres simply did not pay attention to the work being done in Saskatchewan.⁸⁵ While Osmond agreed that their professional isolation might be, in part, responsible, he suggested that the more significant factor was a general attitude of conservatism within the medical community, an explanation that matched his feelings about the research environment in Britain.

In the mid-1950s, they presented their own approach as a middle position between psychoanalysts and biological psychiatrists. After attending the American Psychiatric Association's (APA) annual meeting in 1955, Hoffer sensed that this was a strategic perspective given his suspicions about the changing climate of opinion in the profession. He detected a shift in support away from the psychoanalytical method and towards biological models of mental illness. He reported to his director, McKerracher, that "This may be a retrograde step and we will have to try and retain the philosophy of the analysts,

⁸⁵ SAB, A207, XVIII. Hoffer-Osmond Correspondence, 1951-1992, 3.b. 1956. Letter from Abram Hoffer to Humphry Osmond, 14 November 1956.

which has been very useful, and to improve upon it instead of denying it any virtue whatever.”⁸⁶ Psychoanalysis, according to Hoffer, remained sympathetic to the importance of personal experience in therapy. Moreover, the therapist-patient relationship in both psychoanalytical and psychedelic approaches was defined by a concerted effort to generate empathy by attempting to replicate the patients’ experience.⁸⁷ Finally, psychoanalysts incorporated LSD into their treatment sessions as an adjunct to therapy. Rather than criticise contemporary psychoanalytical perspectives (something he would later do), Hoffer initially employed a more pragmatic strategy hoping to generate interest among disillusioned analysts as well as psychopharmacologists.

Osmond shared Hoffer’s understanding of the seismic shift underway in the psychiatry profession. He too recognised the waning of psychoanalysis within the profession and regarded it as a tremendous opportunity for advancing new theories. By the end of the decade, the two psychedelic researchers distanced themselves from the psychoanalysts and more emphatically placed their own approach in line with the advancing psychopharmacological paradigm. Osmond wrote to Hoffer and exclaimed that, “I hope by the mid 1960s the psychiatric revolution will be well on its way. It is fascinating to be seeing it from the inside.”⁸⁸ In the same letter he explained that “the death of a theory, even if it isn’t much of a theory, makes people immensely uncomfortable because they fear and feel that law and order is about to disappear.”⁸⁹

⁸⁶ SAB, A207, Hoffer III. 194.a. Correspondence, McKerracher. Letter from Abram Hoffer to D.G. McKerracher, 24 May 1955.

⁸⁷ Part of psychoanalytical training requires that the therapist him or herself go through psychoanalytical treatment.

⁸⁸ SAB, A207, XVIII. 11.a., Hoffer and Osmond Correspondence, 1951-1992, Letter from Humphry Osmond to Abram Hoffer, 10 January 1962, p. 6.

⁸⁹ Ibid., p. 3.

Given this situation in the early 1960s, Osmond felt it was imperative to present their biochemical theory at precisely this time in order to fill the void left behind by the discredited psychoanalysis. As they grew more confident with this strategic approach, Hoffer bravely asserted that the only reason the psychoanalysts flourished in the United States was because they themselves had filled an earlier theoretical void. In particular, he felt that the American profession was less developed than the field in Europe and, as German doctors sought sanctuary in the United States during the Second World War, they established a false sense of ideological and theoretical supremacy, when, in fact, their approach had no real scientific legitimacy. In 1966, Hoffer's disdain for psychoanalysts hardened. He complained that "they [the psychoanalysts] have no facts, no data, no science and so they must collapse very easily and quickly. Our attack will merely add to their demise."⁹⁰ His bold assertion further underscored his growing confidence in the importance of their biochemical theory. Moreover, his personal shift in perspective revealed the changing orientation of the profession.

Despite Hoffer and Osmond's quiet rejoicing at the noticeable decline of the psychoanalytical perspective in the mid-1960s, they held firm in their contention that in order to truly modernise psychiatry, theory and practice needed to be married. To this end, they repeatedly reiterated the importance of drawing patients' perspectives into the research environment before employing theoretical frameworks that risked ignoring vital signs of illness, detectable only by listening to patients. For as much as the analysts cherished the idea of self-analysis as a means of cultivating empathy, Hoffer and Osmond

⁹⁰ SAB, A207, XVIII. 23.a., Hoffer-Osmond Correspondence, 1951-1992, Letter from Abram Hoffer to Humphry Osmond, 10 May 1966, p. 2. (emphasis in original).

doubted that even the keenest of psychoanalysts had any real sense of a psychotic patient's experiences.⁹¹ Therefore, listening to patients demanded acknowledging the perceived reality of their experiences, no matter how difficult. Psychoanalysis failed, according to Hoffer and Osmond, not only because it lacked scientific methodology but also because it focused on non-psychotic mental disorders. In other words, they felt free association and couch confessions of the worried well had very little to offer patients experiencing psychoses that often involved inconceivable and indescribable experiences.

Meanwhile psychotic disorders in general, and schizophrenia in particular, received sustained attention from North American clinical researchers during this period. The previous domination of psychoanalytical theories had paid relatively little attention to the major psychotic disorders, and biological and psychopharmacological clinicians initially distinguished themselves by concentrating on the major psychotic symptoms. Additionally, living outside of the institutional environment was particularly difficult for patients with psychotic symptoms, which left a larger proportion of patients with psychotic disorders in the institution and, thus, under closer scrutiny and care of the medical profession. In North America, schizophrenia was more commonly diagnosed in the post-war period than other major mental illnesses, which contributed to the feeling that disorders such as schizophrenia were increasing among the general population.⁹²

⁹¹ SAB, A207, XVIII. 26.c. Hoffer-Osmond Correspondence, 1951-1992, Letter from Humphry Osmond to Abram Hoffer, 30 March 1967.

⁹² For further discussion of these perspectives on schizophrenia see: Sheldon Gelman, *Medicating Schizophrenia: A History* (New Brunswick, New Jersey: Rutgers University Press, 1999); Assen Jablensky, "The Conflict of the Nosologists: Views on Schizophrenia and Manic Depressive Illness in the Early part of the 20th Century," *Schizophrenia Research* 39, 2 (1999): 95-100; and, R. Walter Heinrichs, "Historical Origins of Schizophrenia: Two early madmen and their illness," *Journal of the History of Behavioural Sciences* 39, 4 (2003): 349-363.

Hoffer and Osmond, therefore, further distanced themselves from the psychoanalysts by focusing on the experiences of patients exhibiting psychotic symptoms.

Their insistence on incorporating psychotic experiences into the therapeutic environment, however, worked against contemporary trends in psychopharmacology. By the early 1950s, clinical researchers engaged in pharmaceutical research that increasingly embraced methodologies designed to enhance objective measures and reduce subjective “distractions.”⁹³ By the 1950s the integration of medical statistics and the quest for empirical measurements in psychiatry became dominant features in the evolution of clinical drug trials. One of the reasons for this emphasis on objective measurements emerged out of a desire to minimise corrupting influences, including profit-driven enterprises, over zealous researchers, and unsophisticated observers.⁹⁴ During this decade, drug researchers introduced a variety of controls on experiments in an effort to satisfy these concerns. Double-blind trials, for example, relied on separating subjects into two or more groups and administering the experimental substance (or therapy), with neither the subjects nor the presiding clinicians’ knowledge of which individuals received the potent agent. Other research designs simply used two separate groups of subjects; each group received a different form treatment and a comparative analysis determined which approach offered better results. Controlled trials also increasingly relied on larger samples and a more sophisticated statistical analysis to evaluate the efficacy of a drug.

⁹³ For further reading on the evolution of clinical trials see: W. Linford Rees and David Healy, “The Place of Clinical Trials in the Development of Psychopharmacology,” *History of Psychiatry* 8 (1997): 1-20; Abraham M. Lilienfeld, “Ceteris Paribus: The Evolution of the Clinical Trial,” *Bulletin of the History of Medicine* 56, 1 (1982): 1-18; and, Harry Marks, *The Progress of Experiment: Science and Therapeutic Reform in the United States, 1900-1990* (Cambridge: Cambridge University Press, 1997).

⁹⁴ See Harry Marks, “Trust and Mistrust in the Marketplace: Statistics and Clinical Research, 1945-1960,” *History of Science* 38, 3 (2000), 343-344.

The overall effect of these changes in research design created, what historian Harry Marks has described as: “an ideological cult of impersonality, in which researchers sought to purge scientific observations of individual subjectivity.”⁹⁵

Psychedelic psychiatry, by contrast, fundamentally depended on an appreciation for immeasurable perceptions to guide the therapeutic process. Accordingly, psychiatrists such as Hoffer and Osmond resisted the trend towards controlled trials that tended to minimise the importance of the individual experience. They felt that the significance of perception (which included both physiological sensations and psychological interpretations of experiences), fundamentally affected the reporting of symptoms by patients, as well as their evaluation by clinicians. Consequently, statistical analyses and research methods designed to identify commonalities in experience, could not satisfactorily account for the way that symptoms affected patients’ sense of themselves. Discrepancies in the importance of perceptions had significant implications for clinical objectives in research and treatment. Faith in controlled trials, as the new gold standard in psychiatric medicine, appeared to Hoffer and Osmond as merely an illustration of misplaced authority in empiricism with little or no demonstrated practical benefits for patients. This scientific trend, they argued, led to the incorporation of new technologies, devices, and methods, which superficially conveyed an *image* of advancement within the profession. They asserted, however, that other fields of medicine could legitimately claim improvements with new technologies, such as the X-ray machine, because the incorporation of this device matched theoretical *and* clinical objectives. Psychiatry, on the other hand, was poised to accept new methodologies, such

⁹⁵ Ibid., p. 344.

as controlled trials, prematurely. Without a satisfactory integration of medical theory explaining the causation of mental illness and clinical evidence to support the theory, controlled trials and many resultant psychiatric medicines provided, in their minds, limited advantages for patients.

By the early 1960s the tone of their expression hardened. While they continued to level insults at the fading supporters of psychoanalysis, they now also began distinguishing themselves more clearly from psychopharmacological approaches. They abandoned the relatively more pragmatic style and adopted a less compromising perspective. Hoffer conveyed his frustrations with the contemporary state of the profession in a letter to Osmond:

Psychiatry has not been blessed with scientists who have the right kind of empiricism and creativity. We have on the one hand a small group of pragmatists who almost by error have discovered newer treatments like [Ugo] Cerletti, [Manfred] Sakel, [Ladislav von] Meduna, [Henri] Laborit⁹⁶ and others. But they were able against opposition to introduce these as acceptable treatments. But each treatment, apart from giving confidence to the biologists, did not add much to the general theory of psychiatry. On the other hand, we have a small but vocal group of theorists who refuse to develop testable ideas—the analysts. To them it is sufficient that Freud said so. Rather than face the criticism of medicine and science they have withdrawn into a philosophy of their own—a circular and self-fulfilling one. In between we have a large group of assistants to the pharmaceutical houses. Here I include people who do clinical testing of ideas and of drugs generated by drug firms. This is why it is so extraordinarily difficult to get much interest in the real scientific approach.⁹⁷

⁹⁶ Each of these men was an important figure in the history of psychiatry and associated with developing a particular therapy. Ugo Cerletti developed electro-convulsive therapy in the 1930s in Rome. Manfred Sakel was an Austrian medical graduate who developed insulin-coma therapy. Ladislav von Meduna developed the first “true” convulsive therapy using a drug called Metrazol (Cardiazol). Henri Laborit was associated with the development of the first anti-psychotic medication (Chlorpromazine), which he first used in Paris in 1951 to calm patients before they underwent surgery. See Edward Shorter, *A History of Psychiatry: From the Era of the Asylum to the Age of Prozac* (New York: John Wiley and Sons, 1997), 246-272.

⁹⁷ SAB, A207, XVIII.11.a. Hoffer and Osmond Correspondence, 1951-1992, Letter from Abram Hoffer to Humphry Osmond, 15 January 1962.

In this lengthy excerpt, Hoffer summarised his major criticisms of the dominant approaches in post-war psychiatry, implying that the contemporary rejection of his biochemical model of schizophrenia had little to do with science but rather reflected the unwillingness of the profession to endorse their research design. Moreover, he continued to lament that the disjuncture between theory and practice produced disparate fields of inquiry with limited room for reconciliation.

Meanwhile, Osmond maintained that neither psychosomatic nor psychopharmacological approaches had advantages over his own approach. He opined that these related fields of inquiry faced a different situation. Physicians subscribing to these canons were fascinated with applying scientific methodologies in a frenetic attempt to develop better instruments and systems of measurement. In these approaches, however, research objectives were perverted into a contest for acquiring new ways of collecting and measuring data with very little regard given to why the data was being accumulated in the first place. Moreover, advocates of large-scale and controlled trials, Osmond contended, often relied on scientific methodologies that all depended on assembling *observable* data without adequately accommodating immeasurable qualities, such as subjective experiences.⁹⁸ For example, he lamented the emerging post-war belief that drug experiments were somehow unethical if they did not apply controlled trials. He stated that “many variables may be held more or less steady, but the pretentious, inaccurate and misleading use of the word ‘control’ should surely be abandoned and

⁹⁸ Humphry Osmond, “Inspiration and Method in Schizophrenia Research,” *Diseases of the Nervous System* 4 (1955), 1-4.

editorial authority could properly be exerted here. Its use has become absurd.”⁹⁹ He explained his position by illustrating that faith in the control relaxes the pressure on the observer, and the ingenuity demanded of the experimenter, and rather places undue emphasis on concern for isolating reactions. As a result, the mark of a successful trial had more to do with the capacity of the research designers to isolate a particular reaction. Instead, Osmond recommended that experiments should be devised to measure all effects first and apply controls as necessary. By devising a controlled environment, clinicians privileged the importance of some symptoms over others, before allowing the patient or subject the opportunity to participate in the prioritisation of changes brought upon by a particular experiment.

Hoffer and Osmond’s critique of controlled drug trials rested on three main themes. One, the mere practice of gathering data was purposeless and expensive unless it was connected with an overarching theoretical objective. Secondly, controlled trials did not allow investigators an opportunity to examine unanticipated effects. Finally, dependence on controlled trials for evidence underestimated the importance of observation and undermined the role of perception in medical research.

They held similar views on the growing popularity of the double-blind experiment and regarded it as a valuable tool for the pharmaceutical industry but a rather useless exercise for psychiatric research. By relying on double-blinds the results of mass drug trials were more easily analysed and statistically robust. They did not require either sophisticated experimental designs or skilled observers. Osmond warned, however, that

⁹⁹ SAB, A207, XVIII. 11.a. Hoffer-Osmond Correspondence, 1951-1992, Humphry Osmond “Methodology, Martha or Delilah; or Methodology, Handmaiden or Taskmistress; or Who Shall Control the Controllers,” p. 3. This editorial was later published as “Methodology: Handmaiden or Taskmistress,” *The Canadian Medical Association Journal*, 87 (1962): 707-708.

the increasing faith in these approaches also produced very limited clinical evidence. Moreover, the kinds of results were invariably pre-determined by the drug manufacturers who needed to quickly amass evidence about the efficacy of a drug to achieve national regulatory approval. He argued that the controls be removed from experiments in an effort to more comprehensively evaluate the effects of a drug before it was placed on the market.

Hoffer and Osmond published their opinions about the growing insistence on controlled drug trials in 1961, while simultaneously introducing their own work as an alternative model.¹⁰⁰ The article generated interest and the majority of correspondents agreed in principle. For example, one letter arrived from a neuropharmacologist who disagreed with Hoffer and Osmond's use of statistical theory, but who nonetheless shared their trepidation over the increased faith in controlled trials. In his estimation, the double-blind trial offered very limited evidence to the clinical researcher; ultimately it only demonstrated whether or not a drug created a reaction. This research design, however, could not anticipate the potential dangers associated with a drug but provided enough information to make the drugs marketable.¹⁰¹ Afterwards Hoffer complained that "many believe all one has to do is to place all the 'facts' into a hopper and out will come the answer."¹⁰² Hoffer felt that the integration of medical statistics into clinical research dehumanised and impersonalised medical pursuits.

¹⁰⁰ Abram Hoffer and Humphry Osmond, "Double Blind Clinical Trials," *Journal of Neuropsychiatry* 2 (1961): 221-227.

¹⁰¹ SAB, A207, III. 229.b. Goldstein correspondence, Letter from L. Goldstein to L. Goodman, 30 January 1964.

¹⁰² SAB, A207, III. 163, Kepner Correspondence, Letter from Abram Hoffer to C.H. Kepner, 16 February 1962.

John Smythies, who took a research position at the University of British Columbia in the mid-1950s, cautioned Osmond about his views on the use of controlled trials and, suggested that he temper his allegations. Smythies acknowledged that the use of what he once despairingly referred to as the double-dummy design posed challenges for evaluating reactions to LSD because the profundity of responses was so significant that neither the observer nor the subject had any doubts about whether the placebo or LSD had been administered. But, in a letter to Osmond, he stated that, “I do not think that you can afford at the moment to start a campaign to change the style of scientific papers...I always think it is wise if you present unorthodox views in psychiatry to present them clothed in orthodox language.”¹⁰³ He further recommended to Osmond that “the onus is not on them to confirm your results by personal experiment but on you to design your experiments properly so that your results carry immediate conviction.”¹⁰⁴

Nonetheless, Hoffer maintained his opposition to the use of double-blind controlled trials. He pointed to his own research and recalled the retroactive damage caused by an over-anxious application of controls on the Saskatchewan research program. He asserted that, “it became widely ‘known’ our work was disproven (sic) because we had not run it double blind. Papers from Mayo Clinic and from Germany confirming us were discredited because they were not run double blind. Finally, between 1960-62 Czech psychiatrists ran double blinds and supported everything we had said.”¹⁰⁵ Furthermore, he deplored the way that controls reduced the trials to an impersonal experiment in which neither the subject nor the observer learned very much.

¹⁰³ SAB, A207, XVIII. 2.b. Hoffer and Osmond Correspondence, 1951-1992, Letter from John Smythies to Humphry Osmond, 11 February 1955, p. 2.

¹⁰⁴ Ibid.

¹⁰⁵ SAB, A207, III.56. Carl Neuberger Society, Letter from Abram Hoffer to Gustav Martin, 14 July 1966.

In spite of criticisms that psychedelic psychiatry failed to meet professional standards embodied in the controlled trial, Hoffer and Osmond enjoyed support from within Saskatchewan. Inside this local sanctuary they were able to continue experimenting with LSD, refining the model psychosis, and exploring the therapeutic value of the drug. Although psychedelic psychiatry prescribed a different kind of drug therapy than other, more widely accepted, psychopharmacological substances, Hoffer and Osmond remained convinced that the blend of philosophical and physiological benefits involved in LSD therapy would eventually convince their colleagues of the advantages of a drug therapy that mixed theoretical traditions.

During their initial LSD experiments Hoffer and Osmond discovered that the drug had some therapeutic benefits, even when it was not being tested for such results. This observation prompted them to initiate another avenue of research: employing LSD as a specific therapeutic agent. Experiments with normal subjects demonstrated the drug's enormous capacity to bring individuals to new levels of self-awareness. That is, following an LSD experience some people felt that they had gained a different perspective on their role in the community, their family, or society in general. Some described this enduring feeling as a new sense of spirituality whereas others contended that the change in attitude was essentially philosophical. Hoffer and Osmond wondered then, if this new change in attitude could have some effect on changing an individual's behaviour or habits. Beginning in 1953, they slowly began introducing the drug to non-schizophrenic patients. In particular, they wanted to test its curative effects on alcoholics, for whom temperance reformers surmised simply required more will power and self-

actualisation. Perhaps, they reasoned, the LSD reaction would cultivate that strength and insight.

While they remained committed to monitoring adrenalin production in organic and chemically-stimulated behavioural reactions, the experience generated by the LSD reaction presented fertile territory for further clinical investigation. Reactions to the drug seemed to trigger perceptual responses that provided subjects with personal insights, even a sense of enlightenment. These experiences, however, remained highly subjective and individualistic and, as a result, difficult to evaluate. Nonetheless, the powerful, though often bizarre, chemical experiences kept Hoffer and Osmond fixated on exploring the therapeutic value of the LSD experience.

Chapter Three: Highs and Lows

The therapeutic benefits of LSD for psychiatry remained largely undetermined after the initial round of experiments, but Hoffer and Osmond soon considered testing psychedelic drugs as a potential psychopharmacological cure for alcoholism. The concept of alcohol addiction increasingly attracted medical attention in this period and alcoholism came into view as a medical problem rather than a moral failing.¹ The concept of alcohol abuse as a disease was not particularly innovative in the 1930s and 1940s. Medical and social attention to “problem drinking”² received a renewal of interest following the repeal of Prohibition in the United States in the 1930s. At this time the issue attracted additional social attention with the introduction of Alcoholics Anonymous, an organisation devoted to fraternal support for individuals suffering from excessive drinking and related lifestyle problems.³ Despite the importance of these events, several scholars have shown that the language of addiction and alcoholism has a much longer

¹ For examples of literature on the medicalisation of behaviour see: Peter Conrad and Joseph Schneider, *Deviance and Medicalization: From Badness to Sickness* (Philadelphia: Temple University Press, 1992), originally published in 1980; Mariana Valverde, “‘Slavery from within’: The Invention of Alcoholism and the Question of Free Will,” *Social History* 22, 3 (1997): 251-268; Ian Dowbiggin “Delusional Diagnosis? The History of Paranoia as a Disease Concept in the Modern Era,” *History of Psychiatry* 11 (2000): 37-69; and, Robin Room, “The Cultural Framing of Addiction,” *Janus Head* 6, 2 (2003): 221-234.

² Term used by Nick Heather and Ian Robertson, *Problem Drinking* 3rd Edition (Oxford: Oxford University Press, 1997).

³ For examples of literature on the history of Alcoholics Anonymous see: Susan Cheever, *My Name is Bill: Bill Wilson: His Life and the Creation of Alcoholics Anonymous* (New York: Simon and Schuster, 2004); Ernest Kurtz, A.A.: *The Story or Not-God: A History of Alcoholics Anonymous* (San Francisco: Harper Row, 1988); *Altering American Consciousness: The History of Alcohol and Drug Use in the United States, 1800-2000* (eds) Sara Tracy and Caroline Jean Acker (Boston: University of Massachusetts Press, 2004); Stanton Peele, *Diseasing of America: Addiction Treatment out of Control* (Lexington: Lexington Books, 1989); and William White, *Slaying the Dragon: The History of Addiction Treatment and Recovery in America* (Lighthouse Institute, 1998).

history.⁴ The history of this disease in some ways reveals more about changing political and social attitudes on drinking than independent, medical innovation. Hoffer and Osmond introduced LSD treatments alongside an upsurge of interest in mitigating the consequences of alcohol consumption and, thus, capitalised on an opportunity to launch a new medical perspective on alcoholism.

During the 1930s, alcoholism became subject to an expanding medical discourse that increasingly conceptualised many aspects of inappropriate social behaviour as ill. Penny Booth Page, for example, has explored the highly significant work of E.M. Jellinek at Yale University and demonstrated that his focus on alcoholism launched a new field of alcohol studies. She suggested that Jellinek's pioneering efforts not only advanced medical authority in an area previously governed by excessive politicisation and moral reform campaigns, but also extended a new degree of social authority and leadership to scientists.⁵ Consequently, research in the field expanded and the problem of alcoholism increasingly came under the authority of medical experts.⁶ The Yale group's investigations into alcoholism had a profound influence on social perspectives, by presenting medical studies that suggested that drunkenness was in fact a disease that

⁴ Its history begins with Benjamin Rush's 1784 treatise on alcohol consumption in which he refers to excessive use as an "odious disease." William White, "The Lessons of Language: Historical Perspectives on the Rhetoric of Addiction," in *Altering American Consciousness: The History of Alcohol and Drug use in the United States, 1800-2000*, (eds) Sarah W. Tracy and Caroline Jean Acker, 34 (Boston: University of Massachusetts Press, 2004).

⁵ P.B. Page, "The Origins of Alcohol Studies: E.M. Jellinek and the documentation of the alcohol research literature," *British Journal of Addiction* 83 (1988), 1098.

⁶ See also: Ron Roizen, "How Does the Nation's 'Alcohol Problem' Change from Era to Era?: Stalking the Social Logic of Problem-Definition Transformations Since Repeal," in *Altering American Consciousness: The History of Alcohol and Drug Use in the United States, 1800-2000* (eds) Sarah Tracy and Caroline Jean Acker, 61-87 (Boston: University of Massachusetts Press, 2004); and, Nick Heather and Ian Robertson, *Problem Drinking* Third Edition (Oxford: Oxford University Press, 1997), chapter 2; in this section the authors discuss how the ideas underpinning the use of different authorities on drunkenness have remained relatively consistent over two centuries, while the embodiment of that authority has shifted from Temperance reformers, to Alcoholics' Anonymous groups, to psychiatrists, politicians, women's groups, etc.

deserved treatment and not moral condemnation. These new research initiatives helped deliver alcoholism from the political to the medical arena, with a variety of consequences.⁷

Treating alcoholism as a medically-defined disease carried with it important fiscal implications for states. Betsy Thom and Virginia Berridge have argued that the acceptance of alcoholism as a disease was critical for legitimising state-funded treatment centres in post-war Britain.⁸ The combined medical and political validation of alcoholism as a disease became a necessary step in establishing publicly-funded treatment centres and represented a shift in cultural attitudes away from alcoholism as a product of moral weaknesses. Thom and Berridge's study, moreover, underscored the degree to which the implementation of publicly-funded health care further politicised psychiatric research in the post-war period and added political gravity to medical authority. Medical decisions about disease dictated which disorders received treatment in a publicly-funded health care system. Debates over whether alcoholism existed as a clinical disease or a moral problem had significant implications when publicly-funded treatment options depended on its recognition as a medical problem instead of a social failing.

Some scholars have taken a more critical view and argued that the medicalisation of alcoholism merely created a narrow field of research specialisation. The consequent focus encouraged a reduction of the social problem to a biological or biochemical (dys)function, thus alleviating medical researchers from considering the more

⁷ Carolyn Wiener, *The Politics of Alcoholism: Building an Arena Around a Social Problem* (New Brunswick, N.J.: Transaction Books, 1981) elaborates on the concept of "arena building" with relation to defining social and legal responsibility surrounding alcoholism.

⁸ Betsy Thom and Virginia Berridge, "'Special Units for Common Problems': The Birth of Alcohol Treatments in England," *Social History of Medicine* 8, 1 (1995), 91.

complicated and often politically-sensitive social implications surrounding problem drinking. Roy Porter, for example, argued that medicalising alcoholism was an important step towards treating the alcoholic without moral judgment. He added, nonetheless, that the medical profession, despite taking this step, “never directed its energies into crusading against all those aspects of modern consumer-capitalist culture that encourage the alcoholic’s progress.”⁹ John Burnham approached the issue even more trenchantly, arguing that the acceptance of alcoholism as a disease merely increased profits for the alcoholic beverage industry. If alcoholism indeed existed as a disease that affected only select individuals, Burnham concluded, no compelling argument could be made justifying a return to punitive prohibition policies. Alcohol production could be expanded and made into a commercially lucrative enterprise, whilst isolating a few problem drinkers.¹⁰ As Porter and Burnham argued, the acceptance of alcoholism as a disease had social consequences that expanded the issue beyond medico-scientific research.

Social historians have also pointed out that during the post-war period popular attitudes towards problem drinking changed. Lori Rotskoff, in particular, investigated post-World War Two alcohol consumption in the United States, maintaining that the shifting medical perspectives on alcoholism as a disease had enormous cultural consequences. She analysed the ways in which the medicalisation of alcoholism dovetailed with contemporary perceptions of gender and nation. The cultural climate in post-war America framed the development and reception of alcoholism as a masculine disease. Concerns about women engaging in excessive alcohol consumption did not elicit

⁹ Roy Porter, “Introduction,” in *A History of Alcoholism* J.C. Sournia, xv (Cambridge, 1990).

¹⁰ J.C. Burnham, *Bad Habits: Drinking, Smoking, Taking Drugs, Gambling, Sexual Misbehavior, and Swearing in American History* (New York: New York University Press, 1993).

the same degree of alarm, nor did alcoholism among women appear to be defined as a problem in the post-war period. Rotskoff illustrated that, while Cold War America embraced an all-encompassing ideology of domesticity, alcoholism was refashioned as a threat to the idealised family. In this cultural context the medico-legal language of alcoholism depicted the disease as a danger to middle-class families. The changing attitude towards drunkenness had a profound influence on the image of the post-war middle-class American family.¹¹

As these authors collectively illustrated, concerns over the conceptualisation of drunkenness during the post-war period escalated. For some authors, the disease model assisted in expanding health services; for others, it widened commercial opportunities. The disease model borrowed from a growing psychiatric lexicon, but its reception relied on non-medical factors, including perceptions of the family, political commitments to publicly-funded health care, and post-war notions of masculinity. These combined influences also underscored Hoffer and Osmond's approach to the kinds of treatments that should be made available for alcoholics.

Hoffer and Osmond's LSD experimentation contributed to the growing acceptance of alcoholism as a disease in the post-war period. Initially, they tested LSD in

¹¹ Lori Rotskoff, *Love on the Rocks: Men, Women, and Alcohol in Post-World War II America* (Chapel Hill: University of North Carolina Press, 2002). Patricia Prestwich makes a similar point regarding the higher rates of alcoholic diagnoses for "males" in an analysis of patient records in France from 1876 to 1913. She suggests that 25% of male patients admitted to the asylum were diagnosed with alcoholism, compared with only 7% women admitted for with that diagnosis. Patricia E. Prestwich, "Family Strategies and Medical Power: 'Voluntary' Committal in a Parisian Asylum, 1876-1914," in *The Confinement of the Insane: International Perspectives, 1800-1965* (eds) Roy Porter and David Wright (Cambridge: Cambridge University Press, 2003), 86. Records from the LSD trials with alcoholics in Saskatchewan do not provide sufficient information for a gendered analysis, but the majority of cases treated for alcoholism were male. It is not clear, however, whether the psychiatrists subscribed to a gendered view of alcoholism as a "male disease" or if the patients selected for this category were disproportionately drawn from penitentiaries, suggesting merely that males were more frequently incarcerated for behaviours associated with excessive drinking.

relation to alcoholism with the underlying belief that it would chemically alter the patient's metabolic makeup and cure a neurological process that, they believed, caused alcohol addiction. This approach developed out of their central theory concerning the biochemical roots of major psychiatric illnesses. They quickly discovered that the perceptual disturbances produced by LSD intoxication seemed to offer therapeutic benefits. Alcoholic patients, originally participating as volunteer subjects, seemed to gain inner strength from the LSD reaction. Their responses were highly individualistic, making the results difficult to quantify, but a significant number of these alcoholic patients appeared to have responded to the LSD experience by terminating their drinking. The results mystified investigators, and when the Saskatchewan psychiatrists published their initial findings, many of their colleagues simply did not believe them. The chemical experience itself became the focal point of the therapy, which provoked counter claims that reliance on individualised experiences did not meet the professional standards of research; namely, results could not be replicated in controlled trials.

Nonetheless, the biochemical disease model offered an initial interpretation of alcoholism that built upon contemporary medical discourse. In particular, it complemented findings from the research group at Yale University. In the wake of this pioneering work by E.M. Jellinek, the LSD studies of the 1950s at first appeared in the medical literature as further evidence that alcoholism was indeed a disease, in this case one with biochemical mechanisms. This theory appealed to medical researchers as well as policy makers with an interest in combating the moral arguments surrounding alcohol abuse. Expanding the disease concept of alcoholism also meant that the medical

profession could address concerns for alcohol consumption in society rather than relying on public policy measures to draw distinctions between acceptable and unacceptable drinking. In other words, the medicalisation of alcoholism expanded clinical authority into an arena previously governed by political and social decisions.

Beginning in 1953, part of Hoffer and Osmond's LSD experimentation worked towards advancing a biochemical disease definition of alcoholism that relied on a mixture of medical and socio-psychological models.¹² Their proposal for a corresponding cure involved one mega-dose of LSD or mescaline. Results of early drug trials with alcoholics deviated from the original premise that the hallucinogenic drugs simply produced a model psychosis. Although alcoholic subjects offered descriptions that often matched those given by normals, the alcoholic subjects frequently fixated upon a corresponding change in attitude that accompanied the LSD experience.

Initial experiments demonstrated the drug's regular capacity to bring individuals to a new state of awareness; alcoholic patients claimed that the psychedelic therapy influenced the way they felt and thought about drinking. One former patient recalled the experience nearly forty years later as a life-changing event. He stopped drinking after his LSD treatment in Saskatchewan. Describing his memory of the treatment in an interview, he revealed that:

I had a very definite spiritual experience. It is with me to this day and has changed my attitude to a number of things and I think that...well I'm still changing, I'm not

¹² Miriam Siegler and Humphry Osmond and S. Newell, "Models of Alcoholism," *Quarterly Journal of Studies of Alcohol* 29 (1968): 571; and, Kettil Bruun, "Finland: The Non-Medical Approach," in 29th *International Congress of Alcoholism and Drug Dependence* (eds) L.G. Kiloh and D.S. Bell, 545-559 (Australia: Butterworths, 1971). I am grateful to Robin Room for drawing my attention to this article.

done yet. But it put me in a different time and space. ... It changed...well it changed my sense of the world and my place in it.¹³

As Hoffer and Osmond discovered in their investigation of the LSD-generated model psychosis, the drug had an overwhelming capacity to alter individuals' perceptions of themselves. While the responses to the drug continued to imply that a biochemical reaction remained responsible for the consequent changes in an individual's behaviour, the described experiences of personal insight and reflection often defied obvious scientific explanation. Nonetheless, alcoholic patients seemed to respond extraordinarily well to the LSD treatments, convincing Osmond and Hoffer that the psychedelic experience itself carried potential therapeutic benefits.

The model of alcoholism proposed in Saskatchewan differed from the research done by E.M. Jellinek at Yale University.¹⁴ Hoffer and Osmond's endorsement of a single-session subjective therapeutic experience went against contemporary psychopharmacological trends. The LSD experience was difficult to control and outcomes seemed uncertain, which made several of Hoffer and Osmond's colleagues hesitant to support this therapy. The treatment, nonetheless, appealed to members of Alcoholics Anonymous and some government agencies in Saskatchewan.¹⁵ At the heart of the therapy lay a desire to produce an experience that deeply affected the research subjects, to the extent that they reformed their behaviour. This practice not only presupposed a medical model of alcoholism as a disease, but also aimed at restoring self-

¹³ Patient treated for alcoholism (anonymised by author). Interview with author, 22 June 2003, Calgary, Alberta. This individual reported that he has not had another alcoholic drink since the treatment over forty years ago.

¹⁴ Mariavittoria Mangini, "Treatment of Alcoholism Using Psychedelic Drugs: A Review of the Program of Research," *Journal of Psychoactive Drugs* 30, 4 (1998) 381-386.

¹⁵ For example, the provincial bureau on alcoholism in Saskatchewan demonstrated support for the local LSD treatments.

control to the patient. The process of drugs alone constituted an insufficient therapeutic modality; instead, treatment, according to Hoffer and Osmond, also needed to re-establish personal control. Because LSD acted upon the individual both chemically and psychologically, they reasoned that psychedelic therapy represented a superior treatment option.

Patients underwent an intense LSD reaction, followed by a period of self-reflection that often resulted in attitudinal changes. Proponents of this approach believed that this therapeutic regime incorporated the importance of reflecting upon the individual's reasons for drinking rather than simply focusing on curbing drinking altogether. Duncan Blewett contended that LSD offered a superior form of therapy because it "aid[ed] man in seeing himself, his values and his behaviour in new perspective (sic); in freeing himself from disadvantageous patterns of thought and action."¹⁶ This additional reflective aspect of the therapy attempted to address the frequent complaint from patients that they drank to overcome a feeling that their lives were out of control. Blewett continued by adding that with psychedelic therapy "not only can creative and executive capacities (such as conceptual ability, self actualisation, decision making under stress, self confidence) be heightened, but mental powers akin to intuitive thinking and imagination can be developed."¹⁷ The period of self-reflection involved in psychedelic treatment encouraged patients to contemplate the relationship between self-control and drinking. In contrast with prevailing trends in psychopharmacological treatments that relied on long-term chemical consumption, the

¹⁶ University of Regina Archives, RG 91-87, Box 4, Duncan Blewett, "The Need for Research and Training Programs on the Use of the Psychedelic Drugs," (unpublished), (no date), p. 1.

¹⁷ Ibid., p. 2.

LSD therapies involved short, intense, treatment sessions. Other methods, they contended, produced dependence, whether on a chemical or a psychotherapeutic relationship, and did nothing to assist the patient in resurrecting self-control. Hoffer and Osmond recommended a treatment regimen that consisted of one LSD session only.

Their devotion to a one-session treatment stemmed from a more complicated set of ideas regarding the changing role of medical authority. Although they appeared less concerned about how this played out *vis á vis* patients, Hoffer and Osmond were concerned about the growing power of pharmaceutical companies and the corresponding decline of professional authority among psychiatrists. They supported the retention of medical authority in clinical research and treatment that could not be subverted by commercial interests. Subscribing to psychopharmacological treatments created by for-profit pharmaceutical companies, they feared, wrestled authority away from psychiatrists and promoted the corporate interests of drug companies over patient welfare. They similarly conveyed this attitude in their hesitancy to support the growing practice of large-scale controlled drug trials. Such large-scale trials undermined the researcher, or psychiatrist, in clinical research. Rather, Hoffer and Osmond affirmed that the maintenance, and indeed growth, of medical authority over decisions concerning drug research in the post-war period was particularly important when confronted with the growing power of corporate interests over medical decision-making.

Osmond reasoned that, given the growing social acceptance of drinking, it should not be difficult to convince lay people that alcoholism, as a disease, offered a meaningful

concept. He noted that failed prohibition efforts in previous decades exposed the discernable attitude that a majority of individuals valued responsible drinking in North American culture. Many people, historically and cross-culturally, had demonstrated the capacity to enjoy alcohol consumption and incorporate it into responsible social interactions; thus, excessive drunkenness must display a comparative lack of control located in the individual.¹⁸ Clinicians were therefore faced with the challenge of defining the disease within this social context. The problem, Osmond contended, was that medical researchers had been preoccupied with gathering evidence proving that social factors influenced the development of excessive drinking behaviour. Variables such as class, gender, race and ethnicity emerged from these studies as important indicators of disease probability, but he maintained that this emphasis on socio-demographic factors presented worthless information. For example the observation that Irish men statistically drink more than Jewish men offered no prescriptive solution to the problem of alcoholism. He suggested “the forcible conversion of Irishmen to Judaism would not commend itself much to either of those ancient and resilient people...It appears that we can do little or nothing with this bit of information.”¹⁹ Instead of concentrating on examining the social characteristics of problem drinkers from an external vantage point, Osmond recommended employing tactics similar to studying mental illness and attempted to explore the drinking society as perceived by the alcoholic.

Across North America he estimated that approximately one hundred million people belonged to the drinking society, of which roughly five per cent developed

¹⁸ SAB,A207,AII. Box 75, Osmond, “Notes on the Drinking Society,” 1967.

¹⁹ SAB, A207, A.II. Box 75, Humphry Osmond “Notes on the Drinking Society,” no date, p. 1.

alcoholism.²⁰ He suggested that this social group existed across linguistic, gender, class, race, and age categories and acquired their own social customs and rituals that centred around drinking. The individuals who became alcoholic were, perhaps ironically, leaders or heroes within the drinking society. For example, Osmond stated that:

an alcoholic-to-be is liable to be admired early in his career; indeed he may even be envied by members of the drinking society, his attainments may well receive approbation and he will be invested with status and prestige. At this time his activities are not considered rash or imprudent—quite the reverse. His drinking companions may well feel a little wistful that they do not have a head like his and that their legs are not hollow. It is unlikely that anyone rewarded in this manner by his peers will stop to ponder the possible long term consequences of what may seem to be a wonderful gift.²¹

According to Osmond, the escalation of acceptable drinking into excessive (problem) drinking took place within a socio-cultural context, specific to the drinking society, where virtues did not include restraint. Rather, alcohol consumption and machismo existed as mutually reinforcing factors and excessive drinking behaviour earned the individual status. Jake Calder, director of Saskatchewan's Bureau on Alcoholism elaborated on this sentiment by suggesting that intoxication had particular rewards for young adult males because "it is considered to be a sign of masculinity and adulthood, even though it is disapproved by many other elements of society."²² Similarly, Seldon Bacon at Yale University recognised that the American frontier society valued an image of masculinity that, among other criteria, regularly included drinking.²³ While the sober observer may have concluded that the leaders of the drinking society exhibited a lack of control or

²⁰ Ibid., p. 2.

²¹ Ibid., p. 3.

²² SAB, A207, A.II. 108, J.F.A. Calder, "Spiritual Factors in the Recovery of Alcoholism," p. 8.

²³ Seldon Bacon, "Alcoholics Do Not Drink," *Annals of American Academy of Political and Social Science* 315 (1958): 55-64.

weakness, the conventions of the drinking culture implied the reverse: he who held his liquor demonstrated control, authority, and even leadership.²⁴

By envisioning a medical approach that adopted an empathetic perspective and appreciation for the social context of the drinking society, Osmond recommended a disease model, accompanied by a treatment, aimed at breaking the cycle of alcoholism by using mechanisms found within the drinking society itself. He felt that medical attitudes towards problem drinking needed to offer meaningful definitions and solutions. The extension of medical authority into this area served no particular purpose if it did not present an alternative to conventional attitudes. Therefore, he employed the same logic that he used for redressing the medicalisation of mental illness; he relied on self-experimentation with LSD in an effort to generate medical authority that derived out of an empathetic understanding of the alcoholic.

