

THE SCIENTIST GOES SURFING: TIMOTHY LEARY, LSD AND THE INTERNET

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Timothy Leary did not come to the attention of the press and hence, the world until 1962 when the Boston Herald ran a story reporting the existence of a 'drug cult' at Harvard University. His dismissal from Harvard in 1963 for 'absenting himself ... without permission';¹ his deportation, with a number of his followers, from Mexico, Antigua and Dominica; the activities at the Millbrook commune;² his indictment and subsequent imprisonment for possession of marijuana, and his escape from prison, are now part of the mythology which sustains his memory as the 'unofficial high priest of LSD'.³ However, relatively little attention has been paid to his work, pre-1960, when his first experience with psilocybin convinced him that 'consciousness and intelligence can be systematically expanded'.⁴ This is hardly surprising, in light of his later reincarnation as counter cultural mystic, since Leary the 'serious' psychologist was, in the words of John Bryan (former Managing Editor of the *Los Angeles Free Press*) a 'safe respectable professional' whose job was to 'bring deviants back into the fold' (*WHTTL*, 18). Nevertheless, it is in his early writings that Leary first proposed that the psyche cannot be understood only as an object of science but that psychology requires also an understanding of subjective experience as expressed in abstract symbolic form. It is this idea that structures Leary's later claims for Lysergic Acid Diethylamide (LSD-25) as a technology that would promote a revolutionary change in consciousness. A few years before his death, Leary claimed that the advent of the personal computer, virtual reality and the internet heralded the realisation of his prediction that minds nurtured by the LSD cults of the 1960s would produce a challenge to the hegemony of technocratic bureaucracy. It is not my intention to interrogate this claim with a view to proving Leary either right or wrong (it may, indeed, be too early to tell) but to suggest ways in which we can usefully read his work in light of more recent theoretical explorations of drugs, language, scientific theory and subjectivity. Leary was a scientist for whom art was not just a remedial therapy but a significant mode of expression in his search for a means by which a cultural revolution might be accomplished. What I want to suggest is that he may be usefully (but cautiously) read as a significant contributor to the debates which interrogate the nature and role of scientific rationality in our ongoing encounter with its products and producers.

Psychology in the 1950s was dominated by Behaviourist theory which followed John B. Watson's prescriptions for formulating '*laws and principles*

1. John Bryan, *Whatever Happened to Timothy Leary? ... an unauthorised history*, Renaissance Press, San Francisco, CA, 1980, p69. Henceforth: *WHTTL*.

2. Millbrook was a 64 roomed mansion that Leary and his followers inhabited from August 1963 until their eviction in May, 1968. Complaints from the local community resulted in several police raids led by Assistant D.A.G. Gordon Liddy who later ran for Congress on the local Conservative ticket as 'The Cop Who Ran Timothy Leary Out of Town'; see *WHTTL*, Chapter 13.

3. Daniel Weizmann, Introduction to Leary's, *The Delicious Grace of Moving One's Hand: The Collected Sex Writings*, Thunder's Mouth Press, New York, 1998, pxi.

4. Timothy Leary, *Flashbacks: An Autobiography*, Heinemann, London, 1983, p33. Henceforth: *Flashbacks*

whereby man's actions can be controlled by organised society'.⁵ Leary was happy to refer to himself as a Behaviourist, and in fact proclaimed that his approach 'might be called a *dynamic behaviorism*' (*Flashbacks*, vi, his emphasis). Where he differed from his contemporaries was in his emphasis on personality structures understood strictly in terms of the way in which 'the individual deals with others - his actions, thoughts, fantasies and values as they relate to others' (*Flashbacks*, 6), in contrast to the prevailing orthodoxy which understood behaviour as conditioned only by a set of empirically identifiable physical stimuli. He was also unusual in employing a group therapy technique, considered at the time 'as recklessly dangerous as requesting a group of patients to perform perilous surgical operations on each other'.⁶ However, American psychology was, at this time, beginning to respond to theories which emphasised the importance of clinical practice, and the popularity of psychotherapy demanded simple ways of measuring results and predicting therapeutic outcomes. Leary's research produced a statistical system for classifying 'the interpersonal behavior of the subject and his world at several levels of personality'.⁷ His doctoral thesis, published as *The Social Dimensions of Personality* (1950) was very well received, and his later publication *Interpersonal Diagnosis of Personality* (1957) was hailed as a significant accomplishment.

Leary was appointed to Harvard in 1959 and began to develop an increasingly humanistic approach to psychology. His system of 'existential-transactional therapy'⁸ rejected the standard Behaviourist approach, which insisted that observed behaviour was a reliable indicator of internal states, and stressed instead the importance of encouraging the patient to describe their internal experiences:

Failure to distinguish between the recorded external and the neurally experienced internal leads to a variety of confusions. Only external events (recorded behavior) can become part of a scientific (game)⁹ contract. Internal events (sensory, somatic, cellular, molecular experience) require an explicit, artistic contract between the 'one-who-turns-others-on' and the 'one-who-is-to-be-turned-on'.¹⁰ The patient must become an artist who cares enough about the psychologist to turn-him-on to his experience (BPP, 28).

Leary's point here is that the scientific method, involving the observation, classification and analysis of events in space-time is too limited and linguistically restricted to account for states of consciousness that are not easily expressed or responsive to categorisation. Existential-transactional therapy therefore requires 'that the psychologist teach the patient to be a scientist in observing his behavior and an artist in describing his experience' (BPP, 28). These descriptions were to lead the patient to understand the 'games' that the culture demanded of so called 'sane' individuals and, initially, to adapt their experience to reflect a more acceptable 'game'.

