Hunt Institute for Botanical Documentation
5th Floor, Hunt Library
Carnegie Mellon University
4909 Frew Street
Pittsburgh, PA 15213-3890
Telephone: 412-268-2434
Email: huntinst@andrew.cmu.edu
Web site: www.huntbotanical.org

The Hunt Institute is committed to making its collections accessible for research. We are pleased to offer this digitized item.

Usage guidelines
We have provided this low-resolution, digitized version for research purposes. To inquire about publishing any images from this item, please contact the Institute.

Statement on harmful and offensive content
The Hunt Institute Archives contains hundreds of thousands of pages of historical content, writing and images, created by thousands of individuals connected to the botanical sciences. Due to the wide range of time and social context in which these materials were created, some of the collections contain material that reflect outdated, biased, offensive and possibly violent views, opinions and actions. The Hunt Institute for Botanical Documentation does not endorse the views expressed in these materials, which are inconsistent with our dedication to creating an inclusive, accessible and anti-discriminatory research environment. Archival records are historical documents, and the Hunt Institute keeps such records unaltered to maintain their integrity and to foster accountability for the actions and views of the collections' creators.

Many of the historical collections in the Hunt Institute Archives contain personal correspondence, notes, recollections and opinions, which may contain language, ideas or stereotypes that are offensive or harmful to others. These collections are maintained as records of the individuals involved and do not reflect the views or values of the Hunt Institute for Botanical Documentation or those of Carnegie Mellon University.

About the Institute
The Hunt Institute for Botanical Documentation, a research division of Carnegie Mellon University, specializes in the history of botany and all aspects of plant science and serves the international scientific community through research and documentation. To this end, the Institute acquires and maintains authoritative collections of books, plant images, manuscripts, portraits and data files, and provides publications and other modes of information service. The Institute meets the reference needs of botanists, biologists, historians, conservationists, librarians, bibliographers and the public at large, especially those concerned with any aspect of the North American flora.

Hunt Institute was dedicated in 1961 as the Rachel McMasters Miller Hunt Botanical Library, an international center for bibliographical research and service in the interests of botany and horticulture, as well as a center for the study of all aspects of the history of the plant sciences. By 1971 the Library's activities had so diversified that the name was changed to Hunt Institute for Botanical Documentation. Growth in collections and research projects led to the establishment of four programmatic departments: Archives, Art, Bibliography and the Library.

20 October 1978

Dear Bernard:
Splendid.

A minor suggestion. 'Homer's "Hymn to Demeter"'.

Everyone seems in agreement that the Hymn was not written by Homer of the Iliad and Odyssey. Homer's Hymn is unconventional phrasing and makes it sound as though it is the same poet. 'The Homeric Hymn' is the conventional usage and is clear.

All my best.

RG

my comment on receiving a Rec'd to E-Louise

Digitized by the Hunt Institute for Botanical Documentation

HALLUCINOGENS IN NATIVE AMERICAN SHAMANISM AND MODERN LIFE

Sept. 28 - Oct. 1, 1978

WESTON LA BARRE
CAROL WOODS
CHAPEL HILL, N.C.
27914
from Gordon Wasson.
8-VIII-1981

Digitized by the Hunt Institute for Botanical Documentation

The Second International Conference on Hallucinogenic Mushrooms

It was evident to all who attended the Second International Conference on Hallucinogenic Mushrooms October 27 thru 30, 1977 that this conference was more academically orientated as was shown by the excellent credentials of both the speakers and the audience.

Harvard was represented by four professors (Dr Richard Schultes, botanist; Dr Norman Zinberg, psychiatrist; Dr Andrew Weil, MD; Dr Richard Rose, anthropologist;) and the noted mycologist and research associate, R Gordon Wasson.

Other speakers of the scientific community were Dr Albert Hofmann, retired director and research chemist of Sandoz Pharmaceutical Laboratories, Basel, Switzerland; Dr Gaston Guzman, mycologist; Dr William Scott Chilton, professor of chemistry, University of Washington; Dr Carl Ruck, professor of Greek, Boston University; Dr David Harden, MD, Presbyterian Hospital, San Francisco; and David Repke, research chemist, Syntex Pharmaceuticals, Palo Alto.

The subjects included taxonomy, distribution, identification, cultivation, chemistry, and toxicology. Important papers on history and anthopology based on new research were presented for the first time at this conference and will be published later this year.

Microscopes for the taxonomy classes were graciously made available by both the Drug Enforcement Agency and the Royal Canadian Mounted Police, Narcotics Division.

While the drive to the Olympic Peninsula was quite long, I found the conference well worth both the time and money, in addition to the excellent foraging and the refreshing rain.

K Barker

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

30 July 1978

Professor Bernard Lowy
Louisiana State University
Department of Botany
Baton Rouge, La. 90803

Dear Bernard:

Thanks for the most interesting notes from the Popol Vuj, and thanks for your promptness under the circumstances. You are striking pay dirt. I am most excited by your Tzutuhil data and look forward to studying it.

With appreciation, as ever

RGW

Digitized by the Hunt Institute for Botanical Documentation

(17) *Ixmucané,* de *ix,* ellos; *muc,* ocultar; *a,* acción de; *né,* partícula complementaria de la acción que antecede: El que se oculta de todos. El sol en el ocaso.
(18) *Matzanel,* de *matzán,* velar; *el,* partícula de pluralidad: el que se vela para todos. El sol en el crepúsculo.
(19) *Chuekenel,* de *chueken,* todas las mañanas; *el,* partícula de pluralidad: el sol que aparece todas las mañanas: la Aurora.
(20) *Popol-Buj,* de *pop,* estera; *ol,* partícula de pluralidad y continuidad; *buj,* libro (de *bix,* hablar y *uj,* compilación). Libro de las tradiciones, compilado por los dignatarios que asistían a los consejos.
(21) Otra particularidad del panteón mexicano es la existencia de las divinidades según los *cuadrantes del espacio.* Esta idea de la división del mundo con arreglo a los puntos cardinales existe en la mayor parte de los pueblos de la América del Norte y entre los pueblos modernos de indios y sobre todo entre los *zuñis,* viene a constituir un sistema que rige la vida religiosa y en parte la vida civil. (Beuchat "Manual de Arqueología Americana," pág. 304).

PRIMERA TRADICION

(1) *U Cux Caj,* de *u,* artículo determinante; *cux,* corazón; *caj,* cielo: el Corazón del cielo.
(2) *Cabagüil,* de *cab,* doble; *a,* partícula de continuidad; *gu,* de *guá,* lugar oculto, *il,* ver: el que vé en lo oculto, Dios.
(3) *Jurakán,* de *jún,* uno, una; *rá,* muslo; *akán,* pie: el de una sola extremidad inferior. Dios de la Tempestad.
→ (4) *Cakuljá,* de *cak,* fuego; *ul,* dentro; *já,* agua: fuego entre el agua, el rayo.
→ (5) *Chipí Cakuljá,* de *chi,* procedencia; *pí,* variación de *pé,* venir: lo que viene del rayo, el trueno.
→ (6) *Raxá Cakuljá,* de *raxá,* vislumbre: vislumbre del rayo, el relámpago.
(7) *U Cux Uleu,* de *ucux,* el corazón; *uleu,* tierra: el Corazón de la tierra.
(8) *Ajtzak,* de *aj* de *ajau,* señor; *tzak,* edificar: el Señor que edifica, el arquitecto del Universo.
(9) *Ajbit,* de *aj, ajau,* señor; *bit,* manifestar: el Señor que lo manifiesta todo.
(10) *Nim ak,* de *nim,* grande; *ak,* lengua: el de la lengua grande, símbolo de la luz del sol.
(11) *Nimá Tziíz,* de *nimá,* de *nim,* grande, gran; *tziíz,* sangrar: el gran sangrador: el sol que hace brotar la savia en las plantas.
(12) *Ajcual,* de *aj, ajau,* señor; *cual,* esmeralda: el Señor de las esmeraldas.
(13) *Ajyamanic,* de *aj* como queda explicado; *yamanic,* resplandecer: el Señor resplandeciente.
(14) *Ajchut,* de *aj,* ya explicado; *chut,* punta aguda, que pica, que penetra: el Señor de los rayos penetrantes. Aún decimos: qué picante está el sol.
(15) *Ajtzalam,* de *aj,* ya explicado: *tzalam,* extenso: el Señor de la extensión del firmamento.
(16) *Ajraxá Lak,* de *aj,* ya explicado; *raxá,* vislumbre; *lak,* superficie: el Señor de la superficie luminosa.
(17) *Ajkol,* de *aj,* ya explicado; *kol,* savia de pino, trementina: el Señor que hace brotar las trementinas.

From: Monumento a Chuilacantamup (Popol Buj). J. Antonio Villacorta C. y Flavio Rodas N. 1927, Guatemala.

Digitized by the Harvard Institute for Botanical Documentation

1 Leg Lightning is the first,
  And the second is Dwarf Lightning.
Third then is Green Lightning,
  So that the three of them are the Heart of Heaven.
Then they came to Majesty
  And Quetzal Serpent, and then was the invention
Of light
  And life.
"What if it were planted?
  Then something would brighten —
A supporter,
  A nourisher.
So be it.
  You must decide on it.
There is the water to get rid of,
  To be emptied out,
To create this,
  The earth
And have it surfaced
  And levelled
When it is planted,
  When it is brightened —
Heaven
  And earth.
But there can be no adoration
  Or glorification
Of what we have formed,
  What we have shaped,
Until we have created a human form,
  A human shape," so they said.
So then this the earth was created by them.
  Only their word was the creation of it.
To create the earth, "Earth," they said.

Ka Kulaha Hu r Aqan nabe,
  U kaab q'ut Ch'ipi Ka Kulaha,*
R ox chik Raxa Ka Kulaha,
  Chi' e q'u' oxib ri, u K'ux Kah.
Ta x e' ul k uq ri Tepev,
  Q'uq' Kumatz, ta naohixik

Zaq,
  K'azilem,
"Hu pa cha ta chavax ok?*
  Ta zaqir ok puch a pa chi nak,*
Tzuqul,
  Kool.
Ta ch ux ok.*
  K ix noohin tah.*
Are ri ha ch el tah,
  Chi hama tah,
Chi vinaqir va,
  Ulev
U laqel ta q'u r ib
  Ch'at ta q'ut *
Ta chavax ok
  Ta zaqir ok
Kah,
  Ulev.
Ma ta q'ut u q'ihilabal,
  U q'alahibal*
Ri qa tzak,
  Qa bit,
Ta vinaqir ok vinaq tzak,
  Vinaq bit," x e ch'a q'ut.
Ta x vinaqir q'u ri, ulev k umal.
  Xa ki tzih x q'ohe ri, u vinaqirik.
Chi vinaqir ulev, "Ulev," x e ch'a.

illness, (10) sexy, (11) good for recovery of financial losses or household affairs, (12) good for prayer for prosperity or advice against error or ill temper, (13) children, (14) good for prayer to *huyub-tak'ah* 'mountain and valley', (15) prayers about money, gratitude, (16) good for prayers about money, (17) courtship, freeing of prisoners, paralysis witchcraft, (18) slander and quarrels, (19) trips, quarrels, (20) ancestors, domesticity. (Schultze-Jena, 1933, pp. 29-32.)

186. I believe SJ (p. 187) correctly interprets the etymology of *ch'ipi* 'dwarf'; cf. *ch'ipi nanahuac* in lines 5191-2. *Kaab* is a common variant of *kaib* 'two'. BX misprint *ch'ipa* for *ch'ipi*.

193 ff. The frequent use of direct discourse in this and succeeding passages suggests the possible ritual-dramatic origin of this part of the text. The preceding section is of a different character, although its poetic beauty and tightness also suggest liturgy. The metaphor of creation as an act of farming has occasioned some confusion, some translators reading all forms of *zaq* as references to dawn. 'Brightening' is a metaphor for the maturing corn. The first verb of this frequent couplet is obscure: sometimes it is *avah* 'plant' (line 431) and sometimes it is *chavah* 'whiten' (line 5901). It may be an intentional and traditional pun.

194. The MS has *o* for *ok*.

197-8. WC gives:

So be it!
Let the void be filled!

198. The pronoun is plural. The trinity of the Heart of Heaven is addressing Majesty and Quetzal Serpent. With FX, SJ, and BX, I read it as *naohih* 'think' rather than *nohih* 'fill'. See lines 190, 228, 673.

204. *Ch' a ta* is read 'so they spoke' by WC. This is not textual and is grammatically unlikely, given the context. The MS has *chata*.

210. The MS has *u calaibal*.

Immediately it was created.
It was just like a cloud,
  Like a mist then,
The creation then,
  The whirlwind.
Then the mountain was asked to come from the water.
  Straightaway there were great mountains.
Just their power,
  Just their magic
Caused the making then,
  The invention
Of mountains
  And valleys.
At a stroke there were also created cedar groves on them
  And pine forests on them.
So Quetzal Serpent then rejoiced,
  "It is good that you have come,
Oh Heart of Heaven,
  Oh 1 Leg,
And you, Dwarf Lightning
  And Green Lightning.
Our forming is successful,
  And our shaping," they said.
And once they had created
  The earth,
The mountains
  And valleys,
The paths of the waters were unravelled
  And they proceeded to twist along among the hills.
So the rivers then became more divided
  As the great mountains were appearing.
And thus was the creation of the earth
  When it was created by him
Who is the Heart of Heaven,
  The Heart of Earth,
As they are called.
  And they were the first to think of it.
The sky was rounded out there
  And the earth was rounded out in the water,

Libah chi x vinaqirik.
Kehe ri xa tzutz',*
  Xa may vi,*
U vinaqirik chik,
  U pupuheyik.*
Ta x ta pe pa ri huyub.*

Hu zuq nimaq huyub x uxik.
Xa ki naval,
  Xa ki puz
X banatah vi
  U naohixik
Huyub,
  Tak'ah.
Hu zuq r ach' vinaqirik u k'izizil u pa,*

Chahil u vach.
Kehe q'ut x kikot vi ri Q'uq' Kumatz,
  "Utz mi x at ulik,
At, u K'ux Kah,
  At, Hu r Aqan,
At pu, Ch'ipi Ka Kulaha,
  Raxa Ka Kulaha.
X ch utzinik qa tzak,
  Qa bit," x e ch'a q'ut.
Nabe q'ut x vinaqir
  Ulev,
Huyub,
  Tak'ah,
X ch'oboch'ox u be ha,
  X biniheyik k'olehe r aqan xol tak huyub.*
Xa ch'obol chik x e q'ohe vi ha,
  Ta x k'utuniheyik nimaq huyub.
Kehe q'ut u vinaqirik ulev
  Ri ta x vinaqirik k umal ri
U K'ux Kah,
  U K'ux Ulev,
K e' uch'axik.
  Ri q'ut e nabe x ki noohih.
X k'olo vi ri kah,*
  X k'olo nay puch ulev ch u pam ha,

219. *Tzutz'* is a common variant of *zutz'* 'storm'.

220. SJ reads *mayui*.

222. *Puheh* is not known to me; I base my translation on *puh k'abah* 'eddy, revolve, make a whirlpool'. The form is a reduplicative, continuative, intransitive inceptive. FX has 'in fragments', BB 'in its material state', GR 'of matter', SJ 'its corporality', AR 'a dust storm', VC 'substance'. VR, NP, and BX omit it. WC apparently reads it as *pokoheyik* and translates very loosely 'dust'.

223. FX and BB read 'crab', which is nonsense. SJ accounts for all the elements: 'then one heard the mountains come from the water'. The other translations are elliptical and grammatically obscure.

231. Actually a juniper tree, *Juniperus* sp.

246. *K'olehe* is presumably related to *k'olobah* 'to circle', *k'olok'ik* 'round', *k'olotih* 'curl'; see note to line 459.

255-6. WC apparently reads *q'olo* 'be, stay', which is not textual and results in obscurity.

