If one were to read the accounts of 1950s and 1960s psychiatrists and psychologists about LSD, with the word “LSD” blacked out, one might have thought that the writers were discussing entirely different drugs.

One group of scientists regarded LSD and the other psychodelics as psychotomimetic (“psychosis-inducing”) drugs which mimic the effects of mental illness: “essentially anxiety-inducing drugs.”2 The advocates of this approach were reporting cognitive impairments, psychological distortions and a variety of “disturbances” in those who were given the drug.

Yet another group of scientists described the effects of LSD with entirely different terms. For this group, LSD and the other psychodelics represented consciousness-expanding drugs—cognitive tools to enhance thinking, creative tools to expand creativity, and spiritual tools to increase spirituality. For them, LSD was not a psychosis-inducing drug but rather a revolutionary psychotherapeutic tool ushering in a “new sanity.”

The truly fascinating fact about 1950s and 1960s psychodelic research was that when proponents of the two approaches were talking about LSD, they didn’t just sound as if they were talking about two entirely different drugs—in a way, they actually were. The reason for this is that—as some writers started suspecting in the late 1950s—the effects of LSD and the other psychodelics, far from being invariable, are fundamentally and crucially determined by the set and the setting in which the experience takes place.

THE SET-AND-SETTING HYPOTHESIS
It is difficult to think of many other concepts which are as fundamental and widely accepted in the study of psychodelics as “set-and-setting.” The concept, which was first proposed by Timothy Leary and his group at Harvard, claimed that the character of a psychodelic experience is determined first and foremost by the user’s character, expectations and intentions (Set), as well as by the social and physical surrounding in which the drug experience takes place (Setting). Leary went as far as to claim that 99 percent of the specific response to LSD is determined by set-and-setting.

Set-and-setting go a long way in explaining the highly variant results published by the LSD psychiatrists of the 50s and 60s. 1950s psychotomimetic drug experiments normally took place in highly impersonal surroundings like stark hospital rooms and mental wards. The subjects were often mental patients, and other socially disadvantaged populations such as prisoners, drug addicts, and ethnic minorities who had little choice about participating in the studies. The social surrounding was not very much in the way of relaxation, unless one enjoys the company of unfamiliar medical personnel looking for signs that their patients are becoming psychotic. During the experience, long batteries of physical and psychological tests were often conducted. The subjects usually knew little about the drug experience, except for the suggestions by doctors and other personnel that the drug turns those who take it into schizophrenic madmen.

By contrast, completely different set-and-setting conditions are to be found when one examines the experiments conducted by many of the prominent psychodelic scientists of the late 1950s and early 1960s whose focus was on LSD as a therapeutic, creative, and spiritual tool.

The LSD subject who participated in these sessions was often an artist or graduate student. He had come to the study voluntarily, had often been given a preparatory introduction to the session, and brought to expect a positive and meaningful experience. The relationship with the researcher was of a more personal nature. Sessions were often performed in living conditions.
rooms, or in cozily furnished rooms, where much attention has been dedicated to creating a pleasant surrounding by offering music, flowers, candles, and sometimes a small collection of art books. The person going through the experience would usually have the time to explore the experience for himself, without being asked to go through endless batteries of tests.

The thesis that the extremely different set-and-setting conditions used by different groups of LSD scientists have led to the highly divergent accounts on its effects has been suggested by a number of researchers including Timothy Leary, Ralph Metzner, and Sidney Cohen in the 1960s as well as by later observers such as Lee and Shalin (1985), Dyck (2008), and Fadiman (2011).

In my research, I tested the “Set-and-Setting Hypothesis” by examining the set-and-setting conditions in 1950s and 1960s psychedelic studies, according to nine variables of set-and-setting.

In examining psychotomimetic vs. psychedelic research, significant and even polar differences have been found in eight of the nine variables of set-and-setting. The evidence strongly supports the claim that set-and-setting conditions had played a crucial role in shaping the results of 1950s and 1960s LSD research, and in molding the contours of the psychedelic controversy.

The implications of this theory exceed the boundaries of 1950s psychiatric research significantly. They teach us a valuable lesson about how psychedelics function as a technology, and about the way psychedelic drugs interact with societies and cultures.

THE PSYCHO-SOCIAL CONSTRUCTION OF TECHNOLOGY

Technology scholars have invented a theory by the name of Social Construction of Technology (SCOT) theory. The theory suggests that technology is shaped by social and cultural conditions, as much, if not more, than by “objective” scientific and technological concerns.

