

OVERVIEW ON THE HISTORY OF PSYCHEDELICS AND MDMA AS TREATMENTS FOR PSYCHIATRIC DISORDERS

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CONVERGENT EVOLUTION – ANTHROPOLOGY OF PSYCHEDELICS

Sacramental use for
7,000+ years:

- Religious and medicinal
- Initiation rites
- Diverse cultures
- Widely used
- Influenced religion, philosophy, art



MARIA SABINA

“Heal yourself, with beautiful love, and always remember ... you are the medicine.”

-Maria Sabina

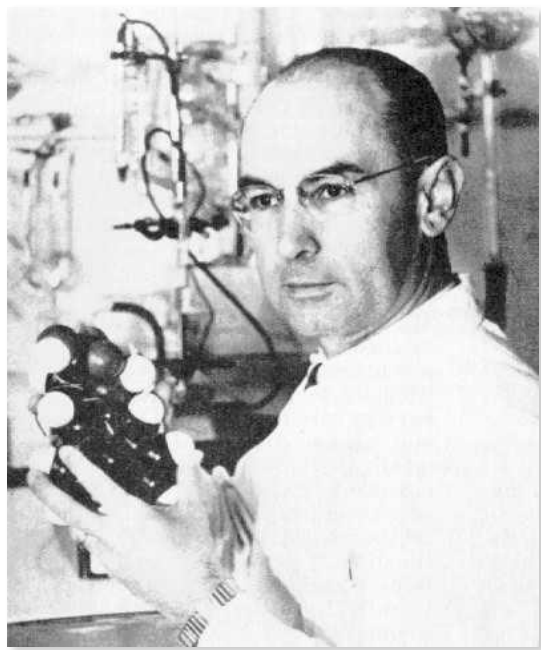


RECEIVING his mushrooms, Wasson takes his night's ration from the hand of *Ciandra Eva Méndez*. In right background *Guy Stessier-Péan*, French anthropologist who accompanied Wasson, has begun to chew his own supply.

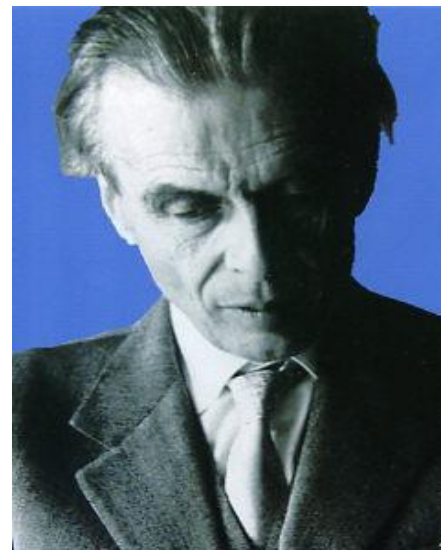
EATING his mushrooms (*below*), Wasson takes them from cup holding his night's quota as the *curandera* prays at the household altar. He chewed them slowly, as is the custom, and his six pair took about a half hour to eat.

WESTERN PSYCHEDELIC PIONEERS: 1940S-1960S

Dr. Albert Hofmann



Aldous Huxley



740 North Kings Road
Los Angeles 46
Cal

March 30th 1956

Dear Humphry,

Thank you for your letter, which I shall answer only briefly, since I look forward to talking to you at length in ~~xxxxxx~~ New York before very long. About ~~the~~ ~~xxxxxx~~ a name for these drugs --- what a x problem. I have looked into Liddell and Scott and find that there is a verb phanerosin, "to make visible or manifest," and an adjective phaneros, ~~a word~~ "manifest, open to sight, evident." The word is used in botany --- phanerogan as opposed to cryptogan. ~~xxxxxx~~ Psychodetic is something I don't quite get the hang of. Is it an analogue of geodetic, geodesy? If so, it would mean mind-dividing, as geodesy means earth-dividing --- from *gē* and *daiein*. Could you call these drugs psychophans? or phaneroptic drugs. Or what about phanerothymes? *Thumos* means soul, in its primary usage, and is the equivalent of Latin *animus*. The word is euphonious and easy to pronounce; Besides it has relatives in the jargon of psychology --- e.g. *cyclothyme*. On the whole I think this is better than psychophan or phaneroptic.

~~xxxxxx~~

I expect to be flying east on the tenth, or eleventh, and will let you know before then where we shall be staying --- possibly not in a hotel at all, but in a borrowed apartment.

Yours,

Aldous

Phanerothyme --- substantive

Phanerothymic --- adjective

To make this trivial word sublime,
Take half a frame of phanerothyme.

To pump me depths or soak angelic,
Just take a pinch of psychedelic.

Aldous Huxley to Humphrey Osmond, March 1956

Box 1056, Weyburn.

