



**fever
talks**



@quendera

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A ciência dos Psicadélicos

Tiago Quendera

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4 de Março de 2020

Porto

Psicadélicos

são uma família de drogas cuja ação primária é a de desencadear a experiência psicadélica, causando alterações no pensamento, resposta visual, auditiva, etc.

Uma “trip”

é o estado temporário de estado alterado de consciência que advém do consumo de drogas psicadélicas.

DMT - AYAHUASCA

5-MeO-DMT – SAPO DO DESERTO DE SONORA

MESCALINE – PEYOTE

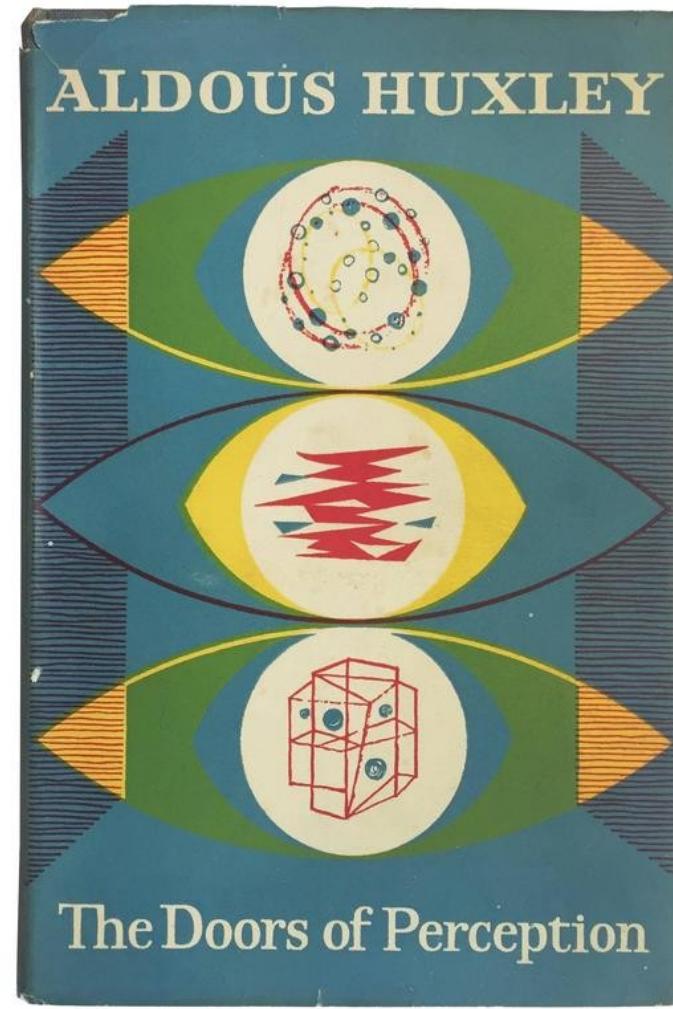
PSYLOCYBIN – MUSHROOMS

LSD - SYNTHESYZED

Psicadélico

(psukhē, “**mente, alma**”) + δῆλος (dêlos, “**manifesta, visivel**”)

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“If the doors of perception were cleansed every thing would appear to man as it is, Infinite. For man has closed himself up, till he sees all things thro' narrow chinks of his cavern.”

— **William Blake**, The Marriage of Heaven and Hell



"they eat a root which they call peyote,
and which they venerate as though it
were a deity."

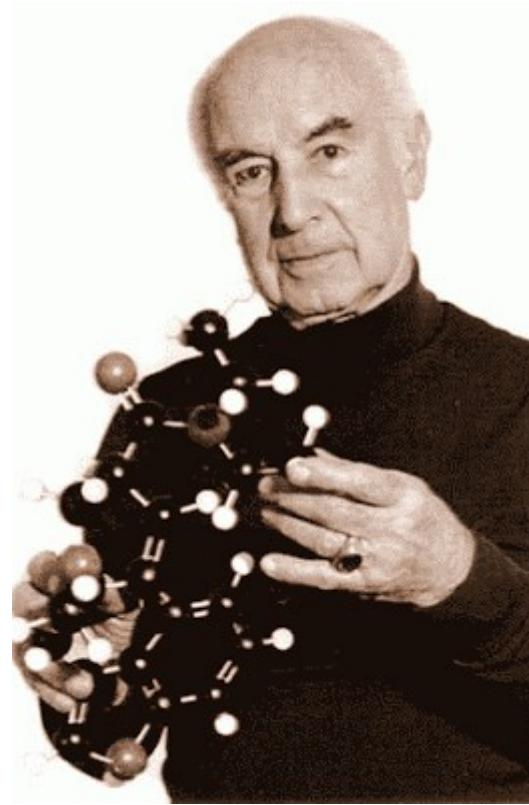
Aldous Huxley - The Doors of Perception

| **experiência/substância sagrada**

| **parte de rituais**

| **“cura”**

Albert Hofmann



"I was affected by a remarkable restlessness, combined with a slight dizziness. At home I lay down and sank into a not unpleasant intoxicated-like condition, characterized by an extremely stimulated imagination. In a dreamlike state, with eyes closed (I found the daylight to be unpleasantly glaring), I perceived an uninterrupted stream of fantastic pictures, extraordinary shapes with intense, kaleidoscopic play of colors. After some two hours this condition faded away"

Hofmann sobre a sua primeira experiência (acidental) com LSD

Dia de Bicicleta: 19 Abril de 1943,
Hofmann ingere 250 microgramas de LSD



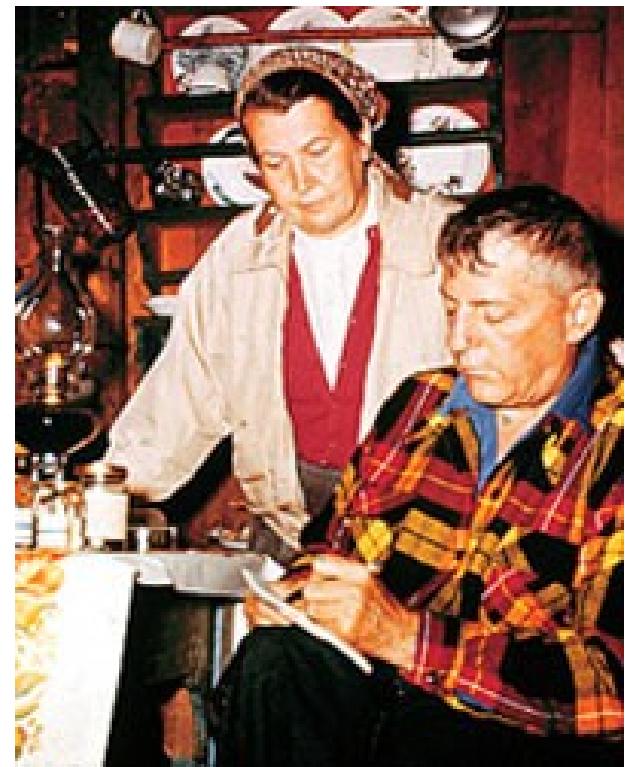


Em 1958, **Hofmann** identifica a estrutura química do composto activo presente nos cogumelos genus Psilocybe, a Psilocibina