According to Pinch and Bijker, each technological artifact has an “interpretative flexibility”—its function and use can be understood in a variety of ways which determine its fate. For example, they show that the course of the technological development of the 19th century high-wheeled bicycle was determined by the varying interpretations of the function of the bicycle. Athletic young men viewed the high-wheeled ordinary bicycle—an unsteady vehicle which demanded great physical dexterity to ride—as an exhilarating sports vehicle and a way to show off their masculinity. However, for women and older men, who wanted to use the bicycle for transportation, the high-wheeled bicycle was simply an unsafe bicycle which demanded fundamental improvements. These different interpretations of the bicycle and its uses led to two different traditions of bicycle design seeking to address different problems and challenges. According to Bijker, “the interpretative flexibility of an artifact can be demonstrated by showing how for different social groups, the artifact presents itself as essentially different artifacts.”

The story of LSD demands adding another layer to the standard SCOT model. Because the character of the effects created by the LSD technology was dependent not only on the social conditions but also on the psychological conditions, and because the experience itself mirrored the interaction of the drug with the user’s state of mind, LSD demands adding a psychological layer to its SCOT interpretation and creating a new model which I call PSCOT: Psycho-Social Construction of Technology.

Different relevant social groups might look at a bicycle and interpret it to be two different things, but that won’t hinder the concrete technological artifact, in this case the bicycle, from behaving identically when operated by users with different conceptions of what a bicycle might be. That, however, was not the case with LSD.

Because the content and character of the LSD experience is determined and shaped by the user’s state of mind, LSD is...
indeed a mind-manifesting drug: a technology which manifests its user's state of mind, as suggested by the literal meaning of the word “psychedelic” (psyche: mind, delos: manifest).

LSD’s action is thus primarily not psychotomimetic, psychotherapeutic, creative, or even spiritual—but just what it is: mind-manifesting. It acts as a mirror and magnifying glass to its user's state of mind. If the state of that mind is anxious, LSD could easily function as an anxiety-inducing drug. If it is creative, then it could equally serve as a creativity enhancer. Should it be spiritual, then spirituality will be enhanced.

The variety of uses for LSD in the 1950s and 1960s was staggering. It included no less than nine main conceptions of LSD, among them: as a psychotomimetic, a psychotherapeutic tool, a creativity enhancer, a spiritual sacrament, a mind control tool (by the CIA), a battlefield weapon (by the U.S. Chemical Corps), and a revolutionary molecule (by groups such as the Yippies and The Weathermen).

For each of these groups, LSD represented something different. Each of them created a set and a setting which was distinctly different and which reproduced the effects of the drug in a novel form, much in the way that each psychedelic experience recreates LSD in the unique form created by the psychological and social conditions in which it is taken, never to be recreated.

The collective set-and-setting conditions presented by a society are its values, its social structure, and its culture. As a result, the set-and-setting conditions provided by the two

THE COLLECTIVE SET-AND-SETTING

The LSD of the 1950s differed from the LSD of the 1960s because they reflected two dissonant eras in the history of America: the 1950s with its Protestant work ethic and conservative Cold War mentality, versus the 1960s with its turbulent political, cultural, and spiritual movements.

Set-and-setting are socially constructed—they are shaped by the wider society and culture in which the psychedelic experience takes place. All the most important variables of Set-and-setting are determined by social surroundings. The character of a person is formed to a great extent by his surrounding society and culture, as are his expectations and intentions when coming to a drug experience. Physical and social settings are also the reflection of the society and culture in which the experience takes place. Different societies in different times in history would have different set-and-setting conditions which shaped the character of the LSD experience in different ways.

One can thus differentiate between two types or levels of set-and-setting: individual and collective. Individual set-and-setting represents the concrete set-and-setting conditions in which the psychedelic experience takes place for an individual: the concrete character, expectations, and intentions of that person, as well as the concrete physical and social environment in which the experience takes place. Collective set-and-setting, by contrast, represents the social and cultural context in which the psychedelic experience takes place, and which frames the individual set-and-setting in the most intimate of ways. It is composed by the society’s character, its knowledge and attitude towards the psychedelic experience, as well as by the physical and social settings provided in that society.

The collective set-and-setting conditions presented by a society are its values, its social structure, and its culture. As a result, the set-and-setting conditions provided by the two
The LSD of 1960s America was a unique technological artifact shaped by the unique social and cultural conditions of 1960s America.