Digitized by the Hunt Institute for Botanical Documentation

21 July 1978

Dear Bernard:

In the Popol Vuh, tell me, please, the verse number, Munro S. Edmonson version, where the word Kakuljá occurs.

I fear you are in Guatemala at present!

As ever,

Gordon

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

26-VII-1978

Dear Gordon,

I have just returned from Guatemala and Mexico with good collections and better ethnomycological data on the Tzutuhil, which I must now organize and work up. This much I can say - mushrooms play a highly significant role in their lives and are directly associated with their creation myths!

I hardly know where to turn first, so much mail has piled up. Your postcard was almost lost in the crush. It got stuck to a piece of advertising which I threw out. By chance, I saw your card attached. Another good reason to abandon postcards. I'm turning to your inquiry first and you will find the documentation you need enclosed. I've added a page from the Villacorta version (1927) which I think should not be underrated. The page from the Goetz-Morley translation I include only for the footnote which bears on the question. Edmonson does not elaborate on the word Cakulja (= Ka Kuklaha) (= Kaqulja) but the notes of Villacorta and G-M are highly pertinent.

I also received the announcement for the seminars to be held in San Francisco Sept. 28- Oct. 1, and see that you are to speak on "a surprising new discovery," which I presume is what you were good enough to tell me about some time ago. Good luck at the meetings. Your audience is in for a treat! Hope you find the enclosures useful.

With best wishes, as ever,

Bonnard

~~B. Lowy~~

Regards to Dick Schultes and Weston La Barre.

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

Dr. Bernard Lowy
Dep't of Botany, College of Arts and Sciences
Louisiana State University
Baton Rouge, Louisiana 70803

Dear Bernard:

Just back from Europe I find your disappointing note. In all big organizations there are jealousies and intrigues, pullings and haulings, that divert the best people sometimes from their merited goals. I suppose one must be philosophical but it is hard.

As ever,

Gordon

Received: 27-IV-1978

Digitized by the Hunt Institute for Botanical Documentation

LSU
LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE, LOUISIANA 70803

College of Arts and Sciences
Department of Botany

5-IV-1978

Dear Gordon,

I have just received the unpleasant news that my candidacy for the award of Distinguished Research Master has been rejected by a University Committee.

My disappointment is heightened because the defeat came in spite of your efforts in my behalf. Nonetheless, I shall not allow the decision to interfere with my future investigations in mycology and ethnomycology.

With sincere gratitude for your help,

as ever,

Bernard

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

AMERICAN REVOLUTION BICENTENNIAL 1776-1976
LSU
A BICENTENNIAL UNIVERSITY

26-X-1977

Dear Gordon,

I am astounded — and deeply moved by your thoughtfulness and generosity! Your book is a princely gift, and I shall always prize it!

As ever,

Bernard

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

AMERICAN REVOLUTION BICENTENNIAL 1776-1976
LSU
A BICENTENNIAL
UNIVERSITY

11-X-1977

Dear Gordon,

You cannot guess how I spent several engrossing hours last night. I "discovered" and read most of a book as notable for its meticulous research as for its handsome design and printing. The author modestly refers to it as an "opuscule," but it is certainly a great deal more than that! I am referring to your "Third and Final Edition" of "The Hall Carbine Affair." I took your advice, reading first Part II, then the 'Epilogue' and so to the end, with a liberal perusal of the rest. Luckily, I was able to convince our librarian of the Rare Book Room where I had gone in search of another volume, to allow me to take it overnight.

As a school boy, the myth of Washington and the Cherry Tree did not escape me but the somewhat more esoteric one about Morgan and the Hall Carbines has just caught up with me. Yes, if only the moral of your story were taken to heart by historians .....

as always,

Bernard

PS— You may be sure that your confidential information about the Ojibway is safe with me.

Digitized by the Hunt Institute for Botanical Documentation

8 - X - 1977

Dear Bernard:

Thanks for your letter. I am incorporating your supplementary material. Of course, as you know, mum's the word for our Algonkin discovery.

As ever,

Rgm

24 September '77

Dear Bernard:

What I asked my secretary to send you today is in strictest confidence, especially the matter relating to our friends the North American Indians.

As ever,

J.

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

24 September 1977

Professor B. Lowy
Department of Botany
Louisiana State University
Baton Rouge, Louisiana 70803

Dear Bernard:

Thanks for your letter of 19-IX-1977, which I was delighted to receive.

Here is a passage from the book I am writing. This passage concerns you and I would appreciate it if you could read it and let me know (1) whether it is accurate, and (2) if so, whether there is anything to add to the thunder and lightning aspect of Mayan idea-associations linking mushrooms with the divine bolt.

Have you talked with the team that was working on the Tzotzil dictionary?

Cordially,

RGW

RGW:mm
Enc.

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

AMERICAN REVOLUTION BICENTENNIAL 1776-1976
LSU
A BICENTENNIAL UNIVERSITY

29-IX-1977

Dear Gordon:

I deeply appreciate your kindness in sending me a few pages of your new book for perusal. Your revelation of the existence in the past of the fly-agaric cult among the Ojibway is astonishing! Is it now in desuetude? How remarkable! Little by little, the cultural gap between Siberia and Middle America is closing.

Regarding the passage in which you refer to my discoveries in Guatemala and Mexico, it is of course, correct. But by possible way of amplification in citing "kakuljá" (p. 15, line 2), it may be pertinent to mention that the word, as you know, occurs in the "Popol Vuh" and that it is also the name of the Quiché god of thunder and lightning. This may fortify the associative meanings of the word in Maya tradition.

I have had no contact with anyone associated with the Great Tzotzil dictionary, but am pleased that Laughlin's Zinacanteco informant confirms my independent finding of the expression "yuy chauk" for Amanita muscaria. I found this out when I consulted the dictionary a few months ago.

Cordially yours,

Bernard
B. Lowy

P.S.- In the last paragraph on p. 15, a typographical lapsus: Psilocybe and Stropharia to be underlined.

Digitized by the Hunt Institute for Botanical Documentation

Fly-agaric in the New World

In 1968 in my SOMA I said that we should be thankful for the data we had assembled on the fly-agaric cult of Siberia but warned against exaggerating their importance. For a shamanic practice that had lasted we know not how many millennia our soundings reached back only three centuries, ripples on time's surface. Moreover those three centuries of cultural upheaval and chaos saw the final end of the practice: it could be observed only when it was in extremis.

Some of the observers [I wrote] were supercilious and none of them saw the

Digitized by the Hunt Institute for Botanical Documentation.

Received from Carlson: 28-IX-77

implications of their observations. None of them seems to have been prepared in botany and none probed the questions that are compelling for us. The circumstances that brought them on the scene were at the same time bringing about the end of the beliefs and performances for which they were to be the sole witnesses. They were observing the fly-agaric cult only in its dying phase, when the area of its diffusion was being lopped away, when in some places the integrity of belief in it had been undermined, and when the tribes themselves were mostly in a pitiful state of physical and psychological disarray. There is ample evidence that the ethnic movements, often gradual and more or less peaceful, in the inhospitable tundra and taiga of Siberia have been continuous, and we are far from unraveling them. In recent centuries the peoples practicing the fly-agaric cult have been living in areas to the north of where they were in their heyday, some of them on or close to the Arctic Ocean. They have been displaced from their former homes by Altaïc tribes who do not, apparently, take the fly-agaric but who have absorbed into their shamanic practices the corpus of beliefs that go with the fly-agaric, beliefs that seem to accompany the ecology of the forest belt, especially the reverence for the birch. For the historian of human cultures it is a matter of regret that the impact of the modern world is inevitably brutal, bulldozer-like, in its disregard and contempt for the beliefs and ways of life of primitive peoples whom our industrial civilization wrenches from their traditions and tries, usually without success, to bring into step with our contemporary ideas. This holds true for the communist as well as the capitalist world.

When I wrote this paragraph about Siberian shamanism and the fly-agaric, I did not anticipate the dénouement. True, almost twenty years ago Claude

Digitized by the Hunt Institute for Botanical Documentation

Lévi-Strauss had given me a lead in a Jesuit's letter to his brother written in the early seventeenth century, and in his lengthy and detailed review of SOMA he expanded on other leads in the North American native cultures, but preoccupied as I was in a different direction and lacking the needed personal contact, those leads, though never forgotten, lay fallow. In 1975 through a combination of circumstances I came to know, at first only by correspondence, a remarkable Ojibway herbalist and shaman, Keewaydinoquay,* living on Garden Island in Lake Michigan, the only resident on an island that had once belonged to her ancestors. There quickly unfolded before us an account of the fly-agaric cult that was breathtaking, not only for itself but for the fact that for centuries, millennia, the Ojibway, and in varying degrees the other peoples of the Algonkin nation, had looked to the fly-agaric for consultation about the most serious matters in their lives. The cultural trait that in Siberia we discerned dimly had been preserved for us, live and pure, as though in a time capsule, owing to the peculiar state of social relations between Whites and Algonkin during these last four hundred years.

As I was busy with other aspects of the hallucinogenic mushrooms in the wide world, I needed someone to take up the rôle of the fly-agaric in Algonkin culture and was fortunate to find Reid Kaplan, who was admirably equipped for the task. The rest is publicly known, as his book came out in

And so, quite unexpectedly, we discover the cult of the fly-agaric in full panoply here in North America. No one knows when the Algonkin arrived here. The European settlers found them occupying a large part of North America, the Amerindian nation that is most widespread. Presumably they came across the

*Kee-way´-dn-o´-quay

Digitized by the Hunt Institute for Botanical Documentation

Bering Straits, or else the landbridge that replaced the Straits during the successive Ice Ages. But if it should develop that they came from the north of Europe, in remote ages when the geography may have been different and stepping stone islands permitted such transit, it would make no difference, for I think I have shown that the fly-agaric cult in former ages was circumpolar in extent, wherever the birch or appropriate conifers thrived.

As in Mexico, we owe the preservation of the cult into these modern times to the total lack of interest displayed by the White Man. It was an important and precious secret for the Ojibway, and they were not inclined to tell anyone about it who would sneer and scoff. How ironic it is that in Michigan and thereabouts, where the mycological faculties have considered themselves strong, the miskwedo (= Amanita muscaria) has played its age-old rôle among the Algonkin until now without so much as a nod from our mushroom men! (There need be no incompatibility between our mycologists and our ethno-mycologists: witness Roger Heim.) Anthropologists and linguists have overlooked that rôle in spite of hot clues in their standard sources and in spite of the widespread interest aroused by the anthology of Siberian source materials in my SOMA Divine Mushroom of Immortality. Those in the Great Lakes area who take a professorial interest in the humane letters pass by on the other side when a poor Indian people not yet at home with the alphabet manifest their faith in a toadstool. Yet these same scholars will sit up straight at the mere mention of Eleusis or the Vedic Hymns, far removed though they are in time and space, or is it precisely because they are so removed?

Dr Bernard Lowy, mycologist of Louisiana State University, may well have uncovered exciting evidence in his ethno-mycological investigations in Chiapas and

Digitized by the Hunt Institute for Botanical Documentation

the nearby Quiché-speaking area of Guatemala. There Amanita muscaria is common and well known but avoided. In Quiché, Dr. Lowy tells us, it is called kakuljá, which carries the terrifying sense of rayo in Spanish, foudre in French, parjanya the thunder-god in Sanskrit. Lightning in Spanish is commonly relámpago but this word is devoid of any aura of supernatural associations, free of mythological meaning. The Quiché speakers do not know why A. muscaria is the lightning-bolt and no longer think of the word's meaning when they use it. How did this association of ideas, to which we are accustomed in Eurasia and among the Ojibway, arrive in the mountains of southern Mesoamerica? In Chichicastenango an alternative name for the kakuljá is itzel ocox, evil or diabolical mushroom. A. muscaria in Tuxtla Gutiérrez and San Cristóbal de las Casas is called yuyo de rayo when the natives are speaking Spanish, again the mushroom of the lightning-bolt. For the Tzeltal-speakers in Zinacantan the fly-agaric is the yuy chauk, again the mushroom of the lightning-bolt.

In folklore throughout Eurasia and Mesoamerica we are well acquainted with the tie that binds together the hallucinogenic mushroom and the lightning bolt. Everywhere that tie is strong, but in Mesoamerica it belongs to the hallucinogenic Psilocybe and Stropharia genera: Dr Lowy has discovered one part of that area where the fly-agaric is also the focus of the lightning bolt. Does this word kakuljá come from a time when the ancestors of the Quiché knew the secret of A. muscaria and used it? Did they abandon it because, long ago, they found the Psilocybe species preferable? Or because the friars in post-Conquest times drove it out?

New perspectives in ethno-mycology are beckoning to us.

The End

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

AMERICAN REVOLUTION BICENTENNIAL 1776-1976
LSU
A BICENTENNIAL
UNIVERSITY

19-IX-1977

Dear Gordon,

The Congress is over, but a busy semester is now under way. I agreed to teach a Freshman level course in General Biology and have a class of 240 students that meets thrice weekly. A pile of tropical Tremellales from various parts of South America also beckons me and I have some writing to do as well.

The ethnomycological sessions went off pretty smoothly, although Dr. Rios could not attend. Oso of Nigeria was there, however, together with Smith, Guzmán, Watling and myself. Our morning session for the presentation of papers lasted about 3 hours and we had another 2 hours or so in the evening. I had planned the latter as an audience participation affair and it worked out satisfactorily.

Good luck on your October meeting in Seattle.

as ever,

Bernard

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

25 - April - 1977

Dear Bernard:

I have found in Mexico that the best way is to approach a sabio, the one with the best reputation in the community, is alone, or sometimes someone close to him, and then after general conversation ask him in a whisper whether he knows the virtues of the hongos sagrados. Good luck to you!

I write you now to inform you, before you hear from anyone else, that I have accepted an invitation to read a paper before a mycological gathering at the end of October in Seattle, all expenses paid and a handsome honorarium to boot. I am violating my doctor's orders going there, but they made the invitation so pressing/it was hard to refuse.

/ and so generous

As ever,

Gordon

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

16 April 1977

Professor B. Lowy
Department of Botany and
Plant Pathology
Louisiana State University
Baton Rouge, Louisiana 70803

Dear Bernard:

In my coming book I should like to reproduce the photo of Psilocybe mexicana that you found in Guatemala. The book will appear in about two years. Will you grant me permission?

A question: so far as I know, you are the first mycologist on record who has done field work in Guatemala. Is this so? Are you planning a trip to Guatemala this year?

Cordially,

P.S.- That the children called S. P. mexicana 'pajaritos' is a fine indication that they honored this name from birthes who got it from

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

AMERICAN REVOLUTION BICENTENNIAL 1776-1976
LSU
A BICENTENNIAL
UNIVERSITY

20-IV-1977

Dear Gordon,

It is good to know that you are at work on another book and I am flattered that you plan to use my photo of *Psilocybe mexicana* Heim from Guatemala.

Regarding your other question, yes, I think you are right.

At the end of May or very early in June I plan to return to Guatemala to follow up my finding *P. mexicana* last year. It will be delicate business finding a curandero who may be willing to share his secrets, and I don't know how I'll fare, but it's worth the effort.

Yours,

Bernard

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

AMERICAN REVOLUTION BICENTENNIAL 1776-1976
LSU
A BICENTENNIAL
UNIVERSITY

11-III-1977.

Dear Gordon,

It is <u>we</u> who are honored!

as ever,

Bernard

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

6 - March - 77

Professor Bernard Lowy
Louisiana State University
Baton Rouge Louisiana 70803

Dear Bernard:

You honor me greatly by nominating me to the honorary chairmanship of the ethnomycological section jointly with Roger Heim. I am delighted to give you my consent. Thank you much.