5. John B. Watson, *Psychology from the Standpoint of a Behaviourist*, Lippincott, 1919, p2, his emphasis.

6. Leary, *Changing My Mind, Among Others*, Prentice-Hall Inc., New Jersey, 1982, p6. Henceforth: CMM.

7. Leary, *Interpersonal Diagnosis of Personality: A Functional Theory and Methodology for Personality Evaluation*, The Ronald Press Company, New York, 1957, p43.

8. Leary, 'Basic Philosophic Principles for a Science of Human Behavior (Ethology) and of Human Experience (Neurology)' (henceforth: BPC), in CMM, 28

9. Leary was later to describe all social interactions as 'games' in which the participants 'contract' to obey the rules.

10. At this point in Leary's career, 'turning on' refers to the ability to transmit your internal state to another.

However, his increasing interest in psychedelics as suitable drugs to enable patients to both describe and adapt their experiences, led him to formulate a more radical proposition, that is to say that individuals who had 'turned on' to neurological states which allowed them to think beyond the restrictive games of the culture would, in turn, influence others to think beyond restrictive paradigms. In short, psychedelics were to provide the impetus for a cultural revolution.

The first issue of *Psychedelic Review*, the journal produced by Leary's International Federation for Internal Freedom, inaugurated while he was still associated with Harvard, contained the following statement:

The synthesis of consciousness-expanding substances which we regard as one of the most outstanding achievements of technological society, has now provided us with a means of transcending and overcoming many of the distortions which operate in the very society that has brought about such substances. It is now possible to affirm the general character of our social technocracy without succumbing to its totalitarian demands. The creation and furtherance of internal freedom for large numbers of people through the intelligent use of psychedelic substances are now a practical reality.¹¹

In other words, LSD was a new, revolutionary technology which would rescue Western culture from the spectre of totalitarianism that had accompanied the developments in machine technology and the culture of expertise that had proliferated since the end of WW II.

Leary and his associates were, of course, not alone in deploring the potential for totalitarianism in the dominance of techniques in work and social life. Theodor W. Adorno and Max Horkheimer in *Dialectic of Enlightenment* (1944), had pronounced that '[a] technological rationale is the rationale of domination itself'¹² and the work of the Frankfurt School, in general, was characterised by a critique of instrumental rationality, understood in terms of 'its aspiration to make the most efficient and effective use of what is in the world within the framework and according to goals defined by the ruling authorities'.¹³ As early as 1941, Herbert Marcuse coined the phrase the 'mechanics of conformity' to describe the rationalisation of 'the social order' in line with late industrial workplace practices and to conform to the requirements of a technocratic regime which he saw manifested in its most fully developed form in National Socialism. 'Technology' according to Marcuse, 'as a mode of production, as the totality of instruments, devices and contrivances which characterise the machine age is thus at the same time a mode of organizing and perpetuating (or changing) social relationships, a manifestation of prevalent thought and behavior patterns, an instrument for control and domination'.¹⁴ This analysis was echoed by Leary himself in a lecture delivered in 1969 in which he proclaimed that '[t]he machine has got us all so cowed that we think of the

11. Gunther M. Weil, Introduction to Gunther M. Weil, Ralph Metzner & Timothy Leary (eds), *The Psychedelic Reader*, University Books, New York, 1965, p vii.

12. Theodor W. Adorno, & Max Horkheimer, *Dialectic of Enlightenment*, (trans) John Cumming, Verso, London, New York, 1997 [1944], p121.

13. Sheldon S Wolin, 'Reason in Exile: Critical Theory and Technological Society' in Arthur M Melzer, Jerry Weinberger and M Richard Zinman (eds), *Technology in the Western Political Tradition*, Cornell University Press, Ithaca and London, 1993, p174.

14. Herbert Marcuse, 'Some Social Implications of Modern Technology' (1941) in Andrew Arato, & Eike Gebhardt (eds), *The Essential Frankfurt School Reader*, Basil Blackwell, Oxford, 1978, pp138-139.

machine as sacred. The idea of immobilizing the machine, of turning against the machine, seems vaguely crazy, or horribly primitive ... The machine counts on the absolute cooperation of all human beings'.¹⁵ Twenty-three years later Marcuse published a more fully developed and updated version of this argument as *One Dimensional Man: Studies in the Ideology of Advanced Industrial Society* (1964), establishing him, according to Theodore Roszak, as one of the 'major social theorists' to emerge 'among the disaffiliated young of Western Europe and America'.¹⁶