My dear Aldous,

To fathom Hell or go angelic

Just take a pinch of PSYCHEDELIC.

(Delos to manifest)

I like phanerothymes. I suggest we discuss which to push for before the engagement. I have booked at the Buckingham. I trust successfully & should see you on the night of Wednesday 11th. I shall call you provided I don't get in too late. We might decide to turn my whole address into rhyming couplets. It would be arresting.

I hope to get another cotton & clover suit the one we bought together was a great success. Very

Humphry Osmond's reply to Aldous Huxley's letter of 30 March 1956, featuring his revised "psychedelic" ditty, April 1956.

Humphrey Osmond to Aldous Huxley, April 1956

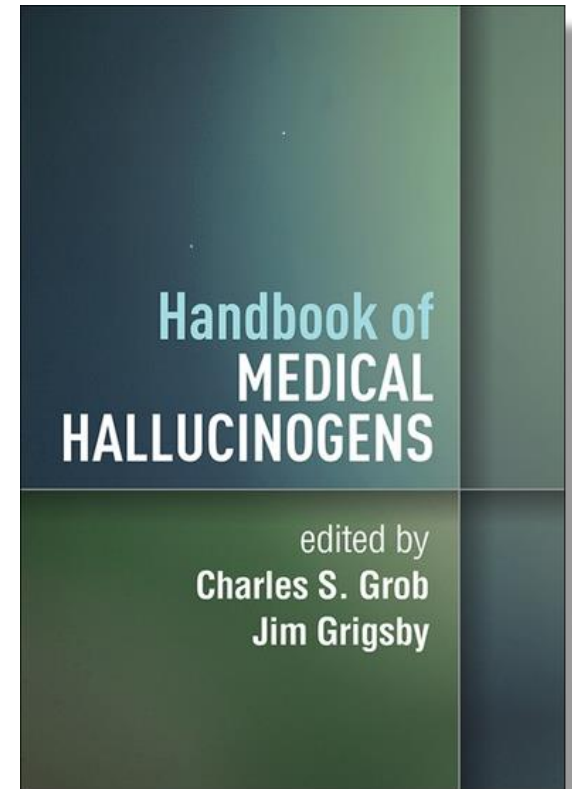
NOMENCLATURE

- ***Psychedelic***: Mind manifesting
 - *(Aldous Huxley, Humphrey Osmond)*
- ***Entheogen***: Accessing the divine within
 - *(Huston Smith)*
- ***Hallucinogen***: Mind journeying
 - *(ancient Latin “Allucinari”)*

NOMENCLATURE

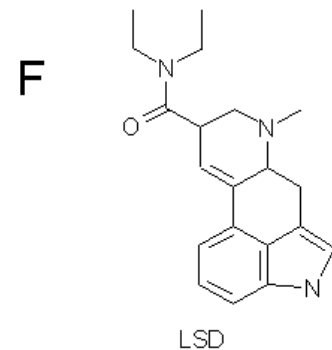
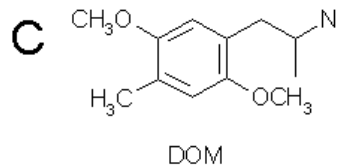
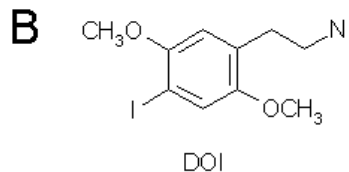
Alternative Terms:

- “Deliriants”, “Delusionegens”, “Eidetics”,
“Misperceptinogens”, “Mysticomimetics”,
“Phanerothymes”, “Phantasticants”,
“Psychodysletpics”, “Psychogens”,
“Psychointegrators”,
“Psychosomimetics”, “Psychotaraxics”,
“Psychotlicants”, “Psychotogens”,
“Psychotomimetics”, “Schizogens”



Guilford Press, 2021

PHARMACOLOGY OF CLASSICAL HALLUCINOGENS



- Role in discovery of serotonin neurotransmitter system (Freedman, 1961)
- 5-HT_{2A} receptor agonists
- Blocked by 5-HT_{2A} antagonist ketanserin (Vollenweider et al, 1998)
- Repeated administration leads to rapid development of tolerance and downregulation of 5-HT_{2A} receptor (Nichols, 2016)

ETHNOBOTANY OF HALLUCINOGENS



Psilocybe cubensis



Lophophora williamsii



Claviceps purpurea

ETHNOBOTANY OF HALLUCINOGENS



Psychotria viridis



Banisteriopsis caapi



Ayahuasca

SUBJECTIVE EFFECTS OF PSYCHEDELICS

- This state is marked by:
 - Stimulation of affect
 - Enhanced ability for introspection
 - Similar to dream and hypnogogic states
 - Perceptual changes (e.g., illusions, synaesthesias, affective activation and alterations of thought and time)