With best wishes,

Gordon

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

AMERICAN REVOLUTION BICENTENNIAL 1776-1976
LSU
A BICENTENNIAL
UNIVERSITY

1-III-1977

Dear Gordon:

My enthusiasm for the ethnomycology seminar has been considerably dampened since I received the news of your inability to attend. But I cannot give it up at this late date, so I continue to move ahead with plans. Meanwhile, another blow has fallen. Our expectations for the funding of overseas participants was dependent upon an allocation from NSF, but this source now seems unlikely to materialize. I already have pleaded with the U.S. speakers on the program to relinquish such support (as I did myself), although this position was forced upon me by circumstances and I still do not think it is fair to ask people to volunteer their services and have them pay for the privilege besides. But mine appears to be a minority view. Anyway, the program still has Smith, Guzmán, Watling (who comes from Edinburgh with other funding), possibly Dobkin de Rios and myself. I also asked Oso of Nigeria, but his attendance now seems illusory, though not impossible.

Some time ago, I wrote to Prof. Heim to ask him whether he would favor us by accepting an honorary chairmanship of the ethnomycological section. He graciously consented. Now since you too are unable to come, I would like to ask whether you would consent to be similarly named on our program. I cannot think of two co-chairmen who could more fittingly share this token of honor. If I may have your approval, I shall see to it that you and Prof. Heim are designated as Honorary Co-Chairmen of the Ethnomycological Section.

With all best regards,

Bernard
B. Lowy

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

19 February 1977

Dear Bernard:

Thanks for your most gracious note of 9 February. I was disappointed for my sake but mostly for you. The trouble is that I feel well, so well that I wonder if the doctors are right. They are only shamans, after all, and sometimes even shamans are wrong.

As ever,
Gordon

PS: I had already ordered Ainsworth from England but it has not reached me. Yes, K.H.Mayer sent me his paper and I agree with you. There were one or two things in it that I had not seen elsewhere.

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

7 - Feb. - '77

Dear Bernard:

I write you at once. I am heartbroken. I waited to write you until my doctor (the best in New York) told me the results of the tests and his opinion. (In 1971 I had a severe episode, a blood clot in the brain, treated in time.) He tells me not to commit myself to any activities. I was glad for his frankness. I spoke of the gathering in Miami. He urged me strongly not to go there, meet strangers, discuss differences, He told me to stay at home That is the verdict. I am so disappointed.

Yours,

Gordon

PS-In a sense I am much relieved. I had a feeling it was unwise to go.

Digitized by the Hunt Institute for Botanical Documentation

Received: 8-II-'77

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

AMERICAN REVOLUTION BICENTENNIAL 1776-1976
LSU
A BICENTENNIAL UNIVERSITY

9-II-1977

Dear Gordon:

The news you have sent me is devastating! Although some years ago in our correspondence, you mentioned a health problem, I thought of it as being something transitory. For some reason (obviously unfounded), I always thought of you as being in robust health, even though I am aware that you are my senior by some 18 years.

I truly hope that you will not find your writing and other routine activities unduly restricted. Surely, since your physician advises you to avoid the hyperactivity associated with large meetings and speaking engagements, you are wise to follow his counsel.

It seems that we are fated not to meet. After 17 years, I was eagerly anticipating seeing you again. It will be a great disappointment to miss the opportunity of greeting you in August, not to mention the irreparable loss to the program that your absence will mean. Please do all your well wishers the great favor of taking good care of yourself.

With kindest regards,

Bernard

B. Lowy

P.S.- Have you seen Ainsworth's "Introduction to the History of Mycology."? It is highly selective in its treatment and emphasizes "the solution of major problems which have confronted students of the fungi over the centuries and novel discoveries which have given new insights." Some of your work is prominently reviewed. And Karl Herbert Mayer's paper "Die Pilzsteine Mesoamerikas" in Archiv für Völkerkunde 29: 37-73, 1975 (1976) gives a good historical summary of the subject.

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

AMERICAN REVOLUTION BICENTENNIAL 1776-1976
LSU
A BICENTENNIAL
UNIVERSITY

26-I-1977.

Dear Gordon,

Not my disinclination, but a concatenation of circumstances has kept me from writing sooner. You received my brief paper from Dick Schultes on his suggestion, to which I gladly assented, and I thank you for your constructive criticism, though regretting that we could not publish jointly. The loss is mine.

The ethnomycological section of the II Int^c has at present 6 participants. Besides yourself, they are: A.H. Smith (taxonomy & toxicity of Psilocybe & related genera); J. Allegro (ethnomycology & religion); G. Guzmán (Psilocybe in Mexico); R. Watling (Greek & Roman ethnomycology); BC (ethnomycology in the market place). Please let me know what subject and title you choose. There are approximately, by the way and the formal abstract is not due until 1 Aug^t.

I expect there will be 2 morning sessions with the following probable sequence of speakers. 1st morning: Smith, Guzmán, Watling. 2nd morning: Allegro, Lowy, Wasson. Additional speakers may be intercalated. Each speaker will have the greatest latitude regarding his presentations, within the ± 35-minute time limit.

Since Dick Schultes and Peter Furst will not

Digitized by the Hunt Institute for Botanical Documentation

be present, there is room for 2 substitutes. If there is someone you would like to see on the program, I'll be glad to invite him. Oso from Nigeria might be good to have and I'll ask him, contingent on funding.

Swiger will no doubt be at the Congress but not associated with our program.

When dates and times for speakers have been drawn up, I'll immediately notify you.

As ever,

Bernard

Digitized by the Hunt Institute for Botanical Documentation

Schultes

COPY

December 21, 1976.

Dear Gordon:

Bernard Lowy has sent the enclosed manuscript and would like to see it in the Leaflets. I think it is appropriate for a journal that has fared so strongly in the sacred mushroom story, but, as you know, it is an in-house organ. I cannot afford to open it to any outsider lest I get a flood of articles from outside which we cannot handle.

I suggested to Bernard by phone that, if you felt that you might be able to add something (Eg. a short discussion on present thought re the mushroom stones in view of the recent article opposing the view that they do represent mushrooms.) to the article, it might be published jointly in the Leaflets, as one of the authors would then be a staff member. The other outlets -- even for so short an article-would now take in the range of 18 months!)

Would you look at the article and think about it? Bernand is very receptive to this idea. He is, incidentally, overjoyed that you will be at the Symposium in Florida. I have just had reluctantly to bow out because of pressure of work and my three months in the Amazon next spring.

My trip to Ceylon was wonderful -- strenuous but a rest. If you haven't spent time there, do so some time when you need a rest and want the most pleasant people in the world.

Sincerely,

Richard Evans Schultes

Digitized by the Hunt Institute for Botanical Documentation

Received 27-XII-'76

BOTANICAL MUSEUM • HARVARD UNIVERSITY • OXFORD STREET • CAMBRIDGE, MASSACHUSETTS 02138, U.S.A.

OFFICE OF THE DIRECTOR

January 17, 1977

Dr. Bernard Lowy
Louisiana State University
Department of Botany
Baton Rouge, Louisiana 70803

Dear Bernard:

I have sent your article to Gordon Wasson who makes the following significant comments which may encourage you to alter some parts of the manuscript.

> "1. The Popol Vuh is not, I have always understood, a 'post-Conquest' document. It antedates the Conquest and had to be written down in Latin letters in the post-Conquest times.
>
> "2. I think Bernard should give us the precise citation in the Popol Vuh for the citation of Kakuljá, perhaps, say, in the bilingual The Book of Counsel by Prof. Edmonson.
>
> "3. I think paragraph marked '3' had better be omitted: they are exposed to challenge and you need not stir sleeping dogs; if you do, Bernard should argue his case at far greater length. But his position I think is weak. I'm sure you don't wish to enter into a detailed discussion of Maya codices and mushroom stones."

Gordon is under such pressure that he feels that he cannot undertake any additional commitments. Since he is so completely fair-minded that he does not want to be co-author unless he can contribute something to the effort. This I fully understand and know that you will. Consequently, I cannot open the Leaflets to this paper, but I do have a suggestion to help you.

I am on the editorial board of the Journal of Psychedelic Drugs. This journal is very reputable and does a beautiful job of publication. Why not send it directly to the editor at my suggestion? The address is Miss Nancy Gottlieb, 118 South Bedford St., Madison, Wisconsin 53703. Publication is rapid.

Sincerely yours,

Dick

Richard Evans Schultes
Professor of Natural Sciences
Director, Botanical Museum

RES:ki

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

AMERICAN REVOLUTION BICENTENNIAL 1776-1976
LSU
A BICENTENNIAL UNIVERSITY

21-I-1977

Dr. Richard Evans Schultes
Botanical Museum
Harvard University
Oxford Street
Cambridge, Massachusetts 02138

Dear Dick:

I have just received your letter and the manuscript of the short paper I asked you to consider for publication in the Leaflets. I understand Gordon's reluctance to go ahead with plans for joint publication, since this would require considerable time in appropriately altering the ms. in order to coordinate it with his contribution. It seemed like a good idea when you mentioned the possibility in our conversation and I am glad that you were willing to explore it.

I shall write separately to Gordon, since I also have further information for him about the II IMC. I shall certainly act upon his suggestion that a citation from the Popol Vuh be given for "Kakaljá." However, I am not so sure about the other 2 points. Point 1 concerns my reference to the Popol Vuh as a "post-Conquest" document. The critical word here is "document." To the best of our knowledge, previous to the Conquest the Popol Vuh existed only in oral Quiché tradition, and only about the middle of the 16th century was it first reduced to writing in Latin script. Consequently no document existed prior to the Conquest. Gordon's 3rd point, about letting "sleeping dogs" lie, I cannot quite agree with. Although some of the points I make in the paragraph are "exposed to challenge," (the interpretation of mushroom stones and Maya codices) they are so because the controversy over them is far from settled and such data as we have are undergoing reinterpretation. Köhler's recent paper on mushroom stones (which I think, incidentally, is largely fantasy) published in American Antiquity, is a case in point. To support my statements in the paper, I have cited previous literature, so that readers may try to evaluate the nature of the evidence. In any event, it must be apparent from the brevity of the paper that it is not meant to be an exhaustive treatment of matters currently under study, but merely an announcement of some new findings stated within the context of related pertinent data. For these reasons I prefer to retain the paragraph in question.

Regarding your suggestion to submit the paper to the Journal of Psychedelic Drugs, you are most kind to offer me this alternative and I shall foward the ms. to Miss Gottlieb on your recommendation.

With many thanks and kindest regards,

Bernard

B. Lowy

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123
7 - XII - 12 ! (76)

Dear Bernard:

I have received the invitation of the Second International Mycological Congress. I don't wish to stay the full course. I wish to arrive the day before I speak and leave the day after. How long does the 'ethno-mycological' part last? Who is speaking in it? How long am I to speak? What time is left for questions? Will Alexander Smith be there? Rolf Singer?

Cordially,

RGW

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

AMERICAN REVOLUTION BICENTENNIAL 1776-1976
LSU
A BICENTENNIAL UNIVERSITY

23-XI-1976

Dear Gordon,

Many thanks for writing to Peter Furst. If he doesn't answer you, I'll almost be ready to give up. What's to be done? — Incidentally, few things are (to me) as unlovely as postcards. Half the Department gets to read them before I do, zb.: "Here's something from a mysterious "C" for you," announced one of my sprightly younger colleagues, as he handed me yours.

In academia, nothing is as deadly as some committee meetings. They are sinful time consumers and can stumble along like a wounded Brontosaurus — getting just about as far! Semesters end is replete with them, leaving occasional intervals for breathing. — I'll fill you in on some details of Psilocybe mexicana in Guatemala shortly.

Yours,
Bernard

PS — has Japanese lineage, vg, vampire sin acento!

Digitized by the Hunt Institute for Botanical Documentation

20 November 1976

Dear Bernard:

Thanks for yours of 12-XI-'76. I am writing Peter but have no illusions! Congratulations on your Guatemala find. I was certain Ps. mexicana would grow in the Guatemalan highlands but it is wonderful to have it confirmed! Where did you discover them? They are called pájaritos in Huautla and this name may be imported by trippers from the Sierra Mazateca. What language do the indígenas speak where you found them? Good luck!

As ever,

S.

RGwaison

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

12-XI-1976

R. Gordon Wasson
42, Long Ridge Road
Danbury, Conn., 06810

Dear Gordon:

On 27 October I sent a telegram to Peter Furst's home address which you gave me in your last note. There has been no reply. He wrote to me in 1973 asking for reprints, which I sent to him, but I have not heard from him since. I am reluctant to drop him from the list of participants because his knowledge of ancient Mexican art as it relates to the hallucinogenic mushroom cult would make an important contribution to the symposium. May I ask your help in writing him a note, suggesting his participation ? I don't think he would ignore any communication from you.

In one of your earlier letters you asked whether I had looked for Psilocybe in Guatemala. This summer I collected Psilocybe mexicana Heim, to my knowledge, the first such collection made from that country. I also found that the mushrooms are offered for sale by children, who call them "pajaritos." I am preparing a note about it and when it is ready I'll send you a pre-publication copy. I was unable to stay long enough to pursue the important question, still unanswered, of whether the local shamans might be using it (or other species) ritually. That will be my next endeavor. Please keep this information confidential.

As always,

B. Lowy

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

23 October 1976

Professor Bernard Lowy
College of Arts and Sciences
Department of Botany
Louisiana State University
Baton Rouge, Louisiana

Dear Bernard:

Peter Furst has a happy way of meeting his correspondence commitments: he does not answer letters, unless compelled to. He was away last April, I think. He is in his university now. His home address is: 60 Salisbury Road, Delmar, New York 12054; telephone (518) 439-0418. He can generally be reached on Saturday evenings.

Do not mention me as the source of your information! Please!

As ever,

J.

Digitized by the Hunt Institute for Botanical Documentation

course! But I wonder (?) how the local politicos would react to the suggestion to correct it. Might be fun to try! Perhaps I'll pursue it — with smiles and soap?

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

AMERICAN REVOLUTION BICENTENNIAL 1776-1976
LSU
A BICENTENNIAL UNIVERSITY

27-X-1976

Dear Gordon,

Thanks for alerting me to the nature of the problem with Furst. I have known other reluctant correspondents and shall try a small stratagem. I'll let you know the outcome.

Yours,
Bernard

Digitized by the Hunt Institute for Botanical Documentation

western union

Telegram

MSG. NO.	NO. WDS. CL. OF SVC.	PD.-COLL.	CASH NO.	ACCOUNTING INFORMATION	DATE	FILING TIME	SENT TIME
					27-X-1976	9:30 — A.M. P.M.	A.M. P.M.

Send the following message, subject to the terms on back hereof, which are hereby agreed to

☑ OVER NIGHT TELEGRAM
UNLESS BOX ABOVE IS CHECKED THIS MESSAGE WILL BE SENT AS A TELEGRAM

TO Dr. Peter T. Furst

ADDRESS & TELEPHONE NO. 60 Salisbury Road Tel. (518) 439-0418

CITY – STATE & ZIP CODE Delmar, New York 12054

ETHNOMYCOLOGICAL PANEL OF SECOND INTERNATIONAL MYCOLOGICAL
CONGRESS WOULD BE GREATLY ENRICHED BY YOUR PARTICIPATION.
FOR DETAILS PLEASE SEE MY PREVIOUS INFORMATIVE CORRESPONDENCE.
DEADLINES APPROACH. WILL YOU WONT YOU WILL YOU WONT YOU ?
RSVP AVANT 5 NOVEMBRE ANNO DOMINI 1976.

BERNARD LOWY
CHAIRMAN

SENDER'S TEL. NO. (504) 388-8485 (Area Code) NAME & ADDRESS BERNARD Lowy, BOTANY DEPT. LSU 70803 (Zip Code) BATON ROUGE

W.U. 5210 (3/73)

Digitized by the Hunt Institute for Botanical Documentation

[$2.75]

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

AMERICAN REVOLUTION BICENTENNIAL 1776-1976
LSU
A BICENTENNIAL
UNIVERSITY

19-X-1976

R. Gordon Wasson
42, Long Ridge Road
Danbury, Conn., 06810

Dear Gordon:

It is most gratifying to know that you will participate in the ethnomycological symposium of the II International Mycological Congress. This augurs well for our proceedings! I shall, of course, keep you informed of all pertinent developments regerding the program.