In *Eros & Civilisation* (1956), Marcuse had argued that Freud's metapsychological theories, far from pointing to a pessimistic analysis of repression as a necessary precondition for civilisation, could be read as suggesting that contemporary culture makes use of repression to enforce conformity but that the unconscious, retaining the memory of 'past stages of individual development at which integral gratification is obtained'¹⁷ can, under the right conditions, allow those memories to influence consciousness to the extent that '[t]he *recherché du temps perdu* becomes the vehicle of future liberation' (*E&C*, 19). The right conditions here are, of course, all important. Under the terms of the 'performance principle'¹⁸ which Marcuse identifies with the existing conditions under which Freud's 'reality principle' is actualised, sublimation 'operates on a preconditioned instinctual structure, which includes the functional and temporal restraints of sexuality, its channelling into monogamic reproduction, and the desexualisation of most of the body' (*E&C*, 206). In other words, the resolution of the Oedipal conflict requires the achievement of a genitally focused (hetero)sexuality which is channelled into monogamous marriage which, in turn, forms the basis of a culture organised around alienated labour.¹⁹ Marcuse requires us to understand that the 'performance principle' is historically specific, in other words it points to a particular social organisation perpetuated by vested interests on the basis of managed sexuality justified by economics. The scarcity of resources which originally made sense of the 'repressive regimentation' of the instincts is 'actually [...] the consequence of a specific organization of scarcity, and of a specific existential attitude enforced by this organization' (*E&C*, 36). What Marcuse refers to as '*surplus repression*' describes the 'additional controls' required by 'the specific historical institutions of the reality principle and the specific interests of domination' (*E&C*, 37, his emphasis). The reality principle, then, is to be understood as constructing sexuality and, hence, the psyche, in line with conditions determined by prevailing social and economic power relations and hence is transformed into the 'performance principle'. Marcuse contends that Freud's analysis of the role of phantasy in psychic life tends towards a pessimistic analysis of the potential for civilisation to evolve beyond the need for surplus repression. If the content of the imagination is understood only as a return of the repressed 'subhistorical and even subhuman *past*, of primal biological and mental processes' then 'the idea of a non-repressive reality principle is a matter of retrogression' (*E&C*, 147). However: '[r]eactivation of

15. 'The Hedonic Society of the Future', in *The Delicious Grace*, op. cit., p245.

16. Theodore Roszak, *The Making of a Counter Culture: Reflections on the Technocratic Society & Its Youthful Opposition*, Faber & Faber, London, 1970, p84.

17. Herbert Marcuse, *Eros & Civilisation: A Philosophical Inquiry into Freud*, Ark Routledge & Kegan Paul, London, 1987 (1956), p18. Henceforth: *E&C*.

18. This is what Marcuse describes as 'the prevailing historical form of the reality principle', *E&C*, 35, his emphasis. In other words, the form in which the sublimated instincts are pressed into the service of work and conformity to institutional demands in contemporary culture.

19. Marcuse thus reconciles Freudian psychoanalysis with the link between monogamous marriage, the family and alienated labour which Frederick Engels proposed in *The Origin of the Family, Private Property and the State* (1884).

polymorphous and narcissistic sexuality ceases to be a threat to culture and can itself lead to culture-building if the organism exists not as an instrument of alienated labour but as a subject of self-realization - in other words, if socially useful work is at the same time the transparent satisfaction of an individual need' (*E&C*, 210).

The solution is 'total automation' (*E&C*, 156), which would release the human organism from the tyranny of labour and enable a move towards a more eroticised form of 'work' in which sensuality is allowed free play and is not opposed to reason or confined to genital sexuality but is an expression of a more highly developed consciousness which would follow from the collapse of the performance principle. Thus, 'the very achievements of repressive civilization seem to create the preconditions for the gradual abolition of repression' (*E&C*, 5).

However, by the time of *One Dimensional Man*, Marcuse's hope for the 'Great Refusal' (*E&C*, 149), which would result from the freedom allowed by increased mechanisation, was considerably diminished. Instead, he saw a contraction of consciousness; a '*desublimation*'²⁰ of instinctual drives which, unlike surplus repression, allows for their expression but in a controlled and managed form under the terms of technological rationality. Increased production leads to increased consumption and the commodification of sex and art, and even resistance produces a conformity of needs expressed in 'operational' language which 'negates the force of history, blocks conceptual development [and] militates against abstraction' (*ODM*, 97). Thus, previously antagonistic contradictions are reconciled by the satisfaction of falsely created desires and, '[j]ust as this society tends to reduce, and even absorb opposition [...] in the realm of politics and higher culture, so it does in the instinctual sphere. The result is the atrophy of the mental organs for grasping the contradictions and alternatives' (*ODM*, 79).

What Marcuse refers to as the '*happy consciousness*' (*ODM*, 76) is his ironic assessment of the prevailing state of mind which 'reflects the belief that the real is rational, and that the established system, in spite of everything, delivers the goods' (*ODM*, 76).

In this sense, the celebrated pessimistic Marcuse could be seen as posing the problem, and Leary as proposing the solution. Leary's experiences with existential transactional analysis had convinced him that '[c]ultural stability is maintained by preventing people from seeing that the Roles, Rules, Goals, Rituals, Language and Values of society are game structures'²¹ and, in one of his most famous essays, originally published as 'The Politics of Consciousness Expansion' in the *Harvard Review*, Summer, 1963 (later reprinted as 'The Fifth Freedom - The Right to Get High'), he stated that '[t]he danger of LSD is not physical or psychological, but social-political'. 'We are', he claimed 'prisoners of the cognitive concepts and intellectual strategies which are passed on from generation to generation. The cognitive continuity of history. And the stuff of it is words'. LSD would free the mind from 'learned abstraction'; 'the effect of consciousness-expanding drugs will

20. Herbert Marcuse, *One-Dimensional Man: Studies in the Ideology of Advanced Industrial Society*, Routledge & Kegan Paul, London, 1964, p72. Henceforth: *ODM*.