SUBJECTIVE EFFECTS OF PSYCHEDELICS

- Characteristics Of The Psychedelic Peak Experience¹
 - Sense of awesomeness and reverence
 - Deeply felt positive mood
 - Transcendence of time and space
 - Sense of unity or oneness
 - Transiency
 - Paradoxicality
 - Ineffability
 - Meaningfulness of psychological and/or philosophical insight

EXTRAPHARMACOLOGICAL VARIABLES: SET & SETTING

■ Set:

- Personality structure
- Current thoughts
- Current mood
- Expectations
- Intention

■ Setting:

- Physical, social and cultural environment
- Safety parameters
- Embedding of therapeutic context
- Guiding and oversight of psychedelic experience by trained therapist(s)

PARADIGM SHIFT

- **Conventional Psychopharmacology:**
 - Drug administered on daily basis for weeks/months/years
 - Ameliorate a presumed pathological brain state
 - Relief not dependent on patient's attitude or insight



PARADIGM SHIFT

Psychedelic Psychopharmacology:

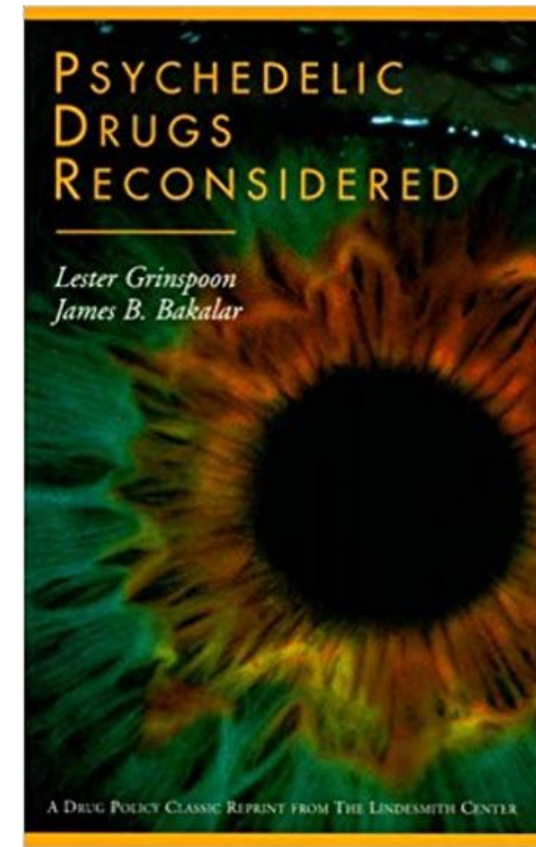
- Drug administered once or several times
- Loosens defenses
- Facilitates insight
- May induce a mystical experience
- Carefully monitored
- Supportive psychotherapy



EARLY WESTERN RESEARCH: 1940S-1960S

“Over a thousand clinical papers were published in the professional literature discussing the experiences of 40,000 patients treated with hallucinogens.”

— Grinspoon and Bakalar, 1979



EARLY WESTERN RESEARCH: 1940S-1960S

Treatment applications included:

- Alcoholism and drug addiction
- Psychosomatic disorders
- Chronic post-traumatic stress
- Obsessive-compulsive disorder
- Anti-social behavior
- Autism
- Existential anxiety in terminal cancer

CULTURAL TURMOIL LATE 1960S-1970S

All Kinds of 'Kooks' Gather for 'Happening'

Seattle Daily Times (Seattle, Washington), 15 January 1967, page 1

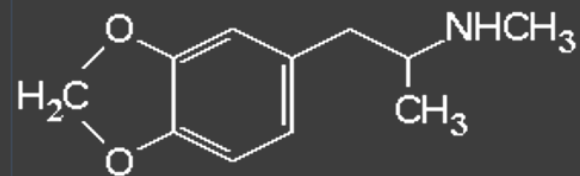
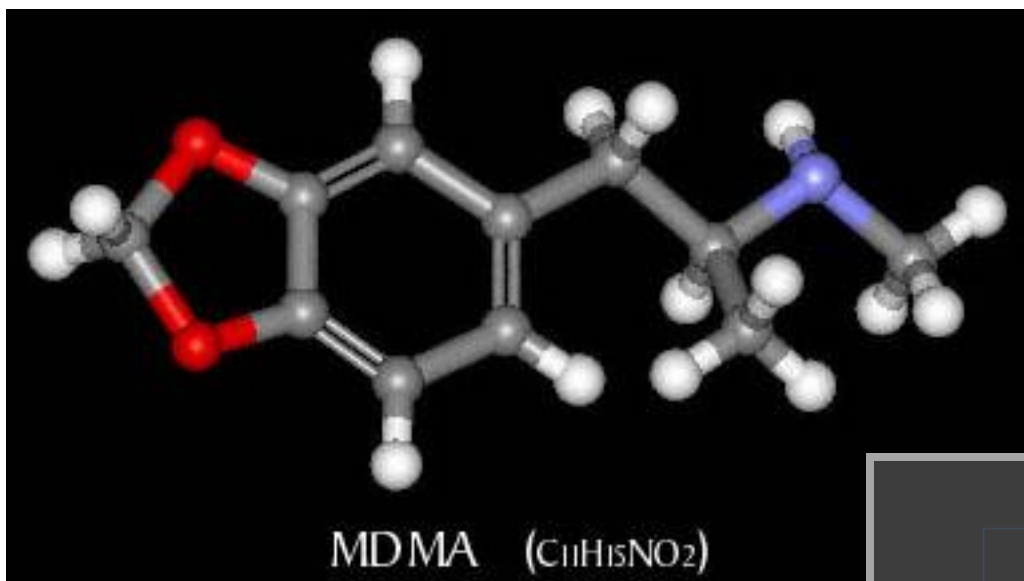