Do you happen to know whether Peter Furst is away from his university just now? I last wrote to him on 4-X-1976 but have not yet had a reply. He could make a valuable contribution to our symposium.

Cordially yours,

Bernard

Bernard Lowy
Chairman, Ethnomycological
Section, II IMC

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

14 October 1976

Professor Bernard Lowy
College of Arts and Sciences
Department of Botany
Louisiana State University
Baton Rouge, Louisiana 70803

Dear Bernard:

I will attend the symposium and read a paper.

As you progress in your plans, please keep me advised as to all the details - the names of the speakers, the mycologists who will attend but not speak, the length of time that will be allocated to each of us who speak, etc. etc.

Thank you much for having invited me.

Cordially,

Gordon

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

AMERICAN REVOLUTION BICENTENNIAL 1776-1976
LSU
A BICENTENNIAL UNIVERSITY

20-IX-1976

R. Gordon Wasson
42, Long Ridge Road
Danbury, Conn., 06810

Dear Gordon:

Your question about expenses indicates that you may consider this to be a deciding factor in your participation. At the moment, a travel fund seems most unlikely, nor has any information yet reached me indicating to what extent expenses in Tampa will be reimbursed, although some allocation may be expected to cover them at least in part. In any event, I have excluded myself as a candidate for funding by the Congress. Whether funds will be available for any overseas participant has not yet been resolved.

With regard to the more important matter of Allegro and Puharich, the latter I have not invited, although I included his name in a tentative list of participants last year. Allegro is quite a different case and I think he does not merit being classified in the same catego_ry with Puharich. I am fully aware that some of Allegro's works have elicited skepticism and some insist that his interpretations (I refer particularly to his book "The sacred mushroom and the cross") may be faulty. He may in fact be wrong on a number of points, but on this score alone I would not relinquish his privilege of having free access to public debate in which those of contrary opinion may challenge him. His book is highly controversial but the critical question, it seems to me, is: was it written with fraudulent intent ? If this can be proved beyond a reasonable doubt, then your characterization of him as a "farceur" would be justified. I am not defending his thesis, only his right to propose it and the right of others to criticise it as they see fit. My basic assumption regarding Allegro is that he is a scholar, not a charlatan and that consequently he is just as susceptible to error as are most other mortals.

If you decide against participating because of Allegro, it will be a matter of deep regret to me and an irreparable loss to the Symposium.

As ever,

Bernard

B. Lowy

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

11 September 1976

Professor B. Lowy
Department of Botany
Louisiana State University
Baton Rouge, Louisiana 70803

Dear Bernard:

If I should decide to attend the gathering, how long are you giving the speakers to talk? I take it from your letter of 3-IX-'76 that we are to be put up in Florida without expense. (You speak only of a 'traveling fund'.)

Are you really inviting Allegro over and paying his traveling expenses?

Allegro and Andrija Puharich are farceurs, not ethnomycologists. Of course Allegro will come over from the Isle of Man if his expenses are paid. I shall resent it if his expenses are paid and ours are not.

Did you receive my letter of 28-VIII?

Cordially,

Gordon

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

AMERICAN REVOLUTION BICENTENNIAL 1776-1976
LSU
A BICENTENNIAL UNIVERSITY

3-IX-1976

Dear Gordon:

In the interim between sending you my last letter and the receipt of yours, the Chairman of the IMC, Emory Simmons, has let me know that in all probability a travel fund for participants from the U.S. will not be forthcoming. Only those invited from overseas will be considered for such support, so I must ask our panel of speakers (U.S.) to be willing and generous enough to provide for their transportation from their own resources. Of course it is my hope that this will not adversely affect your decision to participate in the Congress program. The meetings are scheduled for August 27-September 3, 1977. I am eager to stabilize our program as early as possible and since you know that I am counting heavily on your participation, may I ask you to think in terms of a title for your presentation? I do not expect to ask for abstracts until early next year.

Cordially yours,

Bernard

R.G. WILSON
12, LONG RIDGE RD
DANBURY, CONN. 06810

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

29 - VIII - '76

Dear Bernard:

Thanks for your letter of 24 - VIII. Indeed it interests me. I wish we knew whether the pejorative taint of those names in Mayan dialects reflect the friars' influence and whether there was an earlier Mayan name that expressed a divine inspiration. So far I have seen two early dictionaries (Kakchiquel) that include words for mushrooms that inebriate. We do not know whether the mushrooms in question are A. muscaria or a Psilocybe sp. What do you think? Have you had opportunities to look for Psilocybe in Guatemala?

Again thank you!

Gordon

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

AMERICAN REVOLUTION BICENTENNIAL 1776-1976
LSU
A BICENTENNIAL
UNIVERSITY

24-VIII-1976.

Dear Gordon,

I only recently returned from Guatemala and have news that will interest you. I have found that the Kekchí of Alta Verapaz also know Amanita muscaria by its evil reputation and associate it with the devil. They have an exact equivalent for the expression that I found earlier among the Quiché: ie itzel ocox = hongo del diablo, reported in my 1974 paper. In Cobán the people call A. muscaria by the Kekchí expression rocox aj tza (= hongo del diablo). Although this is not entirely unexpected, it is good to have the verification. Careful inquiries along these lines among other linguistic groups in Guatemala and elsewhere in the Americas should prove useful. — Whenever I return from the tropics I do so with regret that I can not stay longer.

Have you seen Ulrich Köhler's paper on mushroom stones and pottery mushrooms in American Antiquity 4(2): 145-153. 1976.? He says that he "reveals their true function as potters' molds," but there are a number of weak links in his argument. One of them has to do with his "difficulty" in interpreting Shook & Kidder's well known effigy mushroom stone found in the tomb of an important personage in Kaminaljuyú. He ends by

Digitized by the Hunt Institute for Botanical Documentation

saying that it could have been a potter's gift. Another has to do with your pottery & figurine from Veracruz. Köhler thinks she is a potter, a view that I find strained. His comment that the woman's arm is raised because "possibly she is greeting a passerby" I think is frivolous. A good deal more could be said

I hope you had — or are still having — a good summer.

With best regards,

Bernard

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

13 March 1976

Professor B. Lowy
Louisiana State University
Department of Botany
Baton Rouge, Louisiana 70803

Dear Bernard:

How surprising! -- to hear that someone is checking out the Russian names of mushrooms in MR&H. Alas, my wife (she died in 1958) made a number of mistakes in the scientific identification of Russian popular names of mushrooms. If I live long enough, I will bring out a new edition of MR&H and correct them all. She was not a mycologist, simply loved mushrooms.

Tell me, please, how you and Singer found yourselves together in Huautla to listen to María Sabina. Was it chance? Or did you plan it that way? And do you remember how much she charged for the Session? What is Singer doing now? Are you in touch?

Cordially,

R Gordon Wasson

RGW:mm

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

AMERICAN REVOLUTION BICENTENNIAL 1776-1976
LSU
A BICENTENNIAL
UNIVERSITY

18-III-1976

Dear Gordon:

The 1969 trip to Huautla came about as a result of my desire to learn what I could at first hand about the mushroom ceremony. I wrote to Dr. Herrera telling him of my interest and asked whether he would be good enough to arrange another trip. He had, as you know, experienced the ritual conducted by María Sabina in 1965. He responded that he would gladly make the necessary arrangements. Meanwhile, I had written to Rolf Singer, whom I have known for many years, and asked him about his plans for the summer. Subsequently, in June, he and his wife, on their way to Mexico by car, came to Baton Rouge and visited us. I asked Rolf whether he would be interested in going to Huautla and told him about the tentative arrangements. He was interested and so it worked out. He drove on to Mexico where I later joined him and on July 5 we left together for Huautla. - Rolf recently told me that he expects to spend the summer at the University of Vienna working on the problem of forest tree mycorrhizae.

As well as I can recall, María Sabina's fee was about 350 pesos, extremely high, of course, in terms of the value of currency locally, but we had little cause for complaint.

as ever,

Bernard

B. Lowy

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

AMERICAN REVOLUTION BICENTENNIAL 1776-1976
LSU
A BICENTENNIAL
UNIVERSITY

8-III-1976

My dear Gordon,

Thank you for your note on the credentials of Jonathan Ott. I have answered his inquiry although my contact with tourists has always been minimal.

Recently, I read again chapter 1, volume 1 of MRH, wherein, with great charm, your wife had written about the mycophilia of the Great Russians. Among the predominantly attractive, even affectionate Russian vernacular names for various species (lisichki, ryzhiki) a few were left tantalizingly unidentified. "From earliest childhood I recall another curious name- the skripitza, or screeching mushroom: what could it have been?" (P. 16) I wanted to find out, so inquired of my colleague Dr. S. Wasser, agaricologist of Kiev, and an answer came: hastarius vellereus. But it is without explanation of the folklore behind this strange Russian name. "Travjanka" he could not identify and promised

Digitized by the Hunt Institute for Botanical Documentation

to look into it for me. I'll keep you informed of any progress.

as ever,

Bernard

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

21 February 1976

Professor B. Lowy
Department of Botany
Louisiana State University
Baton Rouge, Louisiana 70803

My dear Lowy:

Yes, you had sent me a copy of your 1971 paper. Did I not acknowledge it? I suppose not. I am shamelessly derelict in keeping up my correspondence.

Jonathan Ott I know well. He is a young man, a prodigious worker, in recent years helping Dr. José Luis Díaz in the Centro de Investigaciones Biomédicas of the Universidad Autónoma de Mexico. I think he has a doctor's degree from the University of Washington. I like him and with his extraordinary vitality he will go places. He has two sides to him: he writes well, soberly, in his scientific articles. He has an altogether different style writing for High Times, a breathless hippie style. They certainly pay better than the scientific journals! He knows I don't like his hippie style, which he does with such success!

Cordially,

Gordon

RGW:mm

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

13-II-1976

Dear Wasson,

In answer to your last inquiry I referred you to an earlier paper of mine, a reprint of which I thought I had sent you a few years ago, but it is quite possible that I did not. I no longer have reprints but I enclose a xerox copy of it for you.

I have a letter from Jonathan Ott who says he is a friend of yours. Do you know him? He asks me for information on the "use of hallucinogenic mushrooms in Guatemala by tourists etc," and plans a "psycho-mycological field trip" in Latin America.

as always,

Lowy

Digitized by the Hunt Institute for Botanical Documentation

Universidad Nacional
Autónoma

Jonathan Ott
Instituto de Investigaciones Biomédicas
Apartado Postal 70228
Ciudad Universitaria 20, D. F.

January 25, 1976

Dear Dr. Lowy,

I have been referred to you by my friend Gordon Wasson. I have been most interested in your work on mushroom stones and mushroom motifs in Mayan codices. I have been engaged in studies on the chemistry, pharmacology, history and use of hallucinogenic mushrooms, a study which I call Psycho-mycology. I am presently collaborating with Gastón Guzmán, in the preparation of a monograph of the genus Psilocybe.

This summer I will begin a six month psycho-mycological field trip. I will be in Latin America for three months, collecting mushrooms and data on their modern use as recreational drugs. I will be in South America in July and early August, will make a brief trip to Aspen where I will be giving a course on Psycho-mycology, then will return to Central America, where I will be collecting in late August and early September.

I would like any information which you may provide me regarding use of hallucinogenic mushrooms in Guatemala (by tourists etc.) or any other parts of Central America. I would also greatly appreciate collection sites for Amanita muscaria, Psilocybe cubensis, or any other hallucinogenic species which you may have encountered.

I am enclosing some reprints of recent research, which I hope will be of interest to you. I would appreciate it if you could send me reprints of your Mycologia articles (Vols. 63,64,66) for my files on psychomycology.

Best regards,

Jonathan Ott

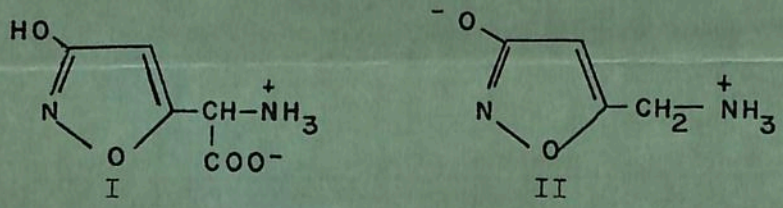
Digitized by the Hunt Institute for Botanical Documentation

FATE OF MUSCIMOL IN THE MOUSE

JONATHAN OTT, PRESTON S. WHEATON and WILLIAM SCOTT CHILTON
The Evergreen State College, Olympia, Washington 98505, and Department of Chemistry, University of Washington, Seattle, Washington 98195

(Received May 1, 1975)

The fly agaric, *Amanita muscaria* (L. ex Fr.) Hooker, generally considered in the Western world to be a poisonous mushroom, was used as an inebriant in remote areas of Northeastern Siberia until the beginning of the twentieth century.[1] An effective dose was relatively expensive among the tundra tribes who used this mushroom because *A. muscaria* is mycorrhizal and does not grow north of the tree line where these people lived. Consequently, it was a practice among the Chukchee eskimos and other Siberian tribes to collect and drink the urine of a person who had eaten the mushrooms to prolong the intoxication or to intoxicate another person. It has been reported that one dose of mushrooms could be effective in three or more persons via urine recycling.[2] The intoxicating property of such urine has been claimed by several North American experimenters in this decade. Wasson has advanced the theory that *A. muscaria* was the euphoriant plant "Soma," of the Rig Veda, long a subject of ethnobotanical controversy. One of the major arguments in favor of the identification of Soma as *A. muscaria* depends on a passage in the Rig Veda suggestive of such urine recycling.[3]



It is probable that ibotenic acid (I) and its pharmacologically more active decarboxylation product, muscimol (II), play a major role in *A. muscaria* intoxication.[4,5] The fate of muscimol in the body is, therefore, of interest to researchers in several fields. In the present study both ibotenic acid and muscimol were detected in human urine within one hour after ingestion of *A. muscaria*. It was, however, necessary to partially fractionate samples by ion-exchange chromatography before analysis.

In order to determine what fraction of the muscimol reaches the urine in the mouse, muscimol was tritiated by decarboxylating crystalline ibotenic acid in tritiated water 0.05

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

24-II-1976

Dear Mr. Ott:

Pardon the long delay in answering your letter. With the press of work at hand I have neglected some of my correspondence.

I do not have much information along the lines of your inquiry. Over the years, I have come across quite a few individuals - mostly in Mexico - who (according to their testimony) have used hallucinogenic mushrooms as what you term a "recreational drug." That is, their chief object was to get "high". Professors like ourselves presumably have more elevated motives. We may get high, but of course its all in a days work. Anyway, my students kid me about this. You may have seen my brief report in Revista Interamericana Review 1: 39-49. 1971, which I wrote mostly in answer to my students' questions about my 1969 "trip" to Mexico. There is undoubtedly a lot of this going on - I mean what you call the "recreational" use of hallucinogens, mushroomic and otherwise. Sometimes its rather funny. Students come to my office with a few mushrooms of the kind they have eaten and ask me what species of Psilocybe they are. Mostly, they turn out to be Panaeolus or Stropharia spp. but it is assumed by these young experts that any mushroom growing on cow dung must be a Psilocybe. It really doesn't matter to them as long as they get the effect they are looking for.

Some documentation along the lines that you plan to investigate would be quite interesting and you are going about it in the right way. Of course you will have to be sure to get a specimen of the mushroom for identification in every case where you suspect one has been used recreationally.

I am enclosing the only reprints I have left that may interest you.

With best wishes,

Sincerely yours,

B. Lowy

B. Lowy

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

22 November 1975

Professor B. Lowy
Department of Botany
Louisiana State University
Baton Rouge, Louisiana 70803

Dear Lowy:

I am grateful to you for your letter of 13-XI-75.