María Sabina – Curandera Mazateca



Gordon Wasson e a sua esposa
Valentina Pavlovna Wasson



106 1

PROPOSAL

It is proposed to continue research on problems critical to a clarification of the fundamental aspects of the stimulus-response relationship in biological systems. Studies will be conducted utilising chronic animal preparations with permanent septal electrodes. Investigations will be conducted utilizing chronic electrode preparations-coupled with selected classical types of conditioning. Studies will be conducted on the geography of the brain in selected species of animals to determine the locus in which stimulations will produce specific reactions.

A careful literature survey, especially of the Russian literature, of foreign research in this area will be conducted.

DEC 15 1964
RELEASED *[Signature]*

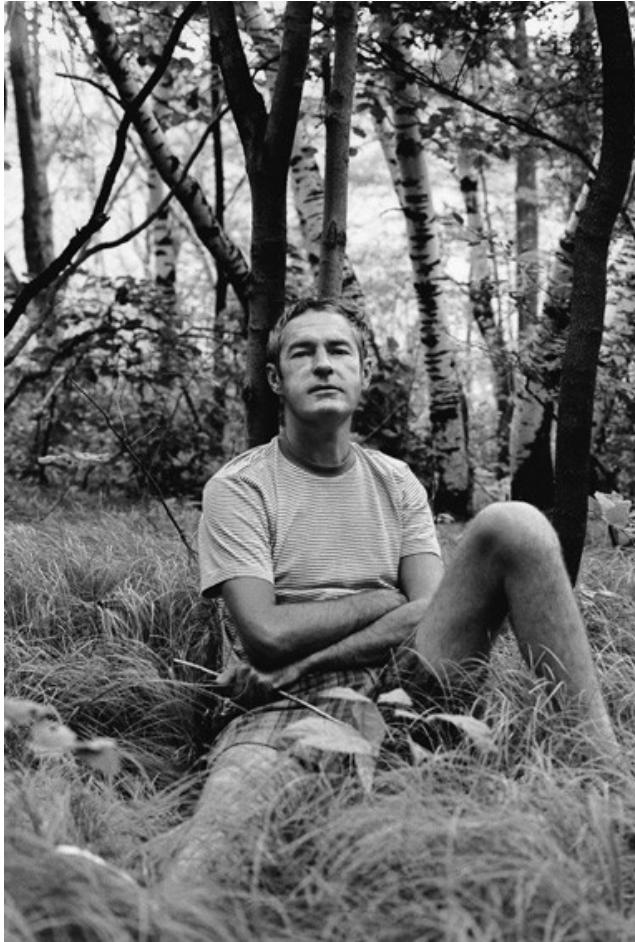
SEEKING THE MAGIC MUSHROOM,
1957 Life Magazine