Alcoholism Trials

According to Hoffer, the idea of relating the LSD experience to alcoholism occurred to him and Osmond one evening while they were in Ottawa in the fall of 1953. The two had arrived in the nation's capital upon invitation from the Department of National Health and Welfare, but had difficulty sleeping in the hotel the night before the meeting. As a result, they decided to forgo rest and instead discussed the contemporary challenges facing psychiatrists. Sometime around four a.m. they struck upon the observation that LSD experiences were also remarkably similar to descriptions of delirium tremens, or the effects of hitting bottom conveyed by alcoholic patients. Hoffer

²⁴ Ibid., p. 1-10.

recalled that the idea “seemed so bizarre that we laughed uproariously. But when our laughter subsided, the question seemed less comical and we formed our hypothesis...: would a controlled LSD-produced delirium help alcoholics stay sober?”²⁵ The contemporary medical literature suggested that approximately ten per cent of delirium tremens had fatal consequences for patients, but that they also marked a critical turning point in the course of the disease. If an LSD reaction could simulate the delirium tremens, might it also help patients overcome their desire to drink excessively? Upon returning to Saskatchewan, Hoffer and Osmond endeavoured to test their assumption.²⁶

Once back on the prairies, they wasted no time preparing the study. At Weyburn, Osmond treated one male and one female patient, each with a single dose of two hundred micrograms of LSD. Although they had already determined that small amounts of the drug produced profound results, in an attempt to re-create an experience as intense as delirium tremens, Osmond reasoned that subjects required a larger dose.²⁷ The subjects of the initial study were patients admitted for chronic alcoholism to the Saskatchewan Mental Hospital in Weyburn. The male patient stopped drinking and remained sober for at least six months, at which point the follow-up study ended. The female patient continued drinking after the experiment but stopped during the follow-up period. The results were puzzling, and they concluded that based on this miniature experiment, LSD may simply have a fifty per cent chance of helping alcoholics. For the next decade, they

²⁵ Abram Hoffer, “A Program for the Treatment of Alcoholism: LSD, Malvaria and Nicotinic Acid,” in *The Use of LSD in Psychotherapy and Alcoholism* (ed) Harold Abramson (Indianapolis: Bobbs-Merrill, 1967), 343.

²⁶ *Ibid.*, pp. 343-406.

²⁷ Osmond, and others, studied the doses through self-experimentation before administering them to patients. See: J. Clancy, A. Hoffer, J. Lucy, H. Osmond, J. Smythies, and B. Stefaniuk, “Design and Planning in Psychiatric Research as illustrated by the Weyburn chronic nucleotide project,” *Bulletin of the Menninger Clinic* 18, 4 (1954): 147-153.

tested this hypothesis on over seven hundred cases to observe the value of LSD in treating alcoholism; they claimed that the results remained astonishingly consistent with those generated in the first experiment.²⁸

Despite their original contention that LSD produced a model psychosis, the results of the LSD trials on alcoholics demonstrated that the psychedelic experience offered real therapeutic benefits. Hoffer maintained that “from the first we considered not the chemical, but the experience as a key factor in therapy—in fact, we used a sort of psychotherapy made possible by the nature of the experience.”²⁹ This assertion differentiated LSD treatments from other psychopharmacological therapies by enlarging the definition of disease and treatment to include the more subjective area of experience.³⁰ Osmond lamented that:

an emphasis on the measurable and reductive results in psychiatrists and psychologists limiting their interest to aspects of experience which fits in with this....we must not fall into the pitfall of supposing that explanation however ingenious can be a substitute for observation and experiment. The experience must be there before the rational ordering.³¹

Their devotion to examining the highly subjective reactions produced by LSD distinguished their approach from contemporary attitudes towards the disease concept of alcoholism.

²⁸ SAB, A207, A.II. Box 75, Humphry Osmond, “Notes on the Drinking Society,” (1967). For their published results see: Nick Chwelos, Duncan Blewett, Colin Smith and Abram Hoffer, “Use of d-lysergic diethylamide in the treatment of alcoholism,” *Quarterly Journal of Studies of Alcohol* 20 (1959): 577-590; and, Abram Hoffer, “A Program for the Treatment of Alcoholism: LSD, Malvaria and Nicotinic Acid,” *Second International Conference on the Use of LSD in Psychotherapy and Alcoholism* (ed) Harold Abramson, 343-406 (New York: Bobbs Merrill, 1967).

²⁹ Abram Hoffer, “Treatment of Alcoholism Using LSD as the Main Variable,” *Prisma* (1966), 19.

³⁰ SAB, A207, II.A.108, J.F.A. Calder, “Experience with New Drug,” (unpublished) 18 and 19 May 1960.

³¹ SAB, A207, XVIII. 3.a. Humphry Osmond, “The Exploration of Experience,” (unpublished), p. 1-2.

Hoffer and Osmond believed that the new-found capacity to produce a model psychosis allowed psychiatrists an opportunity to investigate inner experiences with “rigorous scientific scrutiny.”³² By drawing extensively on theories developed by Carl Jung concerning the relationship between inner experiences and corresponding human behaviour, Osmond believed that the same kind of psychological theorising might apply to considerations of disordered behaviour. Guided by such psychological theories that helped to explain areas of intuition, feeling, and thinking, Osmond recommended further empirical testing. He suggested that classifying psychotic experiences would make it “possible to explore phenomenological worlds; the way individuals [with psychotic symptoms] perceive events need no longer be seen as ‘mysterious’, but can be computed explicitly.”³³ Unlike Jung who developed psychological categories for non-psychotic individuals, Osmond believed that a similar classification system could be developed to clarify psychotic experiences. He felt that psychiatrists had too often avoided this kind of investigation because the vast uncertainties and inconsistencies across experiences “frightened modern investigators away. We [psychiatrists] like our psychology to be safe and under control, and admission of our huge ignorance hurts us.”³⁴ He felt that recent advances in psychedelic psychiatry produced the theoretical frameworks and practical tools necessary for investigating the “experiential world of the schizophrenic” and thereby “removing some of the [clinical] ignorance in this area.”³⁵ Applying psychological classifications to psychotic behaviours prompted Osmond to consider the

³² SAB, A207, XVIII. 25.a. Humphry Osmond, “The Experiential World Inventory—Normative Version,” (unpublished), October 1966, p. 1.

³³ Ibid., p. 2.

³⁴ Humphry Osmond, “Inspiration and Method in Schizophrenia Research,” *Diseases of the Nervous System* 16, 4 (1955), 9.

³⁵ SAB, A207, III. 229.a. Humphry Osmond, “untitled” (no date), p. 1.

same for alcoholic patients. Instead of measuring intuition, behaviour and feeling against normal perceptions, it behoved psychiatrists to develop a separate category of psychological categories based on alcoholic perceptions. This approach, Osmond believed, would give psychiatrists a clearer understanding of the pathology of the disease.

Although they immediately acknowledged that LSD produced highly individualised results that made classification difficult, Hoffer and Osmond recognised the need to identify common trends to promote their therapy within the ascendant framework of mainstream psychiatry. Their biochemical research on schizophrenia supplied some of the theoretical background for explaining the results of their trials with alcoholics. Accordingly, they elaborated a biochemical explanation based on their earlier studies that demonstrated an increased rate of adrenaline production in patients with schizophrenia.³⁶ Related research on chronic alcoholics indicated comparable levels of adrenaline production, particularly during delirium tremens. Hoffer and Osmond thus pronounced a biochemical link between mental illness and addiction that placed both diseases under the authority of psychiatrists, safely within the medical arena.

In 1955, psychiatrist Colin Smith conducted another LSD and alcoholism study in Saskatchewan, involving twenty-four patients from the University Hospital in Saskatoon. After a three-year follow-up he published the results in 1958 in the *Quarterly Journal for Studies on Alcohol*.³⁷ Funded by a National Health Grant, the Rockefeller Foundation, and the Saskatchewan Committee on Schizophrenia Research, Smith recruited local

³⁶ Abram Hoffer, "A Program for the Treatment of Alcoholism: LSD, Malvaria, and Nicotinic Acid," in *The Use of LSD in Psychotherapy and Alcoholism* (ed) Harold Abramson, 343-406 (Indianapolis: Bobbs-Merrill, 1967).

³⁷ Colin Smith, "A New Adjunct to the Treatment of Alcoholism: The Hallucinogenic Drugs," *Quarterly Journal for the Studies on Alcohol* 19 (1958): 406-417.

patient volunteers and coordinated follow-ups within the community.³⁸ Patients who volunteered for this treatment had already been diagnosed with chronic alcoholism and agreed to a two-to-four week stay at the hospital in Saskatoon.

During the first part of their stay, Smith encouraged these patients to talk about their drinking and he explained the objectives of the trial. Although previous research indicated that LSD experiences varied widely from one individual to the other, he nonetheless made an effort to prepare subjects for the kinds of responses to expect from the drug. For example, already their research inventory of experiences demonstrated the strong likelihood that subjects encountered some changes in sensory observation including distortions in depth perception, disorientation, and sensory over-loading. Additionally, Smith and others knew that patients often felt that LSD affected their perception of time. From the elapse of time consumed by the experiment, to a sense of engagement in a particular time period, to an inability to relate to others' recollections of the same time, LSD frequently tampered with the subjects' sense of time.³⁹ These and other observations of perceptual distortions supplied patients with a general idea about how the drug might affect them during the experiment.

In the final days of their stay, patients received a single dose of LSD ranging from two hundred to four hundred micrograms, or half a gram of mescaline.⁴⁰ The experiment

³⁸ Smith worked closely with the Bureau of Alcoholism to select volunteers for the program. Many volunteers had already sought help through Alcoholics Anonymous.

³⁹ SAB, A207, III. 229.a. "Inventory," p. 2.

⁴⁰ Researchers in British Columbia followed a similar course of treatment used even larger doses ranging from 400mcg to 1500 mcg. For a discussion of these doses see: *Lysergic Acid Diethylamide (LSD) in the Treatment of Alcoholism: An Investigation of its Effects on Drinking Behaviour, Personality Structure and Social Functioning* (eds) R.G. Smart, T. Storm, E. Baker, L. Solursh (Toronto: University of Toronto Press, 1967), 91. However, researchers maintained that these doses remained minute when compared with other pharmaceutical drugs. For example, one tablet of aspirin is 300,000 mcg compared with an average

took place in the hospital, but most often the patient spent the day in a private room or a doctor's office, accompanied by a nurse and or a psychiatrist. In the early trials no concerted efforts were made to create a more stimulating environment, but as the trials progressed, stimuli such as music, fresh cut flowers, paintings and other visual aids were added to intentionally create a comfortable or non-threatening environment.⁴¹ Attending staff encouraged patients to enjoy the experience and speak freely or comfortably withdraw from the others in the room. Approximately eight hours after consuming LSD the experience relaxed and patients returned to the ward where they often ingested a second drug to help them sleep. The following day, they were expected to compose a written description of their experience, without interference from hospital staff. In Smith's trial, patients remained in the hospital for a few days following the treatment and he strongly encouraged patients to take up or renew their membership with Alcoholics Anonymous following their discharge.⁴²

Follow-ups for Smith's trial ranged from three months to three years and relied on the cooperation of family, friends, community organisations, employers, and Alcoholics Anonymous. Interviews with the patients' contacts in the community, as well as with

dose of LSD ranging between 200mcg and 400 mcg. See *The Use of LSD in Psychotherapy and Alcoholism* (ed) Harold Abramson (Indianapolis: Bobbs-Merrill, 1967), vii. The United States Department of Justice, Drug Enforcement Administration reports from 2002 claim that current doses range from 20 to 80 mcg of LSD per unit.

⁴¹ This idea came from Al Hubbard whose work at the Hollywood Hospital in New Westminster, British Columbia. Hubbard was well known to Hoffer, Osmond et al.

⁴² Colin Smith, "A New Adjunct to the Treatment of Alcoholism: The Hallucinogenic Drugs," *Quarterly Journal for the Studies on Alcohol* 19 (1958): 406-417. Before conducting this study, more research into appropriate doses found that alcoholics had a higher tolerance to psychedelic drugs than normals. Throughout these studies, researchers in Saskatchewan worked closely with local branches of Alcoholics Anonymous, both to recruit volunteers and to improve treatments and follow-ups. Bill W. himself, founder of Alcoholics Anonymous, became an advocate of Hoffer and Osmond's therapies. See Ernie Kurtz, *'Not-God': A History of Alcoholics Anonymous* (Centre City, Minnesota,: Hazelden Educational Services, 1979), 138-9.

their family members, allowed researchers to conduct follow-up assessments that went beyond clinical contact. The final report from Smith's twenty-four patient study stated that none of the patients became worse. While 12 patients remained "unchanged," 6 entered the "improved" category and the other 6 patients were described as "much improved."⁴³ To qualify for the "much improved" category, the patient needed to exhibit complete abstinence from alcohol for the duration of the follow-up period.⁴⁴ "Improved" status applied to patients demonstrating a significant reduction in alcohol intake in combination with lifestyle changes (including improvements in relationships and regular employment). "Unchanged" classification applied to individuals showing little to no change.⁴⁵

As Smith's experiment illustrated, the trial involved the local community on two fundamental levels. Local participation was necessary for coordinating follow-up reports on the drinking habits of patients, which made community members vital contributors to the study. Conversely, community involvement generated support for the medical research and helped reduce political opposition to treating alcoholism in publicly-funded treatment centres. Actively involving non-alcoholic members of the community in the treatment program expanded the medicalisation of alcoholism into the public discourse on problem drinking. The medico-legal discourse on alcoholism as a (masculine) disease changed local popular perceptions about whether alcoholics deserved medical treatment or legal sanctions.

⁴³ Smith, "A New Adjunct to the Treatment of Alcoholism," 411.

⁴⁴ Follow-up periods varied widely. In ideal cases, patients were monitored for a minimum of two years after treatment. Some patients moved out of the community and did not remain in contact with either the research team, or Alcoholics Anonymous, which made extended follow-ups problematic. Conversely, some patients maintained contact for several years beyond the two-year period.

⁴⁵ Smith, "A New Adjunct to the Treatment of Alcoholism," 408.

This medical-popular alliance concerning perceptions of alcoholism also supported non-medical organisations in their attempt to help alcoholics. Alcoholics Anonymous had been founded in 1935 as an organisation dedicated to assisting individuals with an honest desire to stop drinking. By 1941 A.A. boasted over eight thousand members in chapters across North America and it quickly surpassed medical interventions in reports of helping alcoholics overcome alcohol consumption.⁴⁶ The principles of A.A. were not grounded in medical expertise but instead relied upon fraternal support offered by members who shared experiences with alcoholism. This style of approach created an alternative kind of non-drinking society that tailored its own rules and customs to the needs of problem drinkers. The collegial function of the organisation, for example, continued to provide individuals with a social outlet, which several members suggested was one of the original impetuses to engage in activities where drinking was a focal point. By providing a peer-evaluated and empathetic therapy, A.A. became the most effective form of treatment by the late 1940s and promised a fifty to sixty per cent chance of recovery for its members.⁴⁷ This rate exceeded medical methods, such as aversion therapy (or the use of chemical substances to suppress the desire to drink), by between ten and thirty per cent.⁴⁸

⁴⁶ *Alcoholics Anonymous: The Story of How Many Thousands of Men and Women Have Recovered from Alcoholism* (New York, Alcoholics Anonymous Publishing, Inc., 1955), xviii. See also William W. "The Society of Alcoholics Anonymous (November 1949)," *American Journal of Psychiatry* 151, 6 (1994), Sesquicentennial Supplement: 259-262.

⁴⁷ *Ibid.*, p. 571.

⁴⁸ The most commonly cited alternative treatment was antabuse, which when administered produced extreme nausea when individuals drank even small amounts of alcohol. It acted as a form of aversion therapy. See Peter Conrad and Joseph Schneider, *Deviance and Medicalization: From Badness to Sickness* (St. Louis: Mosby, 1980), 74; and, S. Eugene Barrera, Walter A. Osinski, Eugene Davidoff, "The Use of Antabuse (tetraethylthiuramdisulphide) in Chronic Alcoholics (1950)," *American Journal of Psychiatry* 151, 6 (1994), Sesquicentennial Supplement, 263-267.

In addition to providing social space and peer support for individuals struggling to overcome their obsession with drinking, A.A. adopted a twelve-step tradition or program for combating alcoholism. Part of the twelve-step process involved an early recognition of the ultimate authority of God.⁴⁹ Co-founder Bill W. explained this stage as necessary for beginning the recovery process. He insisted that this phase was spiritual or religious and it reminded the individual that he or she was not alone, nor invincible. Instilling these values became an integral part of breaking the patterns and conventions of membership in the drinking society. Bill W. recalled his realisation that “it was only a matter of being willing to believe in a power greater than myself. Nothing more was required of me to make my beginning.”⁵⁰ Arriving at this perspective was often the most difficult obstacle for individuals trying to overcome the desire to drink, though several individuals achieved this spiritual epiphany after experiencing delirium tremens. For many alcoholics, nonetheless, delirium tremens proved fatal; consequently, A.A. contemplated strategies for convincing members of the significance of spirituality before experiencing delirium tremens.

The LSD treatments being developed in Saskatchewan in the 1950s offered a chemically-induced experience that often generated a sense of spirituality. LSD subjects frequently described their reactions in spiritual terms and claimed that the experience had an overpowering effect on their self-perceptions. The frequency of these kinds of responses led some researchers to believe that LSD was the psycho-active substance capable of creating this necessary set of reactions. In the late 1950s Bill W. himself

⁴⁹ Step Two reads: “For our Group purpose there is but one ultimate authority—a loving God as He may express Himself in our Group conscience.” *Alcoholics Anonymous* (1955), 564-565.

⁵⁰ *Ibid.*, p. 12.

experimented with LSD. Although he was reluctant to support the use of any drugs that might compromise his sobriety, the promise of a spiritual experience intrigued him.⁵¹ After a few sessions, Bill W. ultimately discontinued his experimentation out of concern for his role as the only surviving co-founder of an organisation devoted to sobriety. Nonetheless, he corresponded with Hoffer and Osmond in Saskatchewan and continued to quietly support their research and efforts to introduce spirituality into the medical discourse on alcoholism.

Saskatchewan's director for the Bureau on Alcoholism, Jake Calder, surmised that the reason why LSD offered an effective form of medical treatment, was because it addressed the spiritual needs of the alcoholic that were absent from other medical models.⁵² He commented that "religion's part in therapy has not always been a completely respectable subject for discussion in professional and scientific circles."⁵³ Calder explained that on one hand A.A. benefited tremendously from medical research into the disease by providing scientific evidence that undermined moral arguments about the inherent weaknesses of alcoholics. On the other hand, however, most medical theories betrayed the experience of alcoholism by ignoring the spiritual and social aspects of the disease as it was experienced by the patients.⁵⁴ Therefore, by working closely with A.A., and developing a clinical approach that appreciated the experience of the disease,

⁵¹ Jared C. Lobdell, *This Strange Illness: Alcoholism and Bill W.* (New York: Aldine de Gruyter, 2004), 250. Lobdell explains that Bill W. was particularly interested in observing the effects that the drug would have on deflating ego.

⁵² SAB, A207, II.A. 108, Correspondence with Calder, speech from Calder, "Spiritual Factors in the Recovery of Alcoholism," June 1960, p. 1.

⁵³ Ibid.

⁵⁴ Ibid., p. 3.

Calder endorsed the research program in Saskatchewan as the best available medical treatment for alcoholism.

Psychedelic Treatments

Following the completion of Smith's trial in 1958, the Saskatchewan researchers immediately began analysing the results (after a three-year follow up on the initial trial). They composed a scientific explanation that considered the immediate results of the clinical trials and the lay perspectives collected throughout the follow-up period. Contrary to their earlier hypothesis that LSD produced a reaction similar to delirium tremens, they now revised their clinical position and suggested instead that LSD caused "an upsurge of previously repressed material," or, in some cases, "the effects resembled the state of religious conversion."⁵⁵ Despite this resemblance to psychoanalytical explanations, they nonetheless maintained that the psychedelic treatments relied on a biochemical understanding of alcoholism as a disease. Furthermore, the difficult-to-describe experiences left patients and psychiatrists alike struggling to find appropriate language to explain the effects of the drug.

A common example of an alcoholic patient's reaction came from a psychiatrist's report, where he stated:

he had a momentary oneness with God. Had a vision while lying [down] with eyes closed of a spiral staircase with himself talking to another person. This appeared to have great meaning to him...He seems to have gained some insight and understanding of himself.⁵⁶

⁵⁵ Colin Smith, "Some Reflections on the Possible Therapeutic Effects of the Hallucinogens: With Special Reference to Alcoholism," *Quarterly Journal for Studies on Alcohol* 20 (1959), 293.

⁵⁶ SAB,A207, XVII. Clinical Files, LSD Trials, "anonymous." Patients' names have been removed by the author to maintain confidentiality.

This reaction matched the ideals of A.A. by stimulating an overtly spiritual experience and it persuaded the Saskatchewan group to continue conducting LSD trials with alcoholics who expressed a desire to stop drinking. Linking the description with A.A. principles also helped soften the psychoanalytical overtones by couching the explanation in overtly spiritual terms.

When Osmond formally introduced the term psychedelic in 1957 it readily applied to the alcohol studies as well as to their research on schizophrenia. As mentioned in the previous chapter, Osmond carefully chose the word, in part, to avoid overt clinical connotations that might have stifled a sense of personal ownership in the treatment process, which he saw as necessary for imbuing hope and self reflection among subscribers to the psychedelic therapy. Smith, Hoffer and Osmond maintained that subjects who had had a psychedelic experience, one involving a profound spiritual awareness or even religious conversion, fared best in their trials. One report of a psychedelic experience stated the patient had,

a very vivid experience with auditory and visual hallucinations, distortions of spatial perceptions, paranoid ideas, emotional outbursts etc. During the first hour there were marked feelings of panic. The patient talked about experiencing ‘the glory of God’ and ‘the magnitude of the universe.’⁵⁷

This kind of response, although punctuated by moments of fear and paranoia, culminated in a spiritual vision, which had a lasting personal impression on the patient.

Due to the intensely personal and subjective experiences generated by the LSD treatment, classifying and evaluating their significance for patients became a tremendous challenge. Osmond and others employed the same methods in the trials with alcoholics

⁵⁷ SAB, A207, XVII. Clinical Files, LSD Trials, “anonymised.”

as they used with normal subjects; individuals underwent the trial in the presence of a doctor or nurse who made observations throughout the experiment. These observers subsequently encouraged subjects to submit their own report on the experience within a few days. While the witnesses to the experiments commented on physical and empirically observable behaviour and statements, subjects regularly complained about having difficulties describing their experiences. The distortion of sensory perceptions and overwhelming, and often racing, flow of feelings and ideas frequently left subjects struggling to find the appropriate language to illustrate their encounter with LSD. Nonetheless, this combination of perspectives assisted researchers in laying the groundwork for assessing the therapeutic experience.

Despite the challenge of conveying their experiences, patients offered personal statements after the trial that contributed an invaluable perspective on the research program. One existing set of drug trial transcripts and patients' reports from the University Hospital in Saskatoon from 1958 to 1966 contained several examples of patients' descriptions.⁵⁸ This particular set of records catalogued experiments involving fifty-eight women and one hundred and fifty-eight men, giving a total of two hundred and sixteen patients who volunteered for LSD or mescaline therapy in this trial.⁵⁹ In each of

⁵⁸ Patients' perspectives for this paper come from an examination of patients' reports and letters contained in SAB, A207, AII.V. Hallucinogens—"Patients."

⁵⁹ The majority of the males involved in the study suffered from chronic alcoholism, whereas most of the women were treated for depression or anxiety related disorders. For examples of scholarship that deals with the gendered nature of treatment in psychiatry see: Lori Rotskoff, *Love on the Rocks: Men, Women, and Alcohol in Post-World War II America* (Chapel Hill: University of North Carolina Press, 2002); M.L. McClellan, "Marty Mann's Crusade and the Gendering of Alcohol Addiction," in *Women, Health, and Nation: Canada and the United States since 1945* (eds) Georgina Feldberg, Molly Ladd-Taylor, Alison Li, Kathryn McPherson, 84-100 (Montreal: McGill-Queens University Press, 2003). Elaine Showalter, *The Female Malady: Women, Madness, and English Culture, 1830-1980* (New York: Pantheon Books, 1985); M. Carson, "Domestic Discontents: Feminist Re-evaluations of Psychiatry, Women, and the Family," *Canadian Review of American Studies* (1992), 171-192; and, Elizabeth Lunbeck, *The Psychiatric*

these cases, patients completed a consent form, and a nurse attendant attached a transcript of the trial that recorded the chronology of events and the times at which empirically observable reactions took place. In the majority of cases, a doctor's report on the case also accompanied the trial docket; most often the patient submitted a description in his or her own writing. Anonymous excerpts from the patients' reports expressed the profundity of their responses to the drug. The following patient's description of his spiritual reaction the day after treatment must be quoted at length to adequately convey his sentiments:

How can I explain the face, vile, repulsive and scaly, that I took by the hand into the depth of hell from whence it came and then gently removed that scaly thing from the face and took it by the hand up up into the light and saw the face in all its God given beauty, so much beauty that the pot could not hold it, but it could not spill over. It seemed that my head and shoulders and hips down [there] were separated and my stomach was the battleground between good and evil...I finally talked to [the doctor] who seemed to have no trouble understanding the things I was describing to him and yet can not put on paper. It is a living thing I feel and I wish I were an artist and could paint it or put it to music or verse for the world to share. It seems to be a feeling that only someone that has seen the scale of all emotions, through LSD or alcohol can even come close to knowing or believing even in the most fantastic things you try to convey to them. It is a wonderful feeling of the choice to go up or down. I chose to go up and feel clean fresh and good.⁶⁰

Smith categorised this particular LSD experience as a psychedelic reaction. The patient had a spiritual experience, forcing himself to contend with forces of "good" and "evil" and emerged from the episode feeling confident and reformed. Although Smith required further information from follow-up studies before ascertaining whether the treatment was successful or not, he expected this patient to show promise on account of his spiritual

Persuasion: Knowledge, Gender, and Power in Modern America (Princeton: Princeton University Press, 1994).

⁶⁰ SAB,A207, AII.V. Hallucinogens—Patients "Subject's Report," anonymous subject report, 1.

reaction. Although he considered the psychedelic reaction the most useful for attaining sobriety, Smith found that most patients reached new levels of self-awareness even without having an overtly spiritual experience, which he could only detect through consultation with the patient or after interpreting a patient's report.

Patients' own descriptions of their experiences often explained their perspective on the LSD treatment revealing insights that were difficult for observers to appreciate. Nurses' reports portrayed the challenge of recording a highly subjective experience where physiological reactions did not necessarily match emotional or psychological impressions. Yet, researchers instructed attending nurses to compose a report based on observable or objective changes in the subject. Often the nurses' reports conflicted with the reflections submitted by patients. For example, nurses sometimes documented a patient's withdrawal from a conversation or marked desire to lay still and disengage from the experimental setting. At such times, the observers' reports questioned whether the drug had taken effect or not.

Patients' reports, thus, provided a vital perspective on the effects of the drug that could substantially enhance the evaluation methods available through objective measures alone. For example, the patient's report from the above incident claimed that the period of withdrawal was in fact a moment of intense personal revelation. Another patient responded to the attending nurse's prompting to discuss his reasons for seeking therapy and responded: "I cannot look into the past. Disgusted with myself. (sic) I am always scared of something. I want to be something."⁶¹ The next day, however, the same patient

⁶¹ SAB,A207, AII.V. Hallucinogens—Patients "Subject's Report," nurse's report, 2.

reported in his own words: “In answer to why I fear people, I found that I fear myself and my ability to do things right. In order to overcome this fear I found I had to look inward to myself to conquer, instead of outside myself.”⁶² He claimed that his arrival at this conclusion occurred during the LSD trial but he could not express himself until the following day. These kinds of reflections underscored the importance of encouraging patients to provide their own depictions of the trial in order for psychiatrists to adequately assess the value of the experience. It also suggested the pressing need for follow-up consultations, beyond the termination of the clinical part of the experiment.

A minority of cases in this trial at the University Hospital in Saskatoon revealed evidence of an experience that psychiatrists categorised as negative. Hoffer and others reasoned that the low rate of negative reactions was, in large measure, due to the previous psychedelic research, which convinced them that the LSD reaction bore some relationship with adrenalin production. By employing aggressive screening techniques that utilised the results of biochemical studies, they reduced the number of subjects who exhibited high levels of adrenalin. They thus managed the risk of inducing bad reactions. Despite these precautions, negative responses to the drug occurred. One patient described his experience and alleged, “there are some worms. They’re nodding at me. Am I dying? I must be dying because they’re eating my flesh. They’re gone now. I can’t move. Am I dead?”⁶³ The observer documented these expressions during the trial and owing to the terrifying nature of these hallucinations; the doctor terminated the

⁶² SAB,A207, AII.V. Hallucinogens—Patients “Subject’s Report,” patient’s report, 2.

⁶³ SAB,A207, AII.V. Hallucinogens—Patients “Subject’s Report,” nurse’s report, n.p.

reaction by giving this patient a dose of Niacin.⁶⁴ Interestingly, this patient later contended that despite these outbursts he had felt reassured about his safety by the presence of empathetic staff. He remained confident that the drug produced his hallucinations and that the worms and associated feelings existed outside reality.⁶⁵

The patients' reports made a valuable contribution to the assessment of the therapeutic value of LSD and they also pointed researchers towards aspects of the experimental design that required improvement. Self-experimentation with the drug indicated its capacity to alter perception, but patients' reports reminded researchers that the environment in which the trial took place also affected the type of reaction. For example, two primary considerations arising out of Smith's original twenty-four patient trial, derived from patients' observations of the research environment: the presence of an empathetic doctor and the use of a stimulating setting. Several researchers concluded from these trials that:

unsympathetic, hostile and unfeeling personnel bring about fear and hostility with a marked increase in the psychotic aspect of the experience. Allowing staff members an LSD experience automatically changed attitudes by greatly increasing empathy with the person undergoing the experience.⁶⁶

This finding echoed Osmond's suggestion that in order to produce effective treatment modalities clinicians needed to incorporate an empathetic appreciation of the patients'

⁶⁴ The analogous biochemical research suggested that Niacin terminated the LSD reaction because it slowed adrenalin production. This method was recommended in the Handbook: Duncan C. Blewett and Nick Chwelos, *Handbook for the Therapeutic Use of Lysergic Acid Diethylamide-25, Individual and Group Procedures* (1959); chapter 7 "Equipment." The handbook has since been made available on-line.

⁶⁵ SAB,A207, AII.V. Hallucinogens—Patients "Subject's Report," subject's report, n.p.

⁶⁶ University of Regina Archives, 88-29, Duncan Blewett Papers, Writings of Blewett, D-Lysergic Acid Diethylamide in the Treatment of Alcoholism, 1962, authors: Nick Chwelos, Duncan Blewett, Colin M. Smith, and Abram Hoffer, 2.

perceptions in order to adequately convey a sense of trust in the doctor's authority and the prescribed treatment.

The trials further indicated that the research environment affected the experimental experience in significant ways. A stark clinical setting inspired different reactions than when experiments took place in a room with visual and audio stimuli, including simple items such as windows and record players. A report from Blewett, Chwelos, Hoffer and Smith contended, "the environment surrounding the patient taking LSD was changed by the addition of auditory stimuli, visual stimuli, emotional stimuli and a change in the attitude of the people in contact with the patient."⁶⁷ In an attempt to use a more stimulating research setting they tested different kinds of spaces, employing the general principle that subjects responded best when placed in comfortable surroundings with the presence of distracting objects. The additional stimuli frequently consisted of music (usually classical) from a record player, the presence of fresh cut flowers, and photographs of relatives. These materials seemed to help the subject concentrate on something other than the fact that they were anticipating a physiological reaction. Concentrating on the rich colourings of a flower, the layers of chords in Beethoven's music, or the detailed brush-strokes of a Van Gogh painting, transfixed subjects as they eased into the experience and marvelled at the fascinating distortion of perception.⁶⁸

⁶⁷ Ibid., p. 3.

⁶⁸ Observations of space will be explored further in Chapter Four.

One of Hoffer and Osmond's colleagues in British Columbia conducted a more thorough investigation of the set and setting⁶⁹ with respect to the LSD experiment in the late 1950s. Captain Al Hubbard, also known as Captain Trips, purportedly acquired this title for the many airplane excursions he made along the North American west coast to collect wealthy alcoholic film stars and deposit them at Hollywood Hospital for discrete LSD treatments. Although Hubbard left few records of his work, several of the Saskatchewan researchers credited him with making novel additions to the research setting, based on a mixture of his own self-experimentation with LSD along with his observations of the experimental environment. In fact, Hubbard suggested that the environment might be as important to the therapeutic experience as the drug itself. Hollywood Hospital in New Westminster, where Hubbard conducted most of his own work, dealt predominantly with alcoholics for whom doctors most desired the induction of a spiritual reaction, in accordance with principles from A.A. In an effort to achieve this result, Hubbard recommended the addition of religious pictures, icons, and music. Subsequently, he claimed an increase in the spiritual reactions and the rates of recovery. The Saskatchewan group maintained close contact with Hubbard and gradually incorporated some of his techniques into their own experiments.⁷⁰

The variety of LSD reactions observed in hundreds of trials contributed to the growing inventory of data on the LSD experience. Coupled with self-experimentation, the Saskatchewan psychiatric research program prepared some conclusions on the

⁶⁹ The "set and setting" referred to both the physical and the emotional environment in which the trial took place. The concept is further elaborated in chapter four in a discussion of the Izumi-Osmond socio-petal design that incorporated "psychic space" into the therapeutic environment.

⁷⁰ Blewett, Duncan, psychologist. Interview with author, 28 June 2003, Gabriola Island, British Columbia; Hoffer, Abram, psychiatrist. Interview with author, 27 June 2003, Victoria, British Columbia; and, Jensen, Sven, psychiatrist. Interview with author, 27 June 2003, Victoria, British Columbia.

heretofore-experimental observations. One of the fundamental observations about psychedelic drugs, such as LSD and mescaline, illustrated that these substances contained the capacity to produce a “transcendental feeling of being united with the world.”⁷¹ The trials highlighted the importance of using LSD to cultivate a mind-manifesting experience that led to personal insight, transcendence, or spiritual enlightenment. Furthermore, while LSD triggered the reaction, the experience itself wielded the therapeutic benefits.

In 1959, psychologist Duncan Blewett and physician Nick Chwelos published a comprehensive manual on the use of LSD in therapy, based on the experiments in Saskatchewan. While the manual pertained to LSD experiences in general, it was particularly useful for investigators interested in initiating trials with alcoholics. Regina-based experiments conducted by Blewett and Chwelos combined the results of self-experimentation with outcomes from the trials conducted throughout the province. Working closely with Osmond, Hoffer, Smith and a number of other experimenters in Saskatchewan and abroad, their subsequent analysis served as a guidebook for future LSD experimentation, by cataloguing the range of experiences, doses, and settings.⁷² Excerpts from the handbook offered a survey of the reactions observed in the Saskatchewan experiments. It listed the common responses in this way:

1. A feeling of being at one with the Universe.
2. Experience of being able to see oneself objectively or a feeling that one has two identities.
3. Change in usual concept of self with concomitant change in perceived body.
4. Changes in perception of space and time.
5. Enhancement in the sensory fields.

⁷¹ SAB, A207, Box 37, 233-A. LSD, Gustav R. Schmiede, “The Current Status of LSD as a Therapeutic Tool,” (unpublished), 5.

⁷² Duncan C. Blewett and Nick Chwelos, *Handbook for the Therapeutic Use of Lysergic Acid Diethylamide-25, Individual and Group Procedures* (1959).

6. Changes in thinking and understanding so the subject feels he develops a profound understanding in the field of philosophy or religion.
7. A wider range of emotions with rapid fluctuation.
8. Increased sensitivity to the feelings of others.
9. Psychotic changes—These include illusions, hallucinations, paranoid delusions of reference, influence, persecution and grandeur, thought disorder, perceptual distortion, severe anxiety and others which have been described in many reports...⁷³

Based on this analysis of the LSD trials, the researchers involved concluded that the drug held tremendous therapeutic potential and, moreover, demonstrated the importance of incorporating empathy, spirituality, and patients' perspectives into medical discourse.⁷⁴ By the end of the 1950s, buoyed by the success of the LSD trials, Hoffer and Osmond recommended that psychedelic treatments become part of regular therapy options for alcoholic patients.

In 1962, psychiatrist Sven Jensen, working in Weyburn, Saskatchewan, published the first purported controlled trial on the LSD treatment for alcoholism. Jensen relied upon three pools of subjects for treatment: one group of alcoholics took LSD at the end of a hospital stay (usually lasting a few weeks); the second group received group therapy; and Jensen's colleagues at Weyburn treated the third group with their own standard approaches (excluding psychedelic therapy).⁷⁵ In his two-year study, involving follow-up periods of six to eighteen months, Jensen evaluated patients treated for chronic

⁷³ University of Regina Archives, 88-29. Duncan Blewett Papers. Writings of Duncan Blewett, "Interim Report on the Therapeutic Use of LSD," (1958), 4-5. The same list is in the publication of the Handbook in chapter two, titled: "Nature of the Drug Reaction."

⁷⁴ Ronald Ramsay, Sven Jensen, and Robert Sommer, "Values in Alcoholics After LSD-25," *Quarterly Journal of Studies on Alcohol* 24, 3 (1963): 443-448.

⁷⁵ Sven Jensen, "A Treatment Program for Alcoholics in a Mental Hospital," *Quarterly Journal of Studies on Alcohol* 23 (1962), 4. Earlier attempts to measure the efficacy of LSD treatment in blind trials were abandoned after determining that reactions to the drug were too powerful to go undetected. The group therapy involved regular psychotherapy sessions in a group setting; the other methods involved one-on-one psychotherapy with other psychiatrists, or milieu therapy, which involved in-patient treatment and a combination of one-on-one psychotherapy sessions with Jensen, in combination with institutionalisation.

alcoholism according to these three different methods. The results of the study demonstrated that thirty-eight of the fifty-eight patients treated with LSD remained abstinent throughout the follow-up period. These numbers conveyed greater significance when compared with the outcome from the second group. Among those patients who received group therapy exclusively, only seven of the thirty-eight involved in the trial remained abstinent. Even those figures, however, showed greater promise than the results from the group treated by Jensen's colleagues using other methods; in this group merely four out of thirty-five patients stopped drinking.⁷⁶

Jensen published his study in the *Quarterly Journal for Studies on Alcohol*, and defined the control mechanism based on the comparative component of the trial. He maintained that this exercise underscored the superiority of the LSD treatment over the other two methods. Moreover, this kind of controlled trial did not endanger patients by attempting to isolate the reaction of the drug; a situation that empathetic researchers recognised increased feelings of fear and paranoia while decreasing the probability of a psychedelic reaction. Jensen's comparative study allowed observers to maintain the emphasis on monitoring complex subjective experiences rather than relatively more simple empirically-observable reactions. The publication of the results of a controlled trial based on the LSD treatments also added scientific credibility to the treatment, particularly when other drug treatments underwent scrutiny in controlled trials.

Publicizing the results

⁷⁶ Sven Jensen, "A Treatment Program for Alcoholics in a Mental Hospital," *Quarterly Journal of Studies on Alcohol* 23 (1962), 5.

In Saskatchewan, support for LSD treatments coalesced behind Osmond's psychedelic approach as a progressive therapy option. Local chapters of Alcoholics Anonymous worked closely with the LSD researchers to improve recruitment and follow-up methods and began spreading the message about the LSD treatments amongst its members.⁷⁷ The Saskatchewan Bureau on Alcoholism wholeheartedly embraced the homegrown approach as the best method for appealing to both the alcoholic community and the morally conscious constituency by presenting a medical model that appealed to both sets of objectives. Saskatchewan's premier, Tommy Douglas, applauded the pioneering innovation at the psychiatric services branch and assisted in developing policy that made LSD therapies part of the regular treatment options in the region.⁷⁸ The local reception of the psychedelic treatments was not altogether surprising, since during the early phases of the trials these organisations played formative roles in the experimentation process, after which they felt invested in the approach. Nonetheless, the emerging network of organisations committed to the treatment helped engender local support.

Publications from Saskatchewan's Bureau on Alcoholism contained hard-hitting reports about the dangers of moralistic arguments that restricted alcoholics from seeking the medical attention they needed. In one of their newsletters Duncan Blewett wrote:

what motive could make you personally face strong public rejection and condemnation; extreme self reproach and guilt; marital discord—often divorce and

⁷⁷ Jensen, Sven, psychiatrist. Interviews with author, 27 June 2003, Victoria, British Columbia; and, patient treated with LSD for alcoholism (name removed by author). Interview with author, 28 June 2003, Victoria, British Columbia.

⁷⁸ SAB,A207, AIII. Box 75, "Canadian Temperance Foundation," Address given by T.C. Douglas to Canadian Temperance Foundation Convention, December 1959.

financial disaster? ...they [alcoholics] are unwilling victims caught in the grip of a disease which affects thousands of people in our community.⁷⁹

Blewett continued by explaining how the disease affected the individual physically, psychologically, and spiritually. He concluded with a recommendation for LSD therapy.

The Bureau's bulletins were peppered with information about the on-going research and LSD treatments. The reports, usually coming directly from psychiatric research branches, universally condemned the interpretation of alcoholism as a moral weakness. Pamphlets regularly included a personal story of recovery along with a variety of ways to secure assistance for family members or individuals suffering from alcoholism.⁸⁰ In addition, the bulletins described the scientific research conducted at each of the treatment centres in the province as well as the international recognition Saskatchewan had purportedly gained from its new and innovative approach to treatment.⁸¹ It is clear from the actions of the Bureau that it enthusiastically supported the new alcoholism treatment as a matter of local pride and personal triumph.