When you attended the Velada on 7-VII-69, did you and Singer ingest the mushrooms? If so, how many did María Sabina give you both? What species were they? Teófilo, Singer, and you were present. Did María Sabina have her family there? Who were the others? Where was it held?

With all good wishes,

As ever,

Wasson

RGW:mm

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences
DEPARTMENT OF BOTANY

November 26, 1975

R. Gordon Wasson
42, Long Ridge Road
Danbury, Conn. 06810

Dear Wasson:

The velada of July 7, 1969 in which I participated in Huautla was held at the Posada Rosaura, across the street from the home of Doña Rosaura García (viuda de Carrera). I wrote a brief account of my impressions for the Revista Interamericana Review in 1971 and believe you must have it. It answers some of your questions.

In the article, the person to whom I refer as wearing glasses was Singer and our benevolent observer, who took no mushrooms but stayed with us throughout the night was Teófilo Herrera. A daughter and two young grandsons of María Sabina were present, as were two students from the University of Mexico. After the stage of hilarity had passed, Mrs. Singer, who during the early stage of the ceremony had viewed the proceedings with alternate amusement, displeasure or apprehension, finally prevailed upon her husband to withdraw.

I relate these few particulars to satisfy your immediate inquiries.

Cordially,

Lowy

Bernard Lowy

BL/ef

PS – I recently saw your "María Sabina and her Mazatec mushroom velada." I could only peruse it, admiring its format and style. I have ordered a copy for our library.

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

25 October 1975

Professor B. Lowy
Department of Botany and Plant Pathology
Louisiana State University
Baton Rouge, Louisiana 70803

Dear Lowy:

Thanks for sending me four copies of your latest paper. It contains important information that I had not known about.

I am at a loss to know how anyone could contrive to write a paper on the hallucinogenic mushrooms of Mexico without giving primary credit for the mycological discoveries to Roger Heim. Your bibliography includes two entries bearing his name but you fail to cite him in the text. Singer was in Tucumán when Heim and I undertook our investigations. Singer read Heim's progress reports in the Comptes rendus of the Académie des Sciences. Singer finally raced up in the spring of 1957, arriving in Mexico (for his first and only pertinent visit) as my Life article appeared in which I gave full credit to Heim for his cooperation. Singer canvassed the spots that Heim had mentioned in his papers as having been visited by us, discarded three as too remote, visited the other three, looked up some of the very informants that we had used, rushed up to Ann Arbor (I think that was the center), assembled his 'classification' of the hallucinogenic mushrooms, and completed with Smith their 'monograph'. Singer never ingested, would not ingest, the mushrooms; he made no effort to attend a velada. In due course before the end of the same year we produced our volume on the subject. Heim spent with us three whole seasons in the field in Mexico, Singer but a scant two weeks in 1957 in our footsteps and using our informants. A more egregious case of brigandage (however unsuccessful it was, for informed people) is hard to equal. Friends tell me now that Singer regrets his behaviour. So hastily was Singer's paper written that parts of it hardly make sense. It was Heim who classified the Psilocybe genus and most of the species bear his name as author.

Perhaps you have not seen the bibliography that I and Sylvia Pau got out in 1963 on this matter. Please read pp. 25-35; likewise 55-56.

You also fail to mention by name Alfonso Caso, the renowned scholar who, on the strength of Heim and Wasson's discoveries (as he expressly states), saw the mushrooms in the Codex Vindobonensis. Caso's name would have added weight to your paper.

Cordially,

R. Gordon Wasson

RGW:mm
Enc.

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

13-XI-1975

Dear Warren,

My deletion of any reference to Hernia work (except in the bibliography) was a mistake — one in which I shall not persist in subsequent publications of this kind.

Your account of Singer's conduct in Mexico in 1957 is an important supplement to the statement in your 1963 paper (p. 56), the reprint of which I am glad to have. You have gone on public record in this matter but Singer has not, nor do I expect that he ever will. — On the evening of July 7, 1969, Singer participated in a velada held in Huautla by María Sabina. Dr. Teófilo Herrera and I were among those present. After the stage of hilarity had passed, Singer withdrew and except for a brief interval on the balcony of the Posada Rosaura, I did not see him again until the following morning. Shortly thereafter I wrote to you concerning some points that came up during my interviews with María.

Cordially yours,

R. Lowy

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

September 19, 1975

R. Gordon Wasson
43, Long Ridge Road
Danbury, CT 06810

Dear Wasson:

I am afraid that if one or two others among the principal participants whom I have invited cannot come, the conference will suffer grievously. Fortunately, so far, Schultes, Allegro and Dobkin de Rios have agreed to participate provided that travel support will be forthcoming. But I had to tell them that at the moment this is far from certain. I am proceeding on the assumption that we shall succeed in getting the support now being solicited from NSF and/or other agencies.

I am thinking in terms of about a 30 minute presentation for each participant. For ten people we would need two 2-1/2 hour sessions (morning and afternoon) to be followed by a round-table discussion. A conference of this kind would lose immeasurably without you. Would you not be willing to agree tentatively to be listed as a speaker with the understanding that you may be forced to withdraw should the demands on your time be too great? The meeting is still 2 years off. I must shamelessly appeal to your generosity. Please reconsider!

Sincerely,

B. Lowy

Bernard Lowy
Professor of Botany

BL/mam

PS — This summer I was in Eureka. I spoke briefly with Dr. Heim at the Museum. The last time we met was in Montreal at the 1959 International Botanical Congress. — An ethnomycological paper has just come out but I have no reprints yet. For the summer of '76 I am invited to give a short course in mycology - ethnomycology at the Universidad de San Carlos in Guatemala. — What is the subject of your next book? BL

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123
9 - IX - 75

My dear Lowy:

I am distressed beyond words: at the beginning of August I resolved not to accept any further speaking invitations. They take too much time and take too much out of me, in nervous energy. I still have two commitments, one at the end of this month and the other next spring. I must not allow myself to be distracted from my work, my work being my next book. Please, you must give me this licence.

Sincerely yours,

R Gordon Wasson

PS: Did you go down to Guatemala this year? Any paper about to appear?

Digitized by the Hunt Institute for Botanical Documentation

September 4, 1975

R. G. Wasson
42, Long Ridge Road
Danburg, Conn. 06810

Dear Wasson:

In August 1977, the II International Mycological Congress will be held at the University of South Florida in Tampa. Planning is now under way and the Program Committee has asked me to organize a section on ethnomycology.

I believe that a symposium would be the most effective form of presentation and because interrelated disciplines are involved, I feel that discussions cannot be limited to mycological data although emphasis should be placed in that area of specialization.

There is no one whose contribution to such a symposium could be more appropriate and it is my hope that I may persuade you to participate in the program. Early commitments are important in order that a tentative roster of participants may be included in a Congress Circular to be distributed possibly before the end of 1975.

Among others whose participation I am soliciting are R. H. Schultes, A. H. Smith, W. LaBarre, Dobkin de Rios, G. Guzman and A. Puharich.

Your comments and suggestions will be most welcome.

Sincerely yours,

B. Lowy
Chairman, Ethnomycological Section
II International Mycological Congress

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

10 October 1975

Professor B. Lowy
Department of Botany
Louisiana State University
Baton Rouge, Louisiana 70803

Dear Lowy:

In answer to your last letter, which I received on my return to Connecticut a few days ago, I will go as far as this: since the Congress is two years away, I cannot say now whether I will attend, but I will consider the matter further, and if my expenses are to be paid, I am likely to accept.

Cordially,

R Gordon Wasson

RGW:mm

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

15-X-1975

My dear Wasson,

It is most encouraging to have your reply. This infuses new life into plans for the symposium.

In my communications with the Program Committee of the Congress, I have stressed from the start, the necessity of allocating travel funds for all participants and I believe this eventually will be done. In any case, I'll keep you informed of any significant developments.

With many thanks,

Sincerely,

B. Lowy

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

15 February 1975

Professor B. Lowy
Department of Botany and Plant Pathology
Louisiana State University
Baton Rouge, Louisiana 70803

Dear Lowy:

In Guatemala last September I met David Henne, head of the Guatemala branch of SIL,--Summer Institute of Linguistics. I asked him whether his people could look into the nomenclature in various Quiche dialects of A. muscaria. Just to show you how remote mycology is from almost everyone, I send you his reply.

Henne assigned the task to a Miss Karen Juhl, who doubtless knows several dialects of Quiché well. I had left a half dozen photos of A. muscaria with Henne. Apparently Karen Juhl and her informants mixed up A. muscaria with A. caesarea, as you will see. (See your Mycologia paper of 1974, p. 188-189)

I would ask you whether it is worth while to push this further with field workers of the SIL? They have people scattered all through the area. The SIL people are exceptionally well placed to find out the answers to fungal questions, if they are willing and adept, with a scientific interest. Did you go down to Guatemala again last year? And if so, what did you learn on your trip?

Sincerely yours,

R Gordon Wasson

RGW:mvm
Enc.

Digitized by the Hunt Institute for Botanical Documentation

HABIENDO LEIDO... SE REGOCIJARON
Having read, they rejoiced.

Central America Branch of the
SUMMER INSTITUTE OF LINGUISTICS
Postal Address: Apartado 74, Guatemala, C.A. / Cable: Lingüista Guatemala / Telephone 88-07-43
Street Address: 12 Avenida "B" 10-65, Zona 2, Guatemala, C.A.

February 5, 1975

Dr. R. Gordon Wasson
42 Long Ridge Road
Danbury, Conn. 06810

Dear Dr. Wasson:

I asked Karen Juhl, one of our members here and a botany specialist from Iowa, to see what she could find about your query on the amanita muscaria. Here is the report she gave me as a result of checking with several others in our group:

Mushroom name written with International Phoenetic Alphabet:

K'anjobal	- Ḳ'aṇtsú
Quiché of Chichicastenango, Quiché	- Ḳ'atsú
Quiché of San Bartolo, Toto.	- Ḳ'atsú
Quiché of Totonicapan, Toto.	- amaté, maté'y
Quiché of San Cristobal, Toto.	- Ḳ'axúl c'a jojolín chrij
Quiché of Cantel, Quez.	- Ḳ'atzú
Aguacateco, Huehuetenango	- ts̆'u'h yap hongo del loco
Quiché of Joyabaj	- 'ats'ú
Chorti	- doesn't have a name for it

This story is from K'anjobal:
"The pictured mushroom is known in the area as poisonous, but was eaten by mistake by Miguel's father and foster brother when they were drunk and wandered in the woods. They arrived home without their wood-cutting tools and afterwards could not remember what happened. They frothed at the mouth. However, they remembered that the mushrooms tasted good.

"It is said that some people scrape off the white flakes and eat the mushroom."

In the Achi language, the verb root -tzu- means "to shine".

I hope this will be a help to you. Let us know if you have any further questions.

Sincerely,

David Henne

David Henne
Director
DH/am

cc: Karen Juhl

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

20-II-1975

My dear Wasson:

I reach the same general conclusion that you do regarding the word list fowarded to you by David Henne. But there is of course one curiosity in the Aguateco expression translated as "hongo del loco," which can not refer to Amanita caesarea. As far as the fungi are concerned, I am convinced that nothing short of being in the field with the informant can result in completely reliable information. In this regard, I was fortunate to get the cooperation of the linguists at the Proyecto Marroquín in Antigua last summer and they allowed me to organize two field trips with some of their informants. There were 13 native participants representing five languages: Quiche, Kekchi, Kakchiquel, Mam and Kanjobal. In the short time that we spent in the field together we found neither Amanita nor Psilocybe spp. but I have some names for other fleshy fungi we gathered and it is no secret that there was not a mycophobe among the participants.

Although I have not been in touch with any of the group lately, I first met the SIL people in 1958 at Lake Yarinacocha near Pucallpa, Peru. I think noone in the Americas has better linguistic credentials. But you are intimately acquainted with their work through Misses Pike and Gudschinsky and no doubt others. I should think that if you could interest the right people, the ethnomycological yield would eventually be great.

While looking through the collected works of Eduard Seler, I came across the enclosed which will interest you. Seler also considered the masked Xochipilli to be noteworthy and his insight is admirable. Had he known about hallucinogenic plants and fungi he might have stolen your thunder! By the way, I took a long look at Xochipilli last June, having read your paper. I have no doubt that your interpretation is correct.

With all best wishes,

Cordially yours,

B. Lowy

P.S. Underscoring the need for careful supervision, I have the ~~following entry~~ in Aguateco from a linguist who used one of my photographs of A. muscaria.

tx'u:7j to:7 - "Red one. Venenoso. Crece en la montaña. Cuando está secando, y algo lo pega, sube polvo."

As you see, a curious cross between what is possibly an agaric and a puffball! Carroll's verse is apropos:

Then the bowsprit got mixed with the rudder sometimes
A thing, as the Bellman remarked,
That frequently happens in tropical climes,
When a vessel is, so to speak, "snarked."

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

2-IV-1974

R.Gordon Wasson
42, Long Ridge Road
Danbury, Conn., 06810

Dear Wasson:

Thank you for your kind expression of support. I expect to pursue some linguistic problems again this summer in Guatemala and Mexico.

In my notes taken in Antigua last year, I have the following information from Dr. William Norman who gave me the phonetic equivalents of these words in Quiche:

kaquljá: = kaqulx̣ā

xkoyopá:ʔ = x̌koyopāʔ

The Quichean sounds are purported to have rough equivalents in Spanish as spoken in Latin America. The advantage of using standard symbols is of course evident, but their correct vocalization is a more difficult matter. It is no secret that some Quichean sounds have no equivalents in Spanish and I believe that 2 of the symbols about which you inquire are in this category. K is pronounced with an uvular stop, as opposed to k' with a glottal uvular stop. The latter sound, I believe, is almost exactly duplicated in the Quechua. In the Cuzco region, for example, I found that the place name "Kenko" is always pronounced K'enko, the k being very strongly aspirated. The colon (:), as well as I could determine from my mentors in Antigua, follows a vowel and the aspirated sound is produced by a distention of the glottis, rather like that accompanying the retching reflex, only more gentle. The qu (or c) have their approximate counterparts in Spanish.

I have accepted an invitation from the Foundation for Latin American Anthropological Research, to join the staff at the archeological site of Yaxha, Guatemala, for at least 2 weeks as resident mycologist. I have not been in that part of the Petén, so it may yield some useful mycological as well as ethnomycological data.

With all best wishes,

Cordially,

B. Lowy

B. Lowy

Digitized by the Hunt Institute for Botanical Documentation

12 October 1973

Dear Lowy:

I found your letter and the enclosed ms. on my return from Europe on Saturday. I must say what you have caught in the Maya tongues interests me greatly and I shall make use of it, giving you full credit. My paper will not be ready for some time, doubtless after Mycologia has published yours, and I shall refer to the published article.

Cordially,

RGW

R. Gordon Wasson

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

27-IX-1973

Dear Watson,

This summer I pursued my inquiry into "xtantiloxe" and related words in Guatemala and for equivalent terms in western Honduras and Chiapas. My findings are summarized in the accompanying note which will appear later this year in "Mycologia."

"Xtantiloxe" remains elusive but it may be a word in a Quiché dialect infrequently encountered. However, I have found and amply confirmed the use of the word "xaquiyá:" by the Quiché as well as the expressions "yuy chauk" (Tzotzil) and "juyo de rayo" in Chiapas. The Amanita muscaria - Thunderbolt legend still lives among the contemporary descendents of the ancient Maya!

With best regards,

B. Lowy

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

28-II-1973

Dear Watson,

The enclosed color prints of page XI of the Calinda Codex show a scene fraught with mushroomic meaning. Its equivalent, and I believe the source from which it must originally have been copied, is found on page 61b of the Madrid Codex.