María Sabina – Curandera Mazateca

**Bob Dylan, John Lennon, Mick Jagger,
Keith Richards e Timothy Leary**





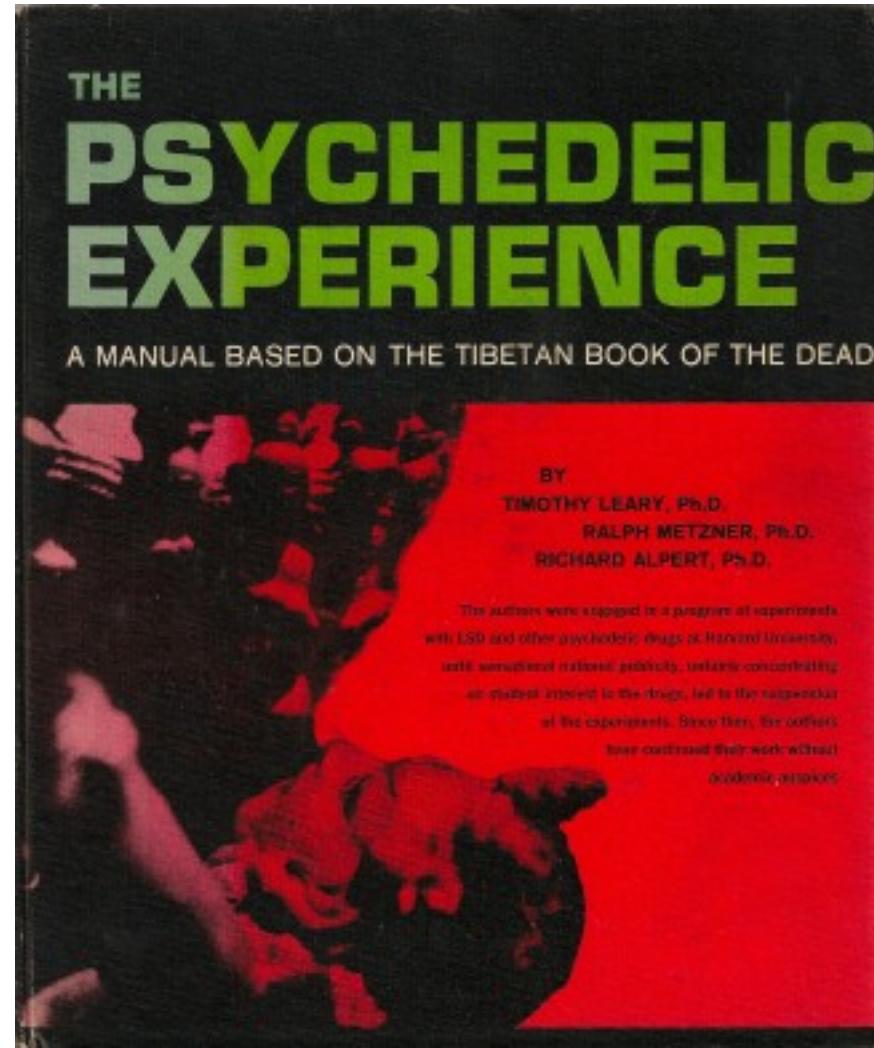
Timothy Leary

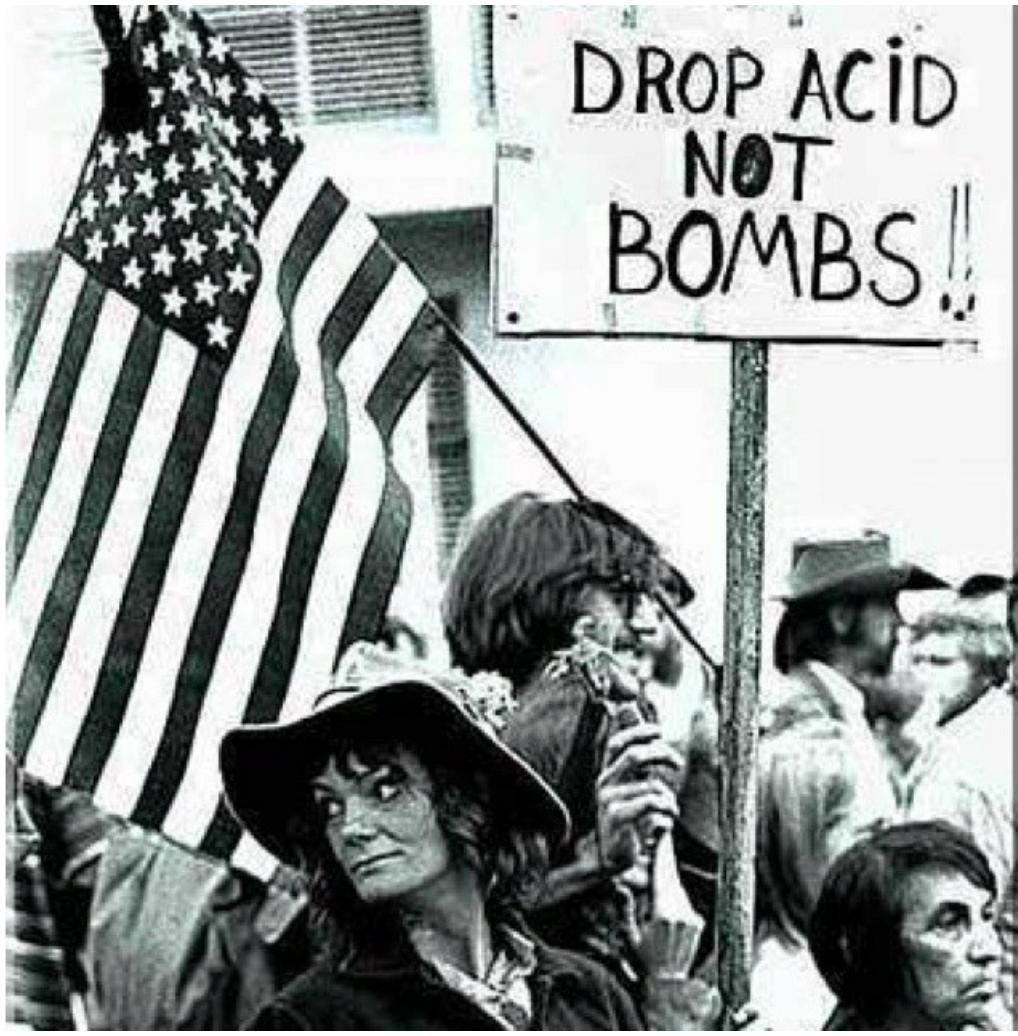


Concord Prison Experiment



Marsh Chapel Experiment





JOHN LENNON



COME TOGETHER

“Sir, the motor car is dangerous if used improperly... Human stupidity and ignorance is the only danger human beings face in this world.”