The Bureau's campaign on alcoholism uncritically promoted the LSD program to Saskatchewan residents; selling the notion to temperance and religious organisations, however, involved different challenges. In these circumstances, advocates such as Duncan Blewett appealed to religious leaders on the basis of the mystical and spiritual experience associated with the psychedelic effects.⁸² Osmond, Hoffer, and Blewett

⁷⁹ Duncan Blewett, "New Drug Attacks Roots of Alcoholism," in *Saskatchewan Alcoholism Bureau Bulletin* 2, 4 (1961), 1.

⁸⁰ For example see: "Alcoholism in Home Challenge to Wife," *Saskatchewan Alcoholism Bureau Bulletin* (1959), 4.

⁸¹ SAB, R-33.1, T.C. Douglas Papers, XVII. 656 (17-22) Bureau on Alcoholism. "Bureau Bulletins," 1959-1961.

⁸² SAB, A207, III. 103, Canadian Temperance Foundation. Letter: Hoffer to Reverend John Linton, 9 December 1959.

attended religious meetings held by temperance organisations and explained the psychiatric research program and its significance to the religious community. They appealed to religious leaders with the well-supported notion from Alcoholics Anonymous that members needed a spiritual experience to overcome their problem drinking. Rather than morally condemn alcoholics, therefore, Blewett encouraged religious organisations and their leaders to embrace the alcoholic patient's need for spirituality.

In 1961 the Canadian Temperance Foundation held its annual convention in Regina and LSD treatment advocates gathered at this meeting to present their idea of treatment over temperance. The concept of the LSD treatment intrigued several conference participants. Pastor Potoroka from the Alcohol Education Service in Manitoba became transfixed with the subject and he later decided to see for himself how the program operated. Potoroka first visited Abram Hoffer in Saskatoon and under Hoffer's direction Potoroka experimented with LSD for himself.⁸³ A few months later he visited the provincial psychiatric hospital in Weyburn and observed the effect of LSD treatments performed by psychiatrist Sven Jensen. His exposure to these different trials convinced Potoroka that LSD indeed held powerful therapeutic benefits for alcoholics.

Upon returning to Manitoba, Potoroka explained to the Alcohol Education Service how LSD treatment worked and what it meant for the role of the clergy. He considered, the LSD experience is a tremendous experience in feeling, in insight, in the re-ordering of the elements of life, and in relationships (human and divine). ...When

⁸³ Reverend Potoroka remained executive director of the Alcohol Education Service in Manitoba, which later changed its name to the Addictions Foundation of Manitoba, for 22 years. In 1980, the Addiction Foundation of Manitoba honoured him by naming its library "The William Potoroka Memorial Library."

the alcoholic has succeeded in surrendering himself to the experience you sense instinctively that an illumination of the human soul may be taking place.⁸⁴

Once the patient submitted to a higher power, according to Potoroka, the understanding and support of the church must be there to help the recovered alcoholic adjust to his new sense of self. The church, therefore, need not eschew the encroachment of science into spirituality but rather welcome the new chemically-inspired spiritual conversions.

Saskatchewan's premier, also a Baptist minister, publicly endorsed the psychedelic treatment as a progressive mixture of both religious and political goals. He explained the problem of alcohol consumption as one requiring collective action and sympathy. In his address to the Canadian Temperance Foundation in 1961, Douglas outlined the need to:

Recognize that in many cases alcoholism is not just something liable to moral strictures but that in many cases alcoholism means that the sufferer is in need of medical and psychiatric care...I think we are losing the old attitude that those who have fallen under alcohol are social lepers and work which is being done today by the psychiatrists is giving us a new sense of sympathy and understanding.⁸⁵

Douglas encouraged communities to think about alcoholism as a medical disease. Sympathy for the diseased individual, he suggested, did more to help alcoholics recover than applying moral arguments that condemned individuals to a lifetime of social stigma. Additionally, Douglas congratulated the pioneering work of Hoffer and Osmond for their bold discoveries in the field that reflected positively on the province. Once again, support from the premier mixed local political objectives with medical research goals to buttress pride in the new therapeutic approach.

⁸⁴ SAB,A207, II. A. 4, Correspondence with W. Potoroka, Report of the Executive Director, 15 June 1961 to the Alcohol Education Service (Manitoba).

⁸⁵ SAB,A207, AIII. Box 75, Canadian Temperance Foundation, Address given by T.C. Douglas to Canadian Temperance Foundation Convention, December 1959.

While public support for the treatments continued to grow in Saskatchewan, the medical theories underpinning psychedelic therapy came under attack from members of the medical community unwilling to support a methodological approach that mixed medical and socio-psychological models of addiction. Support for a disease concept of alcoholism, coupled with LSD treatments, escalated in Saskatchewan throughout the 1950s. After the turn of the decade, however, criticism from the medical community began to chip away at the pool of local support for this therapy. At the end of the 1950s the LSD treatments, in combination with Alcoholics Anonymous, seemed to offer one of the most promising new therapies for alcoholism. The medical literature reported an average forty per cent recovery rate for alcoholics with other methods of drug treatment, whereas the LSD treatments in Saskatchewan and elsewhere claimed an average sixty per cent recovery rate, with some units boasting an overwhelming success rate of ninety-four per cent recoveries. These kinds of claims immediately provoked scepticism from medical colleagues. Elsewhere, medical researchers raised questions about the use of selection criteria. Others suspected that alcoholism could not be treated with any chemical substance at all, and, others still, challenged the Saskatchewan research group to repeat their results using a variety of controlled trials.

The leading organisation for drug and alcohol research in Canada, the Addictions Research Foundation (ARF) in Toronto, weighed into the debates over psychedelic treatments with its own set of LSD studies. In a series of publications in the *Quarterly Journal for Studies on Alcohol* ARF researchers Reginald Smart and Thomas Storm criticised the Saskatchewan LSD treatments for their lack of proper scientific

methodology and discarded Jensen's publication as an unsatisfactory example of a controlled trial. They contended that the results coming from Saskatchewan presented misleading conclusions because the investigators had not employed appropriate controls that effectively isolated the reaction of the drug from other confounding influences. In particular, the ARF criticisms focused on the blatant disregard for environmental influences that could have affected the capacity to produce an objective assessment of the effect of a drug. Adjustments to the set and setting of the experimental context additionally complicated the outcome of the experiments, according to Smart and Storm, further obstructing a clear analysis of the drug reaction. Reports claiming that LSD helped alcoholics overcome their problem drinking therefore presented misinformation about the efficacy of the drug. Until medical researchers conducted trials that controlled for environmental influences, the ARF recommended the discontinuation of publications endorsing the efficacy of psychedelic treatments.

In an effort to re-evaluate the value of LSD in treating alcoholism, the ARF conducted its own trials in the mid-1960s. Researchers Reginald Smart, Thomas Storm, William Baker and Lionel Solursh designed an experimental environment that isolated the effects of the drugs before analysing its efficacy. As a result, they administered LSD to subjects and subsequently blindfolded and/or constrained them. They instructed observers not to interact with the subject, again, in an attempt to concentrate on the reaction of the drug itself. This research design aimed to minimise the influence of all factors but the drug reaction itself. This approach tried to more adequately ascertain whether the drug offered genuine benefits, or whether the perceived advantages merely

inspired clinical enthusiasm that corrupted the real outcomes. Subjects used in the ARF study did show some improvements, but overall the results from this controlled trial demonstrated that LSD did not produce results analogous to those claimed by the Saskatchewan group.⁸⁶ Conclusions from the ARF trial indicated the ineffectiveness of LSD when measured under controlled circumstances. Given the authority vested in controlled trial methodology, the ARF study presented a damaging criticism.

The researchers in Saskatchewan responded by arguing that the research design itself functioned as a contributing factor to the negative results accumulated by the ARF. The controls applied in the ARF study, they argued, facilitated more frightening reactions in patients by reducing the comfort level for the subject and raising apprehensions about the trial. Their personal and clinical experience with the drug strongly indicated that the environment had a significant effect on the results of the trial and while they disagreed over which influence had the most significant effect—environment or drug—they insisted that both demanded consideration when evaluating a psychedelic experience. By placing controls on this important influence, the ARF study, according to Hoffer and Osmond, no longer investigated the subject's experience but instead merely measured the existence of a reaction, which did not provide useful information to either the observer or the subject.

⁸⁶ R.G. Smart, T. Storm, E.F. Baker and W. Solursh, "A Controlled Study of Lysergide," *Quarterly Journal of Studies of Alcohol* 28, 2 (1967): 351-353; R.G. Smart, T. Storm, E.F. Baker and W. Solursh, "A Controlled Trial of Lysergide in the Treatment of Alcoholism: The Effects on Drinking Behaviour," *Quarterly Journal of Studies of Alcohol* 27 (1966): 469-482. A. Kurland, C. Savage, W.N. Pahnke, S. Grof and J.E. Olsson, "Pharmakopsychiatrie Neuro-psychopharmakologie," *Advances in Theoretical and Clinical Research* 4,2 (1970): 83-94. These authors describe the method used by Smart, et al. as part of their attempts to isolate the drug reaction.

Hoffer responded to the study with disdain, arguing that the ARF's position had very little to do with scientific methodology. He suggested that the ARF's unwillingness to consider their disease model and its corresponding treatment regimen had devastating consequences for patients. Moreover, he believed that the ARF continued to rely on sociological indicators of alcoholism, which compounded the problem of stigma that prevented alcoholics from seeking medical support. In a letter to a sympathetic colleague at the North Dakota Commission on Alcoholism, Hoffer complained:

The worst thing we have to face in alcoholism work is the feeling of hopelessness, inertia, and despair so common to many of our colleagues in this field. They really do not believe alcoholics can be helped and so divert themselves in empty statistical or sociological studies. Even if alcoholism is more prevalent in a certain socio-economic class, are we going to sit back and wait for some miracle to send them up two rungs in the socio-economic ladder? ... We have to treat alcoholism with no discrimination.⁸⁷

Hoffer and Osmond believed that their LSD research could scientifically demonstrate the futility and self-interest of such arguments.

Despite the critique from the ARF, a number of clinical studies from outside Canada shared the Saskatchewan group's fundamental contention that the psychedelic treatments pointed clinicians towards a more sophisticated understanding of mental illness and its treatments. A Danish study published in 1962 argued that the effects of LSD produced fear and anxiety in patients that scared them into sobriety, though they concluded that the patient's consequent abstinence from drinking had nothing to do with biochemistry.⁸⁸ Although this article did not support the biochemical perspective, it

⁸⁷ SAB,A207, III.176, Larsen (correspondence) Letter from Abram Hoffer to Larsen, 18 June 1964 (North Dakota Commission on Alcoholism).

⁸⁸ Mogens Hertz "Observations and Impressions from One Year Work with LSD," *Nordisk Psykiatrik Tidsskrift* 16 (1962), 103-8.

nonetheless, recommended expending additional research energy on investigating the psychological and spiritual characteristics of mental illnesses. In 1966, a Czechoslovakian study reported “good” results with LSD treatments for personality disorders, but very poor results with trials on alcoholics.⁸⁹ Once again, although these publications did not confirm Jensen’s statistics, they continued to reinforce the importance of exploring the kinds of reactions elicited by psychedelic approaches. By the end of the decade, supporters of the psychedelic approach to treating alcoholism attempted to construct controlled experiments that would satisfy the growing professional commitment to controlled-trial methodology. Leo Hollister in California reported with negative results and Ray Denson in Saskatoon countered with favourable results when they independently published the outcomes of LSD treatments in controlled-trial experiments.⁹⁰ Most importantly, the on-going debates in the medical journals underlined the necessity of evaluating subjective reactions in drug experiments. Rather than regard these experiments as unscientific, they insisted that the subjective reaction deserved attention that observers could not necessarily appreciate in a rigidly controlled setting.

Medical research in British Columbia investigated the therapeutic application of LSD and readily supported the program developed on the prairies. Dr Ross MacLean at Hollywood Hospital in New Westminster employed a method directly adopted from the Saskatchewan model. He subsequently published his results, strongly supporting the psychedelic treatment. MacLean worked closely with Hubbard and manipulated the set

⁸⁹ M. Hausner and V. Doležal, “Follow-up Studies in Group and Individual LSD Psychotherapy,” (PRAHA) *Active Nerve Supplement* 8 (1966): 87-95.

⁹⁰ Leo E. Hollister, Jack Shelton, and George Krieger, “A Controlled Comparison of Lysergic Acid Diethylamide (LSD) and Dextroamphetamine in Alcoholics,” *American Journal of Psychiatry* 125, 10 (1969): 58-63; and Ray Denson and D. Sydiaha, “A Controlled Study of LSD Treatment in Alcoholism and Neurosis,” *British Journal of Psychiatry* 115 (1970): 443-445.

and setting of the therapeutic environment as part of the treatment, which, he claimed, produced even greater rates of recovery.⁹¹

The experimenters in British Columbia conveyed similar frustrations about endorsing the psychedelic approach. MacLean wrote to Hoffer and explained that

this treatment cannot and must not be viewed as a miraculous panacea, but it is a very promising approach. We and others have had sufficient evidence of its efficacy to know that we are not dealing with a placebo reaction or coincidental spontaneous remission.”⁹²

MacLean, like Jensen, maintained that evaluations of psychedelic therapies required controls that permitted comparison with other treatment methods. Comparative trials convincingly demonstrated the efficacy of the psychedelic therapy, but the comparative methodology did not hold the same currency expressed by experimental designs that controlled for multiple influences. Controlled trials that isolated the drug reaction, however, missed the central philosophy behind the psychedelic approach. MacLean and Jensen displayed deference to the scientific authority vested in controlled trials, suggested by their continued efforts to present their work as part of mainstream psychopharmacological research. Nonetheless, they refused to accept a rigid interpretation of controls that subsequently ignored subjective experiences and distortions in perception in the clinical evaluation of a drug.

Another LSD trial conducted at the Veterans' Administration Hospital in Topeka, Kansas recommended psychedelic treatment, with the proviso that scientific consideration extend to the research environment for its centrality in stimulating specific

⁹¹ J.R. MacLean, D.C. Macdonald, U.P. Byrne, and A. Hubbard, “The use of LSD-25 in the treatment of alcoholism and other psychiatric problems,” *Quarterly Journal of Studies on Alcohol*, 22 (1961): 34-45.

⁹² SAB, A207, III. 195.a. MacLean, J. Ross, Letter from J. Ross MacLean to Mrs. Anne H. Becks, copy to Abram Hoffer, 26 October 1967. Emphasis in original

drug reactions. These American researchers underlined the importance of the environment and observed that

the event is profound and the drug seems to individualize, taking the patient's perception, distorting it and reintegrating it in a meaningful, positive direction. I feel that it is the responsibility of all medical people to keep an open mind concerning the drug.⁹³

Additionally, medical researchers in Czechoslovakia applauded the Saskatchewan group's pioneering efforts in bringing the experiential dimension under scientific analysis, while remaining cautious about how much to conclude about the role of the setting in therapy.⁹⁴ These complementary and independent studies confirmed Osmond's original contention that the distortion in perception, identified in both the drug reactions and in various mental illnesses, required a medical understanding that appreciated subjective experiences.

Despite a growing cadre of perspectives supporting the extension of medical discourse into the subjective realm of experience, the contemporary explosion of pharmaceutical treatments in general and psychiatric medicine, in particular, relied upon increasing objective measures as a mark of modern medico-scientific methodology. The psychedelic drugs shared historical precedents with the discovery and synthesis of many of these chemical substances, but drugs such as LSD engaged clinical investigators in methodological debates about the authority of the controlled trial. As psychedelic practitioners continued to emphasise a philosophical agenda, their approach moved closer to the edge of mainstream clinical research. Meanwhile, other psychopharmacological

⁹³ A. Connolly, "LSD In the Treatment of Chronic Alcoholism," *The University of Toronto Medical Journal* 44, 1 (1966): 32-33.

⁹⁴ See A. Kurland, C. Savage, W.N. Pahnke, S. Grof and J.E. Olsson, "Pharmakopsychiatrie Neuro-psychopharmakologic," *Advances in Theoretical and Clinical Research* 4, 2 (1971): 83-94.

substances, such as the anti-psychotic and anti-depressant medications, assumed a more typical image of psychopharmacological efficacy. These drugs, in contrast to LSD, flourished in controlled trials where they repeatedly demonstrated their capacity to reduce symptoms in patients. Their success, however, also represented the triumph of a particular methodological approach that solidified specific standards for empiricism in psychiatric discourse.

Psychedelic psychiatrists felt that conventional psychiatric drug treatments, which required extended periods of compliance, did not address issues of personal control but instead created another kind of dependence. The LSD treatment, by contrast, offered one intense therapy session that promised to restore control to the patient. Hoffer and Osmond reasoned that this approach demonstrated confidence in the biochemical model, but their endorsement of this method also suggested their desire for further consideration of the culmination of non-medical factors in therapy. Their approach suited plans for health care reforms in Saskatchewan by offering a medical model that treated mental and physical diseases together and a relied on a relatively inexpensive therapy. The intensity of the single experience appealed to patients as an appropriate method for treating a predominantly male disease, a disease that allegedly developed out of an unhealthy obsession with displaying machismo. The restoration of self-control generated by the LSD treatment expanded optimism that alcoholism would not irreparably damage communities and families. Although a decade later LSD itself succumbed to a socially-constructed view of it as a dangerous substance, in Saskatchewan in the 1950s LSD played a prominent role in reconstructing alcoholism as disease. The growing public

perception of drunkenness as a disease reinforced the need for medical attention and, moreover, redefined problem drinking behaviours as something that could be cured. The LSD treatments not only supported medical models of alcoholism but also provided a strong appeal to policy makers, religious leaders, and the lay public to recognise alcoholism in society as a disease with cultural and medical implications for its identification and treatment.

Psychedelic psychiatrists remained committed to developing a theoretical framework that appreciated the role of individual experience in medical research and practice. Part of their devotion to this idea involved exploring the environment in a sophisticated and professional manner, in an attempt to comprehend the interaction among environment, perception and health. In 1957, the provincial government created an unparalleled opportunity for advancing this research paradigm. The CCF government commissioned a study of the Weyburn Mental Hospital that combined an in-depth examination of the traditional asylum setting with the psychedelic theories emerging from the provincial psychiatric services branch. The project introduced new players to the region and to LSD experimentation. The following chapter investigates the application of psychedelic theory to psychiatric hospitalisation and the contemporary post-war trend towards deinstitutionalisation. The architectural assessment conducted in post-war Saskatchewan revealed a confluence of psychedelic-inspired interpretations of institutionalisation, socialist political aspirations to reform health care, and cultural anxieties about new medical technologies.

Chapter Four: Spaced Out

Figure 10

In 1957 architect Kiyoshi (Joe) Izumi and his wife Amy tried LSD for the first time. Joined by their friends Humphry and Jane Osmond, and taken in the comfort of the Izumis home in Regina, Kyoshi and Amy were encouraged to simply let the drug take its course and enjoy the experience.¹ Within the first hour Amy was nauseous.² Kiyoshi, on the other hand, experienced vivid changes in his perception, including the feeling that he had regained hearing in his deaf left ear and that he could see perfectly without his glasses. He had the “indescribable feeling of hearing colours, smelling colours, seeing sound and ‘seeing’ texture in a form which was almost a direct tactile feeling with one’s eyeball or optic nerve.”³ The effects of the drug distorted his perceptions and challenged his sense of reality. However, he described the experience as above all enlightening and he looked forward to applying these newly acquired insights to his task of designing an institution for mentally disordered patients.

Although Izumi’s drug use that evening was primarily recreational he also had a more professional objective. He wanted to use LSD as a tool for gaining an empathetic appreciation for mentally disordered patients’ perceptions. During some of his subsequent LSD experiences, Izumi wandered the halls of Saskatchewan’s largest

¹ SAB, A207, II.A.14, Kyoshi Izumi, “LSD and Architectural Design,” (by Izumi Arnott and Sugiyama), prepared at the request of Dr. Bernard S. Aaronson (Bureau of Research, New Jersey Neuro-Psychiatric Institute), 1967, 2-3. Kiyoshi and Amy were accompanied by Duncan Blewett a psychologist with Psychiatric Services, Saskatchewan Department of Public Health and Francis Huxley a social anthropologist conducting research on a Commonwealth Fund grant. Francis was the nephew of Aldous Huxley, author of *The Doors of Perception*.

² Izumi, Amy, widow of Kyoshi Izumi. Interview with author, 10 October 2003, Scarborough, Ontario. In the interview Amy recalled taking another substance to end the LSD reaction. This substance was likely Niacin.

³ SAB, A207, II.A.14, Kyoshi Izumi, “LSD and Architectural Design,” 3-4.

psychiatric facility, the Weyburn Mental Hospital. He noticed, for example, that the drug made corridors seem infinitely long, echoes sound like voices, and dark colours appear as holes in surfaces. Such observations led him to conclude that the asylum was a frightening place for psychiatric patients. Perceptions of asylum architecture were important to him because, three years earlier, the Director of Psychiatric Services in Saskatchewan had commissioned him to study the overcrowded provincial mental hospital and recommend an architectural solution to the asylum.

Izumi's musings about space and the therapeutic role of the mental hospital were hardly novel. Historian Carla Yanni, for example, analysed the collaboration between architects and medical professionals in the construction of the nineteenth-century asylum, and argued that a significant level of cooperation existed between these two groups. The idea of constructing an ordered environment as a place for medical therapy for individuals considered to be disordered, therefore, had appeal beyond the medical profession. The professional collaboration undermined the suggestion that psychiatrists merely used asylums to advance their own profession.⁴ Similarly, Adrian Forty has examined hospital architecture in modern England and France, and suggested that changes in hospital structures had less to do with medical discourse and more to do with the professionalisation of nursing. In particular, he examined the popularisation of the pavilion plan, famous for its architectural expression of Florence Nightingale's reforms. He demonstrated how this hospital design illustrated the increasing importance of the nursing profession in the nineteenth century. Although contemporary medical discourse

⁴ Carla Yanni, "The Linear Plan for Insane Asylums in the United States before 1866," *Journal of the Society of Architectural Historians* 62, 1 (2003): 24-49

on the spread of disease supported Nightingale's recommendation to provide better ventilation on the wards, the new designs also made it easier for staff working at the hospital.⁵

Studies of twentieth-century hospital architecture have frequently concentrated on health professionals as driving forces behind the development of new institutional designs, but it was professionalisation twinned with technological change. Annmarie Adams, for example, examined the work of hospital architect Edward Fletcher Stevens in inter-war North America and showed that a major feature of the modern hospital was its incorporation of technology. From electric lights and elevators to purpose-built rooms for surgery, the modern hospital embraced a machine-like efficiency as it pertained both to the body and to the institution.⁶ Stephen Verderber and David Fine supported this perspective stating that the modern "hospital was lauded as the apotheosis of pure functionalism."⁷ The smooth functioning of the twentieth-century hospital required technical expertise, which emerged as a symbol of progress.⁸ Technology in the hospital arose as an essential component of modern medicine.

In an examination of American hospitals in the twentieth-century, Rosemary Stevens argued that the incorporation of science and technology became "more important than the health of the population at large; more important than the provision of affordable

⁵ Adrian Forty, "The Modern Hospital in England and France: The Social and Medical Uses of Architecture," in *Buildings and Society: Essays on the Social Development of the Built Environment* (ed) Anthony King, 61-93 (London: Routledge, 1980).

⁶ Annmarie Adams, "Modernism and Medicine: The Hospitals of Stevens and Lee, 1916-1932," *Journal of the Society of Architectural Historians* 58, 1 (1999), 52. See also Stephen Verderber and David Fine, *Healthcare Architecture in an Era of Radical Transformation* (Yale University Press: New Haven, 2000), 17-62.

⁷ Verderber and Fine, *Healthcare Architecture*, 17.

⁸ Verderber and Fine, *Healthcare Architecture*, 18.

care to all those who need it.”⁹ She further contended that, as hospitals increasingly housed technology, patients became merely components of the health system: “doctors and nurses combined to make the hospital a ‘hygienic machine,’ a medical factory where the patient offered up his or her body to treatment.”¹⁰ Stevens’ analysis indicated that bio-medical approaches in medicine offered an implicit scientific promise that they could cut beyond socially-constructed categories of disease. In this way, modern medicine provided a seemingly more objective, even egalitarian, medical discourse. Its manifestation in the hospital environment, however, maintained, if not increased, the social distance between practitioner and patient. Her study further underscored the pressing need to separate medical discourse from professionalisation before drawing conclusions about the motivations underpinning modern hospitalisation.

By investigating the development of the Yorkton Psychiatric Centre in Saskatchewan, this chapter traces the separate but connected influences involved in discussions over designs for post-war mental health accommodations. The resultant design model—the socio-petal concept—also suggests the need for some historiographical departure away from analyses that emphasise the technological determinism of the post-war hospital. While recognising that LSD existed as a form of medical technology itself, the Saskatchewan-made plans for the modern facility displayed a reordering of priorities that placed technology second, after designing an environment that appreciated the individual experiences of patients. In this way, the medical discourse articulated by the psychedelic advocates readily appeared in the architectural plans. A

⁹ Rosemary Stevens, “Technology and Institutions in the Twentieth Century,” *Caduceus* 12, 3 (1996), 9. See also Rosemary Stevens *In Sickness and in Wealth: American Hospitals in the Twentieth Century* (New York: Basic Books, 1989).

¹⁰ Stevens, “Technology and Institutions in the Twentieth Century,” 12.

close examination of the multiplicity of motivating factors behind the plans for the Yorkton Psychiatric Centre, and its ultimate derailment, traces the influences of medical theory, political ideology, and modern technology in a rather unique design.

Psychedelic Architecture

In 1953, Kyoshi Izumi arrived in the provincial capital, Regina, to work as an architect. He had been born in Vancouver in 1921 and trained as an architect in the London School of Economics, Massachusetts Institute of Technology, and lastly at Harvard University, before establishing a private practice in Regina. Throughout his extensive education, he became increasingly interested in environmental design architecture. Izumi's practice captured attention from individuals working in the mental health field, especially D.G. McKerracher and Humphry Osmond. Before long they welcomed Izumi's participation in the provincial mental health reforms. In 1954 McKerracher commissioned Izumi to examine the Weyburn Mental Hospital and make recommendations for a new kind of institution.¹¹

Figure 11

Figure 12

When Izumi arrived in Regina, the province of Saskatchewan had two mental health facilities: the North Battleford Hospital and the Weyburn Hospital. The Weyburn institution, built in 1921 and incorporating the pavilion design, existed as the largest hospital in the province. It was allegedly the last North American institution built according to this design, making it a new hospital representing an older era. Izumi soon

¹¹ SAB, A207, Izumi, "LSD and Architectural Design," 1.

identified it as a model of what to avoid in subsequent facilities.¹² During deliberations on the construction of the Weyburn facility, the Saskatchewan government had followed recommendations of Dr. C.K. Clarke, superintendent of the Toronto Psychiatric Hospital in Ontario, for developing a custodial institution for accommodating the province's mentally ill patients.¹³ The results were stunning. The institution presented an imposing neo-classical, pavilion-plan structure on the bald Canadian prairie, topped by a bronze-tipped roof. It spread out over the prairie, with work farms defining its back quarters.¹⁴ Three long wings jutted out from the central building, making the Weyburn hospital the largest building, and the largest employer, in the community. The North Battleford hospital located in the northwest region of the province encapsulated more humble beginnings by comparison, and received significantly less attention when the government embarked on its reforms. It had opened in 1914 and temporarily served all the provincial mental health hospitalisation needs until the Weyburn hospital assumed responsibility for the southern half of the province.

At the time of the Weyburn Mental Hospital's opening, Saskatchewan's Department of Public Health reported that over 1,500 individuals in the province required institutional care.¹⁵ Twenty-five years later this figure had nearly doubled, yet the capacity for accommodating patients remained the same. At one point, the psychiatric services branch oversaw the temporary transfer of patients with "mental retardation"

¹² Arthur Allen, "The Last Asylum: Weyburn, Saskatchewan," *On Site Review* (2000), 20. See also Harley Dickinson, *The Two Psychiatries: The Transformation of Psychiatric Work in Saskatchewan, 1905-1984* (Regina: Canadian Plains Research Centre, 1989), 21. For an historical examination of the pavilion hospital see Jeremy Taylor, *The Architect and the Pavilion Hospital: Dialogue and Design Creativity in England, 1850-1914* (New York: Leicester University Press, 1997).

¹³ Harley Dickenson, *Two Psychiatries*, 21.

¹⁴ At this time, work was considered central to the therapy at mental health institutions.

¹⁵ Harley Dickinson, *Two Psychiatries*, "Patients on Register by Year from 1914 to 1944, [based on information from the Saskatchewan Department of Public Health Annual Reports], 38.

from the overcrowded institution at Weyburn into an abandoned Royal Canadian Air Force airport until proper facilities could be built.¹⁶ Successive reports suggested that the physical and psychological conditions at the Weyburn institution deteriorated steadily. During the Depression in the 1930s patients suffered tremendously as the asylums underwent significant reductions in food and staff.¹⁷ The alleged causes of these poor conditions included insufficient resources, inappropriate therapies, a lack of trained medical personnel, and poor management policies. Chronic overcrowding compounded these stresses.¹⁸ As a result, the Weyburn institution became routinely associated with the failed legacy of traditional institutionalisation.

Izumi's own professional training as an architect provided him with no particular insight into mental disorders but reminded him of the importance of designing spaces for users. As he began fulfilling his obligations to McKerracher, Izumi grew increasingly frustrated by his inability to understand how patients experienced the institution. He eventually sought advice from the facility's superintendent, psychiatrist Humphry Osmond. Osmond introduced Izumi to the local psychedelic theories and eventually arranged the LSD experiment for Izumi and his wife after convincing Izumi that the drug would help him appreciate how patients experienced their environment. Izumi's subsequent drug-induced observations helped him to gain empathetic insights into the way that patients experienced the institutional spaces, based on the idea that the drug

¹⁶ F.H. Kahan, *Brains and Bricks: The History of Yorkton Psychiatric Centre* (Regina: White Cross Publications, 1965), 19. The "mental defectives" (term used by Kahan) were removed from the Weyburn hospital because medical authorities determined that they required different facilities and should have their own institution. Until such a facility could be built they were temporarily housed in the abandoned airforce building.

¹⁷ C.M. Hinks, *Mental Hygiene Survey of Saskatchewan* (Regina: Thomas A. McConnica, King's Printer, 1945), 8; and, H.E. Sigerist, *Saskatchewan Health Services Survey Commission* (Regina: King's Printer, 1944).

¹⁸ For figures, see H. Dickenson, *Two Psychiatries*, Figure 6, 38

induced a model psychosis. After several years of experimentation, Izumi surmised that the post-war emphasis on technology in the hospital or institutional environment led to a corresponding depersonalisation among patients that caused more harm than good. A modern hospital architect should, he claimed, consider first the individual needs of the patients and, second, judiciously assess the technological requirements of the hospital. In particular, technology in the hospital should only be included when it served the needs of patients, not simply when it improved working conditions for staff.¹⁹

Izumi and Osmond worked closely together drawing up tentative plans whose theoretical basis rested largely on LSD experiments. Their studies seemed to demonstrate how institutional space designed for administrative efficiency might *cause* anti-social behaviour among individuals already suffering from an underlying distortion in perception. Anxieties stemming from positive psychotic symptoms, such as delusions and hallucinations, might be aggravated by the constant hum of motors, the bright lights of an observation room, or the echoes of footsteps down a long hallway. In planning for Saskatchewan's new Yorkton Psychiatric Centre, Izumi and Osmond proposed an alternative institutional design that concentrated on designing comfortable spaces for patients as individuals. Ultimately, their investigations resulted in the creation of what they called the socio-petal design. This institutional design offered an alternative to other contemporary jurisdictions that were experimenting with deinstitutionalising patients from their long-stay facilities.

¹⁹ Kyoshi Izumi, "Some Considerations on the Art of Architecture and Art in Architecture," *The Structurist*, 2 (1961-1962), 46.

The introduction of new drug treatments in the 1950s gave rise to dramatic changes in mental health care in general and psychiatric accommodations in particular. Drugs purportedly reformed mental health care by reducing symptoms in patients to the extent that individuals could live outside the traditional institution.²⁰ In-patient populations reduced dramatically from the mid-1950s as deinstitutionalisation took hold. Patients moved into a variety of new residential settings: smaller community care facilities, half-way houses, assisted living centres, or family homes. The process of deinstitutionalisation was originally conceived of as a positive and progressive move away from institutional care in asylums.²¹

In contributing to the study of Weyburn's asylum-like structure, Osmond deplored what he identified as a regressive development in mental health care in post-war North America. In an unpublished essay on the state of mental hospitals he opined that, despite a proliferation of mental health services and increased scientific research in mental health (referring to psychopharmacological studies in particular), there emerged no appreciable reduction in the numbers of individual patients requiring care. Nonetheless, recent bio-technological developments led to a general optimism that mental health care was in the process of being reformed.²² He felt that the optimism

²⁰ *Biographies of Remedies: Drugs, Medicines and Contraceptives in Dutch and Anglo-American Healing Cultures* (eds) M. Gijswijt-Hofstra, G.M. Van Heteren and E.M. Tansey (Amsterdam: Editions Rodopi B.V., 2002), 4.

²¹ More recently historians have criticised this process. For example see: Harvey Simmons, *From Asylum to Welfare* (Downsview, ON: National Institute on Mental Retardation, 1982); Harvey Simmons, *Unbalanced: Mental Health Policy in Ontario, 1930-1989* (Toronto: Wall & Thompson, 1989); Simon Goodwin, *Comparative Mental Health Policy: From Institutional to Community Care* (London: Sage Publications, 1997); Gerald Grob, *From Asylum to Community: Mental Health Policy in Modern America* (Princeton, NJ: Princeton University Press, 1991); and, *The Principle of Normalisation in Human Services* (eds) Wolf Wolfensberger and Bengt Nirje (Toronto: National Institute on Mental Retardation, 1972).

²² CAMH Archives, Arthur Allen file (#2), H. Osmond "A Grand Strategy for Mental Hospitals,"(unpublished paper), no date, p. 1.

dissipated if one considered the situation faced by patients. According to Osmond, if policy-makers and psychiatrists alike replaced the asylum with a range of professional services and a corresponding dependence on drugs for symptom relief, it left patients participating in a system as consumers of predetermined health promises. The reforms, Osmond deplored, did nothing to address the potential disempowerment experienced by patients.

Even the lunacy reform movement of the late eighteenth century that placed patients into institutions in the first place, Osmond argued, showed greater concern for patients than the advocates of deinstitutionalisation.²³ Post-war plans for mental health care seemed to ignore the influence of environment altogether, or at best, placed a much greater emphasis on the role of bio-technology in advancing cures. The transition from a closed institutional system to an open set of out-patient services reflected changes in professional objectives, but continued to treat patients as an undifferentiated mass of symptoms without pausing to consider the highly subjective and individual experiences that demanded sophisticated, empathetic clinical observation and intervention.

Izumi also reflected on the implications of deinstitutionalisation. His concerns arose from a more diffuse discomfort with the expectations that patients would fare better in normal urban communities. In fact, he felt that post-war North American cities were becoming increasingly impersonal and, therefore, did not provide patients with an appropriate environment for rehabilitation. Rather, patients required a stable residential location that created the context necessary for re-building social relationships and (re)gaining a sense of individuality in a supportive therapeutic setting. As mental health

²³ Humphry Osmond, "How to Judge a Mental Hospital," *Schizophrenia* 1, 2 (1969): 95-99.

care services moved out of the asylums, which were often located in rural areas, and into urban locales, Izumi suspected that patients would languish, regardless of any biotechnological interventions, because they lacked the environment necessary for rehabilitation to take hold. He elaborated on this concern, stating that:

The [modern urban] environment is becoming ever intensely impersonal, depersonalizing, disculturating and dehumanizing. Sheer physical proximity, the attendant lack of even basic privacy and the jungle-like, competitive techno-politico-economic milieu, has increased the amount of enforced and unwanted social intercourse, not only with friends, social and business associates but with strangers and even our antagonists, to a point of saturation which leaves little or no energy and even desire for those more essential dialogue[s] and social relationships with our wives, husbands, parents and children. As our tolerable limits are approached, we tend to retreat psychologically and become indifferent and apathetic.²⁴

In this excerpt, Izumi identified a process of deculturation or depersonalisation that he saw as an inevitable by-product of increased urbanisation. In the face of such strong socio-political currents, individuals undergoing therapy were unlikely to find support in the community at large. Moreover, Izumi felt that even familial relationships came under strain in the fast-paced and impersonal urban environment. The current trend toward placing patients in urban communities, therefore, did not employ conventional medical wisdom concerning the importance of the therapeutic environment.

Despite their commitment to a form of institutionalisation, Osmond also acknowledged the depersonalising effects that long-term stays had on in-patients. He felt that the asylum setting cultivated feelings of obedience in patients that further prevented them from coping in society.²⁵ He felt that at least the nineteenth-century psychiatrists

²⁴ SAB, A207, Izumi file, Letter from K. Izumi to Canadian Mental Health Association, 16 May 1968, p. 1. See also, SAB, A207, Izumi file, Arnott and Sugiyama, Letter from K. Izumi to F.B. Roth, Professor and Head of Department of Hospital Administration, University of Toronto, 14 March 1966.

²⁵ Humphry Osmond, "How to Judge a Mental Hospital," *Schizophrenia* 1, 2 (1969): 95-99.

built asylums according to contemporary medical principles regarding the nature of mental illness. Post-war practitioners, however, seemed to ignore the findings from the LSD research. With a greater understanding of mental illness through model psychoses, modern hospital architecture could accommodate individual needs in a manner that reduced the depersonalising effects of institutionalisation.

Figure 13

Izumi and Osmond recommended an alternative type of institution. What patients needed, they suggested, was a different kind of institution that helped individuals learn critical socialisation skills before being expected to function in an urban community. After exploring the Weyburn facility and formulating these ideas, they applied these principles to an architectural design. Their resultant socio-petal plan incorporated experiences gleaned from their LSD-inspired observations of the Weyburn facility and endorsed a novel model for mental health care that prefaced individual needs over professional objectives.

Finding the patients

Figure 14

In 1957 psychologist Robert Sommer joined Osmond and Izumi and made a substantial contribution to the plans for the Yorkton facility by contributing ideas from the psychology of interpersonal space. Sommer worked as a behavioural psychologist in Kansas in the early 1950s. His studies there focused on the distinctions between privacy and territory. His early examinations largely involved observations of zoo animals and

their responses to living in various spatial constructions. Observing that the health of these animals often directly related to the size and quality of the space allotted in the zoo, Sommer then applied this theory to humans. Shortly after arriving in Weyburn and meeting Osmond and Izumi, he began studies of personal (human) space by observing the patient culture at the Saskatchewan Mental Hospital, in Weyburn.²⁶

Sommer focused on measuring the relationship between perceptions of appropriate personal space and social behaviour.²⁷ For example, he monitored the seating arrangements and subsequent interactions of student volunteers and later of schizophrenic patients. In both sets of experiments Sommer pre-arranged the furniture, recorded the seating choices of individuals, and followed up the experiment with a de-briefing interview with each of the participants. His studies revealed vast differences in the perceptions of personal space and desired seating arrangements between the two groups.²⁸ The students, for example, preferred more distance between individuals and moved chairs or couches to achieve optimal personal space and comfort. By contrast, the patients conversed in closer proximity to one another but did not move the furniture under any circumstances. This experiment revealed that, generally, students felt more control over their environment and took liberties to alter it to suit their objectives. By not moving furniture, the patients in Sommer's study exercised less control. As a result,

²⁶ See Robert Sommer and Humphry Osmond, "Symptoms of Institutional Care," *Social Problems* 8, 3 (1961): 254-263 and Robert Sommer and Irene Watson, "Finding Buried Treasure in the Hospital," *Mental Hospitals* July (1961): 14-16. Sommer's later works were even more influential: Sommer, *Personal Space: The Behavioural Basis of Design* (Englewood Cliffs, N. J.: Prentice-Hall, 1969); Sommer, *Design Awareness* (San Francisco: Rinehart Press, 1971), and Sommer, *Tight Spaces: Hard Architecture and How to Humanize it* (Englewood Cliffs, N.J., 1974).

²⁷ Additionally, Sommer compared the architecture of prisons and hospitals, and contended that, although the institutions had explicitly different objectives, the designs for each environment remained similar. In an effort to understand how incarcerated individuals acted in different spaces, he designed experiments where he could assess the influence of space on human behaviour.

²⁸ Robert Sommer, "Studies in Personal Space," *Sociometry* 22 (1959), 252-3.

patients tended to position themselves in the environment without engaging in social contact.

Variations on these experiments revealed even more dramatic differences when observing a mixed group of patients with schizophrenia and students. Patients attempting to engage in conversation moved closer to a student subject, but when approached, the student volunteers often moved away. Follow-up interviews by Sommer indicated that patients felt rejected by the students. Students, comparatively, described their desire to extend their personal space, while the patients' advances appeared threatening.²⁹

Analyses of why such behaviours occurred introduced a new set of complications to Sommer's studies of personal space, such as differences among long and short-term patients, graduate and undergraduate students, males and females, and other combinations of groups with different culturally-influenced perceptions. Further studies illuminated how ideas of personal space were affected not only by environment but also by perceptions of power relationships. Sommer concluded that the traditional institution reinforced a particular set of cultural assumptions that persuaded patients to behave in certain ways;³⁰ at the same time, it encouraged others to adopt behaviours befitting their professional and cultural identities.

Izumi considered these findings and agreed that proposals for a new therapeutic environment needed to account for both distortions in perception and the corresponding

²⁹ Robert Sommer, "The Distance for Comfortable Conversation: A Further Study," *Sociometry* 25 (1962), 114.