At some future date I plan to publish all 24 pages of the Calinda together with their equivalents from the Madrid.

Yours,
B. Lowy

Thanks for the reprint.

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

17 February 1973

Professor B. Lowy
Department of Botany
Louisiana State University
Baton Rouge, Louisiana 70803

My dear Lowy:

Here is The Death of Claudius. It is a divertissement. The evidence, such as it is, seems to support my hypothesis, but the evidence is not strong. I had fun writing the piece.

Please try to confirm the name of A. muscaria in Chichicastenango, and then confirm the meaning. And would it be possible to send me two glossy prints of the photo in Mycologia of the Galindo codex, one to be sent to Roger Heim, in Paris?

Sincerely,

RGW

Enc.

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

8-II-1973

Dear Wasson,

Would you be good enough to send me a reprint of your paper on "The death of Claudius or mushrooms for murderers"?* Incidentally, Jean Anouilh's play "Jézabel," is another of those works which, like the efforts of Wells, Sherriff, Bramah etc., deserves mention in the same context.

Cordially,
B. Lowy

* Harvard Univ. Bot. Mus. Leafl. 23: 101-128. 1972.

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

8 February 1973

Professor B. Lowy
Louisiana State University
Department of Botany
Baton Rouge, Louisiana 70803

My dear Lowy:

Your discovery of stantilok or stantalok, apparently meaning 'lightning', may be of vast importance. You were in Quiché speaking country, were you not? If this is indeed the sense of the term, we must arrive at the distribution of this word for lightning in the Maya area, including its cognates in other Maya languages. We probably do not need to go outside the highlands. We must see the range of the word in the sense of A. muscaria, or what other terms are used for this species. We must explore more fully the mind of the Indian when he says this species is the 'lightning' mushroom. Why does he use this powerful figure for it? It is always the red form that you find there, is it not? You may have struck gold in this word.

For years there have been rumors, of which I cannot get confirmation, that a mushroom is still used by the Chol Indians, on the Mexican side of the border (except for one Chol village in Guatemala). But what mushroom they use, I do not know. The hippies are down at sea level and mestizo Chol supply them with mushrooms, but this cannot be the only basis for the rumors; for the rumors go back far before the hippy days.

That word for lightning -- we must determine whether it is for 'lightning' alone, or includes the thunder, as is done in some languages; e.g., la foudre in French. Are there various words for lightning, and if so what associations does this word have? In Spanish, e.g., there are three words, centella, relámpago, and rayo, and the powerful folkloric overtones are all concentrated in rayo.

Cordially,

R. Gordon Wasson

Could you send me 3 or 4 copies of your reparatio of the Maya codex pria and also of your mushroom stone pria?
By

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE • LOUISIANA • 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

13-II-1973

Dear Wasson:

Yes, shtantalok/shtantilok (accented on the last syllable), is certainly of great interest and deserves further investigation along the lines you have indicated. In Momostenango on July 4, 1970, I attempted to get additional verification and amplification of its meaning. At that time, Dr. Robert Carmack, a social anthropologist associated with the State University of New York, was living there with his family. I talked with him about mushroom stones and related matters but he had little experience in this area of research. He told me that he spoke the Quiché language but had no information on the role that mushrooms played in the lives of the inhabitants of the region and was unacquainted with mushroomic vocabulary in Quiché. I have had no subsequent opportunity to pursue this but there is a possibility that I might return to Guatemala in the summer.

With best regards,

B. Lowy

P.S. — Additional reprints are enclosed, but I regret no longer having any of the 1971 paper on mushroom stones.

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

1 February 1973

Dear Wasson:

Incidental to other field work, I have been compiling a list of Mesoamerican and Peruvian Indian terms referring to mushrooms, but these are still largely scattered through my field notes. My best recollection is that "shtantalok" means "relámpago" (!), but this needs further confirmation because the translation, as I recall, comes from only a single informant.

On April 15-16, 1972, I attended the Tulane University Symposium on Maya Art in New Orleans and consulted with several Mayanists, none of whom disputed my interpretation. This does not necessarily mean that they have accepted it. I expect that more time will be needed by them and others to study it.

Cordially,

B. Lowy

Digitized by the Hunt Institute for Botanical Documentation

1 February 1972

Professor Weston La Barre
Duke University
CM Duke Station
Durham, North Carolina 27706

Dear Wes:

I received the copy of your letters to Michael Coe and Dr. Lowy of December 29 on my return from Mexico.

May I raise a question that seems to me pertinent. We have been in the habit of thinking of bufotenine as an hallucinogen. May we not be wrong? Dr. Albert Hofmann writes me under date of 8 January as follows:

> Bufotenine, when administered by intravenous injection, was reported by H. D. Fabing and J. R. Hawkins (Science, 123, 886 (1956) to produce psychotomimetic effects in man. They gave enormous quantities ÷ 2-16 mg/kg. Other investigators found no hallucinogenic or psychotomimetic activity after intravenous injection of up to 20 mg (W.J. Turner and S. Merlis, Arch. Neurol. Psychiat. (Chicago), 81, 121 (1959)). I myself ingested orally up to 50 mg without any effect (A. Hofmann, Indian J. Pharm., 25, 245 (1963)) Orally bufotenine is inactive, intravenously it is very weak or even inactive. It could be that the special application in the form of a snuff powder influences its activity.

The initial error began with Theodor Wieland, the German chemist, who reported that he had found bufotenine in A. muscaria. Neither he nor anyone else has been able to repeat this finding, and now he agrees with others that he made a mistake. (There must have been some contamination in his material.) But that mistake drew wide attention, both because of his standing as a first-class chemist andbecause it was 'appropriate' that an extract of a toad's secretion should be found in the supreme 'toadstool'. All sorts of romantic inferences naturally were drawn to it. But it is not so.

The second error was in Howard Fabing's widely publicized finding that Bufotenine, when administered intravenously, produced psychotomimetic effects. If I am not mistaken, this was the one sortie that Dr. Fabing made into the research field, and it was not a fortunate one.

Must we not eliminate bufotenine from this area of inquiry?

Sincerely,

RGW

cc - Michael Coe
B. Lowy ✓
Richard Evans Schultes

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE • LOUISIANA • 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

February 4, 1972

Mr. R.Gordon Wasson
42, Long Ridge Road
Danbury, Conn., 06810

Dear Mr. Wasson:

Thank you for sending me a copy of your recent letter to Prof. La Barre.

Dr. Hoffmann's observations regarding the relative inactivity of bufotenine are certainly most pertinent and have been verified by others (Holmstedt & Lindgren in "Ethnopharmacologic search for psychoactive drugs," p. 369) but apparently there is no unanimity at present on this question. Enclosed are xerox copies of opposing opinions taken from the work just cited (p. 369 is from the paper by Holmstedt & Lindgren and p. 377 gives part of Dr. Isbell's & Holmstedt's oral comments). Dr Horning's remarks (p. 379, ibid) are also interesting. In the same text, Eugster (p. 416) and Waser (pp. 426, 437) confirm the absence of bufotenine in Amanita muscaria, but Waser (p. 437) cautiosly states: "Belladona-like alkaloids, serotonin and bufotenin have not been extracted from the mushrooms with certainty, but possibly there are other hydroxy-indoles present."

Additional observations on the effects of bufotenine might still be useful. We have no way of knowing the dosage of the drug that might have been used in times past (if indeed it was used at all, as the toad effigy on the mushroom stone might suggest) or whether it might have been taken orally or as snuff.

With best wishes,

Sincerely yours,

B. Lowy

Bernard Lowy

cc - Dr. Weston La Barre
Dr. Michael Coe
Dr. Richard Schultes

Digitized by the Hunt Institute for Botanical Documentation

it can occur also in intoxications with *Banisteriopsis* (Preuss 1921). Beringer (1934), who has devoted a study to optic illusions and hallucinations, describes a third phenomenon, a change in size in one direction or the other somewhat reminiscent of what can be achieved with a modern zoom lens of a camera.

Shortly after Horning et al. had isolated DMT and 5-OH-DMT from *Piptadenia peregrina*, Szara (1957), conducted experiments on himself with the injection of DMT. The symptoms he reported are in good agreement with what has been described by the explorers:

> In the third or fourth minute after the injection vegetative symptoms appeared, such as a tingling sensation, trembling, slight nausea, mydriasis, elevation of the blood pressure and increase of the pulse rate. At the same time eidetic phenomena, optical illusions, pseudohallucinations and later real hallucinations, appeared. The hallucinations consisted of moving, brilliantly coloured oriental motifs, and later I saw wonderful scenes, altering very rapidly. The faces of the people seemed to be masks. My emotional state was elevated sometimes up to euphoria. At the highest point, I had compulsive athetoid movement in my left hand. My consciousness was completely filled by hallucinations, and my attention was firmly bound to them; therefore I could not give an account of the events happening around me. After ¾–1 hour the symptoms disappeared, and I was able to describe what had happened.

Macropsia is also a frequent phenomenon in experimental DMT-intoxications (Isbell, personal communication).

The action of 5-OH-DMT (bufotenine) is more controversial. Fabing and Hawkins (1956), reported that intravenous injection, over a three minute period, of 8 to 16 mg of bufotenine in human volunteers resulted in primary visual disturbances, alteration of time and space perception, and paresthesias. It is difficult to judge by this account whether any illusions and hallucinations really occurred. It seems that the observed phenomena can as well be interpreted as general somatic symptoms of intoxication. Neither Isbell nor Turner and Merlis (1959) themselves in their carefully conducted studies, could substantiate the claim that bufotenine injections had any effect on the central nervous system, whereas DMT under the same experimental conditions had psychotomimetic effects.

Control experiments with various preparations of snuff have been carried out by two groups but have not proven the capability of the used preparations to produce the intoxication attributed to it by natives or explorers. In a letter, Dr. Harris Isbell describes his experiment with the same compounds in the following way:

> We studied several forms of the material: Untreated snuff, roasted snuff, limed and roasted snuff, fermented snuff, fermented and limed snuff, fermented, limed and roasted snuff. Our subjects inhaled the snuff through straws. We obtained no reports that there were any subjective effects after inhalation of this material in amounts ranging up to 1 gram, and we further were unable to obtain any evidence of objective effects on pupillary size, tendon reflexes, body temperature, respiration, blood pressure etc., after doses ranging up to 1 gram orally.
>
> Inhalation of pure bufotenine in aerosol suspension, or oral ingestion of bufotenine in doses running up to 100 mg (total dose) also were without effect.

The above quoted experiments were all performed with snuff made from the sample of *Piptadenia peregrina* in which Horning et al. had found

Digitized by the Hunt Institute for Botanical Documentation

DR. ISBELL:

I think that I might speak a little bit about some of the tryptamines other than dimethyltryptamine. One of these is bufotenine. It has been said that bufotenine is not a psychotomimetic drug. I don't think we should say that.

The difficulty is that bufotenine is a drug that has extremely powerful and dangerous cardiovascular effects, and for that reason it is not possible to push the dose in man. Also, it would be difficult to differentiate whether psychotic reactions were due to central effects or to cardiovascular actions. Cardiovascular actions include hypertension and development of an arrhythmia which actually amounts to a ventricular standstill. The auricle does not beat, the beat drops out, and the ventricle takes over, and it is very frightening. Simultaneously with the hypertension and ventricular escapes, one sees spectacular cynanosis in the upper part of the body, similar to that which has been described in the carcinoid flush, which is presumably due to serotonin. So bufotenine is a difficult drug to work in man for this reason, and it would not be too surprising if it did not have some kind of a central action if it were possible to extract it out.

6-Hydroxydimethyltryptamine had no effect in a dose of 1 mg/kg in our subjects, in fact. In contrast, my subjects had spectacular reactions to dimethyltryptamine. My men spoke of taking trips long before this term came into general use. They used to say that with dimethyltryptamine, "You can go to the moon and get back in time for breakfast"—so, they went to the moon long before the rockets landed. I hope they left a flag up there, but the 6-hydroxy derivatives were without effect. The 5-methoxy congener, as Dr. Holmstedt said, has not been tested, and we are still awaiting animal pharmacology on it.

I think we are, perhaps, forgetting that the psilocybin and psilocyn found in the mushroom are derivatives of tryptamine and serotonin with the hydroxyl group in the 4-position. These drugs give us the same kind of effect as does DMT. They are somewhat longer acting, and slower to start.

One interesting thing is that the resemblance of the clinical phenomena one sees with dimethyltryptamine and LSD is very striking. If you get LSD daily you soon develop such a high grade of tolerance that one might as well be issuing water. Then, if you take people who are tolerant to LSD and test them with psilocybin and mescaline, you will find that they are markedly cross-tolerant. We were unable to show a high degree of cross-tolerance between dimethyltryptamine and LSD, so despite the similarity of chemical structure it may be that dimethyltryptamine and LSD may act by somewhat different mechanisms within the brain, although we cannot be sure of this. The only thing we can be sure of, is that there is no great degree cross-tolerance.

CHAIRMAN DR. HOLMSTEDT: I can mention that as far as the animal experiments undertaken with the 5-methoxy compound are concerned, they have shown it to have a very weak effect on the circulation. My statement that bufotenine was not a psychotomimetic agent was based on two things: First your own work, Dr. Isbell; secondly, that its solubility properties are such that it is not very likely to penetrate the blood-brain-barrier.

Digitized by the Hunt Institute for Botanical Documentation

R. Gordon Wasson
42, Long Ridge Road
Danbury, Conn. 06810
17 February 1973

My dear Lowy:

Thanks for the reprints and also for your note of 13-II-73, which have arrived safely. I look forward to the possibility you will be returning to the Quiché area this summer!

Sincerely,

Rgw

R. G. Wasson
42, Long Ridge Road
Danbury, Conn. 06810
3 March 1973

My dear Lowy:

I am <u>most</u> interested. Have forwarded the color photo to Paris. Please keep me informed!

Sincerely,

RGW

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

23 March 1974

Professor B. Lowy
Department of Botany and
Plant Pathology
Louisiana State University
Baton Rouge, Louisiana 70803

My dear Lowy:

Congratulations on your piece in the current Mycologia, and may you succeed, as you say, in assembling additional data.

What is the sound value of the colon after kaqulja: ? What is the difference between 'k' and 'qu'?

'Yuyo' is not of Spanish origin. In Spain it is unknown. Corominas says it comes from Quechua but Corominas does not report it in Guatemala or Mexico.

With kind regards,

Sincerely,

R. Gordon Wasson

Digitized by the Hunt Institute for Botanical Documentation

27 January 1973

My dear Lowy:

Thanks for the copy of your Maya Codex piece.

Have the Maya specialists expressed opinions about the mushroom interpretation? What does 'shtantilok' or 'shtantalok' mean? (p. 821 of your paper).

With all good wishes of the season,

Yours,

R. Gordon Wasson

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

19 November 1971

Professor B. Lowy
Department of Botany and Plant
Pathology
Louisiana State University
Baton Rouge, Louisiana 70803

Dear Professor Lowy:

I am excited by your discoveries! I was not familiar with the Galindo codex. Where has it been written up or reproduced?

I hear you have published a paper in the Revista Interamericana Vol. 1, No. 1, which appeared last spring. If you could send me one (or two, if there are any to spare) copy of this, I shall be much obliged.

Sincerelyyours,

R Gordon Wasson

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences
DEPARTMENT OF BOTANY

Mr. Lawson:

22-XI-1971.

I wrote this for a general audience as a contribution to the inaugural number of the "Revista", of which I am a Consulting Editor. It has nothing new (to you) except the statements on pp 42-43, which I am now preparing to document.

The preliminary statement about the Galindo codex in "Mycologia" will be followed by the publication of the pertinent photographs to which I refer in my last letter.

B. Lowy

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

12 November 1971

Professor B. Lowy
Department of Botany and Plant Pathology
Louisiana State University
Baton Rouge, Louisiana 70803

Dear Professor Lowy:

Your paper on the mushroom stones in the current Mycologia is a valuable contribution to our knowledge. So far as I recall it also marks the first time that a serious ethno-mycological paper has appeared in that journal. This is a progressive step for Mycologia but perhaps it diminishes the number of interested people who will see it.