21. Leary, 'How to Change Behavior' in, *CMM*, 48. Adapted from a paper delivered to the 1961 Convention of the International Association of Psychology in Copenhagen and originally published in *Clinical Psychology*, March, 1962.

be to transform our concepts of human nature, human potentialities, existence'.²² Like Marcuse (*R&C*, 246), Leary recognised that 'Freudian psychology ha[d] become the platform for a psychology of adjustment', and he coined the phrase 'the anthropocentric mythos'²³ to account for '[t]he [...] classic world view [which] concerns itself with equilibria among forces which are visible, external, predictable, measurable, manageable by man':

The religious expression of this mythos is Protestantism, with its emphasis on behavior, achievement, work, balancing and rationality. The current political forms [...] are again anthropocentric [...] and all emphasize a balance among a limited set of external factors, resources, territories. Again, the macroscopic, visible, man-age-able aspects of behavior are stressed [...]. The *psychological* expressions of the anthropocentric mythos again fit the dimensions of the myth. Behaviorism [...] recognises only visible actions [...] (*TCED*, 5, 6).

Leary thus appears to agree with Marcuse's critique of operational rationality, under the terms of which:

[m]any of the most seriously troublesome concepts are being 'eliminated' by showing that no adequate account of them in terms of operations or behavior can be given [...] The radical empiricist onslaught [...] provides the methodological justification for the debunking of the mind by the intellectuals - a positivism which, in its denial of the transcending elements of Reason, forms the academic counterpart of the socially required behavior (*ODM*, 12, 13).

According to Leary, different drugs 'turn on' different levels of consciousness but only the psychedelics can expand awareness to the point at which we understand our potential to evolve beyond the anthropocentric frame of reference. The famous slogan, 'turn on, tune in, drop out' refers to Leary's plan for the psychedelic future where 'turning on' refers to the apprehension of expanded awareness or what Leary refers to as 'cellular wisdom [...] the universe within'; 'tuning in' is the expression of the new awareness in art, music and poetry and 'harness[ing] your internal revelations to the external world' which necessitates 'dropping out' or detachment from 'the ambitions and the symbolic drives and the mental connections which keep you addicted and tied to the immediate tribal game'.²⁴ Leary compares LSD to 'the microscope [which] turns you on to levels of energy which are invisible to the naked eye'.²⁵ What he refers to as 'mind' is the limited, egocentric consciousness of contemporary human beings. If, as evolutionary science seems to indicate, our brains were mature at an early stage, then, he argues, the full development of the mind has been obstructed by successive consciousness contracting social regimes. The *recherché du temps perdu* would

22. Leary, 'The Fifth Freedom - The Right to Get High' (henceforth: TFF), in *The Politics of Ecstasy*, Ronin Publishing, Berkeley, CA, 1968, p67.

23. Leary, Introduction to David Solomon (ed), *LSD: The Consciousness Expanding Drug*, G P Putnam's Sons, New York, 1964, p6. Henceforth: *TCED*.

24. Leary, 'The Molecular Revolution' (henceforth: TMR), in *Politics*, op. cit., pp353-5.

25. Leary, 'Soul Session' (henceforth: TSS), in *Politics*, op. cit., p258.

then, indeed be the vehicle of our future liberation and he anticipates 'a return to the basic human unit which is the clan or the cult' (TSS, 256) once our expanded consciousnesses become aware of the strictures of the technocratic regime.

THE ACID (R)EVOLUTION

Marcuse reinterprets Freud's analysis of the historical roots of civilisation by giving prominence to the death instinct and its role in the development of the super-ego. According to Freud, the primal father was killed and eaten by the primal horde in a 'rebellion against the father's taboo on the women of the horde'. However, introjected guilt and the need to make retribution, compelled the brothers to establish 'the brother clan, which in turn deifies the assassinated father and introduces those taboos and restraints which [...] generate social morality' (*E&C*, 63). Thus the primal father, constantly recreated by the sense of guilt in conflict with the desire to return to the mother (Nirvana), has provided for the increasing dominance of cultural institutions. 'Domination has outgrown the sphere of personal relationships and created the institutions for the orderly satisfaction of human needs on an expanding scale. But it is precisely the development of these institutions which undermines the established basis of civilization [...]. The human energies which sustained the performance principle are becoming increasingly dispensable' (*E&C*, 77, 105). In other words, we have reached the stage of civilisation where these libidinally derived energies can be liberated, to be brought into the service of the 'Great Refusal'. However, as Theodore Roszak points out, Marcuse never fully accounts for why 'domination *does* continue'²⁶ and can find no better explanation than that 'mental development lags behind the real development, or [...] retards the real development, denies its potentialities in the name of the past'.²⁷

Again, Leary would seem to have the answer. What he appears to be proposing is that the anthropocentric, monotheistic culture which has replaced the father with the justifications of science, has prepared the way for a form of psychopharmacology which will allow for the re-eroticisation of social life which Marcuse predicts. Or, in Leary's own words, '[y]oung children are glad to have Daddy be shepherd, but after a while the child has to take responsibility'.²⁸ However, while Marcuse makes clear that he makes use of 'Freud's anthropological speculation only [...] for its *symbolic* value' (*E&C*, 60, his emphasis), Leary wants to suggest that expressions of religious ecstasy expose metaphysical truths. Much of Leary's justification for this comes from the results of the famous 'Good Friday Study', a high profile experiment (reported in the press as 'The Miracle of Marsh Chapel') organised by a Harvard graduate student under Leary's supervision which set out to determine 'whether the transcendent experience reported during psychedelic sessions was similar to the mystical experience reported by saints and famous religious mystics'. What Leary's subjects seemed to be attempting

26. Roszak, op. cit., p111.

27. Marcuse (from *Soviet Marxism: A Critical Analysis*) quoted in Roszak, *ibid*.

28. Leary, 'Our Brain' in *Chaos & Cyberculture*, Ronin Publishing, Berkeley, California, 1994, p37.

to describe was an apprehension of the self as ontologically indistinct from the greater cosmos and as temporally located in the evolutionary process. If evolution can be understood as available to consciousness, then his studies seem to prove that what have been understood as mystical revelations are, in fact, direct experience of this essential knowledge.²⁹ The symbolic language of art, expressing emotional states and apprehensions of abstract ideas produced under the influence of LSD, are to be understood as subjective disclosures of metaphysical 'truths', proving that 'even the uneducated layman can experience directly what is slowly deduced by scientists'.³⁰ Consequently, '[t]hrough LSD, each human being will be taught to understand that the entire history of evolution is recorded inside his body' (STOG, 159).