Maher, Stephen. "The Lost Counterculture." *Jacobin*. Feb 2015.



AP Photo/Steve Rees

MDMA: CHEMICAL STRUCTURE



MDMA: ANALOGS IN NATURE



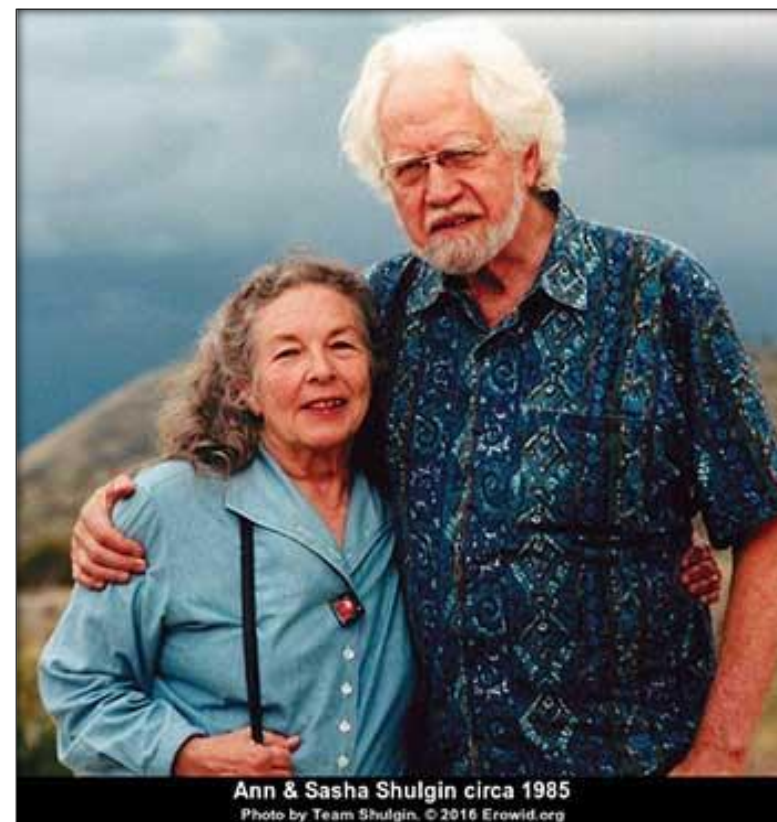
Myristica fragrans - Nutmeg



Sassafras albidum - Sassafras tree

3,4-METHYLENEDIOXYMETHAMPHETAMINE (MDMA)

- 1912 – Chemical Synthesis
- 1914 – Patented by Merck Pharmaceutical Co.
- 1953 – U.S.Army sponsored toxicology studies-EA 1475
- 1976 – Initial therapeutic explorations



MDMA 1980S-1990S

- 1981 – Popularization outside of medical area
- 1984 – DEA scheduling hearings
- 1985 – DEA Schedule I
- 1986 – Initiation of animal studies
- 1994 – First Phase I Clinical Study



New York Times, June 1, 1985



Rave in Manchester, UK dubbed "Madchester" in 1989

MDMA-ASSISTED TREATMENT

- Adjunct to psychotherapy
- Treatment paradigm shift
- Importance of set and setting
- Relatively mild
- Easily controlled
- Short acting

MDMA-ASSISTED TREATMENT

- Empathogen/Entactogen
- Enhanced capacity for introspection
- Improved mood

FUTURE

- Optimize safety
- Strengthen ethical standards
- Prioritize public health
- Create opportunity for greater diversity
- Respond to changing legal status
- Mitigate risks of rapid commercialization



CENTRAL AMERICAN MUSHROOM STONES 1500 BCE