- proibição de todos os psicadélicos em 1966 nos EUA

Alexander and Ann Shulgin





Modern psychedelics

MDMA

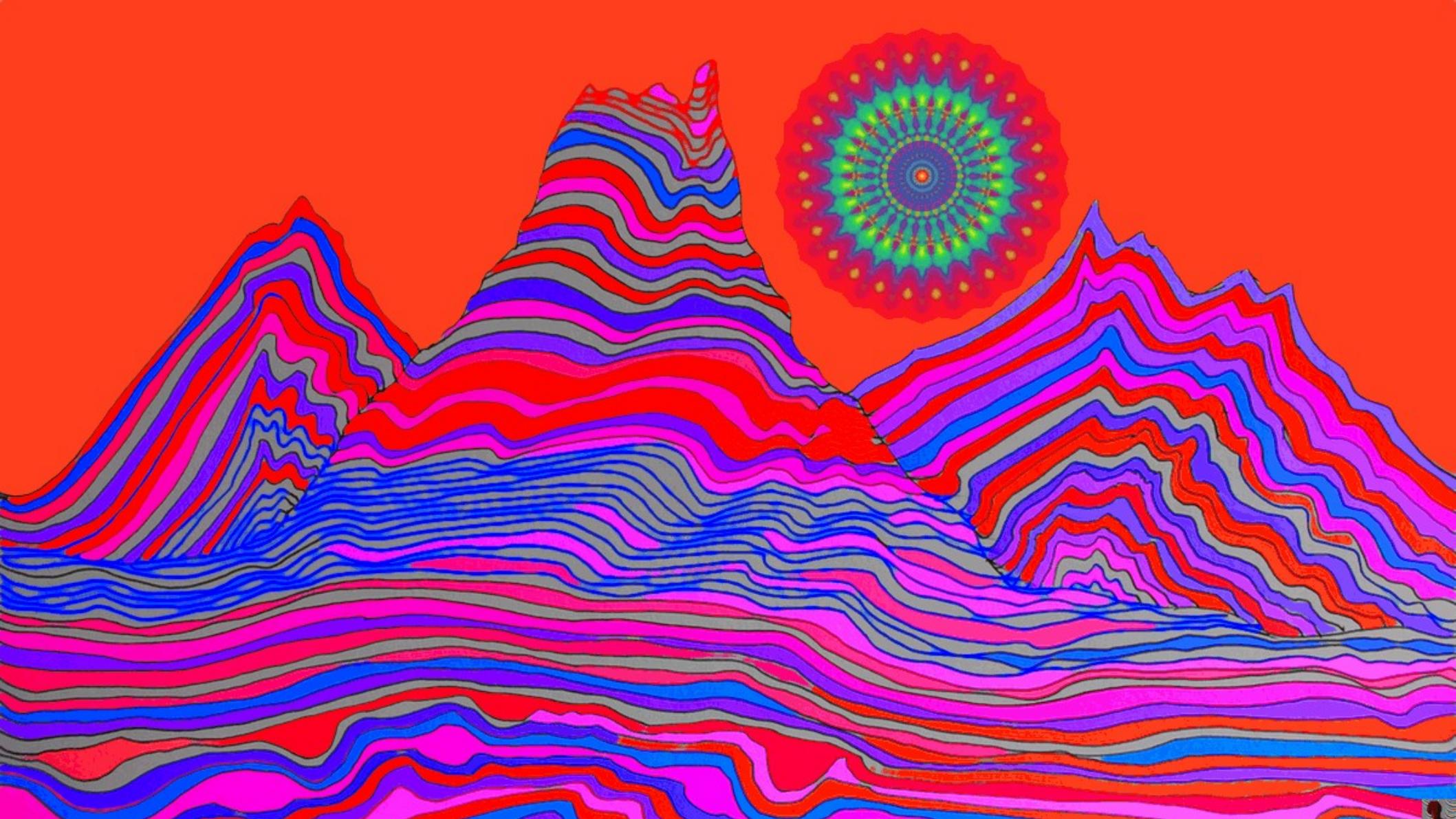
2C*

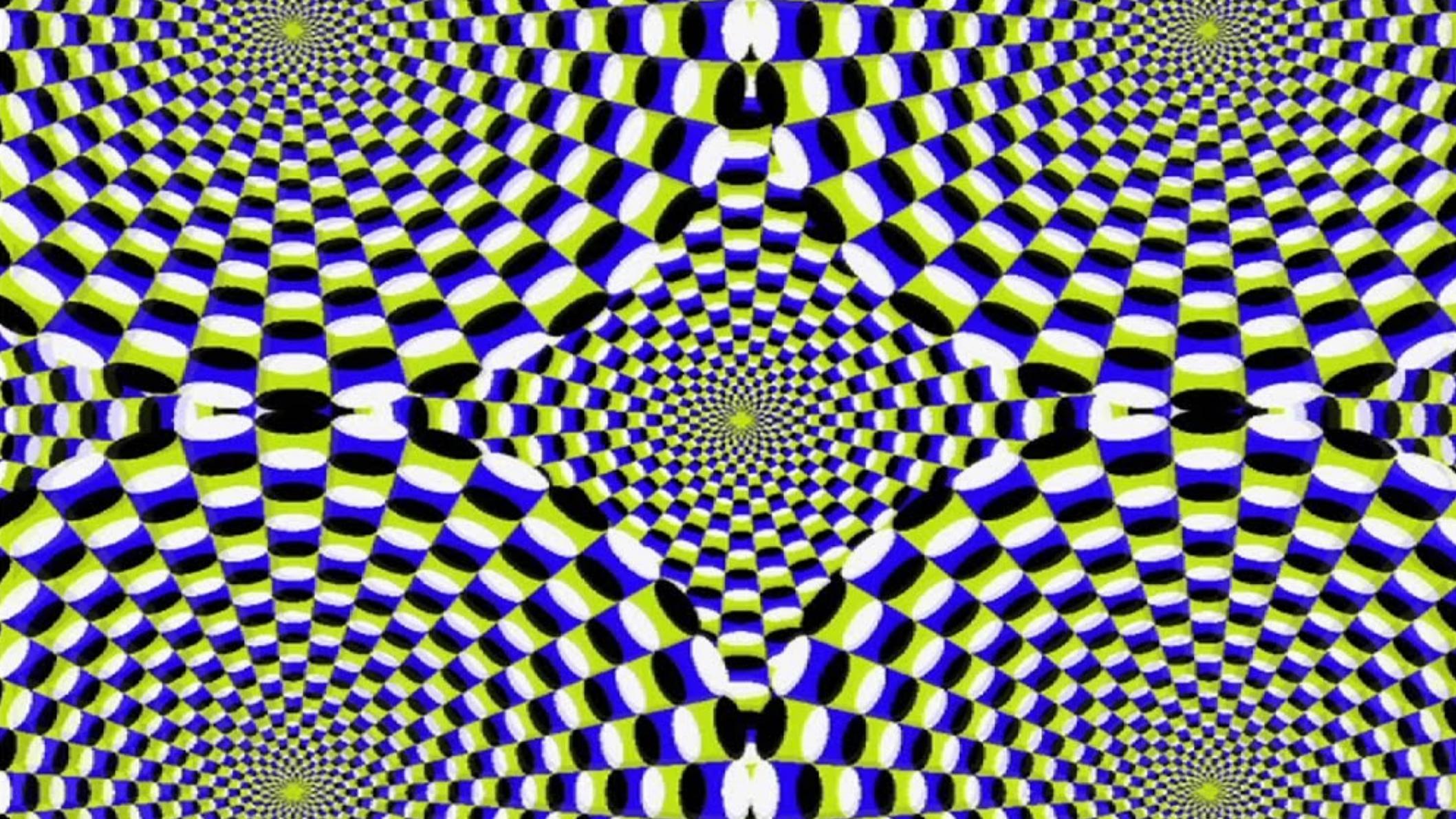
D0x

Ketamine

Nitrous

Como é experienciar um psicadélico?





Perturbação qualitativa de estados de experiência consciente



Roland R. Griffiths
Johns Hopkins Medicine, USA

Em 1999, reiniciou-se o processo de investigação com psicadélicos pelas suas mãos. O primeiro estudo, datado de 2006 investiga os efeitos da psilocibina em voluntários saudáveis.

- | Unity
- | sacredness of the experience
- | noetic (William James - universal truths revealed that are unable to be acquired anywhere else)
- | trancendence joy
- | trancendence of time and space (nowness)
- | undescribeable



"80-90% of participants claim it to be one of the most significant experiences in their life - same rate as birth of a child or death of a relative."

Roland Griffiths sobre os estudos onde os mesmos participantes foram entrevistados, 25 anos depois e sobre o seu estudo de replicação.

“Our 2006 publication on the safety and enduring positive effects of a single dose of psilocybin is widely considered the landmark study that sparked a renewal of psychedelic research world-wide.”