The problem here, of course, is that the history of evolution is, essentially, a product of modern science, which works on the raw palaeontological and anthropological data according to historically specific and culturally determined assumptions. As Stanley Aronowitz has pointed out, we now understand that 'the economic, political, and social environment in which people "do" science and technology intervenes between cognition and its object'.³¹ This being the case, what is brought into doubt are the epistemological premises of Enlightenment science and the guarantees of the production of truth afforded by the idea of the abstract individual. The claims that Leary makes for LSD would seem, initially, to be structured towards disputing the primacy of the scientific method and promoting an awareness of how cognitive structures are culturally produced but, what he should then be forced to question is, not scientific knowledge *per se*, but the developmental and progressive myths that are attached to it. However, when Leary refers to the 'history' of evolution, what he appears to be referring to is the idea of the human as the apogee of a hierarchy of development, with the modern, technological human assumed to be the expression of evolutionary potential realised in social development. This is very different from Marcuse's appropriation of Freud's speculative anthropology to distinguish the psychological restraints that have produced the idea of the technological human in the first place. However, I would suggest that, because the politics of mind expansion include a commitment to freedom from 'the tyranny of the stifling simplicity of words' (TFF, 66), it is possible to read Leary as proposing that psychedelic awareness is fundamentally deconstructive in that it discloses the normative function of language. Although admitting to 'accepting the empirical evidence of modern biochemistry',³² he believed the challenge was, '[t]o develop new symbol systems for [...] new levels of internal consciousness [...] for the new invisible worlds which are opened up by psychedelic drugs' (ATWPK, 203). To fall back into the use of mundane language to describe the experience would be to acquiesce to the oppressions of the 'anthropocentric mythos' and do a grave injustice to the ineffable nature of the trip. Hence, the 'history of evolution' to which Leary refers can be understood as an attempt to represent

29. See 'The Religious Experience: Its Production & Interpretation' (henceforth: TRE), in Weil et al op. cit., pp191-213, revised version published as 'The Seven Tongues of God', (henceforth: STOG), in *Politics*, op. cit., pp13-58.

30. Leary, 'She Comes in Colors', (henceforth: SCIC), in *Politics*, op. cit., p159.

31. Stanley Aronowitz, *Science as Power: Discourse and Ideology in Modern Society*, University of Minnesota Press, Minneapolis, 1988, p16.

32. Leary, 'A Trip With Paul Krassner' (henceforth: ATWPK), in *Politics*, op. cit., p202.

symbolically the epistemological promise of LSD as acting to 'turn on' a form of knowledge which is not violated by the requirements of Reason, the Western scientific method or the ideology which structures ideas of normality. Indeed, the form of words that Leary uses here points to a new form of understanding, rather than an affirmation of what science claims to 'know' and, if the expression of this understanding is in an artistic or abstract/symbolic mode then his claim would seem to be that LSD exposes the arbitrary distinction between scientific and artistic languages which is founded in the assertion of Reason as a guarantor of truth. So, as the scientist writes himself out of a job, he exposes the sense in which the 'history of evolution' performs discursively to construct bodies and 'minds' limited by the anthropocentric mythos; and by insisting that LSD reveals this 'history' to be *inside* the body, he appears to be arguing for a recognition that the hegemony of the performance principle is shored up by discourses that perpetuate the idea of the body as unknowable except by publicly recognised authorities. LSD can thus be seen to problematise the dichotomies of inside/outside, public/private which equally structure ideas of art and science as antithetical. Nevertheless, the contradictions in Leary's writings seem to suggest that, in accepting the empirical evidence of modern science, he was also too ready to accept the ideology encoded in the symbol system by which it is expressed.

Discussing 'The Rhetoric of Drugs' in an interview with Michael Israel for *differences: A Journal of Feminist Cultural Studies*, Jacques Derrida refers to the two '*canonical or dominant* discourses' which structure discussions of drug use in contemporary culture as constituting a 'false opposition'.³³

33. Jacques Derrida 'The Rhetoric of Drugs' (henceforth: ROD), in Elizabeth Weber (ed), *Points ... Interviews 1974-1994*, Peggy Kamuf & others (trans), Stanford University Press, Stanford, CA, 1995, p243.

In the name of this organic and originary naturalness of the body we declare and wage the war on drugs, the war against these artificial, pathogenic, and foreign aggressions [...]. [W]e find [here] a desire to reconstitute [...] the 'ideal body,' the 'perfect body.' But [...] from the other side of the problem, so to speak (for you see how this opposition remains problematic), 'products' otherwise considered as dangerous and unnatural are often considered apt for the liberation of this same 'ideal' or 'perfect body' from social oppression, suppression and repression, or from the reactive violence that reduces originary forces or desire, indeed the 'primary processes' (ROD, 244).