Could you spare three or four reprints? I shall gladly pay for them.

Near the top of p. 984 you say that mushrooms are occasionally depicted 'in the few remaining known Maya codices'. I had not known this and would appreciate the references. At the bottom of p. 988, referring to the pottery mushroom that I own, you say that it is said to be from Tenenexpan, Vera Cruz. I had never associated this locality with it. I had known it only as of the Remojadas culture type. I had thought it came into the market of unknown provenience. Gordon Ekholm confirmed its authenticity and everyone has linked it with the Remojadas culture.

I wish to apologize for that letter of mine dated May 27, 1970. It was quite inexcusable and I have regretted it from the day I mailed it. I hope you will accept my apology.

Sincerely yours,

R. Gordon Wasson

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences

DEPARTMENT OF BOTANY

November 17, 1971

Dear Mr. Wasson:

I shall not conceal from you that I was astonished and shaken by your letter of May 27, 1970 and considering your great provocation, I felt and still feel that my response was a moderate one. I thought it highly improbable then that the breach you so deliberately opened between us would ever be closed. But it is unseemly that men who pursue in research essentially the same goal, the advancement of knowledge, should forever remain incommunicado. It is in this spirit that I accept your apology, so let us continue where we left off.

My reference to mushrooms in the Maya codices is based on my interpretation of sections of the Galindo, Madrid and Dresden codices. I am preparing to publish the necessary documentation for the support of this statement. Meanwhile I may refer you to page 95, figure b of the Madrid codex (=Codex Tro-Cortesianus) which depicts a personage in priestly garb, holding in his numinous hand the object which I interpret as a sacred mushroom. It is also found in the Dresden (pages 25-28) held there by a priest, but in different circumstances. I consider ~~figure~~ figure b, page 95 of the Madrid to be deeply significant and believe it provides the key which will support the assertion that a mushroom cult existed among the Maya. In this painting, directly above the mushroom cap is the solitary glyph "cimi", which signifies death ! The juxtaposition of this symbol with the mushroom is surely not accidental. I am aware of the objections that might be raised, inasmuch as the mushroom in question has traditionally been interpreted (but more commonly ignored in recent times) as a rattle or a fan (Förstemann 1906 and Villacorta 1933, who has simply accepted Förstemann's conclusion, although the latter was not too sure of this). To my knowledge this has never been challenged. In fact it has never been restudied in the light of recent evidence about the mushroom cult for the elucidation of which you have been largely responsible. The painting in the codex to which I call your attention (and there are others in the Madrid as well as in the Dresden) is in my estimation pregnant with meaning, only part of which we can adumbrate. But are we not witnessing in this painting the enactment of an ancient hieratic rite among the Maya, in which sacred hallucinogenic mushrooms played a vital role ?

My statement about your pottery mushroom "said to be from Tenenexpan, Veracruz, Mexico" is based on Borhegyi's statement to this effect in his 1963 paper in "American Antiquity" entitled "Pre-Columbian pottery mushrooms from mesoamerica," p. 332, legend to fig. 5, which I have accepted at face value.

P.S. Because of the unexpectedly large number of requests for reprints of my paper (which I have not yet received from the printer) I must limit the number sent to each of my correspondents to one. There will, of course, be no question of any payment.

Sincerely yours,

B. Lowy

B. Lowy

Digitized by the Hunt Institute for Botanical Documentation

May 30, 1970

Mr. R.Gordon Wasson
42, Long Ridge Road
Danbury, Conn., 06810

Dear Mr. Wasson:

It appears that you consider my dissent so outrageous that words can scarcely offend sufficiently to express your indignation and contempt. Mine was not an attempt to discredit an entire corpus of information that had laboriously been accumulated over the decades. You may consider me arrogant and rude but I am not mad. Had you read my review of your book "Soma" in Mycologia, it must have been clear that I thought the work of you and your collaborators admirable. My crime was to disagree with a small fragment of a much larger question. What I specifically demurred from was, as you put it, "the idea that they (mushroom stones) truly reptesented fungi never crossed his (Sapper's) mind." It is my contention that in all probability this idea had crossed his mind. It is not necessary that Zeus sit in judgement of trivia.

I will not countenance your malignant attack on a respected colleague who because he is unknown to you, you denigrate ! Your gratuitous condemnation of a world renowned scholar's opinion as "worthless" would be incredulous, were it not so transparent an attempt to discredit out of hand a source that dares to disagree with you. My disagreement was and is genuine and to suggest that I had "an amiable agreement" with my interlocutor is reprehensible and repulsive in the extreme. For the record, should there be any doubt on this question, let it be understood that it was not merely "our correspondence" (which was secondary) that was shown to my consultant, but of course the appropriate papers of Sapper and Brinton, which he read.

I once held in esteem your zealous pursuit of knowledge, but you have cast a shadow on the methods you choose to employ, which hardly seem to reflect the sober deliberations of a scholar. You demean yourself, not others, by calling into question the legitimate differences that not uncommonly divide men of informed opinion. It is the discipline of constructive dissent that has always advanced knowledge and it is this privilege and duty of the scholar that you would now presumptuously deny to others.

Sincerely yours,

B. Lowy

Digitized by the Hunt Institute for Botanical Documentation

May 30, 1970

Mr. R.Gordon Wasson
42, Long Ridge Road
Danbury, Conn., 06810

Dear Mr. Wasson:

It appears that you consider my dissent so outrageous that words can scarcely offend sufficiently to express your indignation and contempt. Mine was not an attempt to discredit an entire corpus of information that had laboriously been accumulated over the decades. You may consider me arrogant and rude but I am not mad. Had you read my review of your book "Soma" in Mycologia, it must have been clear that I thought the work of you and your collaborators admirable. My crime was to disagree with a small fragment of a much larger question. What I specifically demurred from was, as you put it, "the idea that they (mushroom stones) truly reptesented fungi never crodsed his (Sapper's) mind." It is my contention that in all probability this idea had crossed his mind. It is not necessary that Zeus sit in judgement of trivia.

I will not countenance your malignant attack on a respected colleague who because hs is unknown to you, you denigrate ! Your gratuitous condemnation of a world renowned scholar's opinion as "worthless" would be incredulous, were it not so transparent an attempt to discredit out of hand a source that dares to disagree with you. My disagreement was and is genuine and to suggest that I had "an amiable agreement" with my interlocutor is reprehensible and repulsive in the extreme. For the record, should there be any doubt on this question, let it be understood that it was not merely "our correspondence" (which was secondary) that was shown to my consultant, but of course the appropriate papers of Sapper and Brinton, which he read.

I once held in esteem your zealous pursuit of knowledge, but you have cast a shadow on the methods you choose to employ, which hardly seem to reflect the sober deliberations of a scholar. You demean yourself, not others, by calling into question the legitimate differences that not uncommonly divide men of informed opinion. It is the discipline of constructive dissent that has always advanced knowledge and it is this privilege and duty of the scholar that you would now presumptuously deny to others.

Sincerely yours,

B. Lowy

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

27 May 1970

NEW YORK CITY:
45, East End Avenue, 10028
TEL: (212) BU-8:2323

Professor B. Lowy
Department of Botany and Plant Pathology
Louisiana State University
Baton Rouge, Louisiana 70803

Dear Professor Lowy:

I am surprised and disappointed. To say that a view held by Steve and me on a subject to which we had given long and careful consideration is 'untenable' is arrogant and rude.

In your last missive you spoke of a 'distinguished German Professor' who supported your view. I cast about in my mind who he could be. I thought possibly it was the late Franz Termer, Director of the Museum in Hamburg, a solid scholar and a personage, a specialist in Middle American cultures, who had published a paper that we had missed. But it turns out to be someone who by your own admission knew nothing about the subject, knows nothing except what you have told him in introducing our correspondence. You quote him to me not realizing that his opinion is worthless, being merely an amiable agreement with his interlocutor. What naiveté! You look into a mirror, see yourself there reflected, and say there are two persons.

So far as I am concerned the correspondence is closed.

Sincerely yours,

R. G. Wasson

Digitized by the Hunt Institute for Botanical Documentation

May 30, 1970

Mr. R.Gordon Wasson
42, Long Ridge Road
Danbury, Conn., 06810

Dear Mr. Wasson:

It appears that you consider my dissent so outrageous that words can scarcely offend sufficiently to express your indignation and contempt. Mine was not an attempt to discredit an entire corpus of information that had laboriously been accumulated over the decades. You may consider me arrogant and rude but I am not mad. Had you read my review of your book "Soma" in Mycologia, it must have been clear that I thought the work of you and your collaborators admirable. My crime was to disagree with a small fragment of a much larger question. What I specifically demurred from was, as you put it, "the idea that they (mushroom stones) truly represented fungi never crossed his (Sapper's) mind." It is my contention that in all probability this idea had crossed his mind. It is not necessary that Zeus sit in judgement of trivia.

I will not countenance your malignant attack on a respected colleague who because hs is unknown to you, you denigrate ! Your gratuitous condemnation of a world renowned scholar's opinion as "worthless" would be incredulous, were it not so transparent an attempt to discredit out of hand a source that dares to disagree with you. My disagreement was and is genuine and to suggest that I had "an amiable agreement" with my interlocutor is reprehensible and repulsive in the extreme. For the record, should there be any doubt on this question, let it be understood that it was not merely "our correspondence" (which was secondary) that was shown to my consultant, but of course the appropriate papers of Sapper and Brinton, which he read.

I once held in esteem your zealous pursuit of knowledge, but you have cast a shadow on the methods you choose to employ, which hardly seem to reflect the sober deliberations of a scholar. You demean yourself, not others, by calling into question the legitimate differences that not uncommonly divide men of informed opinion. It is the discipline of constructive dissent that has always advanced knowledge and it is this privilege and duty of the scholar that you would now presumptuously deny to others.

Sincerely yours,

B. Lowy

Digitized by the Hunt Institute for Botanical Documentation

May 30, 1970

Mr. R.Gordon Wasson
42, Long Ridge Road
Danbury, Conn., 06810

Dear Mr. Wasson:

It appears that you consider my dissent so outrageous that words can scarcely offend sufficiently to express your indignation and contempt. Mine was not an attempt to discredit an entire corpus of information that had laboriously been accumulated over the decades. You may consider me arrogant and rude but I am not mad. Had you read my review of your book "Soma" in Mycologia, it must have been clear that I thought the work of you and your collaborators admirable. My crime was to disagree with a small fragment of a much larger question. What I specifically demurred from was, as you put it, "the idea that they (mushroom stones) truly reptesented fungi never crodsed his (Sapper's) mind." It is my contention that in all probability this idea had crossed his mind. It is not necessary that Zeus sit in judgement of trivia.

I will not countenance your malignant attack on a respected colleague who because hs is unknown to you, you denigrate ! Your gratuitous condemnation of a world renowned scholar's opinion as "worthless" would be incredulous, were it not so transparent an attempt to discredit out of hand a source that dares to disagree with you. My disagreement was and is genuine and to suggest that I had "an amiable agreement" with my interlocutor is reprehensible and repulsive in the extreme. For the record, should there be any doubt on this question, let it be understood that it was not merely "our correspondence" (which was secondary) that was shown to my consultant, but of course the appropriate papers of Sapper and Brinton, which he read.

I once held in esteem your zealous pursuit of knowledge, but you have cast a shadow on the methods you choose to employ, which hardly seem to reflect the sober deliberations of a scholar. You demean yourself, not others, by calling into question the legitimate differences that not uncommonly divide men of informed opinion. It is the discipline of constructive dissent that has always advanced knowledge and it is this privilege and duty of the scholar that you would now presumptuously deny to others.

Sincerely yours,

B. Lowy

Digitized by the Hunt Institute for Botanical Documentation

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803
College of Arts and Sciences — Agricultural Experiment Station

DEPARTMENT OF BOTANY AND PLANT PATHOLOGY

DEPARTMENT OF PLANT PATHOLOGY

May 20, 1970

Dear Mr. Wasson:

I consulted a distinguished colleague at the University, Boyd Professor Emeritus of Sociology, Professor Rudolf Heberle. Professor Heberle has an international reputation of the highest standing in his field. When I approached him on the question of the interpretation of Sapper's paper, he had no previous knowledge of mushroom stones, hence he was completely unprejudiced. I showed Professor Heberle our correspondence, including your letter to me dated April 11, 1970 and my reply to you dated April 21, 1970. He came to the same conclusion that I did, as expressed in my letter. Consequently, I would reiterate that your opinion to the effect that "the idea that they [mushrooms stones] truly represented fungi never crossed his [Sapper's] mind ..." is untenable.

Sincerely yours,

R. Lowy

P.S. - I would like you to have the enclosed print of a photograph of María Sabina (at age 73) that I took of her in Huautla last year.

Copy to R. Heberle

100th YEAR
1869-70 LSU 1969-70
IN BATON ROUGE

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

15 May 1970

Professor B. Lowy
Department of Botany and Plant Pathology
Louisiana State University
Baton Rouge, Louisiana 70803

Dear Professor Lowy:

Who is the German professor and where did his comments appear? Could you send me xeroxes of it? Or was it a personal letter? Please tell me what he said. What chair does he hold and in what university?

Sincerely,

Rgw

[NEW YORK CITY: 45, East End Avenue, 10028 – TEL.: (212) BU-8:2323]

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

1 May 1970

NEW YORK CITY:
45, East End Avenue, 10028
TEL: (212) BU-8:2323

Professor B. Lowy
Department of Botany and Plant Pathology
Louisiana State University
Baton Rouge, Louisiana 70803

Dear Professor Lowy:

As for Brinton, your argument is with Steve Borhegyi not me. I was proud to set forth conspicuously on p. 40 of my bibliography that he had compiled and phrased all the archeological entries. Of course Steve and I would agree with your strictures on the intrinsics of Brinton's idea, but Brinton's is 'historically ... the first known, published reference to mushroom stones as mushroom representations.'

The stone carving that Sapper had before him (called the 'Rietberg artifact' ever since we found it in the Rietberg Museum) was the first of its kind to be introduced to scholars beginning to be interested in Middle America. Because it carried a divine effigy on its column it was obviously a Götzenbild. It had an odd shape that was best described as Pilzförmig, mushroom-shaped. When you see a carving of a man, a horse, you don't say it is man-shaped, horse-shaped. You say it is a statue of a man, a horse. Sapper was an outstanding geographer who was a skilled expositor. If he said the statue was 'mushroom-shaped' he meant just that. After the Wassons advanced the theory that the carving represented what it looked like, i.e., a mushroom, the Germans discussing these stones began to use the word Pilzstein, as Sapper would have done, if he had thought it was a mushroom effigy. If Sapper had had in mind a sacred mushroom, he would have deployed his arguments in favor of this original, this bizarre, idea. You are not the first to go to the sources. Many have read them and I do not know of one has come away from them with your idea. Albert Hofmann was here for the weekend. He is the discoverer of LSD, from Basel. He confirmed my interpretation of the German words and their usage.

You must put yourself back and recapture the atmosphere that prevailed less than two decades ago. No one was thinking of cultic mushrooms then. Steve, endowed with a quick, brilliant insight, when in 1953 he heard us -- my wife and me -- develop our idea, seized on it and quickly adopted it. But even Gordon Ekholm with his vast knowledge and sure judgment thought our notion was a bit far fetched and not worth pursuing. Since he is a kindly man he said no more. We are recapturing an ancient secret, the sacred mushroom, and we must be careful not to antedate our knowledge of it. Brinton's distinction is that he is the first to suggest the mushroom-effigy, not a carving shaped like a mushroom, and Steve thought he deserved credit for this important step.