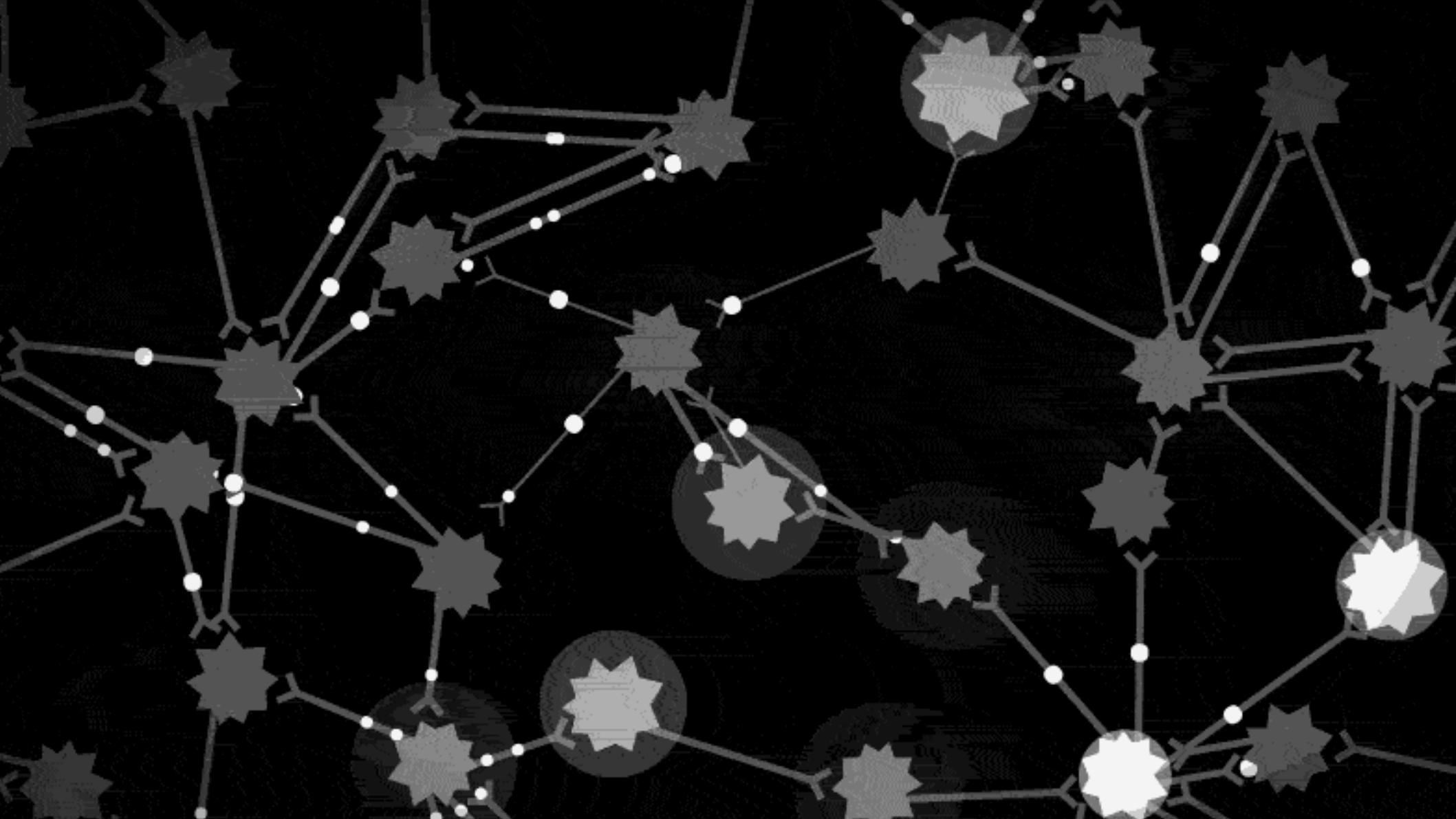
Johns Hopkins Medicine

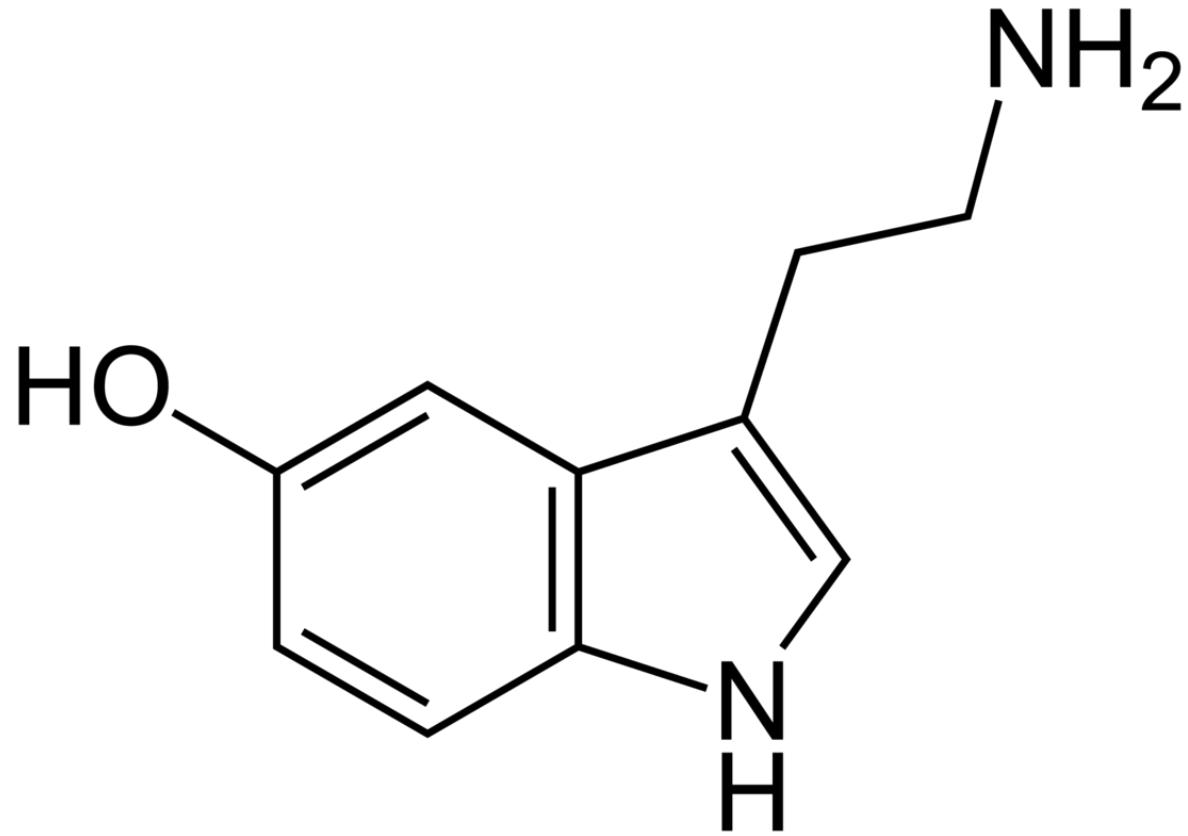
Riscos