On one of his many trips, Leary claimed that he re-experienced his own birth and, later, in an interview for *Playboy* magazine, he advanced the hypothesis that 'your nervous system [is] operating while you [are] still in the uterus. It [is] receiving and recording units of consciousness. Why, then, is it surprising that at some later date, if you have the chemical key, you can release these memories of the nine perilous and exciting months before you were born?' (SCIC). This, and other claims that Leary makes for LSD activating some sort of 'racial' memory, would seem to suggest precisely the

yearning for the 'natural' body to which Derrida refers with all that this implies for an understanding of self as prior to society. While Leary agrees with Marcuse that '[i]n our technological society of the future, the problem will be not to get people to work but to develop graceful, fulfilling ways of living a more serene, beautiful and creative life' (SCIC, 142), his rationale for technological liberation seems to rely on a fundamental ontological assumption based on an idea of consciousness as an a-historical given. His solution to the problem of 'why domination *does* continue' can thus be formulated on the basis of a 'chemical key' only because he has no need, unlike Marcuse, to struggle with the grip of historical forces on the 'happy consciousness'.

This is not to say, however, that drugs in general and, perhaps, the psychedelics in particular, can have no place in reconstructing cognitive awareness or deconstructing the concepts necessary to the maintenance of operational rationality. Marcuse himself gave cautious approval to the potential for 'the dissolution of the ego shaped by the established society'³⁴ which psychedelics seemed to promise; but, for him, it was the '[a]wareness of the need for such a revolution in perception', rather than the psychedelic experience itself which was 'the kernel of truth in the psychedelic search'. But he warned of the seductive power of 'temporary release' and the creation of 'artificial paradises' (*AEOL*, 44) constituting a withdrawal from, rather than a confrontation with, the established order. More recently, David Boothroyd has examined the relationship between deconstruction and drugs in light of Derrida's own reflections on Hackforth's translation of Plato's *Phaedrus*, in which he problematises the notion of the *pharmakon*, which means among other things 'writing' but equally 'drug', 'remedy', 'antidote' and 'poison'. There are no examples which decide the *pharmakon* as one or the other, and Derrida delights in the slippage which occurs both between the speakers of the word in *Phaedrus* itself and in the translation from the original Greek.³⁵ Thus, according to Boothroyd, '[i]t is because the drug will always be apprehended as both antidote *and* poison that it is intrinsically undecidable, liminal *and* transgressive. But because there are no pure exemplars, there are no narcotic means of transcendence either'.³⁶ Thus, the sense in which 'transcendence' refers to a condition always already decided (a 'state' which provides a referent for the idea of 'coming down' or 'returning to normal') itself becomes undecidable. The discourses which enable the presupposition of the 'natural' body are destabilised. In 'The Rhetoric of Drugs', Derrida himself does not distinguish between types of drug because he is more interested in the language and law applied to drug use than the experience itself. However, Boothroyd pays particular attention to the writings of the French poet Henri Michaux, who, according to Sadie Plant, 'was interested in the written word only in so far as he could use it to demonstrate, rather than describe'. Michaux wrote while tripping on mescaline and used words 'as devices and techniques for extending and exploring the worlds opened up by his drugs',³⁷ and it is in Michaux's writings

34. Herbert Marcuse, *An Essay on Liberation*, Penguin Books, 1969, p43. Henceforth: *AEOL*.

35. An edited extract from 'Plato's Pharmacy' can be found in Peggy Kamuf (ed.), *A Derrida Reader, Between the Blinds*, Columbia University Press, New York & Chichester, West Sussex, 1991.

36. David Boothroyd, 'Deconstruction and Drugs: A Philosophical/Literary Cocktail' (henceforth: D&D), in Nicholas Royle (ed), *Deconstructions: A User's Guide*, Palgrave, Basingstoke (UK) & New York, 2000, p58

37. Sadie Plant, *Writing on Drugs*, Faber & Faber, London, 1999, p146. Henceforth: *WOD*.

that Boothroyd discovers ‘that a trip to the limits of normality occurs as a poetic event, an encounter with language in which the difference between writing and experience is magically unmade’. And he concludes:

What he learns is that in order to write, he must be a writer of the border [...]. [S]uch a writer must reject the seductions of both tripped-out mysticism and instrumental reason [...]. From his risky, newly found, liminal perspective, Michaux learned of the ‘scandalous forced *identity*’ he was obliged to readopt on his return - when he came down (D&D, 62)

Boothroyd later elaborates the idea of the ‘writer of the border’ through Michaux’s comment that ‘[t]he observer of psychic experiences has to be ‘entrenched’’,³⁸ by which he takes him to mean ‘one who is able to straddle the limit between exuberant abandon and systematic recollection’ (D&D, 55), and I am particularly interested here in the sense in which Michaux uses the term ‘observer-voyeur’³⁹ in light of Leary’s comment that the ‘patient’ (or experimental subject) should be ‘a scientist in observing his behavior and an artist in describing his experience’. Taking into consideration his rejection of the ‘anthropocentric mythos’, and his claim that ‘mystical or revelatory experience’ (TRE, 193) can be understood as ‘confrontation with an unsuspected range of consciousness’ (TRE, 205), I believe it is possible that he would agree with Boothroyd’s assessment of Michaux’s attempt to write his drug experiences as a negotiation of the awareness that both ‘tripped out mysticism’ and ‘instrumental reason’ are, in fact, ‘seductions’. The entrenched observer is wary of these seductions and aware of how they are grounded in the idea of what Derrida has referred to as the ‘metaphysics of presence’.⁴⁰ The struggle to express the ‘risky, newly found, liminal perspective’ which psychedelic experience enables both refers to and deconstructs these seductions. The problem, again, then becomes one of how to discover a ‘symbol system’, but one which will not fall back into logocentrism. Thus, Michaux wrote ‘with little regard for those elements of French literary culture that place great emphasis on language as a privileged thing in itself’ and ‘[f]rustrated by the demands and limitations of the written word [...] sometimes turned to painting and drawing’ (WOD, 146).