³⁰ See Erving Goffman, *Asylums: Essays on the Social Situation of Mental Patients and Other Inmates* (Garden City, New York: Anchor Books, 1961). Goffman used the term "total institution" to describe the process of institutionalisation and its effects on the behaviour of individuals confined to an institutional environment. *Sommer and Goffman corresponded and it is likely that Sommer learned of this terminology from such correspondence and then used the term in his own work.

effect it had on self-identity. Convinced of the importance of creating architectural designs that embodied these philosophies, Izumi began experimenting with new architectural concepts expressing consideration for the importance of personal space. Central to Izumi's approach was the needs of the patients and, secondly, the goals of the institution. Unlike previous hospital models, Izumi suggested that economics and aesthetics were less important considerations when dealing with patients, because these consumers often had difficulty expressing their desires or regularly felt uncomfortable adapting their environment to their own tastes.

Achieving this empathetic perspective and translating it into design terms presented the largest challenge for Izumi. He suggested that the architect's craft relied on an ability to design according to one's own perceptions, creativity and innovation. To design for patients suffering from disordered perceptions, however, required a different set of priorities.³¹ He described this challenge avowing that:

The architect and artist talk about freedom of expression for themselves, but at the same time we must realize that in architecture, space and the elements in it are also a means of enhancing the emotional experience of other individuals who may or may not perceive this world in sympathy with you, and whose needs are just as important.³²

For institutionalisation to benefit patients, Izumi reasoned that it must balance personal needs with therapeutic objectives. This goal meant removing stimuli that frequently produced feelings of fear or paranoia and incorporating space that encouraged positive social interaction. The central function of the new institution had to involve the development of therapeutic psychic space.

³¹ SAB, A207, Izumi Correspondence, Letter from Izumi to Bruce Koliger, 4 May 1966, p. 2.

³² Kyoshi Izumi, "Some Considerations on the Art of Architecture and Art in Architecture," *The Structurist*, 2 (1961-1962), 46.

The concept of psychic space attempted to codify patients' authority in spatial organisation. During Izumi's first LSD experience he developed an appreciation for this psychic environment. He insisted that the "environment involved your emotional, intellectual, conscious and sub-conscious state which was affected by the 'psychic' qualities of the people."³³ Physical stimuli further affected psychic space. For example,

the acoustical rhythm of the building would be affected by the usual building noise such as the hum of motors, fans, footsteps, typewriters, cleaning equipment...hence a comfortable room was a room that had a rhythm appropriate to its spatial, visual and tactile qualities.³⁴

Encouraged by these observations, Izumi felt equipped to tackle the new design challenge.

Together Osmond, Izumi and Sommer created a new kind of hospital design that emphasised interdisciplinary collaboration along with a desire to prioritise patients' perspectives in the modern therapeutic environment. Izumi defended this goal and considered that "the art of architecture as a technique or form of expression is how well the architect can put together in some order not his own perceptions but the perception of those who are the actual consumers of the environment which he creates to enhance the human experience."³⁵ Izumi further contended that architects must eschew the desire to create art and instead embrace analytical and scientific methods advanced by other professionals. He commented that,

the major hurdle it seems, is inertia and a hesitancy arising out of an unfounded fear of other disciplines usurping, or at least adulterating, the role of the architect and

³³ SAB, A207, Izumi, "LSD and Architectural Design," 6.

³⁴ Ibid., p. 6

³⁵ SAB, A207, Izumi, "LSD and Architectural Design," 17.

the artist. Architect and artist must realise that the added knowledge and insight gained is only to aid them to be more effective with their art.³⁶

Izumi did not express anti-authority or anti-expert ideals, which many other critiques of the asylum were then embracing, but rather he recommended interdisciplinary collaboration with the addition of medical discourse that included consideration for patients' perceptions.³⁷ Indeed, his views on authority merely expanded beyond the role of the professions and he instead recommended an identification of expertise based on first-hand experience.

In an attempt to incorporate these experiential perspectives into the subsequent plans for a new facility, these three men continued to examine the Weyburn hospital to gain a better understanding of the depersonalising effects of institutionalisation. As their research progressed, they began identifying the Weyburn institution as a model of qualities to avoid. Two dominant themes emerged from their collective observations of Weyburn: (1) patients, in general, exhibited a distortion in perception (this distortion seemed particularly acute in, for example, assessments of personal space, social cues for behaviour in a public setting, or “appropriate” public behaviour); and (2) prolonged institutionalisation exacerbated the distorted perception and led to a generalised disculturation (or inability to appreciate social norms).³⁸ If their assumptions were correct—that a disturbance of perception defined mental disorders—then isolation in a

³⁶ Kyoshi Izumi, “Some Considerations on the Art of Architecture and Art in Architecture,” *The Structurist*, 2 (1961-1962), 51.

³⁷ This is part of a broader movement in architecture to incorporate “users,” especially coming out in California. See architects: Chris Alexander, Clare Cooper Marcus, and Galen Cranz. I am grateful to Annmarie Adams for drawing my attention to this movement and providing me with the names of architects involved. See also, Stephen Heathorn, “An English Paradise to Regain? Ebenezer Hoard, the Town and Country Planning Association and English Ruralism,” *Rural History* 11, 1 (2000): 113-128.

³⁸ Humphry Osmond, “Rehabilitation Services Within the Hospital,” *Mental Hospitals* (1958), 45. Disculturation referred to the process of alienation that occurred within the institution that occurred when placing individuals in an environment that did not repair skills needed for socialisation.

large, impersonal institution offered the worst kind of therapeutic environment. Sommer reasoned that an exacerbation in disculturation resulted from prolonged institutionalisation. But, as Izumi explained, care in the urban community caused a similar reaction. Therefore, a different kind of therapeutic environment appealed as the best option. Sommer maintained, “the mentally ill person does not abide by the customs of society because he does not recognise them fully. In other words, people are committed to a mental hospital because they are desocialised.”³⁹ As individuals developed a distorted perception of reality—whether of space, time, or cultural customs—they became candidates for institutionalisation and underwent a further disorientation from their communities; when they needed re-socialisation that remained culturally sensitive to their home destination. Sommer’s continued investigations into the process of disculturation helped to confirm their assumption that a process of desocialisation occurred in tandem with prolonged institutionalisation in isolated settings, which further complicated the course of recovery.⁴⁰

Based on these studies, Izumi, Osmond and Sommer admitted that they did not collectively possess the expertise necessary for planning an alternative therapeutic environment. Rather, institutionalised patients themselves became the most obvious experts on the subject. Communication between doctors and patients, however, presented one of the fundamental obstacles traditionally undermining patients’ expertise, which pointed to a larger set of unresolved issues in psychiatry. In their own review of patients’ perspectives, Sommer and Osmond discovered a high level of misunderstanding between

³⁹ Humphry Osmond, “Rehabilitation Services Within the Hospital,” 45. See also Robert Sommer, “Letter-Writing in a Mental Hospital,” *American Journal of Psychiatry* 115, 6 (1958): 514-517.

⁴⁰ See Erving Goffman, *Asylums: Essays on the Social Situation of Mental Patients and Other Inmates* (Garden City, New York: Anchor Books, 1961).

psychiatrists and patients about issues such as treatment and comfortable space. For example, decorating the hospital for a festive occasion, such as a Christmas party, exposed particularly frightening stimuli for someone experiencing hallucinations.⁴¹ Psychiatrists needed a much more comprehensive understanding about how patients experienced their illness *and* their environment before making recommendations tampering with either. Psychiatrists could observe behaviour that they might subsequently categorise as disorganised, while patients might feel that the same behaviour was logical. Osmond concluded that “the patients lack neither goals nor reason: in case after case what has gone awry is perception.”⁴² Although Osmond did not subscribe to anti-psychiatry perspectives, his comments here superficially reveal sentiments that question the legitimacy of psychiatric expertise. Disorder to the observer had more to do with his or her frame of reference than any objective reading of the situation. From a patient’s perspective, behaviour that might otherwise be categorised as dysfunctional, might suit the situation completely. The locus of dysfunction, therefore, lay in the experience of perception.

Recreating the sensation of disordered perceptions for normals convinced people such as Osmond that even during the temporary drug-induced state, participation in culturally-acceptable behaviour became impossible. Before pronouncing new treatments or constructing new hospitals then, Osmond felt that individuals should experience the mitigating influence of LSD on an individual’s capacity to behave appropriately. One of the mental health administrators, intrigued by Osmond’s research program, volunteered

⁴¹ Sommer and Osmond, “Autobiographies of Former Mental Patients,” 660.

⁴² Ibid., p. 659.

for an LSD experience in conjunction with discussions over the new mental health facility. He claimed that:

the room seemed in a peculiar shape with the corners somewhat rounded, the doors at peculiar angles. The far wall seemed lower and the other walls seemed to converge on it. Somewhat later the people with me seemed to acquire auras of somewhat bluish tinge. Their faces and bodies were somewhat distorted. I thought that this was quite funny but considered it impolite to laugh.⁴³

As the above statement illustrates, the LSD reaction noticeably altered visual perceptions, but this administrator also identified distortions in mood and cognition patterns.

Figure 15

Similarly, Izumi's LSD experience provided him with what he believed were insights into the ways that institutionalised patients described their environment. His report on the experience compared his own observations of the LSD reaction with anonymous patients' descriptions of various institutional environments.⁴⁴ For example, Izumi's experience confirmed a patient's account of "how a room 'leaked' and this related to perceiving your body become a very geletenianous (sic) and fluid form and 'seeing' yourself flow and ooze out through cracks and other openings that are distinct from the accepted openings such as doors and windows."⁴⁵ Further observations revealed the relationship between psycho-social behaviour and stimuli, such as colours, tile arrangements, mirrors, room designs, and hallways. Beige, for example, was a common colour for institutional walls, but patients commented that it produced feelings of

⁴³ SAB, A207, II.A.3, I.J. Kahan, "LSD Report," 27 July 1957, 1.

⁴⁴ Patients in this study were referred to Izumi from the local institution in Weyburn, and from the research hospital in Saskatoon (under the direction of Dr. Osmond and Dr. Hoffer)

⁴⁵ SAB, A207, K. Izumi, "LSD and Architectural Design," 6.

“immobilisation.”⁴⁶ By combining his own observations with these descriptions, such findings became critical for Izumi’s future designs.

Although it is difficult to assess the degree to which patients participated in these studies, several reports include their first-hand descriptions. One patient with schizophrenia complained about the desire for additional space to feel comfortable. He explained to Izumi that he needed “social and emotional freedoms to co-ordinate the body to the environment in a manner which protects freedom to make decisions without interference.”⁴⁷ This patient continued by suggesting that other people may see the schizophrenic patient as simply fast or slow, ambitious or lazy, but explained that his behavioural reactions related to his comfort level in the decision-making process, which he related to finding safe space.⁴⁸ Izumi regarded this situation as an illustrative example of the psychic space concept, in which the provision and construction of suitable space directly depended upon the psychological state of the consumer.

The Socio-petal Design

Based on these multi-layered and interdisciplinary principles, Izumi and Osmond proposed a radical socio-petal plan for the new Yorkton Psychiatric Hospital. The novel architectural design encapsulated a spatial organisation that encouraged therapy through the utilisation of psychic space. The original plans included a building represented by a partial circle connected by a rectangular segment (which housed the nursing and administration sections of the facility). According to this design, the patients lived in the

⁴⁶ Ibid., p. 6

⁴⁷ Ibid., p. 7

⁴⁸ Ibid., p. 7.

circular section in private rooms that opened incrementally into larger spaces, while at the same time providing divisions that facilitated a retreat into private spaces.

The circular design provided private spaces for patients along the perimeter of the building and expanded space for social contact as one moved towards the centre. The extra barriers or buffers created unambiguous divisions in the hospital allowing for an unobtrusive entrance into a room or, similarly, an escape into privacy. The main entrance also incorporated this approach. The architect avoided long corridors that, according to patients and LSD subjects, echoed and reinforced feelings of paranoia and depersonalisation. In an attempt to avoid feelings of surveillance, the socio-petal arrangement designated spaces for nursing staff, visitors, and regular hospital staff in clearly demarcated areas that did not infringe on the privacy of patients. Izumi and Osmond conceived this design as a way to address patients' needs for different kinds of psychic space and ultimately for facilitating the development of therapeutic social relationships.⁴⁹

The interior materials of the institution reflected a desire to reduce perceptual ambiguity and create a setting that allowed for regular social contact. This principle, in turn, helped patients (re)build social relationships as a necessary precursor for living outside the institution. For example, Sommer paid close attention to floor tile designs with respect to appropriate colouring, texture, and arrangement. He carefully chose patterns that cultivated a sense of security in a home-like environment. He was, however,

⁴⁹ CAMH Archives, C. Pleasance File, "An Analysis for the Design of Hospital Quarters," (1955), "Some Architectural Considerations" and Kyoshi Izumi, "Explanation of Socio-Petal Building Design," unpublished, no date.

careful to avoid arrangements involving solid lines, which might suggest barriers.⁵⁰ Floor tiles in the common rooms mapped out seating arrangements in small groups, encouraging face-to-face contact; these arrangements drew directly from Sommer's experiments. Seating arrangements⁵¹ in common rooms received additional attention in an effort to maximise the likelihood for social contact.

Izumi added that the new institution should eliminate ambiguous spaces and features. In particular, he recommended avoiding invisibly suspended signs, clocks or other items that appeared to float. Where many architects desired these kinds of illusory effects, Izumi's LSD experiences convinced him those effects made patients uncomfortable.⁵² He remained careful, however, to avoid simply recreating a stark clinical environment reminiscent of a more traditional setting. In an effort to disrupt this trend, Izumi carefully chose interior details that reminded patients of a home-like environment. For example, he included individual items such as clocks, lights, or artwork that helped distinguish rooms from one another as well as reinforcing the idea that these items demarcated personal spaces. While personal items helped define private and common space, other design principles applied more generally. He avoided using grainy wood panelling after considering the frightening effects it could have for someone experiencing hallucinations. He also took extra care ensuring that colours clearly marked spatial separations to reduce the inclusion of ambiguous characteristics, which demonstrated artistic flare but confused consumers. Windows had dark coloured frames

⁵⁰ Robert Sommer, "Floor Designs Can be Therapeutic," *Hospitals* 34 (1960): 54-56.

⁵¹ Although the seating arrangements were not fixed, Sommer found that patients rarely rearranged the seating arrangements in common rooms.

⁵² SAB, A207, Kyoshi Izumi, draft "The Design of Facilities for the Mentally Ill: Yorkton Psychiatric Centre," 21 May 1964, 3.

to clearly outline the separation between glass and wall. Closets stood out from the walls, avoiding the illusion that there may be a hole in the wall. They ordered lower beds, aimed at situating patients at a more comfortable level, allowing them close contact with the floor to prevent the frightening feeling of being suspended or falling.⁵³

In 1957, seven years before these designs came to (partial) fruition in the Yorkton Psychiatric Centre, Izumi and Osmond proposed the socio-petal concept along with some of the detailed designs at a mental health and architectural conference in Toronto. Based on published responses and correspondence, reactions to the design were generally favourable. Although some individuals demonstrated a concern for professional ethics involved in designing such an institution (such as taking drugs as part of the planning), or architectural capabilities (such as designing appropriate plumbing and heating arrangements for the round building), most reports suggested support in principle. The journal *Mental Hospitals* devoted a special section to a discussion of the socio-petal building and invited hospital superintendents, architects, and doctors to comment. Responses from psychiatrists ranged from dismissing the concept as “fanciful” to lauding it as “a fresh breeze of new thinking.”⁵⁴ Many applauded the desire to devise collaborative teams to analyse institutionalisation with a sophisticated mixture of expertise. Architects remained somewhat less enthusiastic. Although other round buildings existed, many architects pointed out that the circular structure presented

⁵³ F.S. Lawson, “Saskatchewan’s First Regional Mental Health Facility: The Yorkton Psychiatric Centre,” and Kyoshi Izumi, “Special Considerations of Design,” in *Mental Hospitals* (1957): 19-23. Hospital beds were frequently raised in modern hospital settings to reduce the strain to nurses and attendants associated with lifting and transporting patients.

⁵⁴ “Sociopetal Building Arouses Controversy,” *Mental Hospitals* (1957): Architectural Supplement: 25-6.

significant challenges.⁵⁵ The anticipated costs involved in building the socio-petal building exceeded budgets for public institutions. No consensus emerged, but Osmond and Izumi weathered the reception favourably and enthusiastically returned to Saskatchewan and faced the next set of negotiations.

In Saskatchewan, the CCF government remained focused on implementing the Saskatchewan Plan, which integrated psychiatric services into general medicine and otherwise followed Sigerist's advice for establishing health districts. The provincial director, F.S. Lawson, explained that comprehensive services in circumscribed districts remained the primary objective behind the plan, "thus ensuring continuity of care in and outside hospital (sic) by making the services easily accessible to the community."⁵⁶ By providing integrated health services, including access to physicians, nurses, social workers, psychologists and others, in carefully chosen districts throughout the province, Saskatchewan residents enjoyed access to services in their communities where previously they had to travel to Saskatoon or Regina.⁵⁷ Additionally, by spreading interdisciplinary services throughout the community, health care options became more readily accessible and helped reinforce the concept of the community itself as a therapeutic environment.

⁵⁵ This was certainly not the first round building proposal, but the "socio-petal concept" was new. For examinations of other round buildings see: Annmarie Adams *Designing Women: Gender and the Architectural Profession* (University of Toronto Press, 2000) (see cover and section on Janet MacTavish); Lindsay Prior, "The Local Space of Medical Discourse: Disease, Illness and Hospital Architecture," in *The Social Construction of Illness: Illness and Medical Knowledge in Past and Present* (eds) Jens Lachmund and Gunnar Stollberg, 69 (Franz Steiner Verlag Stuttgart, 1992); and, Norman Johnston, *Eastern State Penitentiary: Crucible of Good Intentions* (Philadelphia: Philadelphia Museum of Art for the Eastern State Penitentiary Task Force of the Preservation Coalition of Greater Philadelphia, 1994).

⁵⁶ SAB, R45 80(-4), "Psychiatric Services Miscellaneous Correspondence," Report: The Saskatchewan Plan, no date.

⁵⁷ See, SAB, A207, III. 53, "Canadian Psychiatric Association," 'Brief to S.H. Frazier on Saskatchewan's Psychiatric Care Program,' c. 1970, 1; and F.S. Lawson, "The Saskatchewan Plan" (no date) copy of proposal given at Eighth Mental Hospital Institute in Denver. (c. 1957)

The plan responded to the World Health Organisation's recommendation pronounced in 1950⁵⁸, to develop small regional mental health centres replacing the older custodial asylums.⁵⁹ The Saskatchewan Plan also operated in concert with Sigerist's recommendations for establishing socialised medicine, in which he proposed the establishment of health districts to underscore the value of defining services within the community. As an integral component of this comprehensive system, psychiatric services became part of the CCF's initiative for developing universal health care insurance.

In 1957, the same year that the Psychiatric Services Branch officially launched The Saskatchewan Plan, the provincial government accepted the Osmond-Izumi proposal in principle and began lobbying the federal government for funding for a new mental health facility. Premier Tommy Douglas supported the overall plan, but hesitated on its implementation while he entered into negotiations with the federal government over cost-sharing measures for health care more generally.⁶⁰ For Douglas, including patients with mental illnesses, as well as tuberculosis, in the national program carried social benefits in addition to the medical advantages. On one hand the inclusion of these patients in a national program helped address issues of stigma associated with both illnesses. On the other hand, strong representation on the issue of combining psychiatric and general health added weight to Douglas' insistence on a health system that covered both mental and

⁵⁸ "The Community Mental Hospital," Third Report of the World Health Organization Expert on Community Mental Hospitals, September 1953.

⁵⁹ SAB, A207, III. 53, "Canadian Psychiatric Association," 'Brief to S.H. Frazier on Saskatchewan's Psychiatric Care Program,' c. 1970, 1.

⁶⁰ SAB, R45, (14-26), Letter from T.C. Douglas to M.P. Toombs (President, SK Division, Canadian Mental Health Association), 21 October 1957.

physical health equally. Moreover, locating psychiatric services within the general hospitals significantly reduced the cost of maintaining separate psychiatric institutions.

Before the provincial and federal governments reached a settlement on cost-sharing arrangements, the Saskatchewan government went ahead with its own plans for changing health policy. In 1961, the province introduced a new Mental Health Act, outlining legal changes to the definition of mental illness that placed it on equal footing with physical illness. In particular, the new act addressed admission requirements for patients with mental disorders, making admission to an asylum for anyone over the age of twenty-one comparable to admission to a general hospital.⁶¹ Previously, the Mental Hygiene Act governed admissions to Saskatchewan's mental hospitals and required a court order from a local magistrate. In 1950, the government relaxed this regulation, insisting on signatures from two physicians in place of a magistrate's court order. The 1961 Act further opened the process by permitting voluntary admission, while retaining original measures for compulsory confinement in cases where the individual presented a threat to herself or others. The new act, similarly applied voluntary options to the discharge process. Finally, the Act changed the language of mental health to formally remove connotations of criminality associated with admission to a mental hospital; "mental disorder" replaced an older generation of terms.⁶² Although physicians and psychiatrists in Saskatchewan did not unanimously accept the new Mental Health Act, it

⁶¹ "New Mental Health Act for Saskatchewan," *Canada's Mental Health* (1961), 4. Individuals under the age of 21 required consent from their nearest relative.

⁶² *Ibid.*, p. 4-6.

nonetheless reflected the desire to confront mental health policy as part of the political reform agenda.⁶³

Figure 16

The Yorkton Psychiatric Centre, embodied psychedelic principles, but ultimately its completion in 1964 made it a relic of an earlier era before it even opened its doors. In the end, Osmond, Izumi and Sommer failed to attract support for their socio-petal design. Political pressures coupled with Osmond's departure to the United States in 1961 and concerns that national building codes restricted the circular design, led to the erection of a more conservative rectangular design. The final figure incorporated some of the interior design concepts; Izumi nonetheless felt that the Yorkton Psychiatric Centre failed to embrace the new principles developed through experimentation with LSD and instead succumbed to desires for efficiency and technology.

Despite Izumi's frustration with the overall product, the Yorkton Psychiatric Centre captured the attention of patients, staff, and popular magazines that regarded the new facility as a modern departure from contemporary hospital environments. Izumi pressed the new government for a follow-up study evaluating the facility, but his requests remained unfulfilled.⁶⁴ Informal observations, nonetheless, satisfied his curiosity. In a comparison of patient activities in the Yorkton Psychiatric Centre, the Weyburn mental hospital, and the University Hospital in Saskatoon, nurses reported that patients at the Yorkton site seemed more relaxed and engaged in activities in the common spaces

⁶³ SAB, R45 80(9-4), "Psychiatric Services Miscellaneous Correspondence," 'Report of the SubCommittee of the Saskatchewan Psychiatric Association, concerning "Social Action Committee Position Paper on the Mental Health Act" of Mental Health/Saskatchewan, no date.

⁶⁴ SAB, R45 3-18(e) S.S.H.C; Letter from Izumi to Director of Research (The Foundation for Mind Research), New York, 1968

regularly. A patient, who stayed at both the Munroe Wing at the Regina General hospital and at the Yorkton Psychiatry Centre, wrote about her experiences in a letter to the Health Minister. She explained, “the atmosphere at Yorkton Mental Clinic is a complete contrast to Munroe Wing. I would recommend that you check the two clinics and see if certain modern trends couldn’t be introduced in Regina.”⁶⁵ The anecdotal recollections, even if atypical, concentrated on impressions or feelings about the atmosphere of the facility, which suggested that the new design retained some of its central principles.

Izumi’s visits to the Yorkton facility showed him that patients did not take notice of individuals as they entered common social spaces, making it easier for individuals to initiate contact or occupy social space without feeling that they were under surveillance. Izumi commented that:

the points of entry are not as visually defined as the centred doors into the day rooms at the Saskatchewan Hospital, Weyburn. The surrounding architectural details and colour tends to negate the human figure however bizarre his shirt or dress pattern may be, and yet I think one does not feel subservient to the environment.⁶⁶

This feature particularly interested him, because one of his goals was to create a design that facilitated unimpeded movement in the hospital as a precursor for social contact. Izumi learned that staff also enjoyed benefits from the new environmental designs.

The comments by both staff and patients who have experienced other kinds of institutional environment such as North Battleford and Weyburn, the older psychiatric hospitals in the province, are that Yorkton is much more comfortable and patients are much more relaxed. A visiting staff member commented that ‘it was much easier to be kinder in the Yorkton Center’. In short, what I felt that they meant was that the Yorkton

⁶⁵ SAB, R45 80(904), “Psychiatric Services Miscellaneous Correspondence,” Letter from Marjorie Dybvig to Minister Steuart, 24 May 1966.

⁶⁶ SAB, A207, Izumi, Arnott, and Sugiyama, letter from Izumi to Osmond, November 19, 1964. Refers to “People are Watching Me,” paper. [no author indicated]

environment was much more conducive to their own well-being which in turn reflected upon their attitude and treatment of the patients.⁶⁷

The *Globe and Mail* commented on the significance of Izumi's design efforts for mental health care.⁶⁸ A report in the *Calgary Herald* expressed the views of a nurse who claimed that the Yorkton Psychiatric Centre created an environment that overcame the depressed and spirit-numbing mood often found on the ward by focusing on the individual.⁶⁹

International newspapers applauded the success of the Yorkton Psychiatric Centre for its third way between the traditional asylum and outright deinstitutionalisation. An editorial in the British periodical *The Observer* referred to the facility as a sterling example of Canada's more prestigious mental health treatment centres. This article explained that the Saskatchewan hospital "operates on the philosophy that the majority of the mentally ill can be cared for and treated on the same basis as the physically ill, and has been rated by the American Psychiatric Association as one of the finest of its kind in North America."⁷⁰ The Yorkton facility also inspired other jurisdictions to design similar institutions.⁷¹ Izumi argued, however, that other attempts proved unsuccessful because they ignored the fundamental design philosophy, which involved an earnest concentration on the individual [patient] and their needs for re-culturalisation. Only through sustained research and consideration for the socio-cultural environment, did Yorkton emerge as modestly successful.

⁶⁷ SAB, A207, Izumi Correspondence, Letter from Izumi to Dr. R.E.L. Masters, July 31, 1968, 1-2.

⁶⁸ "'Madness' Drug Helps Architect," *Globe and Mail*, 10 May 1965, p. 10.

⁶⁹ "And then there's Yorkton—a Giant Step Forward," *Calgary Herald*, 2 February 1968, (no page number)

⁷⁰ G. Tori Salter, "Inside Our Mental Hospitals," *The Observer* July (1969), 14.

⁷¹ Other attempts included: Pennsylvania State Hospital in Haverford, the psychiatric wing of Sibley Memorial Hospital in Washington, Fort Logan Hospital in Denver and the Prince Albert Hospital in Saskatchewan; "'Madness' Drug Helps Architect," *Globe and Mail*, 10 May 1965, p. 10.

When it opened in 1964, the Yorkton Psychiatric Centre largely functioned as an out-patient clinic, which relied increasingly on distributing anti-psychotic medications to patients in the community. Elsewhere in North America, the rise of psychotropic medications facilitated such approaches by reducing the symptoms experienced by some patients. As a result, a trans-national trend toward deinstitutionalisation emerged. Osmond, Izumi, and Sommer were overtaken by technological advances: psychopharmacological therapies seemed poised to remove the need for most institutional care altogether. This transformation in psychiatric treatment also presented new challenges for governments, patients and health professionals.

The lack of a coordinated set of community services made it impossible to evaluate the degree to which the Yorkton facility operated as a therapeutic environment, according to its original principles. One letter to the Minister of Health complained that the changes to mental health programs made it more difficult to have someone admitted to a hospital, in light of the increasing emphasis on out-patient services.⁷² Another patient's letter to the minister illustrated the compounding problems associated with drug compliance. She explained that,

I took pills as long as I was in the Mental Clinic and as soon as I was discharged there was no arrangement made to have me continue taking the pills or have periodic check-ups so the second period of hospitalisation was in 1964...The police brought me to the Clinic and put handcuffs on me in spite of the fact that I reassured them I only wanted to sleep and there was no need to do it. ...I am presently taking pills every day as well as having the monthly checkups. The pills cost \$16.35 every month.⁷³

⁷² SAB, R45 80(9-4), "Psychiatric Services Miscellaneous Correspondence," Letter from A. Dybvig (constituent) to David Steuart, 31 July 1966.

⁷³ SAB, R45 80(904), "Psychiatric Services Miscellaneous Correspondence," Marjorie Dybvig (Foam Lake) to Minister Steuart, 7 March 1966.

The situation described by this patient illustrated a system that exacerbated the pre-existing weaknesses deplored by Osmond. Rather than improve communication between professionals and patients, according to Osmond, the desire to embrace a politically expedient solution further moved away from progressive measures.

As Carla Yanni suggests, debates concerning the architectural plans for asylums revealed a complicated set of relationships that influenced the eventual designs.⁷⁴ The concerns surrounding the socio-petal concept illustrated the ways in which medical and patient expertise combined to propose a new kind of mental health facility. The Yorkton case also illustrates that neither medical theories nor professional aspirations dominated discussions of the therapeutic environment. Rather, a combination of experiences from patients and health-care professionals contributed to the formulation of the Yorkton Psychiatric Centre. The construction of the Yorkton facility, in some ways, represented a monument to the psychedelic psychiatry practiced in the region. Although the final structure did not ultimately adhere to the original plans, drastic changes in attitudes towards LSD surfaced on the horizon and extinguished any remaining enthusiasm for psychedelic psychiatry by the mid-1960s.

In the late 1950s the CCF government inched closer towards implementing its version of socialised medicine. Decisions regarding the place of mental health services in the new system politicised psychiatric research in the province. Izumi's LSD-inspired recommendations for an alternative institutional model incorporated a delicate mixture of reform-minded and psychedelic perspectives, both of which remained intensely political.

⁷⁴ Carla Yanni, "The Linear Plan for Insane Asylums in the United States before 1866," *Journal of the Society of Architectural Historians* 62, 1 (2003): 24-49.

By 1964, when designs for a new institution finally came to fruition at Yorkton, in the province's southeast corner, the consequences of the political climate became even clearer.

The fatal challenge levied at psychedelic psychiatry occurred at the end of the 1960s amidst an eruption of moral panic over LSD abuse. During most of the psychedelic experimentation in Saskatchewan, access to LSD for medical research remained relatively innocuous. Few reports appeared in the news media about the drug, whether concentrating on its contribution to medical research or its intrigue for recreational thrill-seekers. This situation began to change in the early 1960s. By mid-decade, popularised images of LSD associated the drug with counter-culture movements, threatening behaviour, and dangerous activities. Governments throughout North America inquired into its use and began enacting legislation banning the substance; these measures also altered the terrain for medical experimentation in general. Opponents of LSD research now seized upon the growing allegations that recreational LSD use created health risks. Chapter five explores this period of increasing public concern over the use and abuse of LSD.

Chapter Five: Acid Panic

In October 1967, Pierre Berton hosted a CBC television program entitled “Under Attack,” which featured Abram Hoffer, Beatnik poet Allen Ginsberg, and (by then) LSD guru Timothy Leary in a debate over the future of LSD.¹ Much to the network’s chagrin, these three individuals concurred on several points, making the program less of a debate and more of a convivial discussion. According to a newspaper article printed after the program, CBC researchers assigned to the episode had assumed that Hoffer, as a leading medical expert on psychedelics, opposed their use. The resultant program created the unfortunate effect of implying that the publicly-funded CBC endorsed LSD use. Senator Gunner Thorvaldson expressed his frustration with what he identified as the television network’s irresponsible promotion of LSD. He complained in the Senate that:

practically without exception the drug is declared to be dangerous and, in fact, a terrible menace, especially in the case of young people seeking thrills. Amazingly, however, as is always the case, some persons appear to champion its use; and in Canada what is to be most deplored is the sensational and ghoulish character of recent CBC television broadcasts regarding LSD.²

A few weeks after the airing of the CBC program the network followed up with a one-hour special program outlining the dangers of LSD.³

Reactions to the Pierre Berton program seemed to typify concerns that television programs, regardless of their stated intentions, titillated viewers and encouraged recreational LSD use. In November 1966 *The Globe and Mail* reported that Hollywood

¹ McMaster University Archives, Pierre Berton papers, Box 386, envelopes 50, 63, 76; 1967 “Under Attack,” subject: LSD.

² Gunner S. Thorvaldson. Debates of the Senate of Canada. Session 1966-1967, Volume II. Food and Drugs Act: “Bill to Amend—Second Reading,” 1821.

³ Allan Kamin, “TV’ing (or—is a prune a vegetable?), *Varsity*, 29 September 1967.

actress Pam Hyatt would take LSD on the CTV investigative journalism program W5.⁴

This kind of televised exposure to LSD added to the growing publicity surrounding the drug and worried government authorities that the drug problem was spiralling out of control. Political opinion initially remained divided on whether these news programs accurately depicted the dangers of the drug (thereby acting as a deterrence) or further peaked the curiosity of viewers (thus inciting experimentation). After watching a television documentary about LSD on CBC's prime time program "Seven Days," one Member of Parliament declared in the House of Commons that he "came to the conclusion that [he] just didn't have the guts enough to try LSD."⁵ In contrast, Canada's federal opposition leader, John Diefenbaker, lambasted the Canadian television networks, arguing that prime time programs on LSD only encouraged recreational experimentation.⁶ Increased publicity inspired public debates over LSD use in medical and non-medical contexts.

As the political debates reflected, by the mid-1960s the image of LSD had changed dramatically. Stories of LSD abuse surfaced in newspapers, blaming (in part) psychedelic psychiatrists for creating an atmosphere that condoned recreational drug experimentation. Rumours of LSD's capacity to produce euphoric experiences engrossed drug users and encouraged a black market production of the drug. Recipes for homemade versions of "acid"⁷ became available through underground sources.

⁴ "LSD for ratings," *Globe and Mail*, 11 November 1966, p. 33.

⁵ Canada. Debates of the House of Commons. 11 July 1966, Mr. Peters, p. 7511.

⁶ "Marijuana, LSD on W5 censured by Diefenbaker," *Globe and Mail*, 14 February 1967, p. 12.

⁷ The term acid, short for d-lysergic acid diethylamide, appeared with greater regularity during this period. Medical investigators did not often use the term acid to describe the drug used in clinical trials, as it often referred to black market versions of the drug and, as discussed later in this chapter, several clinicians remained suspicious as to whether or not acid even resembled LSD in chemical content. I will not continue

Subterranean manufacturers supposedly distributed the colourless, odourless product with minimal risk of detection. Acid appealed, in particular, to some college students who were bound together by ideals antithetical to those of their parents' generation. The ill-defined, and often all encompassing youth counter culture co-opted psychedelic drug use as part of its self-conscious attempt to define itself.

Throughout the latter half of the 1960s, politicians questioned psychiatrists' experimentation with a substance increasingly associated in the public view with recreational drug use. Political criticisms superseded the methodological ones that dogged the early days of LSD research as psychedelic drug use became re-politicised in a popular context. In particular, Hoffer and Osmond's colleagues attacked their personal consumption of psychedelic drugs. Opponents pointed to their individual drug use as evidence that psychedelic research operated in a fringe environment outside the realm of accepted medico-scientific research.

While psychedelic psychiatry continued to develop in Saskatchewan, its support began thinning. In 1961 Humphry Osmond left the region. After spending a brief period in England he took up a new position in Princeton, New Jersey, which placed him in the midst of the moral panic over LSD use in the United States. He maintained regular contact with his colleagues in Saskatchewan, who through association, became embroiled in the political battles over LSD use in the United States. Canadian politicians were similarly influenced by American activities that seemed to disproportionately shape attitudes towards LSD use in North America.

to use quotation marks to indicate the problematic use of this word, but use the term acid deliberately to emphasise the non-medical use of the drug.

In the early 1960s Saskatchewan began losing professionals as regularly as they had arrived in the 1950s. This brain drain signified a sense of exhaustion with medical experimentation in the region. Hoffer lamented that:

It is the hemorrhage of our scientific personnel which may weaken us for many decades...our basic problem is one of attitude. Canadians seem indifferent to the enormous power in research for either good or evil. It is considered a plaything of a few peculiar professors or a few physicians who have not enough guts to compete in the practice of medicine....The more imaginative and progressive scientists are leaving for USA where they find better opportunity, more appreciation and more money.⁸

Hoffer's complaints display his growing frustration the loss of momentum for LSD research in Saskatchewan, which he attributes, in part, to the departure of scientists from the province.

As concerns over LSD use expanded into an international context, support for its clinical use in Saskatchewan steadily declined. This resulted, in part, as individuals such as Osmond left the region. Additionally, in 1961 Saskatchewan's premier, Tommy Douglas, resigned to lead social democrats at the national level. His personal commitment to mental health research had buoyed support for Hoffer and Osmond's work in the province throughout the 1950s. The new provincial premier, Woodrow Lloyd, did not share Douglas' personal interest in psychiatric research. The shift in local support made psychedelic psychiatry more susceptible to criticisms, both those from within the profession and those emanating out of the moral panic over recreational drug use among North American youth.

By 1966, stories about LSD use on college campuses generated an image of the drug that associated its use with revolutionary ideas and the emergent North American

⁸SAB, A207, II. David Orlikow, correspondence, Letter from A. Hoffer to David Orlikow, 22 May 1964.

counter culture. An analysis of LSD reportage in the news media illustrates this popular image and the subsequent re-politicisation of LSD as a dangerous recreational drug. New versions of psychedelics also came on the scene at this time; acid referred to a variety of chemical substances that resembled LSD in content and effect. The growth of a black market in acid contributed to the negative image of LSD. Although North Americans increasingly accepted the role of (prescription and state-regulated) drugs in health care, media headlines describing the dangers of acid significantly altered attitudes about LSD. In a few years, the media transformed LSD from a useful medical innovation to a dangerous, criminal substance.

The hysteria over LSD use in the 1960s constituted what sociologists have termed a moral panic. Since the 1970s, researchers have defined the cultural phenomenon of moral panics and analysed their key components, among them, a shifting context of authority. Stanley Cohen published the first, and most often cited, examination of moral panics.⁹ In his 1972 book, *Folk Devils and Moral Panics*, Cohen defined the term in the context of 1960s British youth culture. He described how the 1960s youth values in Britain resulted from the sustained attention that this generation received from its parents. The parents of the post-World War II children had grown up amidst two world wars. National and familial sacrifices deeply affected their collective experiences and curtailed any indulgence offered by the innocence of childhood and adolescence. By contrast, their children, who became the youth of the 1960s, enjoyed an extended period of

⁹ Kenneth Thompson, *Moral Panics* (London: Routledge, 1998), 7. Thompson points out that Jock Young was actually the first to use the term moral panic but that Cohen developed the sociological theories underpinning its subsequent use.

childhood and adolescence in a post-war period of relative affluence and security.¹⁰

These numerically powerful baby-boomers also had greater access to financial resources, which gave rise to an identifiable youth culture with its own consumable products, fashions, and music.

Cohen maintained that this group of 1960s youth did not rebel against their parents, but rather embraced a collective identity that had resulted from their parents' coddling. Because they grew up in dramatically different cultural contexts, the two generations invariably held different social and moral values. Indeed, the 1960s youth, as products of a post-war concentration on family values, generated a distinct cultural outlook.¹¹ Rather than celebrate the cultural byproducts of a relatively affluent upbringing, the two factions engaged in a conflict superficially divided along generational lines.¹² Stereotypes about youth activities and the political messages purportedly embroidered in their dress, music, and art fuelled a moral panic that associated youth with rebelliousness; the youth had been turned into what Cohen called "folk devils."¹³

Cohen's groundbreaking and influential study pointed to the dichotomies produced by moral panics—us versus them, right versus wrong, youth versus adult—and showed how these situations relied upon exaggerated and unrealistic generalisations. Subsequent scholars have regularly started with Cohen's premise and investigated the

¹⁰ Elaine Tyler May, *Homeward Bound: American Families in the Cold War Era* (New York: Basic Books, 1988). Tyler May argues that the 1950s domestic culture was an aberration from the status quo, rather than a return to normalcy.

¹¹ Stanley Cohen, *Folk Devils and Moral Panics: The Creation of the Mods and Rockers* (Oxford: Martin Robertson, 1972), 196.

¹² Readily absent are interpretations of this period through the lenses of race, class, ethnicity, or gender. Nonetheless, it is not my intention to examine the truth of these images, but rather to understand how LSD fit into stereotypes in this period.

¹³ Stanley Cohen, *Folk Devils and Moral Panics*, *passim*.

motivating factors that led to these social divisions. For example, Stuart Hall explained how the media and politicians worked together to produce moral panics, which consequently gave the state a legitimate reason to intervene in moral decisions for its citizenry. In short, he suggested, that the state authorities (here defined by politicians and police with the aid of the media) benefited from moral panics and exploited these crises to assert their authority.¹⁴

American scholars Erich Goode and Nachman Ben-Yehuda were more reluctant to endorse the idea that specific factions in society produce moral panics in an effort to redress lines of authority. In their study of moral panics over drug use in the United States they concluded that, although these historical moments produced dichotomous social divisions, moral panics resulted from a constellation of factors that could not be explained by a single theory or actor.¹⁵ Instead, moral panics defied explanation as a logical sequence of events or as the product of a particular set of interests. According to Goode and Ben-Yehuda, moral panics required examination within their proper historical and regional context to deflate the notion that dominant economic or social groups manipulated these events. Instead, episodes of panic represented a culmination of fears over social changes with complex origins.

Philip Jenkins, however, undermined the idea that moral panics had complex origins, and instead focused his attention on the role of the media in manufacturing cultural hysteria. He agreed with Stuart Hall that exaggerated and unrealistic claims lay at the heart of moral panics. He differed, though, in his assessment of the motivating

¹⁴ Stuart Hall, *Policing the Crisis: Mugging, the State, Law and Order* (London: Macmillan Press, 1978).