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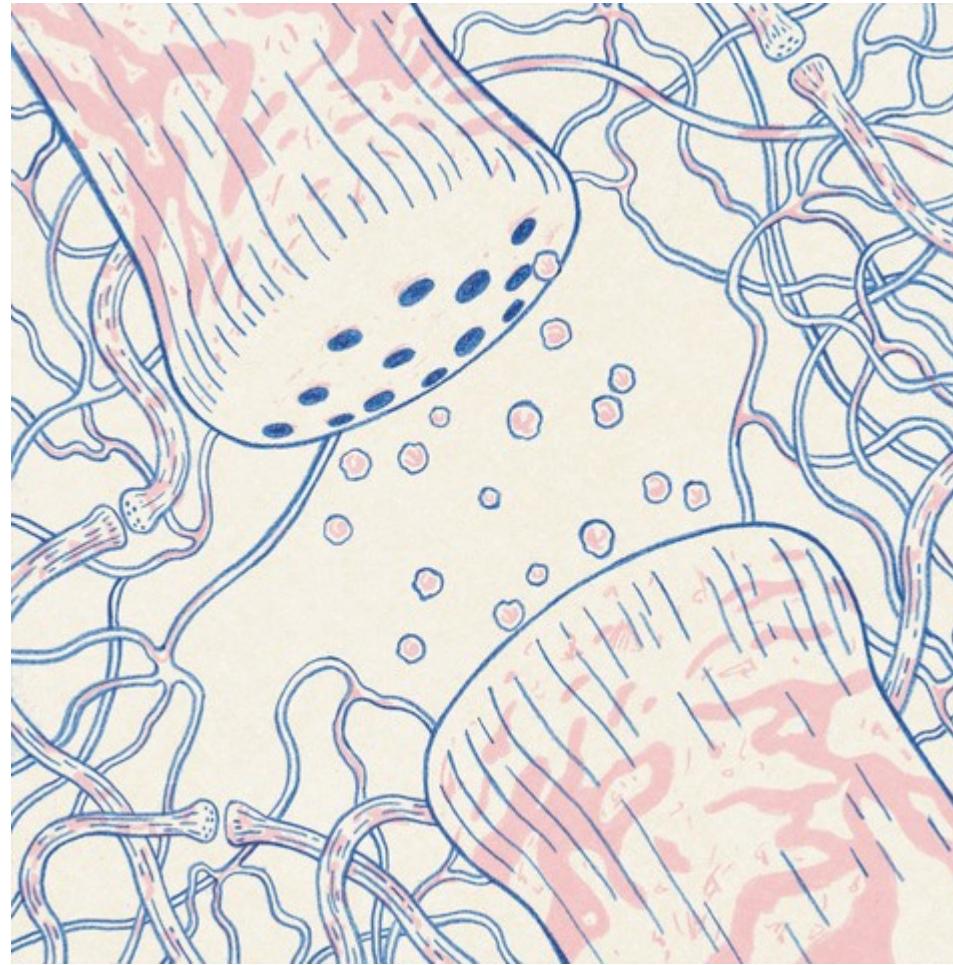


Como funcionam os psicadélicos?