In fact, when he writes of himself as ‘drunk with simultaneous perceptions and knowledge, the better to observe synoptically’,⁴¹ and asks if it is ‘so scandalous that what is most immaterial in matter should come to support the feeling of infinity’ (ibid, 215), he seems to support Leary’s argument for psychedelics as facilitating apprehensions of energetic exchange as a mode of consciousness. Michaux, then, would seem to fulfil Leary’s requirement for the scientist (or ‘observer-voyeur’) who could call on the techniques of artistic expression to communicate the sense in which psychedelic experience exposes what Boothroyd refers to as ‘the rips and tears, resulting from the “infidelities and aggressions” in the general metaphysical diktat by which

38. Henri Michaux, *The Major On Deals of the Mind*, R. Howard, Secker & Warburg (trans), London, 1974, (originally published as *Les grandes épreuves de l'esprit et les innombrables petites*, Gallimard, Paris, 1966), p156, fn 2.

39. Michaux, from *Miserable Miracle* (1956) in David Ball (ed and trans) *Darkness Moves: An Henri Michaux Anthology, 1927-1984*, University of California Press, Berkeley, LA & London, 1994, p203.

40. See *Of Grammatology*, (trans) Gayatri Chakravorty Spivak, Johns Hopkins University Press, Baltimore, 1976.

41. Michaux, from *Knowledge Through the Abyss* (1961), in Ball, op. cit., p211.

Reason attempts to assert its authority over Unreason, madness, intoxication etc.’ (D&D, 56). However, despite Boothroyd’s claim that ‘the nascent deconstructive logic of Michaux’s [...] writing’ demonstrates that ‘drug taking’ is a ‘rethinking of the liminal’ (D&D, 56), he does not so much provide a ‘new’ symbol system as a painful re-working of an old one. Leary’s more utopian project was the discovery of a means of expression that would point to a re-ordering of subjectivity under the terms of psychedelic awareness. With the advent of the micro-chip revolution in the 1980s, Leary broke a decade long silence to announce that he had found the answer. Timothy Leary had discovered the internet.

PSYBERNETIC/QUANTUM LINGUISTICS

In 1989, Leary coined the new term ‘psybernetic’ to refer to ‘psychedelic experience expressed in electronic form’,⁴² gleefully recognising that ‘our research with psychedelic drugs and, in fact, the drug culture itself was a forecast of, or preparation for, the personal-computer age’.⁴³ Computers, for Leary, would realise the social revolution promised by the ontological deconstructing of the Newtonian universe suggested by quantum physics. Equating the mechanical determinacy of Newtonian physics with industrial age social determinacy, he saw the potential of ‘subatomic particles that zoom around in clouds of ever-changing, off-on, 0-1, yin-yang probabilities’⁴⁴ as ‘part of an enormous cultural metamorphosis’⁴⁵ which would ‘eliminate [...] dependence on the enormous bureaucracy of knowledge professionals that flourished in the industrial age’.⁴⁶ The promise of digitalisation is, for Leary, that it encodes all experience as ‘one linguistic: the quantum language of zeros and ones’, thus dissolving ‘the quaint, mammalian dualism of mind versus body’ (HIBA).

I do not have space here to detail the impact of post-Newtonian physics on theories of subjectivity, but will merely point out the most significant effect of the fact that God does, indeed, seem to play dice with the universe; this is that reflexivity becomes part of the paradigm of scientific knowledge. This revelation ushers in the era of the posthuman, a new understanding of the relationship between minds and bodies, matter and consciousness in which the previously opposed status of these categories is brought into significant doubt. Developments in cybernetic theory in the late 1940s and early 1950s (in particular, the work of Dr Norbert Wiener⁴⁷) threw further doubt on the Cartesian opposition between mind and body by showing how feedback loops ‘can flow not only *within* the subject but also *between* the subject and the environment’.⁴⁸ The autonomous, self-directing individual implied by Cartesian theory must thus give way to the idea of the individual in reflexive relation to the universe and constituted by interaction with other bodies, minds and material substances. The idea of the posthuman becomes fully intelligible at the level of digitalisation because not only do we now rely on computers to extend our own capacities but digital processing has

42. Leary, ‘Politics of Ecstasy: The Youth Revolutions of the 20th Century’ (henceforth: POE), in *Politics*, op. cit., p5.

43. Leary, ‘How to Boot Up Your Bio-Computer’ (henceforth: HTBYC), in *Chaos*, op. cit., p42. As he notes ‘the word “LSD” was used twice’ in *Time* magazine’s cover story about the founders of Apple Computer, Steve Jobs and Stephen Wozniak.