¹⁵ Erich Goode and Nachman Ben-Yehuda, *Moral Panics: The Social Construction of Deviance* (Oxford: Blackwell, 1994), 19.

factors. By focusing on moral panic over the use of the popular club drug Ecstasy, Jenkins highlighted the importance of studying drug users in an effort to understand why certain drugs seemed to antagonise authorities whereas other drugs, although abused, appeared more socially acceptable. The moral panic over Ecstasy, he argued, emerged as a foil for more straightforward and insidious commercial objectives, aimed at protecting certain classes of drug users. He explained that,

Prozac becomes a vast commercial success, while another, nicknamed Ecstasy, is laden with sanctions just as severe as those surrounding heroin, though there is little evidence that Ecstasy is any more or less harmful than Prozac. One drug is banned because it is associated with some stigmatised ethnic or racial group, while another is tolerated, either because it is used and accepted by a social elite or because it becomes a profitable commodity for mainstream business.¹⁶

Moral panics over drugs, Jenkins maintained, were constructed with clear intentions. In this example, he identified both corporate and class motivations for fuelling fears and acceptance of drugs. Contrary to Goode and Ben-Yehuda, Jenkins ascribed agency to the corporate agenda, suggesting that moral panics arose from conscious commercial decisions. His approach demonstrated an absence of competing authorities—including medical—even in the marketing of medical products.

Adding further support to the analysis of moral panics as a product of media exploitation, Chas Critcher argued that the nexus of moral panics lay in media-generated images that both drive public fears and cloud commercial interests. He maintained that

¹⁶ Philip Jenkins, *Synthetic Panics: The Symbolic Politics of Designer Drugs* (New York: New York University Press, 1999), 3. In a similar vein Reeves and Campbell investigate the moral panic over cocaine in the 1980s arguing that it did not reflect a true increase in use, but rather revealed its shift from a 'glamour' drug to a middle-class drug. They also contend that the cocaine panic had more to do with strengthening the political mite of the New Right under Reagan, validating public policy moves that reduced spending in social services. And, finally, they demonstrate how drug scares are economically lucrative for the pharmaceutical industry and associated health services treating drug addicts. See: Jimmie Reeves and Richard Campbell, *Cracked Coverage: Television News, The Anti-Cocaine Crusade, and the Reagan Legacy* (Durham: Duke University Press, 1994).

an analysis of these cultural phenomena must not separate the escalation of panic from an analysis of the media. According to Critcher, the moral panics relied on “claims-makers” to establish the public disquiet; “these could be authorities, police, politicians, media, agencies, activists—but must operate in the public arena.”¹⁷ The public exposure feeds a panic, contributing to a spreading image of a pervasive, infectious, perhaps even undefined, threat. While Critcher did not suggest that the media attention created panic independently, he also acknowledged that the atmosphere of authority and risk remained highly contested during these moments.¹⁸ Medical authority, for example, might have played a decisive role in some panics whereas political or commercial authorities assumed command over others; but the media always constituted a mediating factor.

The moral panic generated by LSD use in the late 1960s shifted the context of medical authority over psychedelic drug use. These drugs became symbols of cultural identity, according to both the youth and adult factions.¹⁹ In spite of the hyperbolic association between drugs and youth, the conception facilitated the emergence of a moral panic over drug abuse in North American society. The crisis erupted in the mid-1960s and fed on rumours, sensational media reports, and a growing perception that the younger generation wielded the capacity to overthrow conventional order. In a volatile political climate, psychedelic drug advocates, clinical or recreational, risked being identified as

¹⁷ Chas Critcher: *Moral Panics and the Media* (Buckingham: Open University Press, 2003), 22.

¹⁸ Chas Critcher, “Trust Me, I’m a Doctor’: MMR and the Politics of Suspicion.” I am grateful to the author for sharing this unpublished paper with me. (personal communication, September 2004).

¹⁹ Marijuana is also important but has a different history and was already associated with deviance earlier in the twentieth century. See Ned Polsky, *Hustlers, Beats, and Others* (Garden City, NY: Anchor Books, 1969); Jill Jonnes, *Hep-cats, Narcs and Pipe Dreams: A History of America’s Romance with Illegal Drugs* (Baltimore: The Johns Hopkins University Press, 1996); William Novak, *High Culture: Marijuana in the Lives of Americans* (New York: Knopf, 1980); and David Musto, *The American Disease: Origins of Narcotic Control* (New Haven: Yale University Press, 1973).

socially dangerous. Medical authorities promoting psychedelic psychiatry, it would seem, were indirectly endorsing a cultural revolution.

In the mid-1960s, acid gained a reputation for infecting young minds and for unleashing dangerous behaviours in otherwise benign individuals. The growing popular image of acid, conflated with its clinical counterpart, LSD, had a devastating and direct influence on contemporary psychedelic research and treatment. Researchers encountered great difficulties recruiting subjects who had no prior experience or knowledge of the drug. Conversely, individuals entered clinical trials with wild expectations of attaining a psychedelic euphoria, which subsequently coloured their descriptions of the trial and confounded the research results. The media spotlight on recreational drug use also threw clinical drug experimentation into question, particularly for investigators who engaged in auto-experimentation. Where earlier critiques concentrated on the methodology employed for evaluating experiences, media reports from the mid-1960s armed critics with alarming stories of LSD abuse among disaffected youth. Criticism of psychedelic psychiatry increasingly focused on its relationship with the new counter culture.

The drug received an additional jolt of publicity when, in the early 1960s, Harvard psychologist Timothy Leary openly encouraged LSD consumption with grandiose pronouncements of its universal importance for improving humanity. In 1963, Harvard University dismissed Leary for his idiosyncratic ideas, and he simultaneously rose to counter-culture prominence, exalted as an advocate of a psychedelic lifestyle. As a self-appointed apostle of psychedelics, Leary attracted media attention, and a cult-like following, that propelled the drug into the media spotlight. In public statements Leary claimed that taking LSD would help bring an end to the Cold War, with its chemical

capacity to inspire feelings of “love” and “peace” among consumers.²⁰ For better or worse, Leary became a media darling, the public face of LSD.

Media reports continued to debate the usefulness of LSD years after Leary lost his position at Harvard.²¹ The media attention after 1966 fuelled the transformation of the drug’s image from a medical wonder to a dangerous narcotic. Sensational stories and exaggerated claims found in these sources described the dangerousness of the drug but appeared out of sync with the medical literature.²² Articles in several medical journals continued to examine the potential uses of LSD in a clinical setting.²³ A comparison of the sources of information illustrates a clash of perspectives on LSD, during its ascent to media prominence.

LSD and Youth

After the Second World War, fertility in North America rose significantly from interwar levels. The Canadian birth rate increased by nearly 100,000 from its pre-war level of 300,000 births per year; the fertility rate continued growing annually from 1945

²⁰ For examples of Leary’s perspectives see: Timothy Leary, *Confessions of a Hope Fiend* (New York: Bantam Books, 1973); Leary, *The Politics of Ecstasy* (New York: Paladin, 1970); and, Leary, *High Priest* (New York: World Publishing Company, 1968).

²¹ See: *Time* “Medicine section: Drugs: The Pros and Cons of LSD,” 18 December 1964, p. 63-4.

²² A similar point is made by Goode and Ben-Yehuda. See Erich Goode and Nachman Ben-Yehuda, *Moral Panics: The Social Construction of Deviance* (Oxford: Blackwell, 1994), 54-55.

²³ See: J.Q. Simmons, S.J. Leiken, O.I. Lovaas, B. Schaeffer, B. Perloff, “Modification of autistic behavior with LSD-25,” *American Journal of Psychiatry*, 122, 11 (1966): 1201-11; Abram Hoffer, Humphry Osmond, “Some psychological consequences of perceptual disorder and schizophrenia,” *International Journal of Neuropsychiatry*, 2, 1 (1966): 1-19; J. Buckman, “Lysergic acid diethylamide,” *British Medical Journal* 550 (1966): 302-3; L.E. Hollister, “Research programs in the major mental illnesses. II,” *Hospital & Community Psychiatry* 17, 8 (1966): 233-8; and R. Pos, “LSD-25 as an adjunct to long-term psychotherapy,” *Canadian Psychiatric Association Journal*, 11, 4 (1966): 330-42.

until peaking in 1959 with a 185 per cent increase from pre-war levels.²⁴ This population expansion created a significantly large cohort of individuals who reached adolescence in the period 1965-1975: the archetypal baby boomers. Although scholars have debated over whether or not this segment of the population deserves recognition as a cohesive unit, the moral panic that arose over drug use in the mid-1960s played upon fears associated with the image of an entire generation getting high and engaging in morally reprehensible activities.²⁵ Whether this image depicted reality or not, the very notion galvanised society along generational lines. As a result, the 1960s youth bore the brunt of concerns over the increased use of drugs in the post-war period.

Not all drugs precipitated a moral panic over their consumption. Prescription rates for drugs soared during the 1960s.²⁶ Psychiatry embraced psychopharmacological

²⁴ Doug Owsram, *Born at the Right Time: A History of the Baby Boom Generation* (Toronto: University of Toronto Press, 1996), 4-5.

²⁵ There is a significant body of literature that examines this cohort and its identity or identities. Kenneth Keniston initially argued that the 1960s youth represented a unique manifestation of generational conflict. Kenneth Keniston, *The Uncommitted: Alienated Youth in American Society* (New York: Harcourt, Brace and World Inc., 1960). However, he later revised his position and argued instead that the youth culture was an amalgam of subcultures, one of which was, in part, defined by its identification with drug use. Kenneth Keniston, "Heads and Seekers: Drugs on Campus, Counter-Cultures and American Society," *American Scholar*, 38 1 (1968/9): 97-112. Marxist scholars have also defined this group in class terms. For example, see Edgar Z. Friedenberg, "The Generation Gap," 89-94, and Bruno Bettelheim, "The Problem of Generations," 78-81 in Richard L. Rapson (ed) *The Cult of Youth in Middle-Class America* (D.C. Heath and Company, Lexington, Massachusetts, 1971). While others still, defined the cohort in terms of its potential political strength, thus characterising the group in collective terms as "the counter culture." Theodore Roszak, *The Making of a Counter Culture: Reflections on the Technocratic Society and Its Youthful Opposition*. (Doubleday and Company, Inc.: Garden City, New York, 1968). More recently, historians have adopted a life cycle approach that considers the history of a period as experienced by a particular age cohort. Doug Owsram's examination of the baby-boom generation, tells a history of the 1950s and 1960s in Canada through the experiences of its post-war youth cohort, thereby returning to an identification of the post-war youth as a more cohesive unit. Doug Owsram, *Born at the Right Time: A History of the Baby Boom Generation* (Toronto: University of Toronto Press, 1996).

²⁶ David Healy, *The Anti-Depressant Era* (Cambridge: Harvard University Press, 1997), 258-259; David Healy, "Good Science or Good Business," in *Prozac as a Way of Life* (eds) Carl Elliot and Tod Chambers, 73-75 (Chapel Hill: University of North Carolina Press, 2004). In this section Healy discusses the rising rates of psychotropic medications as a result of aggressive marketing schemes and expanding categories of disorder. See also, Rein Vos, "The 'Dutch Drugstore' as an attempt to reshape pharmaceutical practice: The conflict between ethical and commercial pharmacy in Dutch cultures of medicines," in *Biographies of Remedies: Drugs, Medicines and Contraceptives in Dutch and Anglo-American Healing Cultures* (eds)

treatments and introduced a cornucopia of drugs into the mental health care system; many of these drugs went through similar methodological clinical trials as LSD.²⁷ In 1965, for example, prescriptions for amphetamines in the United States reached twenty-four million, while pharmacies filled one hundred and twenty-three million prescriptions for sedatives and tranquillisers in the same year.²⁸ By 1965, six and a half million American women held prescriptions for the oral contraceptive.²⁹ Middle-class housewives, allegedly suffering from “a problem that had no name,” constituted a large group of drug users, making drugs such Miltown and Valium into popular household items.³⁰ These drugs also captured popular cultural attention. American talk show host Milton Berle jokingly called himself “Miltown Berle.” The British rock group, the *Rolling Stones* sang about “sub-urban housewives who could not tolerate the mind-numbing tedium of

M.Gijswijt-Hoftstra, G.M. Van Heteren and E.M. Tansey, 65 (Editions Rodopi B. V.: Amsterdam, 2002). Vos traces the increase in pharmaceutical use through the professionalisation of pharmacists and the increasing demands for over-the-counter remedies in the Netherlands. LSD was still considered a legal substance until 1966, though its use was restricted to a clinical setting.

²⁷ H.E. Hill, C.A. Haertzen, A.B. Wolbach, E.J. Miner, “The Addiction Research Centre Inventory: Standardization of Scales which evaluate the subjective effects of morphine, amphetamine, pentobarbital, alcohol, LSD-25, pyrahexyl and chlorpromazine,” *Psychopharmacologia* 65 (1963): 167-83; D.V. Siva Sankar, E. Phipps, D.B. Sankar, “Effect of LSD, BOL, and chlorpromazine on ‘neurohormone’ metabolism,” *Annals of the New York Academy of Sciences* 96 (1962): 93-7; H. Takagi, S. Yamamoto, S. Takaori, K. Ogiu, “The effect of LSD and reserpine on the central nervous system of the cat; the antagonism between LSD and chlorpromazine or reserpine,” *Japanese Journal of Pharmacology*, 7, 2 (1958): 119-34; and, K.F. Killam, “Studies of LSD and chlorpromazine,” *Psychiatric Research Reports*, 30, 6 (1956): 35-45.

²⁸ Robert Lauer, “Social Movements: An Interactionist Analysis,” *Sociological Quarterly*, 13 (1972), 319.

²⁹ Elizabeth Siegel Watkins, *On the Pill: A Social History of Oral Contraceptives, 1950-1970* (Baltimore: Johns Hopkins University Press, 1998), 34.

³⁰ Andrea Tone, “Listening to the Past: History, Psychiatry and Anxiety,” *Canadian Journal of Psychiatry* 50, 7 (2005): 373-380. “The problem that has no name” is a phrase coined by Betty Friedan, in her famous feminist critique of American society: *The Feminine Mystique* (New York: Norton, 1963). The phrase refers to the discontent and disillusionment faced by white middle-class women and mothers who felt their personal lives were restricted as they were trapped in a life of domesticity. Betty Friedan, “The Problem that has no Name,” in *‘Takin’ it to the Streets’* Alexander Bloom and Wini Breines (eds) (Oxford: Oxford University Press, 1995): 461-467.

kitchen and kids without resorting to ‘mother’s little helpers’[Miltown].”³¹ These examples illustrate that North Americans readily utilised chemical substances during the post-war period, making the subsequent focus on youth and LSD somewhat inconsistent.³²

In each of the above cases, an identifiable cohort of society predominantly consumed the drugs—patients with mental illnesses, middle-class housewives, or, women of child-bearing years—and yet these groups did not inspire fears. Similarly, the fact that men regularly engaged in alcohol consumption did not arouse panic that the male-dominated rituals would evoke a bond among men that would subsequently threaten to overthrow normal society.³³ Indeed, in the case of patients with mental illnesses and women, despite campaigns aimed at politicising their identity in society, either as consumer survivors or as feminists, their drug-taking activities had a minimal effect, if any, on public perceptions of their group identity.³⁴ In stark contrast, the under thirty-year-old generation assumed a threatening position in society and their drug-taking

³¹ *Prozac: Prozac as a Way of Life* (eds) Carl Elliot and Tod Chambers (Chapel Hill: The University of North Carolina Press, 2004), 2.

³² For examples of increased rates of drug use see: Barbara Clow, “‘An Illness of Nine Months’ Duration’: Pregnancy and Thalidomide Use in Canada and the United States,” in *Women, Health and Nation: Canada and the United States Since 1945* (eds) Georgina Feldberg, Molly Ladd-Taylor, Alison Li, and Kathryn McPherson, 57 (Montreal: McGill-Queen’s University Press, 2003); and, Erich Goode, *Drugs in American Society* (New York: Alfred A. Knopf, 1972), 123-124. It is perhaps ironic that this same group of people may also bear the brunt of concerns over rising health care costs associated with a need for expensive pharmaceuticals for seniors, as the leading edge of the baby-boom generation now enters retirement.

³³ Lori Rotskoff, *Love on the Rocks: Men, Women and Alcohol in Post-World War II America* (Chapel Hill: University of North Carolina Press, 2002), chapter 2. This is not to say that male drinking did not provoke other social concerns, but unlike the association of youth with drug use male drinkers did not become the “other” that “normal” society defined itself against.

³⁴ Indeed, usually the fear now is that patients with mental disorders are *not* taking their drugs. Nonetheless, other case studies suggest that drug use and group identity has been similarly linked in several cases. For example see: Catherine Carstairs, “Innocent Addicts, Dope Fiends and Nefarious Traffickers: Illegal Drug Use in 1920s English Canada” *Journal of Canadian Studies* 33, 3 (1998): 145-162; and, Carstairs, “Deporting ‘Ah Sin’ to Save the White Race: Moral Panic, Racialization, and the Extension of Canadian Drug Laws in the 1920s,” *Canadian Bulletin of Medical History* 16, 1 (1999): 65-88.

activities allegedly united them in a common desire to get high and change societal values.

Despite media and popular cultural images, government inquiries into the drug problem found that North Americans more commonly consumed minor tranquillisers than LSD during the 1960s.³⁵ In a United States' survey conducted in 1970 the Narcotic Addiction Control Commission measured drug use, legal and illegal, in New York State by randomly sampling residents over the age of fourteen. The survey showed that most individuals who admitted to consuming drugs obtained their supplies through prescriptions. In fact, eighty-eight per cent of the individuals surveyed had at one time been on minor tranquillisers, while zero per cent admitted to taking LSD.³⁶ Although it is not surprising that few people would admit to taking a drug that had been made illegal in 1966, the survey nonetheless revealed that a large percentage of New York residents accepted drug-taking behaviours when regulated by the medical profession. This finding further underscored the idea that opposition to LSD in the 1960s was highly political and did not extend to drug use in general.

The psychedelic reaction, according to its proponents, distinguished LSD from other clinical drugs, such as tranquillisers or sedatives, due to its capacity to provide users with a powerful consciousness-raising experience. The drug did not simply produce a

³⁵ Marijuana was also commonly associated with the youth culture and there is a large body of literature dealing with this subject. It arguably entered mainstream American culture through association with Black jazz musicians. Erich Goode, *Drugs in American Society* (New York: Alfred A. Knopf, 1972); William Novak, *High Culture: Marijuana in the Lives of Americans* (New York: Knopf, 1980); Ned Polsky *Hustlers, Beats, and Others* (Garden City, NY: Anchor Books, 1969); Jill Jonnes *Hep-cats, Narcs and Pipe Dreams: A History of America's Romance with Illegal Drugs* (Baltimore: The Johns Hopkins University Press, 1996).

³⁶ Erich Goode, *Drugs in American Society* (New York: Alfred A. Knopf, 1972), 123-124. However, records from the Senate debates in Canada refer to evidence that over 100,000 professional people in the United States had taken LSD. See: Canada. Debates of the Senate. 25 April 1967, p. 1824.

chemical reaction with subjective responses; users described the LSD trip as causing philosophical, epistemological and ontological changes in perspective. Clinical studies already seemed to safely determine that the subjective *experiences* offered by psychedelic drugs such as LSD, mescaline and psilocybin (aka magic mushrooms) had important therapeutic benefits. The treatment of alcoholism, discussed in chapter three, described the significance of considering this kind of experience in medical research that did not fit neatly into a biomedical paradigm and was difficult to evaluate with empirical observations alone. With a reputation for producing exotic, euphoric, religious and introspective experiences, LSD began to appeal to users outside the clinical context as a recreational drug.

Clinical researchers introduced students to LSD on university campuses when soliciting volunteers for testing the effects of these substances on normal subjects.³⁷ At the University of Saskatchewan, like elsewhere in North America, advertisements in student newspapers recruited volunteers for LSD experiments. While Hoffer and others evaluated the students' reactions in the context of medical research, some of the students took advantage of the sanctioned research setting and repeatedly volunteered to take part in the studies because they enjoyed the experiences. Equipped with an armload of their favourite musical records, some student volunteers spent their Saturdays listening to jazz and enjoying the psychedelic experience in the safe surroundings of the clinical observation room.³⁸ Rumours of the pleasant and remunerative experiments produced

³⁷ For example, Ken Kesey, author of *One Flew Over the Cuckoo's Nest*, first took LSD as a student volunteer for the CIA's MK-ULTRA program.

³⁸ Student volunteer, anonymised by author. Interview with author, 16 July 2003, Saskatoon, Saskatchewan.

more and more volunteers, and before long individuals sought to recreate the psychedelic experience outside the clinical context.³⁹

Although Hoffer expressly forbade LSD consumption outside the clinical context, other experimenters did not necessarily share his concerns. Harvard University psychologist Timothy Leary explicitly endorsed the popularisation of LSD.⁴⁰ Leary first encountered psychedelics in the form of psilocybin (mushrooms) while vacationing in Mexico with his colleague Richard Alpert in 1960.⁴¹ Leary's mushroom trip immediately intrigued him with an overwhelming sense of chemically-inspired spirituality. Upon returning from Mexico, Leary established his own psychedelic research program with psilocybin obtained (legally) from the Sandoz Pharmaceutical Company, the same company that produced LSD.⁴² Leary's experiments with a range of psychedelic substances led him to conclude that these drugs, and LSD in particular, triggered a kind of spiritual reaction in individuals that matched religious experiences. In both organically and chemically stimulated scenarios, Leary argued, the subjective experience resulted in a deeper understanding of humanity and its place in the universe. According to Leary then, taking LSD strengthened an individual's spirituality. If everyone took LSD, he asserted, human relations would inevitably improve. Leary even applied this

³⁹ At the University of Saskatchewan student volunteers were offered five dollars compensation.

⁴⁰ Timothy Leary has been the subject of a number of popular studies. For further details of Leary's role in the history of LSD see: Jay Stevens, *Storming Heaven: LSD and the American Dream* (New York: Grove Press, 1987) and *LSD: The Consciousness Expanding Drug* (ed) David Solomon (G.P. Putnam's Sons: New York, 1964).

⁴¹ Jay Stevens, *Storming Heaven: LSD and the American Dream* (New York: Grove Press, 1987), 122.

⁴² For a description of Leary's approach to psychedelics see: Timothy Leary, Ralph Metzner and Richard Alpert, *The Psychedelic Experience: A Manual Based on the Tibetan Book of the Dead* (New Hyde Park, NY: University Books, 1964); Timothy Leary, *Flashbacks: An Autobiography* (London: Heinemann, 1983); Timothy Leary, *Confessions of a Hope Fiend* (New York: Bantam Books, 1973); and, Jill Jonnes *Hep-cats, Narcs and Pipe Dreams: A History of America's Romance with Illegal Drugs* (Baltimore: The Johns Hopkins University Press, 1996), 222.

logic to the Cold War, and suggested that during the Cuban Missile Crisis Soviet leader Nikita Krushchev and American President John F. Kennedy should take LSD to realise that no amount of weaponry could resolve the political conflict of the Cold War.⁴³ As a consequence of his public declarations, Leary's posturing contributed to the belief that LSD manufactured anti-war and utopian sentiments.

By 1962 Leary's flamboyant support for LSD consumption landed him in professional difficulties with Harvard University. The university later dismissed Leary and demanded that he immediately cease his psychedelic experimentation. Undaunted by the termination of his academic position, Leary continued to promote the drug as a private citizen. He, along with ex-colleague Richard Alpert, who also lost his position at Harvard University, initiated a journal devoted to psychedelic explorations.⁴⁴ Leary and Alpert established a new religion in 1967, called "The League for Spiritual Discovery," (not coincidentally with the initials LSD) with Leary as its self-appointed guru. Between 1962 and 1969 Leary regularly proselytised crowds of young concertgoers, rally participants, or demonstrators by explaining how LSD improved humanity.

Leary's behaviour alarmed medical researchers who felt that his antics had negative repercussions for their own LSD research. Abram Hoffer wrote to Humphry Osmond in 1963 and complained about the attention garnered by Leary. He feared that the "publicity from Leary and Alpert may lead to the removal of LSD [from legal medical research funding]."⁴⁵ Osmond later replied to Hoffer, and expressed concerns

⁴³ Stevens, *Storming Heaven*, 145. Stevens adds that Beat poet Allen Ginsberg even attempted to phone Kennedy with this foreign policy advice. He was unable to reach the President.

⁴⁴ *The Psychedelic Review* (publishing period, 1961-1969)

⁴⁵ SAB, A207, XVIII 14.b. July 1- December 31, 1963, Letter Abram Hoffer to Humphry Osmond, 4 November 1963.

that Leary continued to masquerade as a psychologist, giving undue scientific credibility to the conception that LSD provided a legitimate medico-scientific avenue for exploring a new religion. Although Osmond conceded the importance of spirituality in medicine, he feared that Leary's pseudo-scientific authority reflected poorly on genuine scientific inquiries. Moreover, Leary's promotion of a new religion galvanised through psychedelic drug use undermined its potential clinical use and, therefore, Osmond carefully distanced himself from Leary's promotion of the drug. Osmond contended that Leary surpassed: "legitimate scientific interests to a bona fide religious interest which occupies most of his life...insisting on the right to use psychedelic substances for psychologic (sic) enquiries without medical support."⁴⁶ Osmond believed that Leary's grandstanding undermined careful medical analyses by drawing media attention to his unethical and indiscriminate promotion of LSD that had no therapeutic purpose.

Two days after making these complaints to Hoffer, Osmond contacted Leary directly and conveyed his apprehensions about establishing a psychedelic religion. In no uncertain terms he told Leary that, "as a good member of my profession [I] strongly oppose you."⁴⁷ In particular, he objected to Leary's self-identification as a medical expert on psychedelics, which he used to bolster support for the legitimacy of his League for Spiritual Discovery. According to Osmond, Leary operated under the pretence of the psychology profession when it suited his purposes, but refused to engage in serious medical debates about the value of the drug in clinical practice. Osmond asserted that "medical hostility can be harmful to you and I think you must face these objections rather

⁴⁶ SAB, A207, XVIII. 25.b. Hoffer Osmond correspondence, Humphry Osmond letter to Abram Hoffer, 8 December 1966.

⁴⁷ SAB, A207, XVIII. 25.b. Hoffer Osmond correspondence, Humphry Osmond letter to Timothy Leary, 10 December 1966. Emphasis in original.

than dissipate them with a smile, however cosmic.”⁴⁸ Osmond, quite rightly, feared that legitimate medical research would quickly become associated with Leary’s promotion of a new religion. Although Osmond did not deny the importance of relating the LSD experience with spirituality he felt that the League for Spiritual Discovery had little if any therapeutic benefits for schizophrenic patients, for whom professional psychedelic research might benefit. Osmond concluded his letter to Leary by recommending that he direct his evangelicalism towards consenting adults rather than continue fuelling the generational divide. Furthermore, he recommended that Leary stop masquerading as a clinical authority when he operated outside the checks and balances of the profession. Leary’s censure might, at least, help salvage the reputation of legitimate researchers.

Hoffer and Osmond had good reason to worry about Leary’s activities; the news media seized upon Leary’s public behaviour and contributed to a growing perception that acid was intimately woven into the formation of a youth culture in the 1960s and, furthermore, that medical researchers such as Leary endorsed its use. Indeed, Leary’s frequent brushes with the law seemed to elevate his status among the counter-culture youth, making him an honorary member and, as Osmond abhorred, even an idolised figure.⁴⁹ As Leary repeatedly landed in jail on drug charges, the connection between his promotion of LSD and criminal behaviour forged a strong illustrative bond between the two activities. Osmond maintained, however, that Leary’s behaviour deepened the generational divide and gave politicians, and newspaper editors alike, ample ammunition

⁴⁸ Ibid.

⁴⁹ SAB, A207, XVIII. 22.a. Letter from Humphry Osmond to Abram Hoffer, Re: your earlier predictions, 12 March 1966 in response to: “Former Harvard Teacher Sent to Prison on Marijuana Charges,” *New York Times*, 12 March 1966 (no page number listed).

for describing Leary as a counter-culture leader and psychedelic apostle. In a letter to colleagues Osmond expounded that:

Timothy Leary is also a corrupter of youth, friend of the underworld, etc, but this at once widens the issue and makes it impossible to avoid bringing in extraneous matters. Timothy [Leary] is most unlikely to be harmed by wider issues due to the changing state of our current morality.⁵⁰

While Leary used his professional identification with clinical psychology to legitimise his promotion of LSD, he was unlikely to suffer the professional consequences of his actions. The paradoxical image distorted the public perception of scientific authority on psychedelics.

Leary's publicity, whether coincidentally or not, corresponded with the emergence of a black market in LSD. In 1963 newspapers in California reported on the existence of a homemade version of LSD: "it is not widespread but it exists," claimed Dr. Keith S. Ditman of the University of California Medical Centre in Los Angeles.⁵¹ According to news reports, the subterranean versions of psychedelic chemicals resulted from sloppy medical controls that provided university students with unprecedented access to the drugs. Students also exchanged recipes for home production. According to instructions later published in *The Anarchist's Cookbook*, LSD could be made at home after obtaining morning glory seeds or baby Hawaiian wood rose seeds.⁵² Given the

⁵⁰ SAB, A207, XVIII. 24.c. Letter from Humphry Osmond to Abram Hoffer, Dr. Aaronson, Dr. El Melegi, T.T. Paterson, Dr. Cheek, Dr. Man, M. Siegler, Dr. Al Hubbard and Mrs. Wynn, 21 September 1966; in response to: "Dr. Leary Starts New 'Religion' with 'Sacramental' use of LSD," *New York Times*, 20 September 1966.

⁵¹ "Small Black Market Reported in LSD" *News Call Bulletin—San Francisco*, 4 January 1963, no page number listed.

⁵² William Powell, *The Anarchist's Cookbook* (Barricade Books Inc.), originally published in 1971. Although this book was not published until 1971 it seems likely that recipes for LSD were available as early as 1963. It is, of course, very difficult to locate written sources to confirm this belief, but through a combination of newspaper reports and anonymous oral interviews it is clear that black market, kitchen, "bathtub" or "basement" LSD became available in the early part of 1963. In fine print, this guidebook

accessibility of these instructions and the apparent ease of concoction, homemade versions of acid became available, with an alarming capacity to evade detection.

Osmond corresponded with other psychedelic researchers and the chief LSD distributor, Albert Hofmann of the Sandoz Pharmaceutical Laboratories. Although they could not entirely rule out the possibility that Sandoz-produced LSD leaked into a black market from medical laboratories, Osmond remained confident that this explanation of the problem represented a misreading of the subterranean economy's hold on psychedelics.⁵³ Albert Hofmann revealed to Osmond that approximately fifty other psychologically-active substances closely resembled LSD, and he suspected that many of these other substances circulated in the black market, being described as acid.⁵⁴ Hofmann's assessment meant that clinicians investigating psychedelics were not to blame for the growth of black market supplies. Osmond considered, therefore, that the growing drug problem owed as much to unknown substances sold in the underground market as known psychedelics. Additionally, individuals hospitalised for bad trips often consumed drug cocktails, or a combination of chemical substances of suspicious origins. In response to these observations, Osmond concluded that authorities required more medical research on these illicit substances and the nature of the black market psychedelics before proclaiming the dangers of LSD.

The problem, Osmond contended, was not that medical experimenters freely distributed psychedelics, but rather that legislative measures curtailed medical research

warned that some seeds might be coated with a substance that, when subjected to the process of turning them into LSD, made the end product poisonous.

⁵³ SAB, A207, XVIII. 22.b. Letter from Humphry Osmond to "Al," April 25, 1966.

⁵⁴ Osmond recounts this discussion later in a letter warning the National Institute of Health about these conditions. SAB, A207, XVIII. 26.b. Letter from Humphry Osmond to Dr. Jonathan Cole, Chief, Psychopharmacology Service Centre, National Institute of Health, 9 February 1967.

and incapacitated professionals from analysing the real dangers of black market substances. The public panic surrounding acid made establishing research laboratories for testing underground drugs politically unpalatable. Nonetheless, Osmond pointed out in a letter to the American National Institute of Health that, where data existed, the results suggested that street acid generally contained between a twenty-fifth and a fiftieth of pure lysergic acid.⁵⁵ These findings suggested that neither medical authorities nor consumers really had any way of determining what combination of substances constituted a street hit. For example, Osmond later recalled hearing about a West Coast concoction of green liquid “LSD,” which reportedly caused vivid reactions that lasted days and even weeks.⁵⁶ He came across the green acid because a colleague learned of it and sampled it in an effort to determine whether or not it was safe; after several days the doctor committed suicide.⁵⁷ Osmond had never encountered a similar experience nor read any such descriptions in the medical literature, based on investigations of Sandoz-approved LSD. He immediately suspected that the green acid contained impurities, which might have been responsible for the tragic reaction. Consequently, he contacted the American Food and Drug Administration and recommended a thorough investigation of the faux LSD.

After consulting with a self-identified LSD user, Osmond reiterated his views on the black market enterprises. Following a long conversation with a self-identified young acid distributor, Osmond concluded that the young man in his office had a good understanding of the effects of LSD as well as the dangers of synthetic versions. The relative ease of purchase for young users described by this individual struck Osmond as

⁵⁵ Ibid.

⁵⁶ SAB, A207, XVIII. 26.a. Letter from Humphry Osmond to Dr. Frances Cheek, re: Social and Other consequences of substances alleged to be LSD 25, etc., 2 February 1967.

⁵⁷ Ibid., p. 2.

further evidence that authorities had a limited conception of the magnitude of the underground market in drugs. Nonetheless, the individual's knowledge on the subject encouraged Osmond that public education programs would adequately manage the drug problem. After conversing with the young drug dealer, Osmond remarked that the alchemist "confirmed what I suspected that the government's hope and belief that they can somehow suppress the use of these substances, particularly by younger people, seems to be based on some fundamental misunderstanding as to the nature of the problem."⁵⁸ Osmond finished his report in a mocking tone about how the government might resolve the drug problem among college students.

I suppose that they could go a long way to stamping out these matters by having an elaborate spy system on campuses, or some kind of special secret police. Apart from its considerable expense, the grave disruption which this would produce is a kind which I think they would be very prudent to think about long and deeply before getting involved. It has some open ended qualities which give the military and political people such appalling headaches in their sphere, particularly now that I see that the anti-universities are developing.⁵⁹

Osmond retained his original conviction that authorities misdiagnosed the problem of drugs on campuses. The question remained, however, whether or not the potentially misconstrued assessment of youth drug abuse existed as a ruse for exercising greater

⁵⁸ SAB, A207, XVIII. 20.b. Letter from Humphry Osmond to Dr. Bryant Wedge, 22 December 1965.

⁵⁹ Ibid., p. 2. Osmond does not refer again to the 'anti-universities' but seems to imply a situation that he sees as paradoxical. Universities are intended to promote higher learning and groom individuals for participation in political legal and decision-making. Ironically, the campus culture of the 1960s suggested that youth were openly engaged in activities aimed at dismantling decision-making (even bureaucratic) infrastructure. In the Senate debates (1967) several Canadian senators similarly comment on the state of university education in the 1960s. Here, they refer to the "Cubehead Revolution." Senator Orville H. Phillips described the situation: "Sometimes they [university students] seem to be either more brilliant than we were when we were in universities or they appear to have much more free time. We had to study during university life, but students now seem to be free to look for more varied experiences. As Senator Thorvaldson has said, it has become fashionable in the press and on TV to glamorise the life of an LSD addict as one of leisure and as the ideal life to follow." Canada. Debates of the Senate. 25 April 1967, p. 1824.

political control on campuses, with corresponding consequences for medical experimentation.

Media Coverage

News coverage about LSD in the 1950s and 1960s contained an implicit ideological message concerning the growing social and cultural upheaval of the era. Sensational reports repeatedly connected LSD use with morally deviant and politically dissident behaviours. Additionally, newspapers relied upon psychiatric experts for corroboration of the medical dangers related to LSD abuse. Medical critics of the psychedelic theories readily offered public statements about its dangers that played upon the growing fears conveyed by a conservative establishment. The moral panic over unfounded beliefs of an LSD epidemic satisfied two distinct ideological objectives. Politically, fears that a youth generation endangered society by engaging in a risky drug-dependant lifestyle justified the need for state intervention. The actual rates of consumption no longer mattered, but the confluence of social activism and drug abuse necessitated policing measures. Secondly, medical researchers identified the methodological divisions between psychedelic and psychopharmacological treatments along ideological lines; the political stakes were equally high within this professional milieu. Medical support for the criminalisation of LSD tipped the scales in favour of a particular kind of approach to psychiatric experimentation; one that did not include a new philosophy or spirituality packaged in a pill. The media's role amplified the ideological assault posed by LSD consumption, which culminated in exaggerated impressions of both the drug's dangers and the irresponsibility of some members of the scientific community.

Figure 17

An examination into the media coverage on LSD as reported in the *New York Times* suggests that Leary's activities triggered public concerns over LSD use.⁶⁰ Leary's behaviour undoubtedly enlarged LSD's public profile, which seems evident from the increased annual number of newspaper articles on the drug, up from one or two to half a dozen. For example, when the *New York Times* inaugurated its coverage of LSD in May 1951 it began with a relatively benign exposé on chemical research involving lysergic acid and its role in advancing a better understanding of mental illness.⁶¹ The next time LSD appeared in this newspaper its reference was buried in an account of lectures from the American Psychiatric Association, which appeared in May 1954. The report described the work of psychiatrist Max Rinkel and his experimentation with LSD and its relationship with mental illness.⁶² In October 1954 another article on LSD appeared and supported the continued use of LSD in medical research.⁶³ Over the next eight years, LSD appeared in another seven chronicles, which reported on its contributions to medical research.⁶⁴

⁶⁰ Erich Goode, *Drugs in American Society* (Stony Brook, NY: Alfred A. Knopf, Inc., 1972), 118.

⁶¹ "2 Drugs Expected to Aid Mind Study: Chemicals Induce Mental Ills in Volunteers During Tests, Psychiatrists Hear," *New York Times*, 11 May 1951, p. 40.

⁶² "Red's Psychiatry for P.O.W.s Bared: Army Expert tells conference how the Chinese Succeeded in Confusing Captives," *New York Times*, 8 May 1954, p. 5.

⁶³ "Research in Mental Illness has Paid Striking Dividend: More Funds for Study and Greater Use of Advances Seen as Solution to Problem," *New York Times*, 31 October 1954, p. 82.

⁶⁴ "U.S. Health Units Cover Vast Field: 7 National Institutes Attract Scientists by the finest Research Facilities," *New York Times* 29 May 1955, p. 31; "Science Notes: Colors from Black and White Images: Schizophrenia Tests Simulated Color—Insanity Chemical—Stroke Study—Tranquilizer," *New York Times* 1 December 1957, p. 237; "Clams and Insanity: Experiments may shed light on Schizophrenia," *New York Times* 5 December 1957, p. 52; "Rats Befuddled in Plasma Test: Show Abnormal Symptoms after Blood Injections From Mentally Ill," *New York Times* 26 October 1958, p. 128; "The Mind on the Wing: Exploring Inner Space, Personal Experiences Under LSD," *New York Times*, 14 May 1961, p. BR7; and, "Biochemical Detective Findings Lead to Gains in Mental Health," *New York Times*, 21 May 1961, p. 82.

In 1962, the number of reports in the *New York Times* climbed to six, quadrupling the annual average for the past decade. Comparatively, the increased attention on LSD raised awareness and scepticism about the drug. In addition to the increased attention, the tone of reportage had also changed. Three of the six articles centred on the publication of a book titled *My Self and I*, a monograph written by Constance Newland describing the case history of a patient treated with LSD.⁶⁵ The remaining articles contained alarming headlines with a different image of LSD from that of the previous decade. Headlines included: “Doctors reported a Black Market in Drug that causes Delusions;” and “Drug Used in Mental Ills (sic) is Withdrawn in Canada.”⁶⁶ Timothy Leary’s subsequent dismissal from Harvard University, and the related concerns over the rise of a subterranean drug economy captivated attention to LSD in this press over the next two years, with a handful of articles per annum.

In Canada, LSD attracted even less media attention. Before the news of Leary’s dismissal from Harvard, reports about the drug rarely made the news.⁶⁷ When it did appear, newspapers such as the *The Globe and Mail* continued to discuss it in relation to medical experimentation. The majority of these articles maintained the importance of sustained clinical investigations with LSD and its carefully controlled use in a medical

⁶⁵ “Books and Authors: Editors Appointed, Psychotherapy with New Drug, Life of an Inventor,” *New York Times*, 17 February 1962, p. 17; “Books Today: Fiction General,” *New York Times*, May 15, 1962, p. 36; “Through Fantasy to Serenity,” *New York Times*, 12 August 1962, p. 37.

⁶⁶ “Doctors reported a Black Market in Drug that causes Delusions,” *New York Times*, 14 July 1962, p. 47; “Drug Used in Mental Ills is Withdrawn in Canada,” *New York Times*, 21 October 1962, p. 30.

⁶⁷ “Drug Converted Confirmed Alcoholic to Honour Student, Psychiatrists Told,” *Globe and Mail*, 9 May 1962, p. 8.

setting.⁶⁸ Nonetheless, throughout the 1960s Canadian newspapers increasingly monitored the drug scene in the United States.

By 1965 the excitement in the United States surrounding Leary dissipated and headlines in the *New York Times* once again reflected a more positive role for LSD in medical experimentation. The shift in tone seemed to coincide with new legislative measures that criminalised the non-medical use of the drug. Rather than convey fearful headlines about the growing black market in dangerous drugs, the headlines suggested that state control and medical authority had reasserted themselves over the threat of LSD and its distribution through underground circuits.⁶⁹ At the same time, new stories appeared reminding readers of the benefits of LSD experimentation conducted by professionals in a medical setting. This time, the *New York Times* included the experiments in Saskatchewan as examples of LSD use in medical experimentation. For example, one article examined Kyoshi Izumi's daring experimentation with LSD-inspired hospital designs and commented favourably on the results.⁷⁰ Rumours of Hoffer and Osmond's psychedelic treatments for alcoholism also made it into back pages, with encouraging commentary.⁷¹ Attention even turned to Harvard University, which seemed undeterred by the episode with Leary, and in 1965 reported that the "mind drugs" had positive benefits for medical research.⁷² This hiatus of relatively positive reporting

⁶⁸ For example see: "Banned Drug Released for Research," *Globe and Mail*, 10 January 1963, p. 3.