Serotonina
5-HT



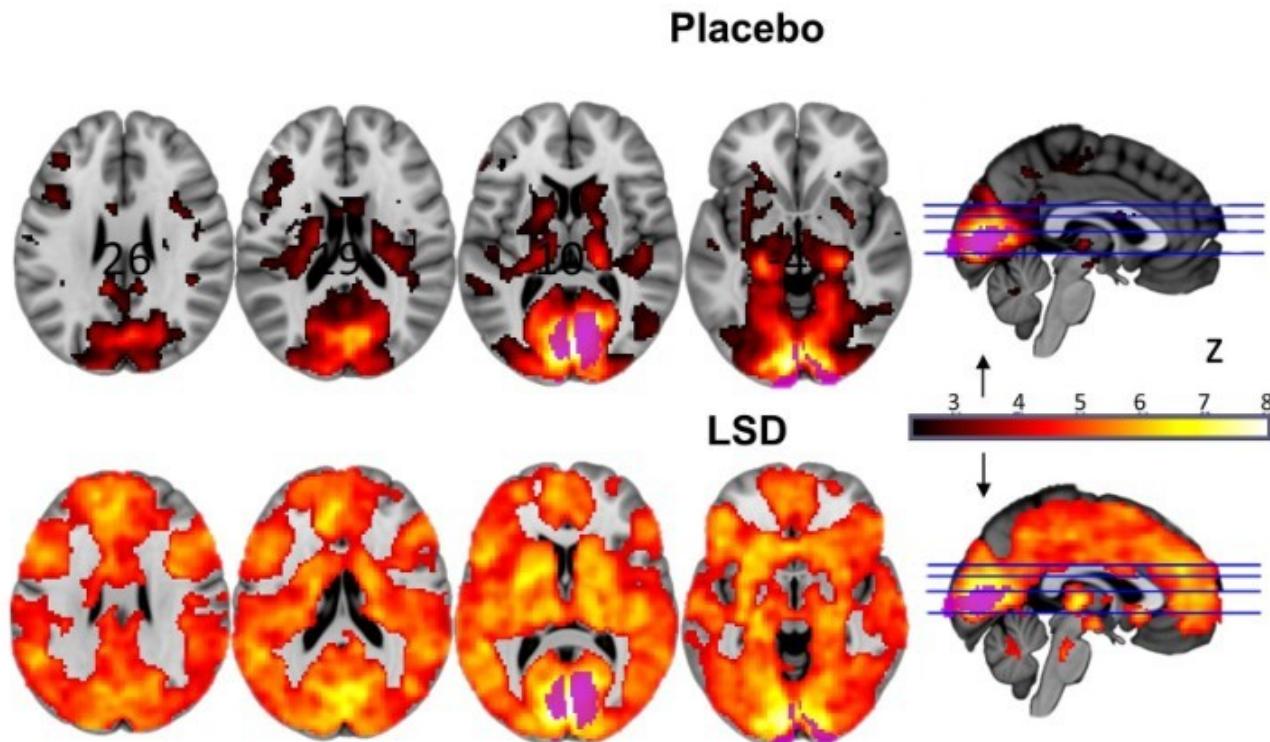
5-HT 2A

Imperial College London

Robin Carhart-Harris e David Nutt



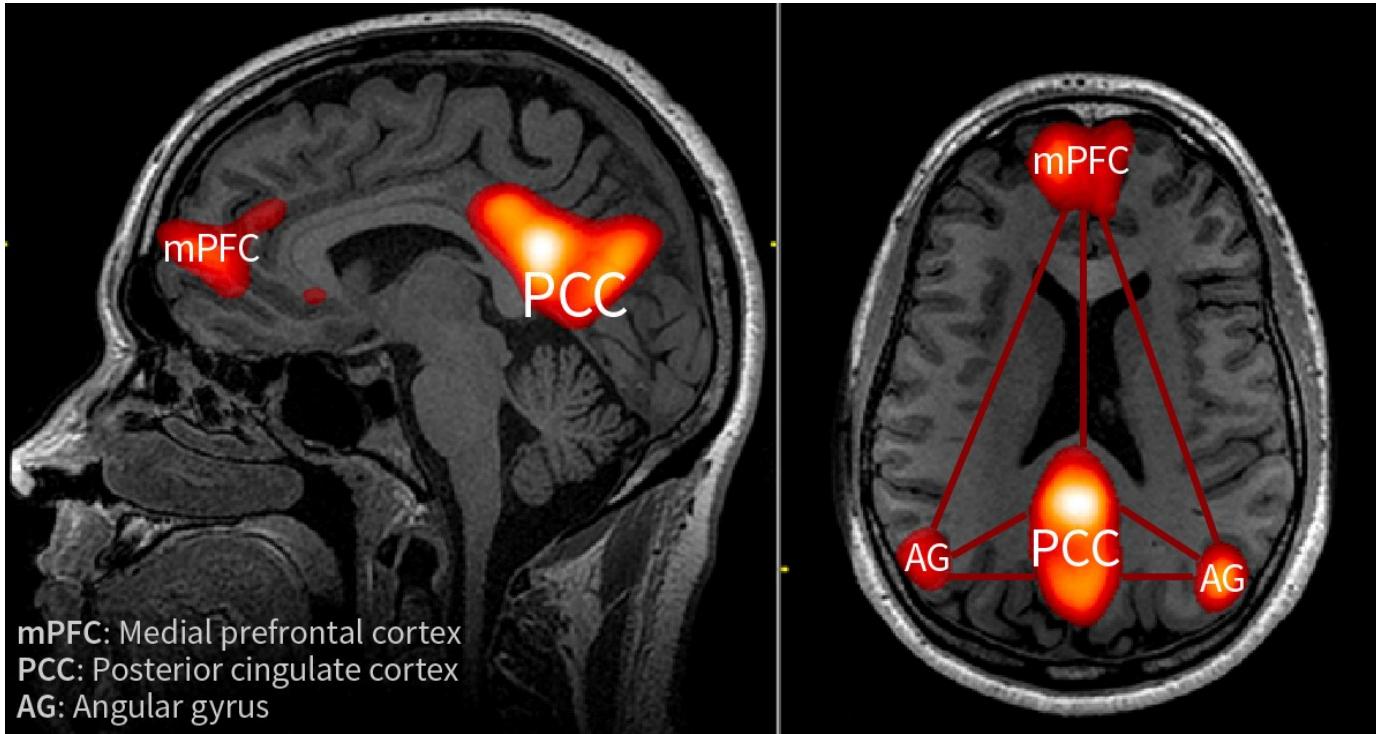
© Tony Buckingham/REX/Shutterstock



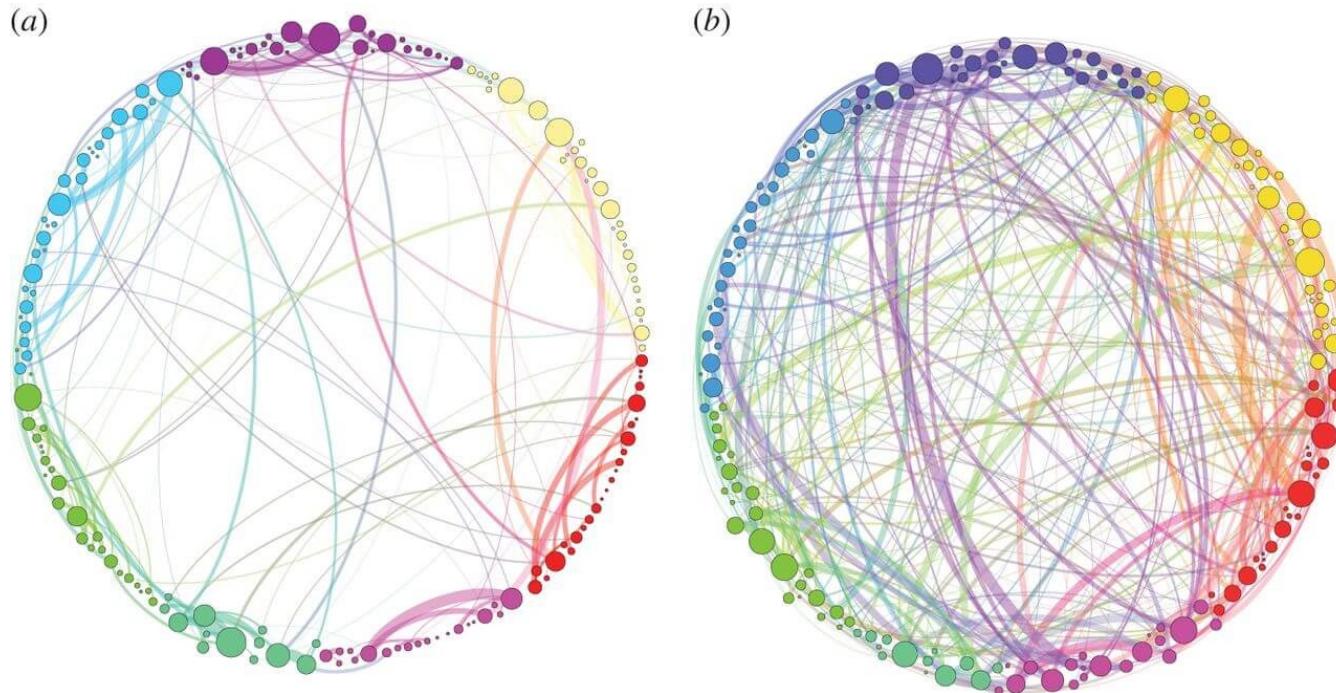
IMPERIAL COLLEGE LONDON

"(...)these substances weaken the brain's 'default-mode-network' (or DMN for short) which is, simply put, the normal operation of the brain when the mind is wandering around."

Robin Carhart-Harris



Default Mode Network



Grafo de conectividade antes(a) e durante(b) a toma de Psilocibina.

Quais as implicações destas descobertas?