44. Leary, ‘Quantum Jumps, Your Macintosh, and You’ (henceforth QJ), in *Chaos*, op. cit., p44.

45. Leary, ‘How I Became an Amphibian’ (henceforth: HIBA), in *Chaos*, op. cit., p3.

46. Leary, ‘Personal Computers, Personal Freedom’ (henceforth: PCPF), in *Chaos*, op. cit., p43.

47. See Norbert Wiener, *Cybernetics* (1948) and *The Human Use of Human Beings* (1954).

48. N Katherine Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*, University of Chicago Press, Chicago & London, 1999, p2.

become the model by which we understand biological and physical processes like the immune system and the human genome. Thus, we are now able to conceptualise things like minds, bodies, viruses and subatomic structures in terms of an informational model.

Although, as Katherine Hayles points out, '[t]o the extent that the posthuman constructs embodiment as the instantiation of thought/information, it continues the liberal tradition rather than disrupts it' (ibid., 5), other theorists, such as Donna J. Haraway and Sadie Plant, have, like Leary, recognised that a cybernetic conception of subjectivity allows for a politically useful troubling of the ideology of operational rationality. If, as Haraway claims, '[i]t is not clear who makes and who is made in the relation between human and machine'⁴⁹ then the 'imagined organic body' (ibid., 154) that can be dominated by the material and ideological machinery of the technocracy is brought into significant doubt and the 'bureaucracy of knowledge professionals' which ultimately depends upon the supposed integrity of the abstract individual, can be challenged.

It comes as no surprise then that Leary was able to see the connection between the claims that he made for LSD as requiring the development of 'non verbal communication' which would free us from 'the stifling simplicity of words' (TFF, 66) and William Gibson's description of cyberspace as 'a consensual hallucination'. As Gibson told Leary: 'In effect [you're] creating a world. It's not really a place, it's not really space. It's notional space',⁵⁰ leading Leary to coin the phrase 'quantum linguistics'⁵¹ to describe the writing of Gibson (and, before him, James Joyce, William Burroughs and Thomas Pynchon) who are able to 'atomize the molecules of grammar' (WG, 175). Instructive here also is Gibson's description of the structure of the cyberspace matrix as reminiscent of 'proteins linking to distinguish cell specialities',⁵² recalling Leary's claim that expressions of psychedelic experience are explicable as a 'direct awareness' of the 'processes which [scientists] measure' (TRE, 197). Gibson's 'quantum linguistics' enable an expression of the contemporary understanding of our bodies and the world as process or as an exchange of energy/information which can be expressed in digital language but which is apprehended as a virtual space populated by morphable entities which are simultaneously the expression of numerical and linguistic data. Cyberspace thus conceptually defies the logocentricity of language, even while utilising that language. As I have argued elsewhere, the promise of cyberspace is that it is 'a literal universe of signs which embodies the arbitrary nature of signification [...] in that none of its elements can be apprehended as self-identical. At the most basic level of machine code, 0 and 1 do not represent 'something' and 'nothing' but are always expressions of potential states which their combination might produce. Furthermore, any actualisations (such as writing, music, pictures, video, virtual reality) are only nodes in a chain of potential substitutions. As Sadie Plant puts it, '[z]eros and ones are utterly indiscriminate, recognising none of the old boundaries between passages and channels of communication,

49. Donna J. Haraway, 'A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century' in *Simians, Cyborgs & Women*, Free Association Books, London, 1991, p177.

50. Leary, 'Conversation with William Gibson' (henceforth: CWWG), in *Chaos*, op. cit., p25.

51. Leary, 'William Gibson: Quark of the Decade' (henceforth: WG), in *Chaos*, op. cit., p174.

52. William Gibson, *Neuromancer*, Grafton Books, London, 1986, p26.

and spilling out into the emergence of an entirely new sensory environment'.⁵³ In other words, they do not refer/defer to a logocentric ultimate presence or to a temporally organised hierarchical structure'.⁵⁴ It can thus be understood to correspond to Michaux's 'virtual space in the image of reality'⁵⁵ opened up by psychedelic experience, which David Boothroyd explains as 'not [...] a vision of transcendence, of another reality, but [...] a zone of deferral; a kind of reduction or bracketing of traditional systems' (D&D, 54). The possibility thus exists for the confrontation with the established order which Marcuse required.

Perhaps, then, Leary's 'quantum linguists' can be understood to correspond to Boothroyd's 'writer[s] of the border': 'entrenched' observers able to resist the seductions of both transcendence and operational rationality while marking the liminal terrain where the boundaries between subject and object and science and art become available to deconstruction. And, I would suggest that Leary himself can be usefully read as similarly preoccupied with what Haraway refers to as 'particular sorts of breached boundaries that confuse a specific historical people's stories about what counts as distinct categories crucial to that culture's natural-technical evolutionary narratives'.⁵⁶ Leary emerges as a scientist who understood that science itself is a high stakes political game indebted to historical narratives that mark out the laboratory as a space in which particular truths are produced. His insistence that psychology should be attentive to abstract or artistic modes of expression as revealing useful data in a clinical setting can, through his later writings and his search for a symbol system that would express the potential of the new conceptual space opened up by psychedelic experience, be understood as a significant challenge to the hegemony of knowledge production.

53. S. Plant, *Zeros + Ones: Digital Women + The New Technoculture*, Fourth Estate, London, 1997, p185.

54. Debra Benita Shaw, *Women, Science & Fiction: The Frankenstein Inheritance*, Palgrave, Basingstoke (UK) & New York, 2000, p169.

55. Michaux quoted in Plant, op. cit., p147.

56. Donna J. Haraway, 'Cyborgs & Symbionts Living Together in the New World Order' in Chris Hables Gray (ed), *The Cyborg Handbook*, Routledge, New York & London, 1995, pxvi.