⁶⁹ "Amateur Chemist Seized Over Pills: Student Accused of Making Hallucinogens in Home," *New York Times*, 12 November 1965, p. 12; "Ousted Lecturer Jailed in Laredo on Drug Charge," *New York Times*, 24 December 1965, p. 15. Leary was the "ousted lecturer" in question.

⁷⁰ "Mind Drugs Help Architect's Work: Use of LSD Aids Designer of Mental Hospitals," *New York Times*, 9 May 1965, p. 61.

⁷¹ "Mind Drugs Helped Alcoholic to Quit Habit, Scientists Report," *New York Times*, 11 May 1965, p. 68. Given that by this time thousands of scientists had experimented with LSD, it is telling that the American press reported on the work being done in Saskatchewan.

⁷² "Harvard Study sees Benefit in the Use of Mind Drugs," *New York Times*, 15 May 1965, p. 64.

offered psychedelic researchers some reprieve from the negative publicity directed at their laboratories during the Harvard debates over the perils of Leary's drug testing. Despite this experience, psychedelic researchers were left completely unprepared for the fomentation of negative attention that occurred in the following year.

The next, and more intense, explosion of media sensationalism regarding the public image of LSD took place in 1966. The number of reports in the *New York Times* that year jumped from five in 1965 to over five hundred in 1966. The *Globe and Mail* experienced a comparatively lower rate of increase, but altered the editorial tone of the articles dramatically.⁷³ The content of articles in the Canadian press shifted from the earlier focus on LSD in medical research to a growing sense of alarm over recreational LSD use, particularly in the United States. As American and Canadian state authorities began considering new legislative action, the news coverage increasingly centred on LSD in legal terms.

In 1962 when scientists discovered that the drug thalidomide caused severe birth defects in children, newspapers reported the situation as a "crisis" and the *New York Times* devoted nearly two hundred articles to the unfolding thalidomide crisis. Reports on LSD in the same newspaper more than doubled those concerning thalidomide, suggesting that LSD posed a larger threat, at least by crude numerical comparison. The magnitude of the psychedelic threat incited a moral panic, with different consequences and an alternative atmosphere of legitimate authority.

⁷³ For example, see: "Ottawa Seeks Closer Control on LSD Sales," *Globe and Mail*, 5 February 1966, p. 4; RCMP Start LSD Probe to halt illegal trafficking," *Globe and Mail*, 11 February 1966, p. 35; "The Big Turn-on Goes to College," *Globe and Mail*, 21 March 1966, p. 21; "LSD subject arraigned in murder: DA convenes talks in New York on Hallucinatory Drugs," *Globe and Mail*, 15 April 1966, p. 16; and, "LSD fascinating to collegians, alarms U.S. Parents and Police," *Globe and Mail*, 25 April 1966, p. 4.

In 1966 the tone of the news reports also changed dramatically. Stories moved to the front pages and opened with striking headlines presenting the frightening consequences of abusing LSD. Whereas earlier reports tended to differentiate between medical and black market versions of the drug, accounts now blurred these distinctions and eventually erased them altogether, categorically describing the drug as dangerous. Evidence of its dangerousness ranged from descriptions of subjects who experienced extended psychotic states, to those who committed murder and suicide, to others who engaged in risky behaviour, including promiscuous sexual activities, vandalism, theft and experimentation with harder drugs, such as heroin and cocaine.⁷⁴ Reports also indicated that LSD use led to political dissent and inhibited interests in economics, politics and the law.⁷⁵ The sensational reports about LSD reinforced the idea that it was responsible for a whole range of activities that threatened social order. These kinds of headlines destroyed the image of medical and political control over LSD consumption and instead highlighted chaotic consequences of a non-compliant generation of drug abusers.

In 1970, William Braden, a reporter from the *Chicago Sun-Times*, offered an insider's reflection on the way the press handled reports about LSD. He recalled that LSD presented news editors with a number of challenges. During the early stages of the drug's history, stories about LSD fell naturally to the science or medicine reporters, but as the drug entered different phases of its history it became more difficult to determine who should cover the story. It could reasonably fall into categories of science, medicine, religion, crime, or even travel. Yet, publication in any one of these columns

⁷⁴ See *New York Times*, *Globe and Mail*, *Toronto Star* (1965-1969), *passim*.

⁷⁵ Canada. *Final Report of the Commission of Inquiry into the Non-Medical Use of Drugs*. Canada. (Ottawa: Information Canada, 1973): appendix on hallucinogens.

unintentionally curtailed the complicated story of LSD and distorted the information offered to the public.⁷⁶

Braden contended that Timothy Leary's conduct brought further attention to the drug and often placed it on the front page. This situation accounted for LSD's transfer from the science and medicine columns to the police and general editors' reports. The major turning point for LSD coverage according to Braden, however, came in April 1966 when shocking reports that originally appeared in the *New York Times* were picked up by virtually every other paper. The first article shocked readers with the headline "Police Fear Child Swallowed LSD."⁷⁷ According to this article, a five-year old girl ingested a sugar cube laced with LSD that her uncle had purchased for his own recreational experimentation. A neighbour noticed the child behaving "wildly" and called the hospital; the uncle was subsequently arrested. Five days later the front page contained the headline: "A Slaying Suspect Tells of LSD Spree: medical student charged in mother-in-law's death."⁷⁸ In this case, a thirty-year old medical school drop-out told police "he had been 'flying' for three days on LSD" when he killed his mother-in-law, though he had no recollection of the murder.⁷⁹ These two outrageous events set the tone for press coverage on LSD for the next two years.

As Braden pointed out, these two stories seemed to set the standard for subsequent articles. The drug had found its way onto the front page and there was no

⁷⁶ William Braden, "LSD and the Press," in *Psychedelics: The Uses and Implications of Hallucinogenic Drugs* (eds) Bernard Aaronson and Humphry Osmond, 400-418 (Garden City, NY: Anchor Books, 1970).

⁷⁷ "Police Fear Child Swallowed LSD: Brooklyn Girl of 5 Admitted to a Hospital After She suffers Convulsions," *New York Times*, 7 April 1966, p. 41. Days later a follow-up story confirmed that the child was in good health.

⁷⁸ "A Slaying Suspect Tells of LSD Spree: medical student charged in Mother-in-law's death," *New York Times*, 12 April 1966, p. 1.

⁷⁹ *Ibid.*, p. 1.

longer any deliberation about whether the science or medicine journalist would cover the story. LSD became a subject that evoked sensationalist journalism and conjured commanding images that helped sell newspapers. Headlines over the next two years reinforced notions of fear and danger with provocative statements, such as: “parents fear spread of LSD in schools;” “LSD most dangerous;” “LSD-user charged with killing teacher;” “LSD, fascinating to collegians, alarms U.S. parents, police;” “sampled LSD, youth plunges from viaduct;” “LSD use near epidemic in California;” “Taking a trip to Deathville;” and “Six students blinded on LSD trip in sun.”⁸⁰ These kinds of captions explicitly connected LSD abuse with fatal consequences and reinforced the divisions between traditional authority figures (police, parents, doctors) and dissident youth.

For approximately the next two years, stories about LSD in the print media commented on its dangerousness and its increased consumption by youth, fed by underground (and therefore unregulated) drug markets. Throughout this coverage, university students were portrayed as the primary culprits. This further amplified fears that the situation would continue, as these very same youth had been groomed to assume authoritative positions in society. LSD became a symbol of an emergent youth counter culture, a hotly contested term that encapsulated a desire for wholesale changes in society.⁸¹ The news media no longer referred to psychedelic drugs as clinical research

⁸⁰ “BC police, parents fear spread of LSD in schools,” *Globe and Mail*, 8 March 1967, p. 29; “LSD most dangerous, N.Y. Doctors report,” *Globe and Mail*, 30 March 1966, p. 10; “LSD-use charged with killing teacher,” *Globe and Mail*, 12 April 1966, p. 2; “LSD, fascinating to collegians, alarms U.S. parents, police,” *Globe and Mail*, 25 April 1966, p. 4; “Sampled LSD, youth plunges from viaduct,” *Globe and Mail*, 20 March 1967, p. 1; “LSD use near epidemic in California, physician believes,” *Globe and Mail*, 30 March 1967, p. W06; “Taking a trip to Deathville,” *Ottawa Citizen*, 21 March 1967; and “Six students blinded on LSD trip in Sun,” *Globe and Mail*, 13 January 1968, p. 11.

⁸¹ For example, various songs performed by The Beatles, Bob Dylan, The Grateful Dead, etc. Poetry from Beatnik authors, including Allen Ginsberg. LSD also inspired an entire genre of artwork known as psychedelic art. The Regina Five (Ron Bloore, Ted Godwin, Ken Lochhead, Art McKay and Doug

tools, even in the back pages, but instead described the drug as a catalyst in a moral panic over fears that a drug-crazed generation of North American youth would steer the nation into a future of chaos and immorality.

Osmond, then working in New Jersey, wrote to a colleague in 1965 and commented on the explosion of publicity, and subsequent public fears, generated over the use of psychedelics. He diagnosed the issue as a culmination of four inter-related factors. The first was psychedelics—LSD’s capacity to deliver a euphoric experience.⁸² Secondly, and put simply, youth.⁸³ Osmond cited the rapidly changing society as the third component, one that gave rise to general anxieties about the transience of social values. Finally, he included “a variety of political colorations,” which he defined as a “hell broth” of old and new ideologies including “anarchism, nihilism, libertarianism, etc.”⁸⁴ In this letter, Osmond recalled historical events, such as prohibition, that arose out of similar circumstances where public panic erupted during a rather tumultuous period and targeted a particular activity for causing social friction. In the case of prohibition, he pointed out that suppression of alcohol led to its proliferation in an underground economy. The result was unsatisfying for authorities as well as for social drinkers and alcohol producers. He asserted, therefore, “unsuccessful attempts to suppress psychedelics will spread rather than inhibit their use—there are far too many young

Morton) were a set of artists inspired by psychedelic drug use in Saskatchewan. The five painters received international acclaim in the 1960s for their work. In 1961, the National Gallery of Canada held an exhibition of their work titled “Five Painters from Regina.” University of Regina, News Release “Regina Five Installation Planned,” 20 October 2001. Accessed 5 May 2005.

<http://www.uregina.ca/commun/news/2001/october/october20a2001.html>.

⁸² For further elaboration of this concept, see: SAB, A207, XVIII. 26.a. Memorandum from Humphry Osmond to Dr. Moneim El Meligi, Re: The Exploration and Consideration of Euphoria, 25 October 1965.

⁸³ Though Osmond did not elaborate on this point in the letter, other letters and publications lead me to conclude that he believed the youth were often more curious than adults and with the large cohort of youth in North America, they would naturally be drawn to psychedelic experimentation.

⁸⁴ SAB, A207, XVIII, 20.a. Letter from Humphry Osmond to “Al,” 4 November 1965, p. 1.

chemistry majors and PhDs about.”⁸⁵ Instead, Osmond recommended further medical examinations and honest reporting of results. In general, he felt that a moral panic and reactionary measures amplified the real dangers of LSD use.

Hoffer adopted a slightly more aggressive position defending psychedelics amidst the moral panic. He attended a psychedelic festival in Toronto, hosted by University of Toronto students, in the fall of 1967. In an interview for the student newspaper Hoffer stated that LSD was as safe as aspirin. The article recounted: “‘the headlines,’ Dr. Hoffer told a panel, ‘scream when a child takes a sugar cube coated with LSD by mistake. Yet the child who is killed by an overdose of aspirin rates only a back-page story.’”⁸⁶ Hoffer deplored the way that the press treated LSD, and by association its medical advocates, while ignoring its clinical history or the medical context from which it emerged. The students, by contrast, identified Hoffer as a leading expert on psychedelics and used his advice in establishing a safe environment for their festival. A student leader, Bob Rae, told the *Varsity* “we want to set up an experiment in controlled environment, perhaps consisting of a series of rooms, each concentrating on a different theme [for LSD experimentation].”⁸⁷ Hoffer applauded the organisers’ diligence and responsibility.

One of Hoffer’s sympathetic colleagues wrote to him in September 1967 complaining about the unbalanced press coverage. He deplored the intimate relationship forming between their professional critics and tabloid-style journalists. He wrote to Hoffer:

⁸⁵ Ibid., p. 3.

⁸⁶ “LSD as safe as aspirin: Hoffer,” *Varsity* (University of Toronto student newspaper), 25 September 1967, p. 2.

⁸⁷ “UC plans festival on mass insanity,” *Varsity*, 18 October 1967.

it also hurts the cause of truth when some of those authorities, who have the national spotlight, tend to simply beat the hysterical drum in time with the irresponsible journalists. Not all journalists are irresponsible and look only for the fast buck but I wish the responsible ones would call their errant brothers to task. We seem to have the same problem in our ranks.⁸⁸

The re-politicisation of LSD gave medical critics of psychedelics more leverage within professional debates, and their influence strengthened as they enlisted the support of a growing mass of concerned parents and politicians. Hoffer complained about the situation, which he felt displayed a “deliberate attempt on the part of some news media to create hysteria in Canada, aided and abetted by irresponsible statements released by physicians who have never really studied LSD.”⁸⁹

Unfortunately for psychedelic psychiatrists, neither political nor medical authorities heeded their advice and, the escalation of moral panic over psychedelics continued unabated. The result had devastating consequences for medical experts such as Osmond whose careers were linked to LSD experimentation. Until the explosion of press coverage on the dangers of LSD, Osmond remained a leading medical authority on psychedelics. By 1966 his status in the medical community changed dramatically, as the ideological divisions on LSD use galvanised. Medical reports on the use of psychedelic treatments maintained claims that LSD offered an effective therapy for a range of disorders, alcoholism being the principal disease that responded well to the experience-driven approach. Negative publicity surrounding acid infected psychedelic trials in a number of ways that diminished the professional enthusiasm for employing model psychoses to study mental illness. On the one hand, media exploitation of the alleged

⁸⁸ SAB, A207, III. 106. Godfrey, Dr. K.E. 1964-1969 correspondence, Letter from K.E. Godfrey to Abram Hoffer, 6 September 1967.

⁸⁹ SAB, A207, II. David Orlikow, correspondence, Letter from A. Hoffer to David Orlikow, 7 April 1967, p. 1.

proliferation of acid encouraged government legislation that made psychedelic drugs illegal. Although in some cases medical researchers continued trials with special government permission, their ability to attract volunteers, given the negative reputation of the drug, led some researchers to abandon their investigations altogether. On the other hand, the growing concerns over the inherent dangers of hallucinogens presented their medical colleagues with further opportunities to discredit psychedelic approaches. In this way, the media had a tremendous influence on the politicisation of psychedelic psychiatry, suggesting that its elimination from the advancing psychopharmacological paradigm resulted, in part, from a cultural hysteria.

The responses to LSD use in the 1960s had all the essential ingredients for its identification as a moral panic. The increasingly politicised youth became the “folk devils,” to borrow Stanley Cohen’s term, and set the stage for a panic that pitted youth against adults. The drug scare took flight during a heightened period of general anxieties about the shifting political and cultural values in post-war North American society, which supports Goode and Ben-Yehuda’s explanation that moral panics spread because their complicated origins made the panic both invisible and pervasive. Based on these theoretical frameworks, an investigation of the moral panic over LSD use in the 1960s illustrates a clash of interests—commercial, political and medical—and their jockeying for moral authority in the post-war context. In the case of LSD, medical experts with intimate knowledge about the drug’s effects found themselves on the wrong side of the political trend.

The dischordant cultural and medical views of a drug underscored the importance of the media in prescribing risks associated with drugs. As Philip Jenkins has argued,

media-generated labels of dangerousness have enduring consequences for public and medical perceptions of a drug and its users.⁹⁰ In the case of LSD, clinical psychedelic authorities were also consumers of the drug. At the height of the moral panic, psychiatrists had to choose between professional and political allegiances. In the context of the moral panic over LSD psychedelic experts bore the additional political burden of implicitly endorsing a generational uprising through continued support for psychedelic drugs. During the moral panic the context of professional authority shifted and by the end of the decade psychedelic psychiatry no longer seemed grounded in valid medical principles.

The final chapter examines the way that this publicity affected psychedelic psychiatry. Newspaper reports contained graphic images depicting the horrific consequences of abusing hallucinogens, but as psychedelic experts tried to make clear, the embellished accounts did more harm than good. Curious thrill-seekers gleaned more information about psychedelics from the increased media exposure and, despite legislative restrictions, the subterranean channels of the drug trade flourished. For researchers such as Hoffer and Osmond, the political response to the moral panic over drug abuse redrew the lines of professional authority and ignored input from psychedelic experts.

⁹⁰ Philip Jenkins, *Synthetic Panics: The Symbolic Politics of Designer Drugs* (New York: New York University Press, 1999)

Chapter Six: “Too many young chemistry majors”

In December 1961 newspaper headlines in Europe and North America alarmed readers with the frightening news that the popular over-the-counter medication, Thalidomide, caused severe birth defects. The news rattled consumers and raised suspicions about the reliability of so-called wonder drugs. It also cast doubts on the capability of medical experts to determine the long-range effects or diversity of reactions of pharmaceutical medications, even those that performed well in controlled trials. The West German government became the first jurisdiction to withdraw Thalidomide from the marketplace after discovering that it caused congenital birth defects. Chemie Grünenthal in West Germany, Richardson-Merrell in the United States and Frank W. Horner Limited in Canada had marketed Thalidomide as a “remarkably safe” over-the-counter sleeping pill. The active ingredient in the drug also appeared in several other non-prescription medicines for colds, flu, headaches, neuralgia and asthma.¹ By the time the drug was withdrawn over 10,000 children were born with deformities, generally involving missing long bones in the shoulders, hands, legs and feet, giving the appearance of limbs growing directly from the torso.² Concerns over liability ricocheted through the medical and legal communities and raised public alarm.

¹ Barbara Clow, “‘An Illness of Nine Months’ Duration’: Pregnancy and Thalidomide Use in Canada and the United States,” in *Women Health and Nation: Canada and the United States Since 1945* (eds Georgina Feldberg, Molly Ladd-Taylor, Alison Li, and Kathryn McPherson, 47 (Montreal: McGill-Queens University Press, 2003).

² Arthur Daemmrich, “A Tale of Two Experts: Thalidomide and Political Engagement in the United States and West Germany,” *Social History of Medicine* 15, 1 (2002), 138. Daemmrich states that over 4,000 of these children were born in Germany where Thalidomide had been the most popular sleeping pill. In the

The Thalidomide issue served as a lightning rod for medical and political decisions regarding the safety and availability of drugs. In Canada, the decision to place Thalidomide on the Narcotics Schedule gave politicians occasion to pause and consider adding other drugs to this list. LSD arose as a possible candidate.³ Debates in the House of Commons and the Senate revealed deeply-held concerns that LSD should join Thalidomide on a list of restricted drugs. A motion to classify LSD with Thalidomide passed in both the House of Commons and the Senate but the bill was withdrawn under protest from the Canadian Psychiatric Association and the Royal College of Physicians and Surgeons.⁴

The objections from the medical community centred on the apparent efficacy of lysergic acid treatments for alcoholism and the growing clinical insights gleaned from research into model psychoses.⁵ Despite professional differences on the potential clinical applications of the drug, the medical community resisted the interference of politicians and the precedent of banning potentially therapeutic psychoactive substances. Medical practitioners rallied together to defend their professional prerogative to determine the

United States 17 babies were born with deformities caused by this drug. Daemmrich obtained these American figures from United States, Food and Drug Administration files (1962).

³ Canada. Debates of the House of Commons (1962), statement by Mr. H.C. Harley (Halton), 979-980. Debates in the House of Commons in October of 1962 over proposed legislation restricting the use of LSD, centred on the government's inaction regarding Thalidomide and prompted lengthy debates over how to handle LSD more swiftly.

⁴ Canada. Debates of the House of Commons, Volume 1, 26 October 1962, 974-993; Debates of the House of Commons, Volume 1, 12 November 1962, 1522- 1527; Debates of the House of Commons, 1962, Volume I, 12 November 1962, 1537-1552; Debates of the House of Commons, Volume I, 13 November 1962, 1562-1572. [Bill No. C-3] Support from the medical community came from: C.A. Morrell (FDD Director, Ottawa); Abram Hoffer (Saskatoon); David Archibald (Director of Addictions Research Foundation, Toronto); J.K.W. Ferguson (Connaught Laboratories and federal medical advisory board member); J.F.A. Calder (director of Saskatchewan Government's Bureau of Alcoholism); Duncan Blewett (psychology professor, University of Saskatchewan, Regina). "Drug Acclaimed by Researchers May be Banned," *Globe and Mail*, 20 October 1962, p. 1; "Ban on Drug 'Halts Some Cures'," *Toronto Daily Star*, 21 December 1962, section 3.

⁵ For an explanation of the theories on model psychoses developed by Osmond et al, see chapter 2.

ultimate therapeutic value of pharmacological substances. The Canadian government responded with a compromise: it banned the public sale of the drug and issued a new regulation permitting the continuation of medical experimentation only with explicit approval from the federal minister of health.⁶ Psychedelic authorities in Saskatchewan remained wary of the increased political control this bill granted the Minister of Health, but seemed satisfied with the opportunity to continue research.⁷

The window of opportunity to investigate LSD, however, was slowly closing. In a matter of several years, LSD shifted legally from a licit substance with medical potential to an illicit substance with criminal overtones. The change in legal status also involved a transfer of authority to evaluate the safety of pharmaceuticals from the exclusive domain of the medical community to one increasingly involving the state.⁸ Even before the legislative amendments came into effect, clinical experimentation with LSD was encountering new obstacles. Several laboratories discontinued LSD experiments in the mid-1960s due to the difficulties the sensational media stories created for obtaining grants, recruiting staff, and maintaining professional respect. More

⁶ Canada. Acts of the Parliament of Canada. Public General Acts. Statutes of Canada, 1962-3, Volume 1, chapter 15 "An Act to amend the Food and Drugs Act," assented to 20 December 1962, 119-120. This amendment placed LSD on Schedule H of the Food and Drugs Act, alongside Thalidomide. For media coverage on this change, see: "Banned Drug Released for Research," *Globe and Mail*, 10 January 1963, p. 3; "Drug Used in Mental Ills is Withdrawn in Canada," *New York Times*, 21 October 1962, p. 30.

⁷ "Will Ottawa Choke this Cure to Death?" *The Financial Post* (Toronto), 5 January 1963, (no page number).

⁸ For additional information on this process and other contemporary drug policies see: Patricia Erickson, *Illicit Drugs in Canada: A Risky Business* (Scarborough: Nelson Canada, 1988); Patricia Erickson, *Cannabis Criminals: The Social Effects of Punishment on Drug Users* (Toronto: Addictions Research Foundation, 1980); and, Jill Jonnes, *Hep-cats, Narcs and Pipe Dreams: A History of America's Romance with Illegal Drugs* (Baltimore: The Johns Hopkins University Press, 1996). For an excellent collection of essays addressing shifting boundaries between licit and illicit drugs and the subsequent criminalisation that occurs, see: *Altering American Consciousness: The History of Alcohol and Drug Use in the United States, 1800-2000* (eds) Sarah Tracy and Caroline Jean Acker (Amherst: University of Massachusetts Press, 2004), especially Timothy Hickman, "The Double Meaning of Addiction: Habitual Narcotic Use and the Logic of Professionalizing Medical Authority in the United States, 1900-1920," 182-202; Susan Speaker, "Demons for the Twentieth Century: The Rhetoric of Drug Reform, 1920-1940," 203-224.

profound consequences existed for clinicians who had staked their careers on LSD research. In addition to losing research facilities, they had gradually become marginalised members of the psychiatric community. Psychedelic psychiatry, and its advocates, moved to the fringes of experimental medicine and became associated with unorthodox therapies. Although some clinical researchers attempted to continue publishing accounts detailing the benefits of exploring psychedelic therapies, their stories were frequently lost in the back pages of newspapers amidst a barrage of contrary headlines. While LSD researchers had faced strong methodological opposition from their medical colleagues in the 1950s, the media uproar over LSD in the 1960s delivered a decisive strike against the continuation of psychedelic drugs in medical trials and clinical practice.

LSD's path from "medical marvel to modern menace" is familiar territory for historians of drugs. Virginia Berridge and David Courtwright have each traced the history of opium from its acceptance in medicine to its cultural reincarnation as an illicit drug.⁹ While Berridge concentrated on experiences in Britain and Courtwright focused on the United States, both found that the criminalisation of opium had significant consequences for those who used it for other than medical purposes. These and other authors have also illustrated the ways in which medico-legal debates about drug policies frequently operate in tandem with cultural perceptions of addiction. Timothy Hickman, for example, has stressed the importance of studying addiction as an expression of class

⁹ Virginia Berridge, *Opium and the People: Opiate Use and Drug Control Policy in nineteenth and early twentieth century England* (London: Free Association Books, 1999); and, David Courtwright, *Dark Paradise: Opiate Addiction in America before 1940* (Cambridge: Harvard University Press, 1982).

tensions.¹⁰ Peter Mancall has investigated a persistently racialised concept of alcoholism as it pertained to North American Indians.¹¹ Historians have also argued that the disease concept of alcoholism merely reinforced gendered assumptions about male and female behaviour.¹² These studies emphasise the significant influence that cultural perceptions of users have had on the history of drugs. Several psychoactive substances, including cocaine, tobacco, and methadone, explicitly link drug use with criminal behaviour by focusing on perceptions of drug users.¹³

By contrast, other drug histories have focused on the role of the medical-industrial complex and its overzealous promotion (rather than societal consumption) of pharmaceuticals as an underlying cause for subsequent restrictions on drugs. Thalidomide provides a striking example of a commercially-available drug that historically represented a tragic failure in modern pharmacology. In this case, historians have focused on critiquing the medical profession, the licensing agencies and the

¹⁰ Timothy Hickman, "The Double Meaning of Addiction: Habitual Narcotic Use and the Logic of Professionalizing Medical Authority in the United States, 1900-1920," in *Altering American Consciousness: The History of Alcohol and Drug Use in the United States, 1800-2000* (eds) Sarah Tracy and Caroline Jean Acker, 182-202 (Amherst: University of Massachusetts Press, 2004).

¹¹ Peter Mancall, "'I Was Addiction to Drinking Rum': Four Centuries of Alcohol Consumption in Indian Country," in *Altering American Consciousness: The History of Alcohol and Drug Use in the United States, 1800-2000* (eds) Sarah Tracy and Caroline Jean Acker, 91-107 (Amherst: University of Massachusetts Press, 2004).

¹² Michelle McClellan, "'Lady Tipplers': Gendering the Modern Alcoholism Paradigm, 1933-1960," in *Altering American Consciousness: The History of Alcohol and Drug Use in the United States, 1800-2000* (eds) Sarah Tracy and Caroline Jean Acker, 267-297 (Amherst: University of Massachusetts Press, 2004); Lori Rotskoff, "Sober Husbands and Supportive Wives: Marital Dramas of Alcoholism in the Post-World War II America," in *Altering American Consciousness: The History of Alcohol and Drug Use in the United States, 1800-2000* (eds) Sarah Tracy and Caroline Jean Acker, 298-326 (Amherst: University of Massachusetts Press, 2004); and, Lori Rotskoff, *Love on the Rocks: Men, Women, and Alcohol in Post-World War II America* (Chapel Hill: University of North Carolina Press, 2002).

¹³ Joseph Spillane, *Cocaine: From Medical Marvel to Modern Menace in the United States, 1884-1920* (Baltimore: Johns Hopkins University Press, 2000); Jarett Rudy, "Unmaking Manly Smokes: Church, State, Governance, and the First Anti-Smoking Campaigns in Montreal, 1892-1914," *Journal of the Canadian Historical Association* 12 (2001): 95-114; and, Caroline Jean Acker, *Creating the American Junkie: Addiction Research in the Classic Era of Narcotic Control* (Baltimore: Johns Hopkins University Press, 2002).

pharmaceutical industry for promoting a drug that turned out to be unsafe.¹⁴ David Healy offered a more pointed criticism of the highly lucrative commercial benefits of pharmacological promotion, thus foreshadowing a looming menace caused by western society's overindulgence in drug remedies in general.¹⁵ He has suggested that the contemporary acceptance of pill-popping solutions has cultivated a dangerous and powerful liaison between the pharmaceutical industry and advertising agencies. Healy argues that commercial interests that masquerade as legitimate actors within the medical community therefore mediate popular conceptions of health, risk, and danger.

Psycho-active substances that invite dramatic labels of wonder or danger have been attractive subjects for cultural-historical analyses of drugs.¹⁶ These labels reveal socio-cultural assumptions about a particular drug, its users and its promoters. In the case of LSD, its entrenched reputation as a dangerous substance became linked to its recreational use by 1960s youth. Examinations of military investigations with LSD, or clinical trials with patients unaware of its anticipated effects, similarly have contributed to its reputation as a dangerous substance. Hoffer and Osmond's contributions to the history of LSD experimentation, however, clearly demonstrate how the drug's history has heretofore been framed in the context of its recreational use and, later, its military

¹⁴ Richard McFadyen, "Thalidomide in America: A Brush with Tragedy," *Clio Medica*, 11, 2 (1976): 79-93; Stefan Timmermans and Valerie Leiter, "The Redemption of Thalidomide: Standardizing the Risk of Birth Defects," *Social Studies of Science*, 30, 1 (2000): 41-71; and, Arthur Daemmrich, "A Tale of Two Experts: Thalidomide and Political Engagement in the United States and West Germany," *Social History of Medicine*, 15, 1 (2002): 137-158.

¹⁵ David Healy, "Good Science or Good Business?" in *Prozac as a Way of Life* (eds) Carl Elliot and Tod Chambers, 72-79 (Chapel Hill: University of North Carolina Press, 2004).

¹⁶ David Courtwright, *Forces of Habit: Drugs and the Making of the Modern World* (Cambridge: Harvard University Press, 2001); and, Alan Yoshioka, "Streptomycin in Postwar Britain: A Cultural History of a Miracle Drug," in *Biographies of Remedies: Drugs, Medicines and Contraceptives in Dutch and Anglo-American Healing Cultures* (eds) M. Gijswijt-Hofstra, G.M. Van Heteren and E.M. Tansey, 203-228 (Amsterdam: Editions Rodopi B.V., 2002).

applications. The popular preoccupation with LSD drew negative attention to its medical uses, and psychedelic psychiatrists such as Hoffer and Osmond subsequently found themselves at the margins of the profession.

Medical Response

The second half of the 1960s marked an important turning point in the clinical history of psychedelics. By 1966 over two thousand articles concerning psychedelics had appeared in the medical literature.¹⁷ While acid trips among counter-culture youth demonstrated a flirtation with revolutionary ideas, medical experimentation with LSD similarly toyed with new chemically-inspired medical philosophies. The psychedelic experience promised consciousness-raising introspection and cultivation of a new philosophical perspective that could not be empirically measured by standard medical instruments. American clinical psychologist Robert Mogar surmised that, “the ‘Psychedelic Ethic’ promise[d], namely, passion and meaning in a cold, objective world. It would be indeed ironic if the agent of scientific-man’s salvation should appear in the form of synthetic drugs—a secular version of the cosmic joke.”¹⁸ In a pill-popping post-war culture, LSD, on the one hand, promised to bring new perspectives into medicine within the advancing psychopharmacological paradigm. Conversely, the recreational use of psychedelic drugs and the crisis created by the Thalidomide tragedy seemed to suggest that the medical community did not have sufficient knowledge of, or control over, its drugs. By the end of the 1960s, doctors using LSD in their clinical practices wielded

¹⁷ Robert E. Mogar, “LSD and the Psychedelic Ethic,” *Per/Se: Charter Issue* (1966): 56-58.

¹⁸ *Ibid.*, p. 58.

limited credibility in this professional atmosphere, an environment backed by strong moral opposition to all things psychedelic.

While newspaper reports seized upon the dangers associated with taking LSD for kicks, articles in the medical journals remained faithful to their profession and continued publishing the results of LSD trials without commenting on the media distortion.

Although a clinical consensus on the value and efficacy of drugs such as LSD, mescaline and psilocybin had not yet emerged by 1966, concerns about the drugs' dangerousness did not appear in the medical literature. Most articles until mid-decade continued to explore the potential uses of the drug.

In spite of this trend, an American psychiatrist in California did raise concerns about LSD's safety. Sidney Cohen worked as a psychiatrist at the Wadsworth Veterans Administration Hospital in Los Angeles and as an adjunct professor of medicine at the University of California, Los Angeles School of Medicine. Cohen had a strong background in psychopharmacology before assuming these positions and introduced many medical and graduate students to the field with his "infectious enthusiasm for research."¹⁹ After taking LSD himself in 1955, Cohen joined the ranks of other psychedelic drug researchers and began conducting his own LSD experiments in the Bay area. Unlike Hoffer and Osmond, however, Cohen grew increasingly concerned by the feeling of emptiness, loneliness, and sometimes despair reported to him by his LSD subjects after the trials.²⁰ The contemporary medical literature on LSD did not offer any

¹⁹ Steven Novak, "LSD Before Leary: Sidney Cohen's Critique of 1950s Psychedelic Research," *Isis*, 88,1 (1997), 88.

²⁰ *Ibid.*

explanations for this response and, indeed, the absence of articles on the topic prompted Cohen to prepare his own.

In 1960, Cohen conducted a comprehensive survey of medical literature on LSD and distributed a questionnaire to his fellow researchers experimenting with LSD; he published the results in the *Journal of Nervous and Mental Disease*.²¹ His analysis was drawn from a collection of responses from approximately five thousand individual researchers, who reported their results with over twenty-five thousand experiences (volunteers and patients) with either mescaline or LSD. Based on the responses he received and the literature available, Cohen concluded that no published medical article or questionnaire respondent encountered harmful physical side effects from LSD.²² Larger doses, it seemed, produced more variable results, including intense paranoid thinking and acting out. Adverse reactions also occurred among neglected subjects, where investigators refused to interact with the subject or when the subject engaged in self-experimentation alone.²³ Cohen's study identified the occurrence of negative reactions under certain circumstances, but overall seemed to indicate that the drug was relatively safe.

In 1966, media coverage frequently fixated on suicides and homicides related to LSD use; Cohen's analysis, however, found only one case of completed suicide.²⁴ In fact he claimed that "in only a very few instances a direct connection between the LSD

²¹ Sidney Cohen, "Lysergic Acid Diethylamide: Side Effects and Complications," *Journal of Nervous and Mental Disease*, 130 (1960): 30-40.

²² Ibid., p. 30-31.

²³ Ibid., p. 31.

²⁴ He states that in this case a woman had been given the drug without her knowledge. "The devastating effects of a completely inexplicable psychic disruption were seemingly too much for this person to endure and she took her life." Ibid., p. 33.

experience and the movement toward self-destruction could be discerned.”²⁵ He added however, that only previously diagnosed “disturbed patients” registered in this category. No normal subject ever reacted with suicidal behaviour; and the rate of incidence for attempted suicide among patients who consumed LSD was 1.2/1000.²⁶ He maintained that any direct connection between LSD use and the subsequent suicide attempts by depressed patients could not be established with any degree of certainty. Comparatively, he found that this rate ranked moderately lower than the rate of attempted suicide for patients consuming chlorpromazine, by then the anti-psychotic wonder drug of psychiatry. Yet, chlorpromazine did not invite public scrutiny in an analogous manner.

Cohen also discussed the problem of determining the probable causation of prolonged or recurring effects attributed to the drug. For example, he argued that the powerful reactions produced by psychedelics often made a lasting impression on the individual subject. The individual might revisit the experience in his or her memories and continue remembering the details of the reaction. For some, an obsessive-like thought pattern developed, which would later become known as a flashback. Cohen commented that:

The highly suggestible or hysterical individual would tend to focus on his LSD experience to explain subsequent illness. Patients have complained to [Harold] Abramson that their LSD exposure produced migraine headaches and attacks of influenza up to a year later. One Chinese girl became paraplegic and ascribed this catastrophe to LSD. It so happened that these people were all in the control group and had received nothing but tap water.²⁷

²⁵ Ibid., p. 33.

²⁶ Ibid., p. 36. See also: A. Lapolla and L.R. Nash, “Two Suicide Attempts with Chlorpromazine,” *American Journal of Psychiatry*, 121 (1965): 920-922; S. Cohen, C.V. Leonard, N.L. Farberow, E.S. Sheidman, “Tranquilizers and Suicide in the Schizophrenic Patient,” *Archives of General Psychiatry*, 11(1964): 312-321.

²⁷ Cohen, “Lysergic Acid Diethylamide: Side Effects and Complications,” 38.

It appeared, according to his investigation, that LSD emerged as the causal factor in the development of subsequent unexplained or bizarre thoughts, behaviours and emotions. The desire to link cause and effect appeared so strongly that LSD emerged as the culprit in a number of cases where subjects had never even been exposed to the drug.

Cohen's study, published before the Thalidomide crisis, served as a comprehensive guide to LSD reactions for psychedelic researchers and helped clinicians negotiate real from perceived reactions to the drug. Ultimately, Cohen's investigation demonstrated to his colleagues that the drug held tremendous research promise. Contemporary clinicians such as Hoffer and Osmond interpreted Cohen's study as an endorsement of the relative safety of the drug.²⁸

Two years after Cohen's initial publication, he prepared an addendum to the original study in light of the rise of black market acid. While the second study largely repeated many of the previous findings, the tone of the report shifted to reflect a more cautious and somewhat ambivalent endorsement of psychedelics in psychiatry. This time, the article concluded with:

The use of LSD-25 can be attended with serious complications. This is especially true now that a blackmarket (sic) in the drug exists. The dangers of suicide, prolonged psychotic reactions, and anti-social acting out behaviour exist. Misuse of the drug alone or in combination with other agents has been encountered. Properly used, LSD-25 remains an

²⁸ Abram Hoffer, "D-lysergic acid diethylamide (LSD): A Review of its Present Status" *Clinical Pharmacology and Therapeutics*, 39 (1965): 183-255; SAB, A207, IX. 22. Manuscripts "Lysergic Acid Diethylamide (LSD): A Review of the Present Status," (1964 draft), 24. Steven Novak, "LSD Before Leary: Sidney Cohen's Critique of 1950s Psychedelic Research," *Isis*, 88, 1 (1997): 87-110 argues that Cohen's 1960 article in fact represented his concerns for its safety and *should* have been interpreted as a warning rather than an endorsement.

important investigational instrument which might assist in the elucidation of significant problems in the study of the mind.²⁹

These tepid warnings reinforced the mounting problems created by the black market drugs. In spite of this publication, medical research with psychedelics continued, and many clinicians maintained claims that the drug produced no ill effects. While medical trials investigated the efficacy of the drug in clinical practice, critics of LSD in psychiatry continued to concentrate on the difficulties in evaluating its effects in controlled trials. After 1966 several accounts surfaced in medical journals exploring the possible side effects and abuses of LSD.³⁰ By the end of the decade the medical literature revealed a shift in enthusiasm for LSD investigations as few positive accounts appeared in the medical journals.³¹

The connection between LSD and dangerousness emerged in the medical literature after it appeared in the popular press. In 1967, 1968 and 1970 respectively the *Globe and Mail* published headlines claiming medical evidence concerning the dangerousness of LSD: “Doctor sees evidence LSD harms offspring,” “Neurologist calls

²⁹ Sidney Cohen and Keith S. Ditman, “Complications Associated with Lysergic Acid Diethylamide (LSD-25),” *The Journal of the American Medical Association*, 181 (1962), 162.

³⁰ For example see: Anonymous, “Amphetamines, Barbiturates, LSD and Cannabis: their use and misuse,” *Reports on Public Health and Medical Subjects*, 124 (1970): 1-75; D.F. Berg, “The Non-Medical Use of Dangerous Drugs in the United States: A Comprehensive Overview,” *International Journal of the Addictions*, 5, 4 (1970): 777-834; G.D. Johnson, S.E. Elmore, F.F. Adams Jr, “The ‘trip’ of a Two Year Old,” *South Carolina Medical Association Journal*, 66, 11 (1970): 424-425; D.T. Barnes, “The uses and abuses of LSD and other hallucinogenic drugs,” *Australian & New Zealand Journal of Psychiatry*, 4, 1 (1970): 170-3; W.D. Paton, “Drug dependence: pharmacological and physiological aspects,” *Journal of the Royal College of Physicians of London*, 4, 3 (1970): 247-254; G.V. Rossi, “Pharmacologic effects of drugs which are abused,” *American Journal of Pharmacy & the Sciences Supporting Public Health*, 142, 4 (1970): 161-70; M.M. Cohen, M.J. Marinello, N. Back, “Chromosomal damage in human leukocytes induced by lysergic acid diethylamide,” *Science*, 155, 768 (1967): 1417-1419; M.H. Keeler and C.B. Reifler, “Suicide during an LSD reaction,” *American Journal of Psychiatry*, 123, 7 (1967): 884-885; B.J. Materson and E. Barrett-Connor, “LSD ‘mainlining’: A new hazard to health,” *JAMA*, 200, 12 (1967): 1126-7; and, M. Bowers, A. Chipman, A. Schwartz and O.T. Dann, “Dynamics of psychedelic drug abuse: A clinical study,” *Archives of General Psychiatry*, 16, 5 (1967): 560-566.

³¹ Recently this situation has begun to change; see Erika Check, “The Ups and Downs of Ecstasy,” *Nature*, 429 (2004): 126-128.

LSD dangerous;" and, "LSD study shows it may be mutagen."³² Despite reference to testimony from medical experts in each of them, only the first headline corresponded to a published record of chromosomal damage caused by LSD.³³ Although this headline explicitly linked LSD to the dangers associated with Thalidomide, articles in the medical literature did not readily support this claim. Nonetheless, the media-generated hysteria about LSD had a significant influence on clinical trials with psychedelics.