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(intervalo)

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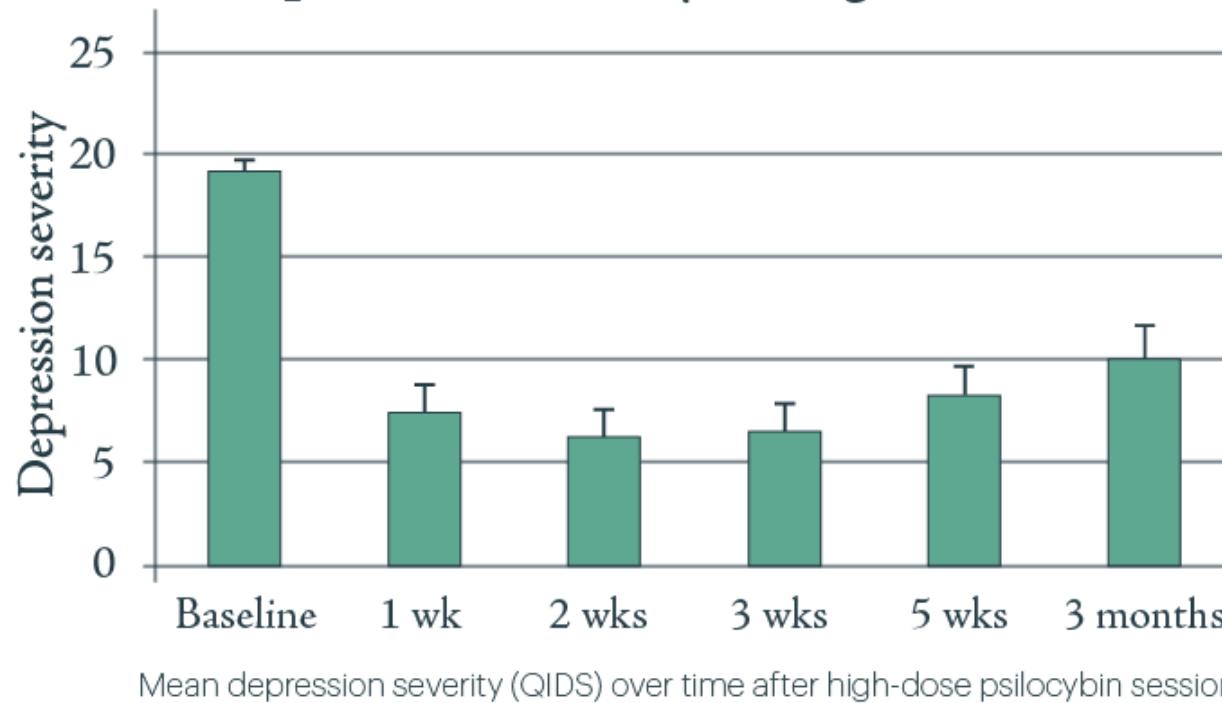
Quais as implicações destas descobertas?



A procura por um tratamento “agudo”

(Carhart-Harris et al 2016)

Depression severity ratings over time



"Participants had suffered from depression for an average of 18 years, with severity ranging from moderate to severe." - **Imperial College London**

Flexibilidade Cognitiva



A Investigação em Portugal



Albino Oliveira-Maia
Fundação Champalimaud



Zachary F. Mainen
Fundação Champalimaud

Outros centros pelo mundo

- | MAPS – MDMA em PTSD
- | JHM – Depressão, Meditação e Psilocibina
- | KCL – Psilocibina e LSD
- | Universidade de Praga – Estudo fundamental da Psilocibina

Discussão

Qual é a função destes compostos na natureza?

Qual a importância destes fenómenos na sociedade?

Qual a importância destes fenômenos no indivíduo?



Agradecimentos

Dr. Zachary Mainen

Dr. Albino Oliveira-Maia

Laboratório de Neurociência de Sistemas

Unidade de Neuro-psiquiatria

Fundaçao Champalimaud

Fever (Diana Branco)

Todos os presentes



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<http://ar.fchampalimaud.org>

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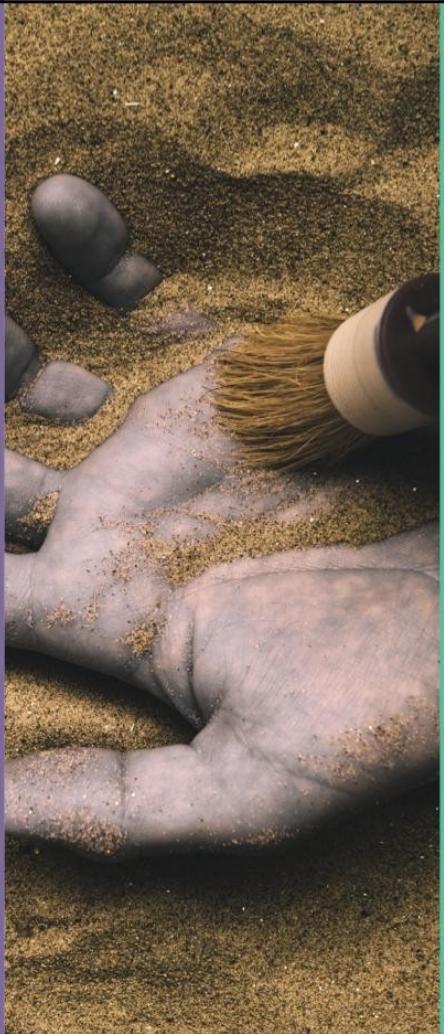
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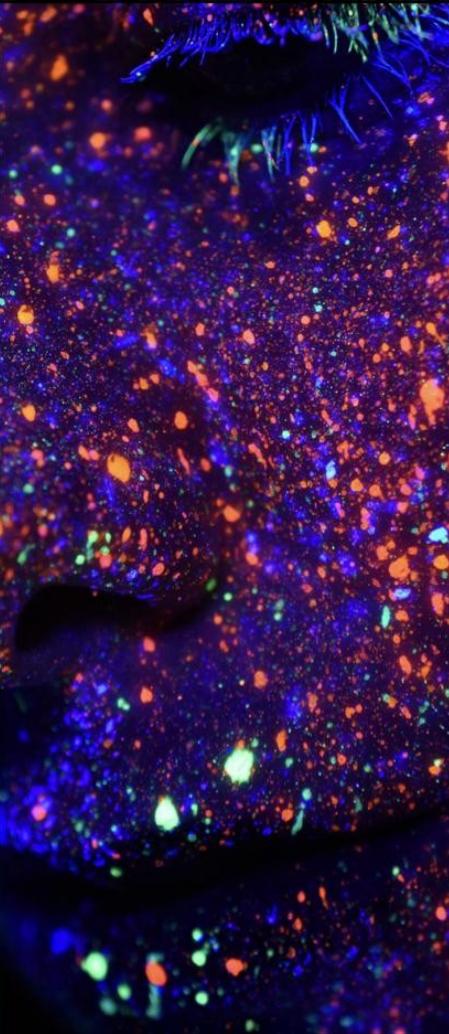
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Next fever talks

CRIME CRIME CRIME CRIME CRIME CRIME



DRUGS DRUGS DRUGS DRUGS DRUGS DRUGS



PSYCHOLOGY PSYCHOLOGY PSYCHOLOGY PSYCHOLOGY



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