The increased publicity surrounding LSD reinforced its popular image as a dangerous drug for recreational experimentation. This common perception also affected its reputation in clinical trials. As the drug attracted more publicity, clinical researchers found it increasingly difficult to recruit volunteers prepared to offer an unprejudiced description of their response to LSD. Instead, volunteers seemed to have developed preconceived ideas about the drug. Consequently, subjects volunteered for an LSD experiment seeking a mind-expanding experience. Patients slated for LSD therapy exhibited higher levels of anxiety when undergoing treatment. Increased publicity shaped popular perceptions of the drug, with significant consequences for clinical research that remained dependent on a large inventory of experiences.

By the end of 1966, medical researchers began doubting their capacity to continue studying LSD amidst the media sensationalism. A research team in New York sent out questionnaires to clinicians involved in psychedelic drug trials in an effort to assess the effect they felt the media had on their work. The New York team had experienced

³² "Doctor sees evidence LSD harms offspring," *Globe and Mail*, 17 March 1967, p. 11; "Neurologist calls LSD dangerous," *Globe and Mail*, 29 January 1968, p. 13; and, "LSD study shows it may be mutagen," *Globe and Mail*, 5 May 1970, p. 12.

³³ M.M. Cohen, K. Hirschhorn, and W.A. Frosch, "In vivo and in vitro chromosomal damage induced by LSD-25," *New England Journal of Medicine*, 227, 20 (1967): 1043-1049.

difficulties attracting volunteers to their trials after the outbreak of sensationalist stories in the spring of that year. Correspondence with their colleagues throughout North America revealed common difficulties among psychedelic researchers in the recruitment of suitable volunteers. They found, for example, marked differences in the kinds of people volunteering for LSD trials.³⁴ The most frequently reported change in recruitment referred to the suspicion that the increased media exposure seemed to attract volunteers seeking “the promise of nirvana.”³⁵ In some cases this promise flooded trials with an abundance of volunteers determined to find new levels of spirituality, utopia, or achieve new philosophical insights. With such expectations, the subjects’ reports often concentrated on a comparison of their assumptions about the drug’s effects with the reality of the experience. Results from these trials offered limited clinical insight.

Patients also exhibited changes in attitude towards psychedelic therapies. Individuals who already felt anxious about the treatment or experiment expressed heightened fears that sometimes led to panic attacks before the trial. The number of individuals seeking reassurance about the drug’s safety and a detailed explanation of the probable effects also increased. One respondent included the recent publicity: “increased favourable attitudes among the previous sceptics or fence sitters, but with those negative or uninterested to begin with the publicity has served to reinforce their fears concerning adverse effects.”³⁶ These findings suggested that the negative media exposure had a limited effect on dissuading individuals from trying the drug, but nonetheless hardened positions on its use.

³⁴ SAB, A207, III. A. Box 53, Charles C. Dahlberg, Ruth Mechaneck, and Stanley Feldstien, “LSD Research and Adverse Publicity,” (1967), 2.

³⁵ *Ibid.*, p. 4.

³⁶ *Ibid.*, p. 5.

Regarding the influence on scientific investigation more generally, several clinicians complained that they had discontinued their work by early 1967; either as a result of the difficulties obtaining supplies, pressure from the government, low morale among staff, or concerns that colleagues regarded the research as “shady.”³⁷ Each of the programs reviewed in this New York investigation had worked with the drug for at least a year before the increased media attention and all who responded identified the noticeable influence of the adverse media. Despite the negative publicity, however, respondents generally felt that the situation had not damaged the bond of trust between patient and doctor.

In 1968 Robert Mogar published a critique of the psychedelic craze and explained his reasons for withdrawing from further clinical trials with the research program at Menlo Park, California. After identifying himself as an “average” researcher, he was an investigator who, despite the absence of negative results, decided to terminate his clinical explorations. He described his frustration trying to obtain quality supplies, receiving repeated rejections for federal grants and near harassment for making public statements on psychedelics. This new role, forced upon him, restricted Mogar from pursuing other research objectives. Reflecting on the relationship between publicity and psychedelic research he commented:

Since no one lives in a cultural or scientific vacuum, literally all the work and commentary to date have been strongly influenced by the sensationalism and controversy generated by psychedelic drugs. Although operative to some degree in all scientific endeavours, cultural and personal biases toward psychedelic phenomena have grown to absurd heights, obscuring almost totally the substantive empirical issues. Studies that are bold and imaginative as well as systematic and reasonably objective are

³⁷ Ibid., p. 6.

not likely to be conducted in the foreseeable future. Attempts to research or discuss psychedelic states in a spirit of open inquiry quickly deteriorate into ‘which side are you on’.³⁸

Consistent with the New York study, Mogar discovered that the increased publicity significantly affected attitudes about LSD in clinical trials. It also forced clinicians such as Mogar to either support the medical profession’s prerogative to engage in psychiatric research or the state’s responsibility to make decisions regarding the efficacy of certain experiments based on political concerns.

By the end of the decade these divisions extended into the professional arena and redressed the lines of authority. Between 1966 and 1968 medical researchers increasingly lost authority with respect to their studies and public comments on the use of LSD. Pronouncements about LSD came from non-medical sources and profoundly altered the context of debate over the value of the drug. Humphry Osmond, who remained one of the world’s leading figures in psychedelic research, continued to speak out about the importance of clinical studies on psychedelics, but during this period his professional credibility eroded and his pleas for increased tolerance went unheeded. Nonetheless, Osmond maintained confidence that reason would prevail and psychedelic psychiatry would not be jeopardised in the prevailing atmosphere of panic. As his psychedelic colleagues began discontinuing their investigations with LSD, Osmond encouraged Hoffer to strengthen his resolve and endure the political storm; after all, he believed, the panic over LSD merely reflected cultural anxieties over contemporary socio-political changes. Once the revolutionary spirit dissipated, reasoned scientific

³⁸ Robert E. Mogar, “Research in Psychedelic Drug Therapy: A Critical Analysis,” *Research in Psychotherapy*, 3 (1968), 500.

inquiry would resurrect psychedelic psychiatry because it offered “real” insights into mental illness.³⁹

Personal correspondence between Hoffer and Osmond describe the subsequent decline of LSD in medical research and, with it, their own professional relocation to the margins of clinical relevance. They responded by trying to convince political authorities about the importance of maintaining a balanced perspective on the so-called LSD epidemic. They retained their perspective on the significance of psychedelics in medicine and repeated their call for controlled use and further investigation into the realities of the black market drug world. By 1967, however, Hoffer and Osmond were increasingly frustrated by the lack of respect extended to them by government policy makers. Osmond instructed Hoffer,

we can take a hard line with the authorities. They have not consulted us. They have acted rashly and things look as if they are going badly and likely to go worse. Young people don't believe their lies and are consequently liable to disregard the truth at the same time to their detriment.⁴⁰

The real dangers of acid abuse, therefore, stemmed from the persistence of ill-informed policies that not only drove home-made psychedelics deeper underground, but also further weakened deference to authority. The wrong-headed policies, he asserted, resulted in a situation where “the government and the professionals were made to look stupid and the result was to amuse and raise the morale of illegal users.”⁴¹ Osmond felt that a more empathetic approach to the problem would result in a greater capacity to curb

³⁹ SAB, A207, XVIII. 26.b. Letter from Humphry Osmond to Abram Hoffer, 6 March 1967.

⁴⁰ Ibid., p. 2.

⁴¹ SAB, A207, XVIII. 26.b. Letter from Humphry Osmond to Frances Cheek, re: Different Kinds of Psychedelic People, 5 March 1967, p. 3.

the real dangers presented by an unregulated drug trade and, simultaneously, cultivate better attitudes towards authority in general.

Osmond felt that his responsibility, as a medical expert on psychedelic drugs, was to identify the main issues involved in the LSD problem and direct research and education towards solving it. He maintained that, given the nature of LSD, especially its potency and capacity for concealment, fears over its widespread use must be handled delicately. The most pressing concern, therefore, was the home production of psychedelics. The availability of LSD-like substances stymied clinicians in their attempt to treat individuals who were experiencing bad trips. Doctors treating individuals for a bad drug reaction had simply no idea what kinds of chemicals the individual might have ingested. The most appropriate solution, according to Osmond, was to clearly and publicly delineate the differences, and the consequences, between medical and recreational LSD.⁴² In fact, he believed that he had a medical responsibility to investigate the problems posed by an alleged LSD-abuse epidemic. In a heightened climate of moral panic, he asserted that, “what is the moral position of the medical man who refuses to treat an immoral person or one who has transgressed the law? Or who holds information which might prevent such a person from being gravely ill.”⁴³ Similar to his approach to examining mental illness, Osmond felt that the best method for curbing drug abuse depended on an understanding of the individual’s desire to take drugs in the first place. By applying empathetic insight into drug-taking behaviour, Osmond felt that more progressive drug policies would result.

⁴² SAB, A207, XVIII. 26.c. Letter from Humphry Osmond to Abram Hoffer, 16 March 1967, p. 3.

⁴³ SAB, A207, XVIII. 26.c. Letter from Humphry Osmond to Abram Hoffer, 16 March 1967.

Legal Measures

In 1966, federal debates in the Canadian Senate and House of Commons again moved towards placing LSD on the official list of narcotics, which would remove the possibility of continuing legal psychedelic drug research. While legislation further restricted medical access to the drug, black market sources continued to provide illegal versions of acid to individuals seeking avenues for non-medical experimentation. Media coverage of psychedelics mixed medical claims with tepid concerns for the proliferation of synthetic forms of LSD, thereby, piquing the curiosity of experience-seekers. Rather than eliminate black market production, between 1963 and 1968 it seemed, according to reports in the newspapers, that bathtub acid supplies had multiplied. This street acid also threatened to undermine medical research. Sandoz-produced supplies ensured that the products conformed to standards concerning doses and ingredients, whereas the underground versions were, of course, not subject to any such controls. The disproportionate media focus on black market LSD trips conflated the multiple versions of the drug and did not account for differences in consumption practices. Impurities in the ingredients, doses, predispositions of users, or the combined use of drugs or drug cocktails (including acid, marijuana, alcohol, etc.) produced entirely different reactions in subjects.

Humphry Osmond suggested that the rise of recreational users demanded additional investigation and public discussion. He deplored what he saw as the reactionary legislative decisions which, he felt, drove bathtub acid production deeper

underground. Osmond acknowledged that this particular substance presented an acute problem given the relative ease of production and the extraordinary difficulties surrounding its detection, both in terms of its manufacture and distribution. Despite Osmond's insistence that medical researchers required more evidence before making definitive statements about the drug epidemic, governments throughout North America explored legal options for terminating the spread of drugs.

During this period, the Sandoz Pharmaceutical Company in Switzerland remained the sole legal manufacturer of the drug, with regional distribution centres in Canada and the United States. In 1963, Sandoz temporarily withdrew its supplies in an effort to help identify the underground sources.⁴⁴ Medical researchers throughout North America continued to obtain the drug, but governments now required researchers to formally apply for supplies through a process external to Sandoz. In Canada, this measure complemented an order-in-council passed in 1962, which, as mentioned earlier, restricted supplies to medical researchers.⁴⁵ The Canadian federal government later bestowed the responsibility for distribution on the Connaught Medical Laboratories in Willowdale, Ontario, under the directorship of Dr. James Ferguson.⁴⁶ Ferguson was a pharmacologist with a particular interest in addictions. Connaught Laboratories had a long-standing

⁴⁴ Canada. Debates of the House of Commons, 1966, "Manufacture of Drug LSD-25," 5 October 1966, p. 8328. Upon questioning, MacEachen confirmed that Sandoz Pharmaceuticals remained the sole manufacturer of the drug and that legal distribution in Canada operated under the control of Sandoz (Canada) Ltd., in Dorval Quebec. All experimental research with the drug required approval from the Minister of National Health and Welfare before receiving supplies. See also: University of Regina Archives, Duncan Blewett, Box 5, Articles: "Small Black Market Reported in LSD," *News Call Bulletin—San Francisco*, 4 January 1963, (no page number).

⁴⁵ Canada. Acts of the Parliament of Canada. Public General Acts. Statutes of Canada, 1962-3, Volume 1, chapter 15 "An Act to amend the Food and Drugs Act," assented to 20 December 1962, 119-120. This amendment placed LSD on Schedule H of the Food and Drugs Act, alongside Thalidomide.

⁴⁶ University of Regina Archives, Duncan C. Blewett, 91-87, Box 3, "Legislation," Letter from Allan MacEachen (Minister of Health) to D.C. Blewett, 3 April 1967.

relationship with the Addictions Research Foundation of Ontario, making Connaught a suitable choice as the Canadian LSD distributor.⁴⁷

The new legislative measures apparently provided sufficient controls over the errant distribution of LSD for the next few years, but in 1966 problems re-emerged. This time, Canada's federal Health Minister, Allan MacEachen, cited the growing publicity over LSD abuse, in combination with concerns that disaffected American youth smuggled sources into Canada, as justification for additional and more restrictive legislative controls. In particular, federal authorities demonstrated uneasiness over allegations that Canada's West Coast was becoming an important satellite for the American illegal drug trade.⁴⁸ Since the 1962 order-in-council, which placed LSD on a restricted substances list under the Food and Drug Act, possession of the drug remained legal, but sale or purchase of LSD constituted a criminal offence. Concerns from the federal government arose suggesting that increased publicity about psychedelics in the United States created corresponding demands in Canada. By early 1966 Canada's Department of Health recommended further investigations into LSD use in Canada.⁴⁹

⁴⁷ I thank Christopher Rutty for his expertise about Connaught and for sharing information with me for this section.

⁴⁸ Canada. Debates in the House of Commons, 13 May 1966, p. 5100. M.P. Frank Howard (Skeena) questioned National Health and Welfare Minister MacEachen on the state of legislation concerning LSD following a *Globe and Mail* article, which indicated that the first arrest for possession of LSD took place only that week. Howard registered his concern that the Canadian government needed to address the issue of drug trafficking straight away. MacEachen responded by stating that he and the Minister of Justice were looking into the matter. He later publicly responded and promised to increase policing measures. MacEachen's statement, reported in *Globe and Mail*, 17 May 1966, p. 7; "MacEachen plans police measures to combat smuggling of LSD," *Globe and Mail*, 16 May 1966, p. 1.

⁴⁹ "Ottawa Hears LSD Crackdown Due Today," *Toronto Daily Star*, 16 May 1968, p. 2; "Ottawa Seeks Closer Control of LSD Sales," *Globe and Mail*, 5 February 1966, p. 4; "RCMP start LSD probe to halt illegal trafficking," *Globe and Mail*, 11 February 1966, p. 35; "Curbs on LSD being studied, Commons told," *Globe and Mail*, 17 May 1966, p. 44.

Agitation for a federal inquiry into the illegal sale and consumption of LSD

appeared in the House of Commons debates on May 6, 1966.⁵⁰ Ten days later Minister of National Health and Welfare, Allen MacEachen, responded with a lengthy statement in Parliament indicating his intentions to appoint a federal commission of inquiry into the situation. Additionally, the federal government would increase the capacity of the Royal Canadian Mounted Police (RCMP) drug enforcement units with special measures devoted to identifying the roots of the hallucinogenic drug trade.⁵¹ Minister MacEachen's pronouncement met with a cautionary statement from Member of Parliament William Dean Howe of Hamilton South, who asserted that:

the drug has tremendous potential for medical research and should not be curbed in this respect. However, the real danger of this drug lies not in the control of its lawful manufacture and importation but the ease with which it can be made by amateurs and made available to younger people for the production of kicks.⁵²

Debates at the federal level continued to invoke the need to distinguish between recreational and medical LSD use.

By November 1966 some Members of Parliament grew frustrated with the slow pace of legislation in contrast with the rapidly growing threat of LSD. Federal representatives pressed the National Health and Welfare Minister for immediate action. In particular, the Member of Parliament from Okanagan-Revelstoke, Howard Johnston, chastised MacEachen for not delivering on his promises of improving the RCMP's drug enforcement measures. Furthermore, he criticised the federal government for their

⁵⁰ Canada. Debates of the House of Commons. 6 May 1966, 4792. Member of Parliament Howard Johnston (Okanagan-Revelstoke) first raised the issue, referring to the increased publicity surrounding its dangerous use.

⁵¹ Canada. Debates of the House of Commons, 1966, Volume 5. "Statement on Control of Drug LSD" by Honourable A.J. MacEachen, 16 May 1966, p. 5156-5157.

⁵² William Dean Howe (Hamilton South) Debates in the House of Commons, 16 May 1966, p. 5157.

inaction in light of recent reports in the national news media that known American LSD advocates held public forums on its use in Canada.⁵³ Johnston recommended that the government heed the warnings issued by the news media and “make every effort to prevent the spread of this menace in our country.”⁵⁴

Increased publicity about LSD continued to attract debate in the House of Commons over the next few months, but in the Senate the issue inspired more rigorous discussion. By April 1967, Bill S-60 came before the Senate in an effort to amend the Food and Drugs Act in a manner that would increase penalties for the sale and distribution of LSD.⁵⁵ Changes recommended in this Bill would result in summary convictions for first time offenders, including a fine, not exceeding one thousand dollars, or imprisonment under six months, or both.⁵⁶ The implications of this Bill meant that anyone caught with LSD risked jail time and a criminal record, including university students and clinicians who had not secured special government permission. Some senators felt that the proposed measures were overly punitive. Instead, they recommended medical treatment for the student-aged offenders.⁵⁷ Consideration for the kinds of individuals routinely involved in LSD use prolonged the debates over its legal

⁵³ Howard Johnston (Okanagan-Revelstoke) Debates in the House of Commons, 21 November 1966, 10157-10158. He particularly cited evidence from *The Sheaf* (University of Saskatchewan student newspaper) and CBC television for providing Timothy Leary and Allen Ginsberg with an opportunity to publicly discuss LSD with a Canadian audience. Their appearances further provoked debate given that in both cases their participation was funded (indirectly through the University of Saskatchewan and directly from the Canadian Broadcasting Company) by the Canadian government.

⁵⁴ Howard Johnston (Okanagan-Revelstoke) Debates in the House of Commons, 21 November 1966, 10158.

⁵⁵ Canada. Debates of the Senate of Canada. Session 1966-1967, Volume II. Food and Drugs Act: “Bill to Amend—Report of Committee Adopted,” Hartland de M. Molson, 16 April 1967, 1845-1848.

⁵⁶ *Ibid.*, p. 1846.

⁵⁷ Statements by Senators: Malcolm Hollett, A. Hamilton McDonald, and Joseph A. Sullivan referred to this issue. Debates of the Senate of Canada. Session 1966-1967, Volume II. Food and Drugs Act: “Bill to Amend—Report of Committee Adopted,” 26 April 1967, 1846-1847.

characterisation. If LSD remained under the jurisdiction of the Food and Drugs Act, clinical experiments could continue and the criminalisation of illegal users carried less severe penalties. If, however, the federal government reclassified the drug as a narcotic, it came under the jurisdiction of the Narcotic Control Act, and invoked the crime of trafficking. Because LSD remained a colourless and odourless substance, the RCMP had almost no capacity to identify traffickers and, thus, enforcement of this crime remained difficult.⁵⁸ Moreover, the potential criminalisation of young university students presented an unsavoury political position.

Efforts to criminalise LSD use gained federal attention in the United States as well, giving rise to three separate senate investigations into the growing abuse of LSD, especially on college campuses. A report in a Washington newspaper stated:

a college co-ed is given a capsule at a party, blacks out in a subway car on her way home, ends up in a psychiatric ward. Two youths are arrested eating grass from a lawn and bark off the trees. These and other bizarre cases are in the big file marked 'LSD' in the office of the Senate....⁵⁹

These alleged occurrences became the subject of examinations by Senate subcommittees on juvenile delinquency, headed by Democratic Senators John L. McClellan and Thomas J. Dodd. Additionally, the National Institute of Mental Health conducted two individual surveys into the growing abuse of acid, with preliminary results suggesting that the scope of the crisis was exaggerated. Senator Robert F. Kennedy added grist to the investigations with a three-day hearing on the drug scene. Despite warnings that more publicity only amplified an already overblown situation, Senator Dodd told Washington

⁵⁸ Canada. Debates of the Senate of Canada. Session 1966-1967, Volume II. Food and Drugs Act: "Bill to Amend—Second Reading," 25 April 1967, 1823.

⁵⁹ "3 U.S. Senate groups look into the use of LSD," Associated Press, as cited in, the *Globe and Mail*, 16 May 1966, p. 4.

reporters that “we owe it to the public to get to the bottom of this problem before it gets further out of hand.”⁶⁰ American authorities moved towards the implementation of stricter fines and sentences for possession and sale of the drug.⁶¹ In 1966, Sandoz voluntarily removed LSD from its distribution repertoire in the United States, maintaining that its legitimate supplies were not responsible for the black market but that the “unforeseen public reaction” necessitated the removal of Sandoz LSD.⁶²

Osmond wrote to Senator Kennedy in May 1966 and appealed to him as a progressive, young American leader. In his letter, he carefully distinguished the importance of continuing clinical psychedelic research from the pressing need to curb the dangers associated with the unregulated production and distribution of psychedelic-like substances. He urged Kennedy to consider the essential contributions of medical experts in determining the most sustainable resolution to the drug panic. In the case of LSD, Osmond explained, the real medical experts were practitioners with personal experiences; those without these critical insights seemed more susceptible to the public panic.⁶³ The crux of the problem, according to Osmond, concerned the proliferation of allegedly hallucinogenic substances in the black market. Legislative measures targeting LSD, therefore, missed the central issue and unnecessarily constrained legitimate research: “the outcome must result in the illegitimate users becoming far more knowledgeable about these substances than the legitimate non-users.”⁶⁴ The solution, as Osmond viewed

⁶⁰ Ibid.

⁶¹ “End of black market for LSD is predicted,” *Globe and Mail*, 24 May 1966, p. 4. Also printed in the *New York Times*.

⁶² “Sole U.S. distributor surrenders its right to handle drug LSD,” *Globe and Mail*, 14 April 1966, p. 1.

⁶³ SAB, A207, XVIII. 23.b. Letter from Humphry Osmond to The Honourable Robert F. Kennedy, 24 May 1966, p. 4.

⁶⁴ Ibid., p. 9. Emphasis in original.

it, depended on the cooperation between government and medical authorities, where medical experts involved in the policy discussions had engaged in self-experimentation.⁶⁵

In the United States prohibitive measures extended into many areas of LSD investigation, initially only permitting research in hospitals administrated by Veterans and projects sponsored by the National Institute for Mental Health.⁶⁶ Dr. J.R. McLean, operating at Hollywood Hospital in British Columbia took a leading role in organising a response from psychedelic psychiatrists. He worked closely with his colleagues in Saskatchewan, such as Abram Hoffer and Duncan Blewett, to articulate a cohesive medical perspective on the situation. This loose coalition of western-Canadian based psychedelic psychiatrist also supported Osmond's view that suppression and prohibition did not solve the problem but instead endangered psychedelic research under the guise of respecting public safety. The underlying problem, MacLean maintained, was a fundamental misunderstanding of the nature of psychedelics and of the black market in chemical substances. He argued that "current legislation and regulation is a classic example of 'throwing out the baby with the bathwater'!"⁶⁷ Although some researchers, including McLean, found it tempting to blame Leary for the eruption of fear over LSD abuse, McLean believed that in spite of the moral panic, medical and political authorities needed to deflate cultural anxieties with reasoned debate and a balanced assessment of psychedelics with medical expertise.

On March 10, 1967 Vancouver's medical health officer, J.L. Gayton, issued an open letter to all young people and parents describing the dangers of LSD. The pamphlet

⁶⁵ I could find no record of a response from Senator Kennedy.

⁶⁶ SAB, A207, 195.a. J. Ross MacLean Correspondence. Letter from J.R. McLean to Miss Susan Wright, 2 August 1967, 1.

⁶⁷ Ibid., p. 2.

outlined the risks and side effects associated with taking psychedelic drugs, allegedly with supporting scientific evidence from the Narcotic Foundation of British Columbia and “other reliable sources.”⁶⁸ The open letter explained that youth were particularly susceptible to the drugs’ overpowering effects, which might lead to suicide and permanent brain damage. Furthermore, it explained that LSD was indeed not a psychedelic, because it “shrunk” the mind rather than “expanding” it. After outlining the legal consequences, the leaflet concluded with the assertion that, “case histories show a slipping in achievement in every phase of life. Secrecy that surrounds the use of LSD and all illicit drugs tends to drive young people into groups separated from the rest of society.”⁶⁹ In no uncertain terms, this letter served as part of a wider political campaign against youth activism, or at least certain types of youth activism.

In response, J.R. MacLean, Abram Hoffer, Harold Abramson and Humphry Osmond formed the International Association of Psychodelytic Therapy to continue combating the growing demonisation of LSD. The deliberate convening of the committee revealed the organisers’ desires to appear international and distinctive from the increasingly ambiguous term psychedelic, which they believed had been co-opted by non-medical users. In a news release of March 27, 1967, this committee complained about the hysteria that affected the reputation of serious medical research. They declared that “it must first be recognised that d-ld-25 as employed in medically supervised

⁶⁸ SAB, A207, 195.a. J. Ross MacLean Correspondence, Flyer “Published by the Vancouver School Board: Dangers of LSD (Lysergic Acid Diethylamide),” 10 March 1967.

⁶⁹ Ibid.

research and therapy is not the drug being so widely misused.”⁷⁰ They continued by explaining that:

Pharmaceutical d-lsd-25 is not addicting (sic): it is not physically harmful; causes no ‘brain damage’, nor other organic damage, and no death has been attributed to the drug per se. When competently and ethically used, the likelihood of precipitating prolonged depression, anxiety states or psychoses is of such rarity as to be almost non-existent.⁷¹

The problem, according to the self-described psychodelytic committee, concerned the impure chemical substances circulating in the black market. Additionally, the widely publicised fears propagated by government authorities further encouraged an already irreverent youth generation into experimenting with these *verboden* mind-manipulating substances. The misinformation distributed by the media, they claimed, embellished the dangers of the drug and ignored its benefits entirely. For example, the committee members deplored the public misconception that LSD caused flashbacks, which constituted a form of physiological harm or brain damage. They complained that the idea that “spontaneous recurrence of perceptual distortions is proof of permanent brain damage is ludicrous...the credibility and effectiveness of all warnings is called into question by such overzealous exaggeration.”⁷² The members of the psychodelytic organisation maintained that rational medical evidence offered reasonable solutions.

Duncan Blewett responded to the pending legislation separately. In a series of letters he explained his position with a sympathetic view toward young LSD users.⁷³ He

⁷⁰ SAB, A207, 195 a. J. Ross MacLean Correspondence, “News Release, ‘L.S.D. ‘Dangers,’” 23 March 1967.

⁷¹ Ibid.

⁷² Ibid.

⁷³ University of Regina Archives, Duncan C. Blewett 91-87, Box 3 “Legislation” includes a number of letters he sent to federal government officials in 1966-1967, some on behalf of *The Canadian Psychodelic Institute*, of which he was secretary.

believed that young students seeking self-exploration through LSD led to greater self-understanding, a position that the Canadian government should applaud. Therefore, in a letter to Member-of-Parliament Tommy Douglas, Blewett stated:

LSD which is non addictive and physically harmless is almost the perfect contraband (it can be absorbed on cloth, paper, hair, candy or dissolved in alcohol or water and an active dose of it is only 1/300,000 of an ounce). For these reasons the proposed legislation will be subverted and the enforcement agencies will come to be regarded as stupid and inept. This type of lawlessness fosters a general disregard for the law...⁷⁴

After likening the discovery of LSD for psychiatry to the development of the microscope for biology, or the telescope for astronomy, Blewett concluded with an open invitation to meet with federal bureaucrats to discuss the formation of public policy regarding LSD. He included a list of other willing participants for the purposes of such consultation and agreed to cover his own expenses.

Regardless of Blewett's accommodations, he and other psychedelic researchers received stock responses from Members of Parliament, including Saskatchewan representatives. Replies from such federal officials often referred to the pending report of the federal inquiry into the drug problem, as proof of the government's intention to examine the issues carefully with appropriate input from medical experts. Leading psychedelic practitioners, such as Humphry Osmond, Abram Hoffer, Colin Smith, Duncan Blewett, and Ross McLean, were never invited to participate in the commission.⁷⁵ One disgruntled practitioner complained that "those who demanded the prohibition of psychedelics, and those who made the law, were, as has been pointed out,

⁷⁴ University of Regina Archives, Duncan Blewett records, 91-87, Box 3, "Legislation," Letter from D.C. Blewett to T.C. Douglas, 26 August 1966.

⁷⁵ University of Regina Archives, Duncan Blewett records, 91-87, Box 3, "Legislation," Letter from Allan MacEachen (Minister of Health) to D.C. Blewett, 3 April 1967.

not qualified by their own experience to decide whether these agents are good for people or bad for them.”⁷⁶ Consequently, he argued, misinformed policy-makers constructed laws based on moral responses to a misunderstood dilemma.

Osmond remained unsatisfied with the Canadian government’s response, and conducted an investigation of his own. After consulting with college youth on university campuses and learning more about the stereotypical counter culture, he found evidence supporting the connection between youth and a drug-stimulated revolution. In 1967 he met with a young man, who identified himself only as the alchemist. The alchemist claimed that he controlled approximately ninety per cent of the underground LSD available in the United States; he also allegedly introduced the Beatles to LSD. He took his distribution mission very seriously and believed that psychedelics would inspire a “pharmaco-political revolution.”⁷⁷ The insurgency he described would “save mankind from the danger of the bomb and from the dangers of a mechanistic and inhuman conformism.”⁷⁸ The alchemist felt that the American way of life needed to change and psychedelics generated the experiences necessary to incite the requisite transformation in cultural values.

Osmond reflected on his meeting with the alchemist and compared these perspectives with his own views on psychedelics. He agreed that LSD experiences might wield some political influence, because the ritual of the psychedelic trip may impart a commonality of experience in users. This shared effect created, according to Osmond,

⁷⁶ University of Regina Archives, Duncan C. Blewett, 88-29, Box 3 “Others’ Writings on Narcotics Legislation,” open letter from D.G. Poole, c. 1967.

⁷⁷ SAB, A207, XVIII, 26.d. Transcript of interview. Humphry Osmond with “the Alchemist,” 30 April 1967, p. 4-5.

⁷⁸ Ibid., p. 4.

“the sense of sharing similar worlds and similar goals and of being part of a larger whole in a way which no amount of meetings can do.”⁷⁹ The latent political and cultural potentialities of a psychedelic philosophy did not alarm Osmond. Indeed, he later displayed sympathy for the revolutionary sentiment, as described by the alchemist. Osmond believed in the underlying principles of the alchemist’s idealised objectives. The young chemist envisioned a “techno-tribalized society which is to a considerable extent non-bureaucratic and non-hierarchical. This is a formidable and appealing model, even without psychedelics; with them, it is something to be thought about.”⁸⁰ Clearly, the kind of cultural upheaval Osmond imagined had a positive outcome and did not rouse any need for moral or political intervention. In fact, Osmond conveyed compassion, and perhaps even empathy, for the young revolutionary drug dealer.

Osmond’s private tolerance for these revolutionary ideals, similar to Blewett’s sympathy for the students’ eagerness for self-exploration, located them on the wrong side of the concerns over increasing drug abuse. Osmond’s appeal for additional clinical investigations into LSD applications also placed him on the margins of his profession. By mid-decade newspaper reports and government legislation clarified the situation by drawing sharp political divisions between moral and immoral citizens. Superficially, the over thirty generation represented order, establishment and authority whereas youth inspired cultural change, radicalism, and anti-authority. Psychedelics became an important badge of the under-thirty revolutionary philosophy. Several psychiatrists studying LSD and other psychedelics abandoned their research at this time, out of

⁷⁹ Ibid., p. 6.

⁸⁰ SAB, A207, XVIII, 26.d. Letter Abram Hoffer to Michael Tuchner, British Broadcasting Corporation, no date.

pressure from government agencies but also out of the recognition that they could no longer perform scientific trials while the drug received so much publicity. Some, such as Sidney Cohen, even revised or clarified their positions on the efficacy of LSD after popular reports raised concerns about its dangerousness. In sum, medical research on psychedelics responded to the growing moral panic about a particular kind of drug use in society, suggesting that cultural factors profoundly influenced the termination of psychedelic psychiatry.

In Canada, an even more decisive condemnation of psychedelic psychiatry emerged after the federal inquiry into the drug problem reported its final set of findings in 1969. The Royal Commission on the Non-Medical Use of Drugs (Le Dain Report) concentrated on drug use in Toronto's famous youth-dominated area, Yorkville, as well as Montreal and Vancouver.⁸¹ Consequently, the commission reinforced the image of urban, middle-class youth taking drugs. The Le Dain Commission also relied heavily on information supplied by the Addiction Research Foundation of Ontario (ARF); in effect, the commission, and by extension the public policy, gave authority to a particular institutional organisation.⁸² The inquiry also distinguished medical from non-medical uses along somewhat mysterious lines.⁸³ The commission similarly overlooked the abuse of psychoactive substance that could be obtained through prescriptions. At the outset, the commission's chair, Gerald Le Dain, explained the focus of the inquiry on the "non-

⁸¹ Canada. *Commission of Inquiry into the Non-Medical Use of Drugs* (LeDain) (Ottawa, 1969) Interim and Final reports. Sheila Gormley, "The Road Show: The LeDain Commission," *Drugs and the Canadian Scene* (Toronto: Pagurian Press, 1970).

⁸² Marcel Martel, "Que faire? Le gouvernement ontarien et la consommation des drogues à des fins récréatives, 1966-1972," *Canadian Bulletin of Medical History* 20, 1 (2003): 109-113.

⁸³ This is inconsistent with the American investigation, which included drugs such as nicotine, caffeine, and alcohol in its study of the "drug problem." See Edward M. Brecher, *Licit and Illicit Drugs: The Consumers Union Report on Narcotics, Stimulants, Depressants, Inhalants, Hallucinogens, and Marijuana—including Caffeine, Nicotine, and Alcohol* (Boston: Little, Brown and Company, 1972).

medical use of sedative, stimulant, tranquillising, hallucinogenic and other psychotropic drugs or substances.”⁸⁴ The resultant concentration on particular kinds of drugs with what psychedelic researchers felt was a corresponding under-representation of clinical expertise on the drugs under examination, further politicised the issue. The reports of the commission confirmed earlier concerns that widespread youth consumption of drugs, with a focus on LSD and marijuana, revealed an epidemic in drug abuse.⁸⁵

Even before the federal commission reported its findings, provincial governments began imposing more prohibitive fines for possession. In British Columbia, which allegedly held the greatest fascination for American drug smugglers, the provincial authorities increased fines to two thousand dollars while neighbouring Alberta added jail terms to its drug legislation.⁸⁶ Saskatchewan politicians remained quiet in these debates. In 1968, the United Nations and the World Health Organisation both recommended that nations comply with their demands to place LSD and other hallucinogens on a narcotics schedule.⁸⁷ The Canadian government responded to these events, in combination with preliminary results from the Le Dain investigation, by placing LSD under the jurisdiction

⁸⁴ University of Regina Archives, Duncan C. Blewett, 91-87, Box 3 “Commission of Inquiry,” “Statement by Gerald Le Dain, Chairman, Commission of Inquiry into the Non-Medical Use of Drugs at the first public hearing in Winnipeg, November 13, 1969. The members of this commission were: Gerald Le Dain, Marie Andrée Bertand, Ian L. Campbell, Heinz E. Lehmann, and J. Peter Stein.

⁸⁵ For more information on the LeDain Commission and the resultant policy recommendations see forthcoming work from Marcel Martel.

⁸⁶ “New Controls on LSD under study: Pennell,” *Globe and Mail*, 21 March 1967, p. 4.

⁸⁷ “UN groups disagree over dangers of LSD,” *Globe and Mail*, 8 January 1968, p. 10; Resolutions adopted by the Economic and Social Council, United Nations plenary meeting, 23 May 1968: sections 1-3 deal with LSD restrictions. The UN resolutions allowed for medical and scientific research but recommended additional controls and restricted all other uses, manufacture and distribution.

of its Narcotic Control Act in 1968, which effectively ended medical experimentation with the drug and made all LSD use illegal.⁸⁸

In view of the legislative changes, Osmond lamented that North Americans had chosen to re-establish a comfortable sense of order rather than invest in a potentially extraordinary medical technology. He complained that:

By devoting most of our energy to vague threats and police action we have lost some of the more important attributes of medical authority, which is mostly concerned with preservation of health and the treatment and prevention of harm.⁸⁹

The legislative response to the drug problem exacerbated an already strained relationship between traditional authorities and the youth generation. The situation placed the medical community in an awkward position and Osmond chose to honour his responsibilities as a medical expert, despite the politicised moral consequences of his actions. His decision to hold steadfastly to his views on psychedelics, however, also affected his position within the medical community.

The new drug policies had enduring consequences for the legacy of scientific psychedelic research. As Hoffer pointed out, “the American government has, or is thinking of passing new drug legislation which will give F.D.A. power to pass upon not only the safety of drugs but upon their efficacy.”⁹⁰ The result of these actions meant that mediocre researchers, in Hoffer’s opinion, might retain the capacity as federal bureaucrats to make decisions that could affect scientific methodology. By ignoring the perspectives of medical experts with the most clinical and personal experience analysing psychedelics, the resultant policies undermined their credibility in the profession.

⁸⁸ Canada. Acts of Parliament of Canada. Statutes of Canada, 1968-9, Volume 17-18, chapter 41 “Food and Drugs, Narcotic Control, Criminal Code, amendments,” 991-995.

⁸⁹ SAB, A207, XVIII. 26.a. Letter from Humphry Osmond to Dr. Frances Cheek, 2 February 1967.

⁹⁰ SAB, A207, XVIII.12.a. Letter from Abram Hoffer to Humphry Osmond, no date.

In perhaps a final effort to demonstrate faith in LSD's therapeutic potential, psychedelic psychiatrist Ray Denson conducted a survey in 1969 on the adverse effects and complications based on research in Saskatchewan. He stated:

The experience acquired in Saskatchewan has shown that research into LSD treatment can be carried out in a general hospital setting with minimal hazard to the patient, probably less than that which accompanies routine medical treatment. Is it too much to hope that scientific objectivity will penetrate the atmosphere of hysteria which surrounds this drug and that it will receive the attention from the medical profession which its remarkable properties deserve?⁹¹

Denson's pleas remained unanswered, reflecting a complex set of forces unwilling to endorse psychedelic medical observations, particularly when combined with strong moral opposition. The research sanctuary once provided by political and cultural conditions in Saskatchewan no longer existed. Many psychedelic psychiatrists had left the province and ended experimentation with LSD. Politicians eager to endorse experimental ideas had similarly moved out of the province or lost the enthusiasm that characterised the culture of experimentation of the 1950s. Although Denson drew attention to the acceptance of psychedelic psychiatry in Saskatchewan, his pronouncements referred to a bygone era.

The strong moral, political and medical opposition to LSD in psychiatry cultivated a compelling image of the drug as quintessentially dangerous. Medical and non-medical factors contributed to the discrediting of psychedelic psychiatry and the subsequent marginalisation of this practice within the profession. As clinicians such as Hoffer and Osmond failed to endorse their studies with scientifically-approved methodologies used to evaluate other psychopharmacological substances, they attracted

⁹¹ Ray Denson, "Complications of Therapy with Lysergide," *Canadian Medical Association Journal*, 101 (1969), 57.

criticism from within the profession. The moral panic surrounding LSD use in the late 1960s, however, focused on the dangerousness of the drug itself, and levelled a damaging criticism at LSD users, including those in the medical community. The combination of factors produced an historical assessment of LSD as medically misguided and culturally harmful.

Conclusion

On January 17, 1973 American government officials captured Timothy Leary in Afghanistan, declaring that Leary was the “most dangerous man in America.” High priest and now internationally famous LSD advocate, Leary made inflammatory statements in the American media describing Washington as a “lethal evil” and calling upon revolutionaries to “hijack planes” and “assassinate police.”¹ For an individual whose reputation remained integrally associated with LSD, his criminal activities exacerbated the image of dangerousness associated with the drug. LSD, once hailed as a modern psychopharmacological wonder drug, now routinely inspired public panic.

The criminalisation of LSD in the late 1960s brought an end to medical experimentation with the drug. This dissertation contends that the shift in perspectives about psychedelics reveals some of the significant cultural and political changes that occurred in post-war North America during this period. Attitudes towards miracle drugs changed throughout North American society in general and within the medical community in particular. The Thalidomide crisis in 1962, for example, generated serious public doubts concerning the safety of drugs. Within the psychiatric profession, the insistence on employing controlled trials altered the context of experimentation and changed the ways in which drugs were evaluated and promoted. Psychedelic psychiatry failed to weather these changes.

¹ Richard S. Erhlich, “The ‘Most Dangerous Man in America’ Captured in Afghanistan,” *The Laissez Faire Times*, 6, 3 (2002): January 21. On-line: <http://www.geocities.com/glossograph/afghan02timothylearyct.html>, accessed 8 June 2005.

By the mid-1960s the context for medical experimentation in Saskatchewan began changing. Saskatchewan no longer existed as a “working utopia” for individuals seeking a sympathetic environment for political or medical experimentation. In 1961 Weyburn lost its clinical director and Saskatchewan one of its most famous psychedelic pioneers: Humphry Osmond and his family moved to Princeton, New Jersey. Osmond had played a critical role in generating enthusiasm for psychedelic psychiatry in the province. His activities in the 1950s attracted other clinical researchers to the region and established a large and significant set of LSD experiments on the prairies. Throughout the escalation of moral panic over LSD use in the late 1960s, Osmond remained committed to finding scientific solutions to the problem. For the next forty years, he continued investigating “models of madness” from different combinations of philosophical and clinical perspectives but from his new locus in the United States.

Before leaving his post at Weyburn, in July,² Osmond wrote a letter to Tommy Douglas describing his faith in the psychiatric research being done in the region. In one of his moments of self-congratulation, he affirmed that:

The research is making really encouraging progress. [Ten years ago] it seemed wholly improbably that our idea would last more than a year or so. It is now becoming the centre of more and more attention and gradually confirmation is seeping in....I could not have done it alone ... I'm not sure what the social implications will be of a measurable, visible, biochemical schizophrenia but it is, I think, (and one can always be a bit premature) very close round the corner.³

In addition to a justification for his decade-long investigations, this letter also indicates Osmond's appreciation for the political support he received in Saskatchewan.

² “Dr. Osmond Returns to England,” *Regina Leader Post*, 24 July 1961, (no page number) and SAB, A207, XVIII. 10.a. Hoffer-Osmond correspondence. Letter from Humphry Osmond to Mrs. Cooper, 25 July 1961.

³ SAB, Regina R-33.1, XVI. 573.a. Letter from Humphry Osmond to T.C. Douglas, 14, July, 1960, p. 2.

Abram Hoffer did not leave the province—at least immediately—but he did distance himself from LSD experimentation. He initially relied on these studies for investigating an antidote to the psychedelic reaction. In early trials with alcoholics in the 1950s, they had discovered that Niacin modified the LSD reaction. When pressured to discontinue LSD experimentation, he turned his research attention to Niacin and B Vitamins, and went on to develop a controversial mega-vitamin therapy for schizophrenia. This line of inquiry directed him into the field of orthomolecular psychiatry, and connected him with a new network of clinical researchers in another experimental field. By the 1970s, Hoffer began working with Linus Pauling, the double Nobel Prize winner.⁴ Ten years later he relocated his practice to Victoria, British Columbia. Even today, Hoffer remains dedicated to the promotion of mega-vitamin therapies as part of a preventative biochemical therapy to protect against the onset of major mental disorders.⁵

Thus, by the mid-1960s, several of the medical investigators central to psychedelic research left Saskatchewan, signifying the slow demise of LSD experimentation in that province. This exodus weakened the existing medical research

⁴ Abram Hoffer, "Mechanism of action of nicotinic acid and nicotinamide in the treatment of schizophrenia," in *Orthomolecular Psychiatry* (eds) David Hawkins and Linus Pauling (San Francisco: WH Freeman and Co., 1973); and, Abram Hoffer and Linus Pauling, "Hardin Jones biostatistical analysis of mortality data for cohorts of cancer patients with a large fraction surviving at the termination of the study and a comparison of survival times of cancer patients receiving large regular oral doses of vitamin C and other nutrients with similar patients not receiving those doses," *Journal of Orthomolecular Medicine*, 5 (1990): 143-154. Linus Pauling won Nobel Prizes in 1954 for Chemistry and 1962 for Peace.

⁵ Abram Hoffer and Humphry Osmond, *The Chemical Basis of Clinical Psychiatry* (Springfield, Illinois: CC Thomas Publishers, 1960); Abram Hoffer, *Niacin Therapy in Psychiatry* (Springfield, Illinois: CC Thomas Publishers, 1962); Abram Hoffer, "Megavitamin therapy: In reply to the American Psychiatric Association Task Force report on megavitamins and orthomolecular psychiatry," *Canadian Schizophrenia Foundation* (1976). Abram Hoffer and M. Walker, *Orthomolecular Nutrition* (New Canaan, Connecticut: Keats Pub, 1978); Abram Hoffer and M. Walker, *Smart Nutrients - A Guide to Nutrients That Can Prevent and Reverse Senility* (Garden City Part, New York: Avery Publishing Group, 1994); Abram Hoffer, *Hoffer's Law of Natural Nutrition* (Kingston, Ontario: Quarry Press, 1996).

network and the internal support for LSD therapies. By the time LSD panic took hold in the latter half of the decade, many of the psychedelic psychiatrists had dispersed to various destinations throughout North America. In the 1950s the region provided something of an ideological sanctuary for political and medical experimentation with like-minded colleagues. By the mid-1960s many of the original medical researchers remained in contact through correspondence, but few continued to work out of the same institutions. The scattering of these individuals left them more vulnerable to attacks, from within the profession as well as from outside the medical community.

By the early 1960s the political climate in Saskatchewan also began changing in ways that weakened enthusiasm for supporting a culture of experimentation. On November 7, 1961, Tommy Douglas resigned as premier of Saskatchewan to lead the newly formed national political organisation, the New Democratic Party. His replacement as CCF leader and premier in Saskatchewan, Woodrow S. Lloyd, continued promoting health care reforms.⁶ The transition in leadership, however, accompanied a number of personnel changes throughout the civil service and several key individuals left the province. After more than a decade of pursuing radical policy innovations, the momentum behind the political experimentation had declined. Gradually, the province sunk into its former routine of losing rather than attracting professionals, diminishing its capacity to implement sweeping political changes.

The new Liberal government in Saskatchewan maintained the CCF's Medical Care Insurance Act (which later functioned as a blueprint for the national Medicare

⁶ For a more in-depth discussion of this battle see: Robin F. Badgley and Samuel Wolfe, *Doctors' Strike: Medical Care and Conflict in Saskatchewan* (Toronto: MacMillan of Canada, 1967).

program), but withdrew governmental support from several other CCF-initiated programs. The Saskatchewan Plan, including the construction of the Yorkton Psychiatric Centre, became collateral damage in the leadership transition. Although remnants of the plan remained intact, the policies governing them shifted enough to affect the overall principles embedded in the institution as well as in the services available in the community. Instead of building an alternative therapeutic environment, the Yorkton Psychiatric Centre operated largely as an out-patient clinic, without the corresponding services in the community that McKerracher prescribed in his original vision. The outcome presented new challenges to the government as patients now encountered a loosely coordinated set of services with limited therapeutic or practical advantages over the older system in Weyburn. The regularity with which governments complained about this situation, indicated that deinstitutionalisation presented challenges regardless of political orientation.⁷

The difficulties encountered in establishing out-patient services also applied to the alcoholism treatment centres. Although the treatment facilities continued to offer LSD therapy for patients until 1967, funding for follow-up studies decreased. Without adequate services to assess how well a patient functioned in the community, clinicians had a diminished capacity for evaluating the long-term effects of psychedelic therapy. As their colleagues in other regions increasingly focused on the ineffectiveness of LSD in therapy, the medical researchers who remained in Saskatchewan were left in a relatively weak position to defend their claims.

⁷ A national commission investigating concerns over medical care further politicised the issues: Emmett Hall, *Report: Royal Commission on Health Services* (Ottawa: Queen's Printer, 1964-1965)

Tracing the history of LSD in post-war medical experimentation demonstrates how a particular drug encapsulated the *zeitgeist* of both 1950s psychopharmacological optimism and 1960s revolutionary fervour. At its inception, LSD appealed to medical investigators as an important chemical substance with tremendous potential for improving insights into mental illness. Its timely introduction appealed to the psychiatric community because the profession was in the midst of a paradigmatic shift. Mid-way through the twentieth century new theories, technologies, and experiments began challenging psychoanalytical and biological traditions. Psychopharmacological advancements, using pills to control specific symptoms, gradually emerged as the most promising avenue for psychiatry. LSD initially fit into both approaches, suggesting that the two models co-existed with more concord than discord. As drug trials became more refined, and their chemical products arguably delivered more satisfying therapeutic results, psychopharmacology gradually overtook other approaches. LSD experimentation, however, continued to straddle both paradigms.

Historians of post-war psychiatry have concentrated on these two dominant theoretical frameworks—psychopharmacology and psychoanalysis—to explain the changing professional culture and the introduction of new medical technologies in the post-World War II context.⁸ This examination of LSD experimentation in psychiatry, however, suggests that the dichotomous premise overlooks the significance of non-medical factors in influencing the paradigmatic shift. Rather than simply accept the suggestion that psychopharmacology offered better therapeutic outcomes for patients

⁸ See: Edward Shorter, *A History of Psychiatry: From the Era of the Asylum to the Age of Prozac* (New York: John Wiley and Sons, 1997); and, David Healy, *The Anti-Depressant Era* (Cambridge: Harvard University Press, 1997).

because it was more scientifically-grounded, an investigation of the failure of LSD therapy to engender clinical support demonstrates that the triumph of psychopharmacology was also dependent on cultural considerations.

Psychedelic psychiatry took root in Saskatchewan because it planted seeds in a fertile political environment. In 1955 Hoffer articulated the significance of the political support the psychiatric research received in Saskatchewan. He publicly remarked that:

The support from our own Provincial Government cannot be estimated in dollars and cents. There is no other province in Canada which could have provided better soil for such a program. The contribution has been in the form of providing opportunity, providing the co-operation of their professional people and in diverting a substantial proportion of the Mental Health Grant toward research.⁹

His statement suggests that psychiatric research in the region received endorsements from financial and social actors as well as from a government committed to wholesale health reforms. This radical political agenda energised medical researchers who now operated with the knowledge that their experiments might have immediate practical applications.

The politicised environment produced a culture of experimentation in the region that distinguished Saskatchewan from other Canadian provinces. Medical experimentation with LSD endured sustained support because specific regional conditions endorsed bold local innovations. Place, therefore, played a critical role in shaping the development of LSD experimentation.

While these medical innovations emerged as a source of local pride, they failed to engender sufficient support within the broader established psychiatric profession. In fact, the LSD trials intensified methodological debates within the medical profession. At first,

⁹ SAB, A207, XVIII 2.b. Abram Hoffer, "Funding for Saskatchewan Psychiatric Research," May 1955, p. 1. National Health Grants and Rockefeller Foundation grants provided the remaining funding for their research program.

the cultivation of empathy through chemical intervention created an important bridge between older psychoanalytical practices and newer psychopharmacological objectives. Recognition that LSD created a model psychosis provided therapists with new avenues for relating to patients—in this case, psychotic patients. New drug therapies, however, gradually eclipsed psychoanalytical approaches in the second half of the twentieth century. Psychopharmacology did not rely on empathetic interpretations of patients' experiences, but instead depended on empirical observations and classification of observable symptoms. The newly-designed drugs targeted specific symptoms and, thus, modified the therapeutic modality from one relying on a therapeutic relationship to one dependent on neuro-chemical interventions.

The widespread introduction of drugs in psychiatry required new mechanisms for evaluating therapeutic progress. Clinical trials, which had a long history in medicine, became the centrepiece for measuring the efficacy of psycho-active substances. Drug trials were designed to isolate the reaction of a psycho-active substance and remove all distractions which might interfere with the reaction. Methodological innovations, such as the double-blind controls and patient randomisation, further distanced the presiding researcher from tampering with the results by removing any foreknowledge about which particular subjects had taken active substances. This ascendant scientific approach to measuring the effects of drugs ushered in a new era of medical experimentation.

LSD reactions did not fit neatly into this paradigm shift. Although it ostensibly offered a chemical therapy, much the same as many other psycho-active substances developed in the 1950s, the experience produced by LSD became difficult to classify and to conform to controlled trials. Researchers readily detected which subjects had taken the

active sample. Additionally, the reactions produced by LSD had diverse meanings for subjects; these observations were neither empirically observable nor consistent among users. Consequently, investigators found the reactions extremely difficult to evaluate in a controlled-trial environment. The unwillingness to design controlled trials for LSD also stemmed from a fundamental assertion that the experience itself could not be controlled. The therapy derived from LSD required, they argued, a highly subjective experience that provided the individual with an opportunity for introspective reflection. In other words, psychedelic psychiatrists did not subscribe to the theory that psychopharmacology offered a mono-causal therapy based on neuro-chemistry alone.

This belief became further entrenched in their expression of alcoholism as a medical and psycho-social disease. Alcoholism, according to Hoffer and Osmond, had both biological and social precedents. Its cure, therefore, also required a balance of these perspectives. LSD treatments offered a biochemical trigger for a therapeutic process that fundamentally involved a period of subjective introspection. The LSD experience itself, however, ostensibly allowed patients an opportunity to cultivate the inner strength necessary for reforming their dysfunctional behaviour. The psychedelic treatment encouraged abstract thinking, which often produced a period of intense personal scrutiny and reflection.

The psychedelic approach to alcoholism also borrowed mechanisms from non-medical organisations for interrupting the social cycle of problem drinking. LSD treatments in Saskatchewan worked closely with local chapters of Alcoholics Anonymous to maintain a strong social network among cured alcoholics. Alcoholics Anonymous offered a non-drinking cultural space that recreated some of the social

rewards that originally recruited members into a drinking society. Recognising that the social activities that frequently complemented alcohol consumption often exacerbated the problem of excessive drinking, clinicians sought an effective treatment that addressed the social as well as the medical origins of the disease. By broadening the precedents of the disease and enlisting the sympathetic support of community organisations, this approach combated moral arguments that exclusively located the dysfunction within the individual.

The consciousness-expanding, madness-mimicking, spirit-raising, or even transcendental feelings produced by LSD introduced new language and resurrected older philosophical traditions. In doing so, it presented a subtle critique of the profession. Although the LSD experiences remained difficult to classify, they also inspired psychiatrists to carefully consider the nature of experience in therapy. Promises of philosophical revelations through LSD downplayed the importance of the therapist and, instead, placed high expectations on the individual undergoing treatment. Regaining self-control emerged as the central objective of therapy, but in a manner that now privileged patient expertise over professional authority. Whether the previous authority derived from the therapist performing an analysis or the scientist developing a clinical technology, the promotion of LSD treatments modified the clinical relationship by focusing on the patient as an active participant.

This principle became even more pronounced in attempts to design institutional therapeutic spaces. Innovative investigations with LSD, however, provided invaluable insights into the perceptive world of schizophrenia and inspired professional collaboration that codified these findings in a new institutional arrangement. The resultant design of the Yorkton Psychiatric Centre relied on medical and psycho-social

interpretations of psychotic disorders to construct therapeutic space. Osmond and Izumi introduced the socio-petal design in 1957 as a new institutional model that reconfigured the spatial organisation of the modern mental health care facility. The subsequent plan allowed for a safe hospital environment that also appreciated the ways in which psychotic symptoms, such as hallucinations and delusions, distorted patients' perceptions in a manner that led them to withdraw from society.

Their architectural model illustrated a further enhancement of the belief that patients in the mental health care system wielded an inherent expertise superior to that of any clinician or trained professional. In fact, they maintained that previous professional efforts to design a therapeutic environment revealed a fundamental misunderstanding of patients' perceptions. Patients' perspectives, expertise, and ultimately, control, emerged as the primary set of objectives embedded in this new construct. Medical technology, professional perceptions, and even labour considerations remained secondary in the evolution of the socio-petal project. Historians have identified the nineteenth-century asylum as a concrete embodiment of contemporary psychiatric theories. Although the final construction of the Yorkton Psychiatric Centre did not conform to Izumi and Osmond's original design, in many ways it similarly reflected the ideals of psychedelic psychiatry.

By the early 1960s psychopharmacology appeared to have achieved a degree of cultural acceptance in North America. An assortment of pills for a variety of ills became popular household items. Public awareness of LSD also came about in the 1960s, but rather than receiving benign social endorsement, it inspired a moral panic. Initially, LSD use outside the clinical context invoked what sociologists have termed a moral panic.

Eventually, the panic spread to include all LSD use, medical and recreational. Two cultural anxieties led to the escalation of fear over LSD use. First, suspicions that the large cohort of North American youth used LSD to augment anti-authority attitudes. This situation presented a serious threat to an older, war-weary parental generation who painstakingly reconstructed a relatively stable post-World War political economy. Second, traditional authorities that crossed this artificially-constructed generational line similarly posed a threat to conventional order. Psychedelic psychiatrists fit this profile.

After 1966 sensationalist media reports concentrated on the dramatic consequences and hazards of LSD use, while rarely discussing the potential benefits of psychedelic psychiatry for medical research. LSD trips that allegedly inspired murder, suicide or generally bizarre behaviour, received more attention than the minutia of psychopharmacological discoveries. The popular perception of LSD, therefore, combined images of dissident youth and dangerous behaviour evoking fears among middle-class America of an imminent cultural revolution. The drug itself became politicised; allegedly, those who consumed LSD implicitly endorsed a revolutionary ideological perspective.

The disproportionate media attention that Timothy Leary received in the 1960s did little to dispel this myth. As a former Harvard clinical psychologist, Leary's indiscriminate promotion of LSD tied the medical community to his activities. Subsequently, several clinicians rejected Leary's membership in the medical community and publicly discredited his LSD experimentation. Throughout the 1950s criticism levelled at the psychedelic psychiatrists focused primarily on concerns for appropriate research designs, the use of controlled trials in particular. By the late 1960s, however,

more and more members of the medical community portrayed LSD as a dangerous substance. Their actions formed part of a concerted effort to distance themselves from suspicions that the medical establishment endorsed a counter-cultural revolution.

As the medical community gradually aligned itself with traditional authorities, psychedelic psychiatrists became marginalised within the profession. Legislation restricting, and ultimately criminalizing, LSD further entrenched their separation from mainstream psychiatry. Debates in the Canadian House of Commons and Senate illustrated this shift in professional acceptance of LSD. When concerns over dangerous drug use precipitated by the Thalidomide crisis emerged in 1962, the medical community, in spite of internal divisions, supported the continuation of clinical LSD experimentation. When members of parliament again raised concerns over LSD use, in 1966, several members of the medical community stepped forward to condemn LSD in psychiatry.

The use of psychedelics in psychiatry had not changed dramatically in this four-year period, but the moral panic surrounding LSD altered the reputation of the drug and its clinical promoters. The context of experimentation changed: trials increasingly attracted volunteers seeking nirvana, colleagues questioned the efficacy of a drug therapy that promised philosophical or religious insights, and funding agencies worried about endorsing research projects that had significant political consequences. These social factors significantly altered the culture of LSD experimentation. Furthermore, the clinical practice of auto-experimentation firmly embedded in the psychedelic ethic, displayed a blatant disregard for potential health risks associated with drug use. Moreover, psychedelic psychiatry ignored the mantra of randomised, controlled trials, which treasured the capacity of the clinical observer to evaluate the outcome of a drug

trial from an objective perspective. According to Hoffer and Osmond's critics, clinicians who consumed the drug themselves were no longer capable of such objectivity.

Historically, LSD cultivates a dramatic image whether it is associated with counter-cultural ideals, Timothy Leary's promises of a new chemically-inspired religion, or the CIA-funded experiments with unwitting subjects. The history of LSD experimentation in Saskatchewan, however, demonstrates that these aspects of its past have long overshadowed its clinical history. Some of the largest and most influential trials occurred on the Canadian prairies, and made significant contributions to debates over medical theory and practice at a critical juncture in the history of psychiatry. Contributions from Osmond and Hoffer, therefore, offer an invaluable window into a profession in the midst of a significant re-orientation from psychoanalysis to psychopharmacology. Their gradual marginalisation from mainstream psychiatry highlights the importance of non-medical factors that influenced the profession and its practice.

The history of LSD in medical experimentation illuminates some of the fascinatingly complex ways in which health, drugs and culture combine to frame our understanding of mental health. The acceptance *and* rejection of new medical technologies and drug therapies depend on medical and non-medical conceptions of health and risk. These conceptions are further defined in a broader cultural context. In the 1960s, the risks associated with a cultural revolution seemed greater than the benefits that psychedelic therapy offered alcoholics. In the twenty-first century, the potential benefits provided by Ritalin for families with hyper-active children, might conversely

outweigh the financial and social costs of supporting a commercial pharmaceutical industry that markets drugs and disorders.

Recently the therapeutic uses of psychedelic drugs have resurfaced as a topic of debate in neuropsychopharmacology. Contemporary research with the psychedelic drug MDMA, known popularly as “ecstasy,” suggests that this psycho-active substance may affect serotonin levels.¹⁰ Research units in the United States are currently examining the usefulness of MDMA in treating pain in Parkinson’s disease and cancer in addition to investigating its role in psychotherapy for individuals suffering from post-traumatic stress disorder (PTSD).¹¹ The current debate over the therapeutic use of MDMA mirrors the debate that occurred over LSD in the 1960s. MDMA and LSD share active ingredients, and both alter perception, cognition, and mood.¹² Both drugs incite debate as to whether their therapeutic benefit derives from the often-described feeling of heightened self-awareness produced by a psychedelic experience or whether the credit belongs to some as-yet unknown or, at best, poorly understood metabolic reaction. Given the current preoccupation with rediscovering the possible therapeutic uses of psychedelic drugs, a reconsideration of the controversial history of LSD research in psychiatry is long overdue.

These developments in MDMA research suggest a recurring interest in studying psychotic symptoms, model psychoses, and the kinds of drugs that produce these reactions. In the early 1950s John Smythies identified a pattern in the medical literature concerning medical curiosity for drug-induced psychoses. Individuals such as William

¹⁰ Erika Check “The ups and downs of ecstasy,” *Nature* 29 (2004):126–128.

¹¹ D. Bennett, “Dr Ecstasy: Alexander Shulgin,” *New York Times Magazine* 30 (2005): 36.

¹² H.D. Abraham, A.M. Aldridge, P. Gogia, “The psychopharmacology of hallucinogens,” *Neuropsychopharmacology*, 14 (1996): 285–298.

James, S. Weir Mitchell, and Havelock Ellis initiated the trend at the turn of the twentieth century with investigations into drugs that seemed to cause a psychological experience. The topic resurfaced in the 1930s when a new generation of researchers learned how to isolate the active chemical, mescaline, from the peyote cactus. Thirty years later, these mescaline experiments inspired people like Humphry Osmond to the study other hallucinogens, thus launching the psychedelic psychiatry of the 1950s and 1960s. Recent investigations into the hallucinogenic drug MDMA, therefore, suggest that our fascination with psychedelic psychiatry endures.

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Appendix A: Figures

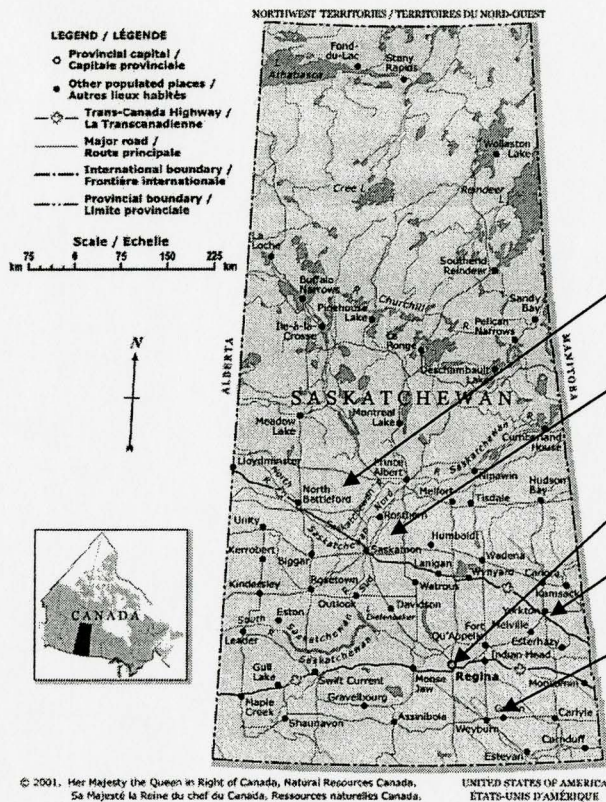


Figure 1: Map of Saskatchewan
(Sites of experimentation)

- Provincial Mental Hospital, North Battleford
- University of Saskatchewan: Saskatoon
- General Hospital, Munro Wing: Regina
- Psychiatric Centre: Yorkton (1964)
- Provincial Mental Hospital, Weyburn

Figure 2a. Henry E. Sigerist

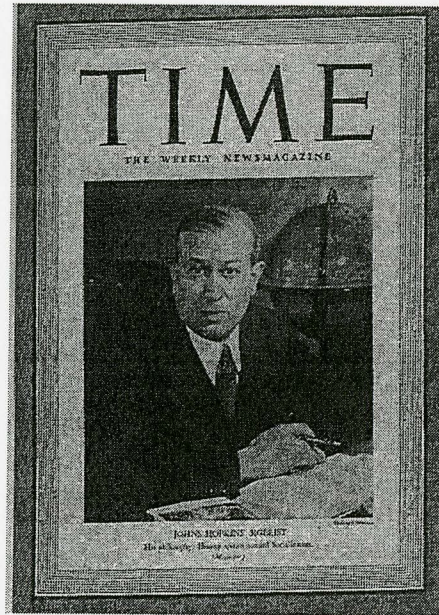


Figure 2b. Tommy C. Douglas



Figure 3 Humphry Osmond



Figure 4: Abram Hoffer

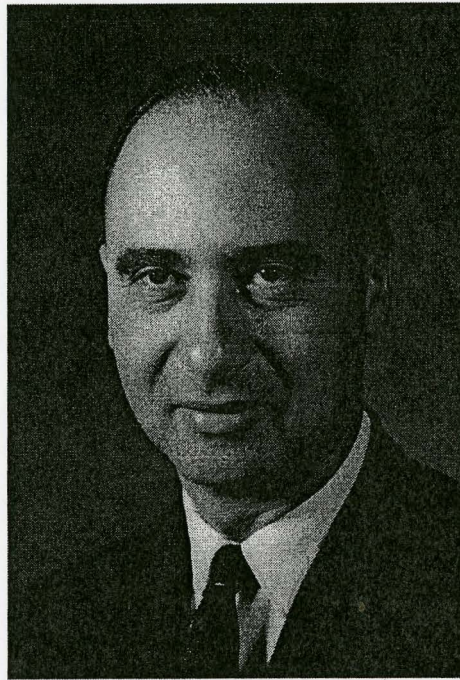


Figure 5 Aldous Huxley

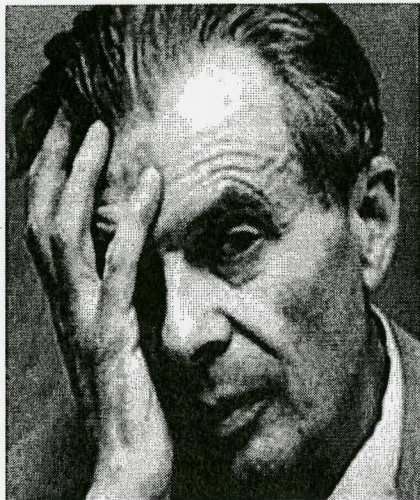


Figure 6: Experiment with Sidney Katz



1953, Sidney Katz (reporter for MacLean's Magazine) drinking LSD, monitored by Chuck Jillings, Humphry Osmond, (Katz), John Cumming and Elaine Cumming (left to right).

Figure 7 Experiment with Sidney Katz



Figure 8 Depiction of Katz's experience

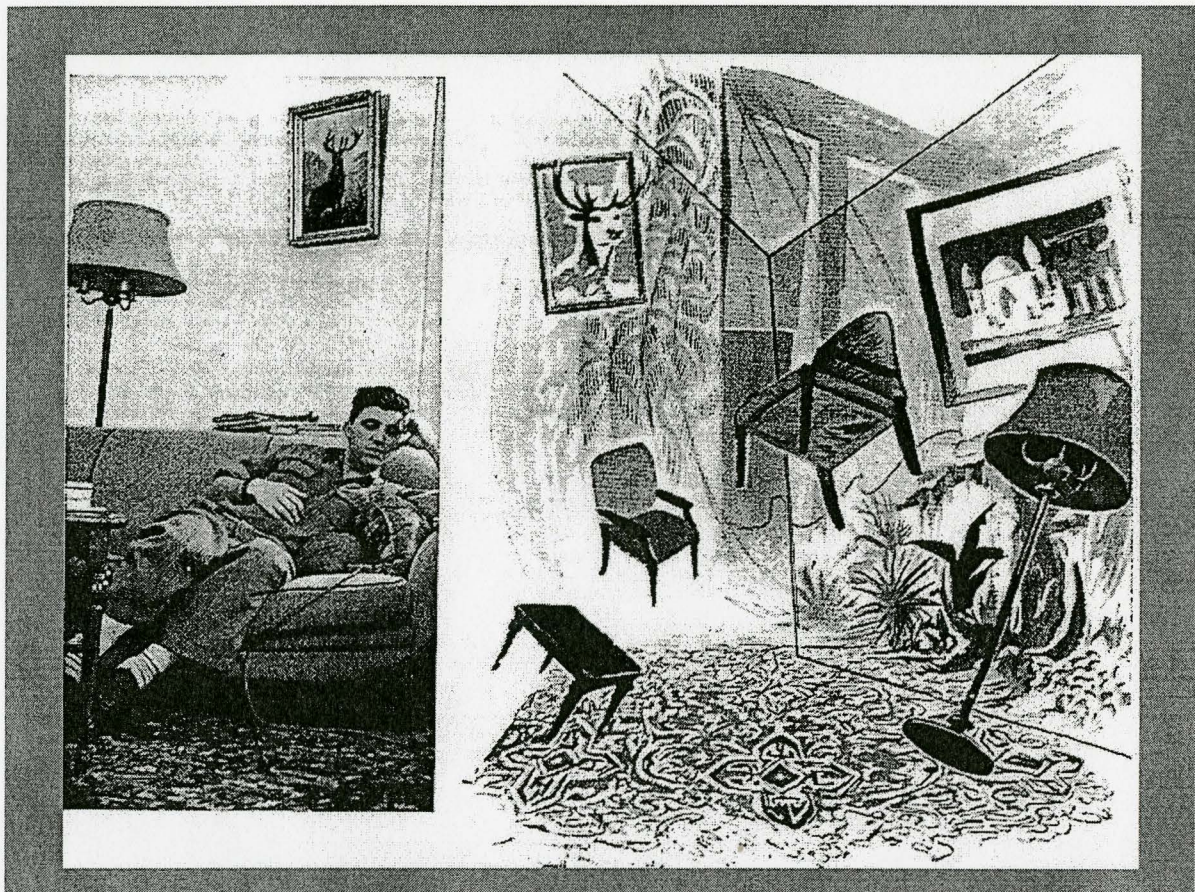


Figure 9· Experiment with Katz

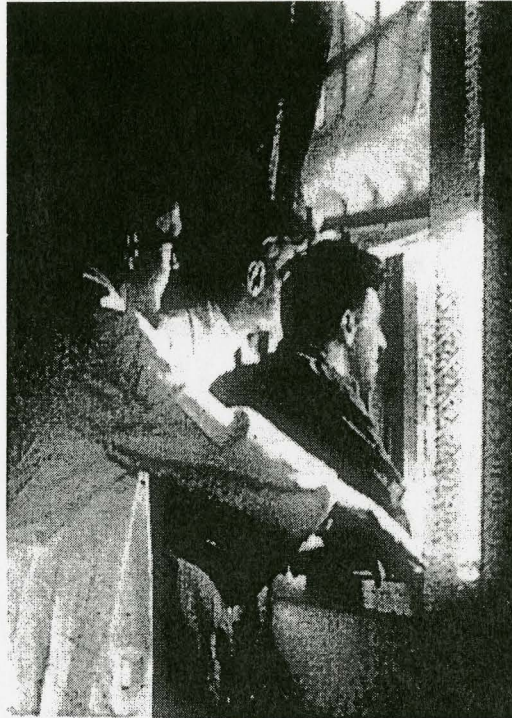


Figure 10: Kyoshi (Joe) Izumi

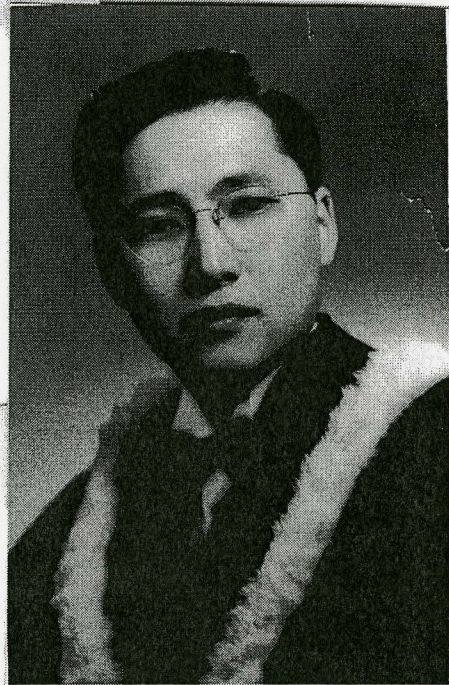
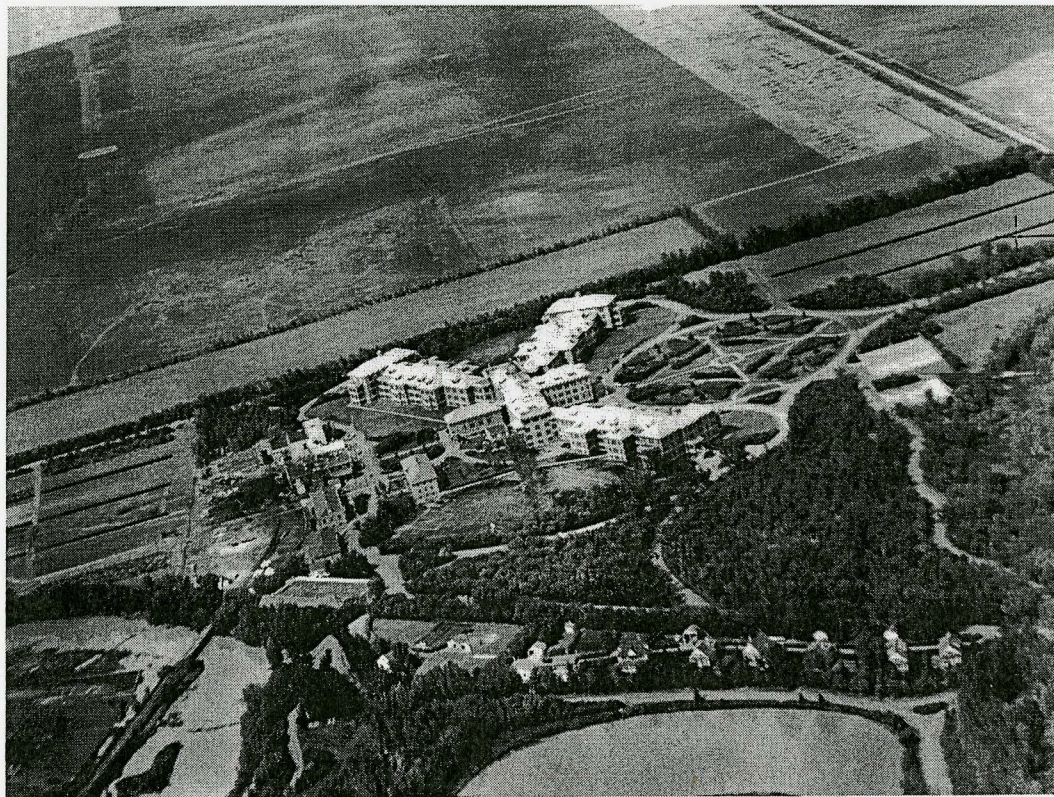


Figure 11 Saskatchewan Mental Hospital, Weyburn



Figure 12. Saskatchewan Mental Hospital, Weyburn



Aerial view of Saskatchewan Mental Hospital, Weyburn, circa 1952.

Figure 13 Socio-Petal concept

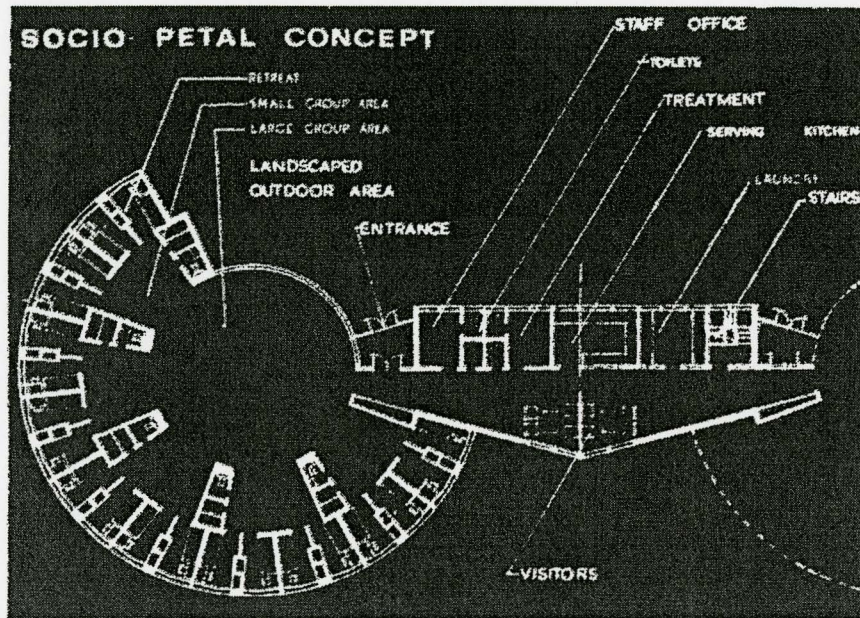


Figure 14. Robert Sommer



Figure 15 Newspaper clipping of Kyoshi Izumi

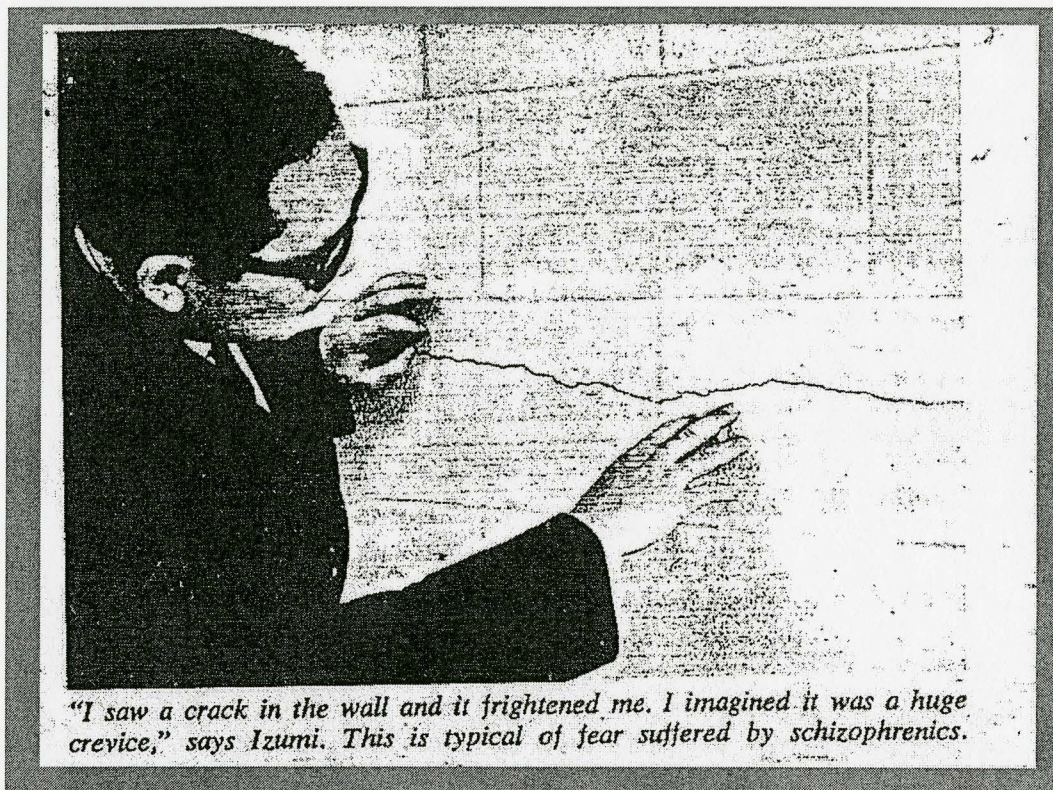


Figure 16 Yorkton Psychiatric Centre, 1965

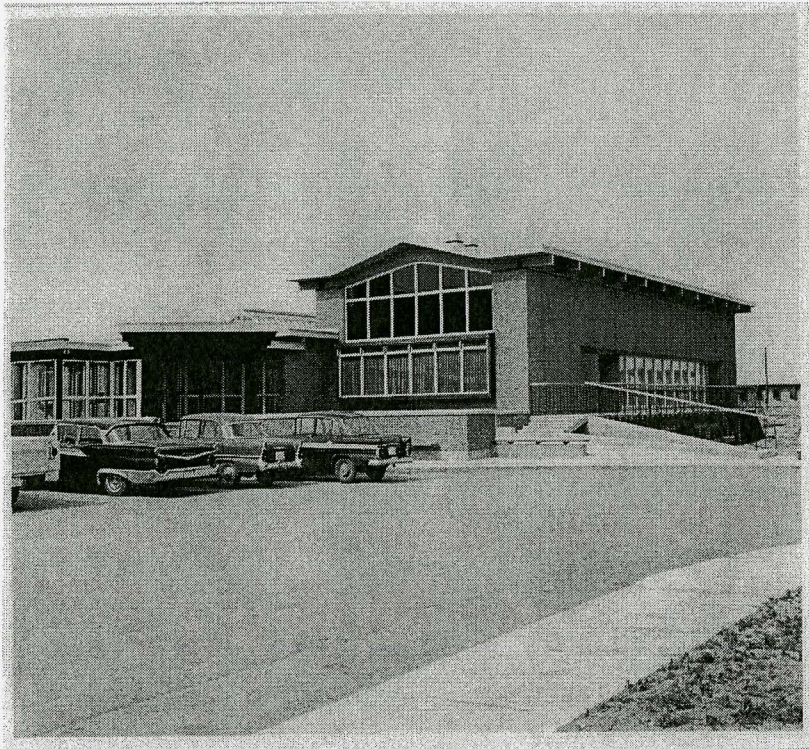


Figure 17 LSD in the Headlines

RUSSIA PUTS THE FIRST MAN INTO SPACE

STAR WEEKLY

APRIL 29, 1961 15 CENTS



LSD:
miracle drug
or menace?