I might add here that the style of the archeological entries in my bibliography bears witness to Steve's distinctive draftsmanship in every line. He was brilliant, a warm friend, scintillating, an enthusiastic collaborator throughout. We shall not see his like again. His death in mid-career is irreparable. Was it suicide, as in Vaillant's case?

Digitized by the Hunt Institute for Botanical Documentation

If you pursue the mushroom quest for any length of time, you will discover how basic and common in nature is the shape of the fleshy-capped fungus. You may be plagued, as I have been, with correspondents who discover 'mushroom-shapes' everywhere and try to link them with a cult, since my wife and I initiated the vogue of cultic mushrooms. Unless there was genuine evidence of a link with a cult, we refused to be seduced, even though we may have thought in some cases that a link ought to exist. For example, the megalithic stone 'mushrooms' of Kerala and Nepal, the murals and friezes of 'mushrooms' in India, the 'mushrooms' that surmount the oldest Buddhist stupas,--do they perhaps derive from Soma? I am tempted to think so but have no evidence to support my notion.

Yes, I attended María Sabina. I wrote an account of it for a few friends in Mexico and France who were with me in 1955-57, in the years before everybody descended on Huautla, when we were the only outsiders who had ever heard her or of her. I enclose my account of the performance for your perusal. Please return it.

Sincerely yours,

R. Gordon Wasson

[Answered May 6. on xerox copy of N.Y. Times review by Hughes of "Maria Sabina, Magic Mushroom Woman". I indicated also that Dr. Heim had confirmed my interpretation of Trinity for Soyaba vs Brinton.]

Digitized by the Hunt Institute for Botanical Documentation

20 April 1970

Copy - from R.G. Wasson - 5-V-1970

Performance of María Sabina, a 'Tragifonía'
at Carnegie Hall
on Friday Evening, 17 April 1970
Words by Camilo José Cela, music by Leonardo Balada

The stage was filled when we arrived. The large orchestra occupied the whole of the center and it was surrounded by the four choirs, about 30 voices in each. The choirs wore elegant sarapes, some yellow others blue. In the center rear a scaffolding about 12 feet high was to serve as the scaffold on which María Sabina was to be hanged. A hangman's noose hung from one corner of this scaffolding. An immense screen blanketed the back wall. The undersurface of a gilled mushroom (Psalliota bispora, I think, a specimen presumably bought in a New York supermarket; certainly not a Psilocybe) was the first picture to be projected on this screen, then what seemed to be a scene from a pre-Columbian codex, then other more or less abstract designs throughout the performance.

I believe the performance lasted 93 minutes without intermission. The lead role -- the dominant figure in the whole performance -- was María Sabina. She was a Porto Rican, a quadroon perhaps, with a Papuan hairdo. This hairdo is not Indian and does violence to the text:

El cabello le cuelga
Lacio hasta la cintura.

(You remember her long braid down the middle of her back, almost reaching the floor.) She wore a handsome sarape, blue with black embroidery around the collar, over a shapeless yellow garment of light-weight material that from the knees down hung in strips about three or four inches wide. She did not sing, she spoke, she intoned. I could not understand much of what she said, but the next day I got the libretto, written by Cela in 1965 and published in the Colección Juan Ruiz, No. XVI, under Cela's rubric as one of the Ediciones de los Papeles de Son Armadana; Madrid and Palma de Mallorca. It seems that Cela thought of her as vestido de harapos de mil raídos colores con una soga de horca around her throat. The staging did not follow the text in this and other respects.

The weight of the performance was carried by María Sabina. Her voice, the flinging about of her body, her gestures, filled the hall for most of the time. The atmosphere of Mexico, of Huautla (which is never mentioned), is conveyed in the opening lines:

1. En la serranía de Oaxaca
Crece el hongo de fray Bernardino
Los indios le dicen nanacatlh
Y con él se emborrachan y cantan

2. Los herejes los sabios los brujos
Las leonadas galas del teyhninti
La sangre del dulce sacrificio
La sangre del ave de la selva

3. La sangre del Ometepec niño
Enfermo de amor y vanidad
La sangre de los guerreros muertos
En brazos de las sucias doncellas

4. Y la leche de las lobas madres
Adornando el cielo de cometas
Sobre los infinitos gusanos
Por encima de las ciertas flores

Digitized by the Hunt Institute for Botanical Documentation

5. Pátzcuaro Patambán Taucitaro
Colima Nevado de Toluca
San Andrés Tuxtla Cofre Perote
Y de nuevo lombrices pacientes

6. Al cabo de cuatro siglos largos
Nació el ángel María Sabina
Que come teúnanacatlh amargo
Y bebe ron y anís y agua clara

7. La condenaron a muerte en la horca
Y de nada valieron el llanto
de Valentina Pavlovna Wasson
Y el fantasma de Antonin Artaud

8. Pidiendo caridad al demonio
Clemencia a los ángeles ruinosos
Mil llamas al Popocatepetl
O el fin del mundo a los verdes dioses

9. La psilocybe mexicana Helm
Da la psilocibina lucida
Y el fuego de los montes de fuego
Ardiendo dentro del corazón

10. He ahí la leña del Jorullo
La carne del festín que el demonio
Aviva con sus alas de raso
Con sus cuernos de humo y su rabo

11. Hecho de mil hebras finísimas
Que el señor de las moscas azules
De los escarabajos de oro
De plata de esmeraldas de cobre

12. De jade que el señor de los sapos
Azules y casi sosegados
Del hierro de substancia de orina
De la culebra atroz comestible

13. Se apiade de María Sabina
Y del corazón de sus verdugos
Sin nombre para poder decir
Desnudos alacranes hambrientos

14. Calvos de tiña mansa y de tiña
Brava y de astronomía ilegal
Amén y sobre las cien cabezas
Del cordero brille el relámpago.

This is about all of Mexico in the text. María Sabina is, as you see, not a Mazatec but Nahua. 'Heim' becomes 'Helm', teyhuinti becomes 'teyhninti'. On the other hand Cela is superb in the rest of the libretto. First María Sabina presents her credentials:

Soy una mujer que llora
Soy una mujer que escupe
Soy una mujer que mea
Soy una mujer que ya no da leche
.....

and on and on. Cela clearly either had our recording sold by Folkways Records and Service Corporation or some other translation of Maria Sabina's singing. (Record listing: No. FR 8975). The acting, unfortunately, had more of Africa about it than of Mexican Indian.

There is a choir of Virgins, a choir of Harlots (putas), a choir of maricones, called the 'echo'. There is a town crier. The choirs express respect and love for María but wish to see her die, hanged by the neck. Throughout she is on the platform. There is no suggestion that she had taken the mushrooms; there is no further effort at recapturing the Mexican atmosphere. In fact, the author is obviously a Spaniard and he introduces the town officials under their Spanish names -- alguacil, the mayor is alcalde, etc. Except for the opening lines that I have quoted, Mexico, the sacred mushrooms, the serranía of Oaxaca might as well be 10,000 miles away.

The villagers ask for María Sabina's death in precisely the manner of Dürrenmatt in The Visit; her death is inevitable, responding to an irresistable undertow of village feeling. But whereas in Dürrenmatt there was obvious motivation, here there is none.

Digitized by the Hunt Institute for Botanical Documentation

This is the weakness of the libretto. The words, the verses, in themselves are powerful, but one never understands what makes the villagers desire María's death, since they respect and love her. At the end she is executed. As for the music, I am no judge. It is avant garde and bears no relationship to María's chanting or to Mexican themes.

On the other hand, this performance has suggested to me a staging of María Sabina's tragedy in terms that would be memorable. Let us suppose that the villagers have told her she is to be hanged at dawn on a certain day. Her offense is not that she has engaged in evil brujerías. They concede that she is limpia, that she is sin mancha, that she is pura. But she has not kept the secret of the mushrooms. She has revealed the Mystery of the Indians' religion to outsiders. This is unforgiveable. (I think it was really a mistake of judgement on her part to serve us in 1955.) So, though pura, limpia, sin mancha, she must die. A great crowd is on hand for the execution. María arrives, full of dignity, imperturbable. She has obviously imbibed the the sacred mushrooms. Thereupon, accompanied by a Greek chorus, the chanting swings back and forth just as we have heard it in the night, she sings her chants, accepting Cela's wording for them, perhaps expanded according to the translation of the entire text that I possess. María wields an overwhelming mastery of the situation, stirring the throng to a frenzy, the whole being resolved finally by her being hanged. Motivation is thus achieved, the words are revised in the light of the longer texts that I could supply, the costumes should be Mazatec huipiles. By making the performance Mazatec it achieves, perhaps paradoxically, universality. The present arrangement, dominantly Spanish and international and nondescript, loses touch with reality, and losing all reality, it loses all force.

Digitized by the Hunt Institute for Botanical Documentation

(Sapper + Brinton attacked)

LOUISIANA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGE
BATON ROUGE · LOUISIANA · 70803

College of Arts and Sciences — Agricultural Experiment Station

DEPARTMENT OF BOTANY AND PLANT PATHOLOGY

DEPARTMENT OF PLANT PATHOLOGY

April 21, 1970

Dear Mr. Wasson:

It certainly may be argued whether Sapper understood the full implications of his own terminology (I am convinced that he did not) but concerning the stones, to question that "the idea that they truly represented fungi never crossed his mind," seems to me to give him much less credit than he deserves. I would be inclined to accept his terminology as prima facie evidence that Sapper interpreted the stones as mushroomic symbols and not as phalli or any other objects. While Barberena "hält das Ganze für einen Phallus" and Sapper replies that "diese Deutung erscheint mir aber unhaltbar ...", prefering to call these artifacts "Pilzförmige Götzenbilder", then it seems to me that Sapper has clearly committed himself. He did not guess that the stones might represent hallucinogenic mushrooms, but we are not on absolutely firm ground regarding this interpretation even today, in spite of the evidence now at hand which tends to support this hypothesis. That Sapper considered the stones to represent sacred objects, I think cannot be doubted. His description of them as "Götzenbilder" - false dieties or idols - is a value judgement, but it is also an admission of his belief that these idols were sacred to someone nevertheless. I would say that Sapper, in his brief note, came remarkably close to what we consider at present to be the best interpretation. I am not aware of anything else that Sapper had to say on the subject, but I would not agree with your statement (in Bot. Mus. Leaf. 20(2a): 42. 1963, entry 88) that Brinton makes "historically ... the first known, published reference to mushroom stones as mushroom representations."

I find no merit in Brinton's cursory note which is in fact, completely misleading. After accepting Sapper's interpretation that the stones are not "phallic emblems", Brinton goes on to say, quite incredibly I think, that Sapper "...advances, however, no other explanation". Sapper's terminology embodies his explanation and Brinton's "suggestion" is superfluous. Brinton's further comments that "the night growth of the fungus would strengthen the mythical alliance" (ie the Maya word "hu" being "sufficiently near" to "uh or yuh", meaning moon) would itself appear to be based on a myth.

Were you at Carnegie Hall on April 17 for the premier of Cela and Balada's "tragifonia", "María Sabina"? Sorry I could not be there, but I was thinking of you -- and of María.

Best wishes, as always,

B. Lowy

B. Lowy

This interpretation was upheld by Dr. Rudolph Hebert, whom I consulted on May 5, 1970, showing him Sapper's + Brinton's notes which he read, as well as pertinent correspondence between Wasson and myself. BL

Digitized by the Hunt Institute for Botanical Documentation

April 21, 1970

Dear Mr. Wasson:

It certainly may be argued whether Sapper understood the full implications of his own terminology (I am convinced that he did not) but concerning the stones, to question that "the idea that they truly represented fungi never crossed his mind," seems to me to give him much less credit than he deserves. I would be inclined to accept his terminology as prima facie evidence that Sapper interpreted the stones as mushroomic symbols and not as phalli or any other objects. While Barberena "halt das Ganze fur einen Phallus" and Sapper replies that "diese Deutung erscheint mir aber unhaltbar ...", prefering to call these artifacts "Pilzformige Gotzenbilder", then it seems to me that Sapper has clearly committed himself. He did not guess that the stones might represent hallucinogenic mushrooms, but we are not on absolutely firm ground regarding this interpretation even today, in spite of the evidence now at hand which tends to support this hypothesis. That Sapper considered the stones to represent sacred objects, I think cannot be doubted. His description of them as "Gotzenbilder" - false dieties or idols - is a value judgement, but it is also an admission of his belief that these idols were sacred to someone nevertheless. I would say that Sapper, in his brief note, came remarkably close to what we consider at present to be the best interpretation. I am not aware of anything else that Sapper had tomsay on the subject, but I would not agree with your statement (in Bot. Mus. Leaf. 20(2a): 42 42. 1963, entry 88) that Brinton makes "historically ... the first known published reference to mushroom stones as mushroom representations."

I fing no merit in Brinton's cursory note which is in fact, completely misleading. After accepting Sapper's interpretation that the stones are not "phallic emblems", Brinton goes on to say, quite incredibly I think, that Sapper "...advances, however, no other explanation. Sapper's terminology embodies his explanation and Brinton's "suggestion" is superfloous. Brinton's further comments that "the night growth of the fungus would strengthen the mythical alliance" (ie the Maya word "hu" being "sufficiently near" to "uh ot yuh", meaning moon) would itself appear to be based on a myth.

Were you at Carnegie Hall on April 17 for the premier of Cela and Balada's "tragifonia" "María Sabina"? Sorry I couldnot be there, but I was thinking of you -- and of María.

Best wishes, as always,

B. Lowy

Digitized by the Hunt Institute for Botanical Documentation

Unsere Abbildungen zeigen die Ceremonie des Verbrennens, und zwar stellt Fig. 1 den Beginn des Vorganges dar, Fig. 2 den Moment des Vollbrandes und Fig. 3 das Ende der Handlung, wo die Überreste der Verbrennung in einer Urne gesammelt werden, um sie

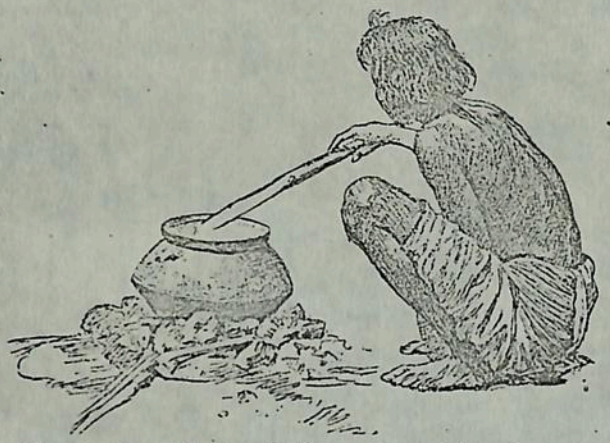


Fig. 3. Sammeln der Leichenasche und Knochenreste. Gezeichnet von N. Samokisch.

dann in das Wasser, womöglich in den Ganges, hinein zu werfen. Wird der Ort, an welchem der Scheiterhaufen gestanden hat, mit Wasser gewaschen, so wird ein kleiner Graben gemacht, damit das Wasser in den Fluſs abläuft.

In dem russischen, von Gustav Radde herausgegebenen Prachtwerke „23 000 Meilen auf der Jagd Tamara", das die Reise des Groſsfürsten Alexander und Sergej Michailowitsch nach Indien und Ostasien behandelt und dem auch unsere Abbildungen entnommen sind, finden wir noch die Bemerkung, daſs die Leichenverbrenner in Indien eine besondere, niedrige Kaste bilden. Aber sie sind alle reich, weil sie den Gold- und Silberschmuck der Leichen — der nicht abgenommen zu werden pflegt — erhalten, wenn auch im geschmolzenen Zustande.

Pilzförmige Götzenbilder aus Guatemala und San Salvador.

Auf der mittelamerikanischen Ausstellung in Guatemala waren aus verschiedenen Gegenden der Republik Götzenbilder ausgestellt, welche in ihrer äuſseren Form lebhaft an Pilze erinnern. Die Figuren bestehen gewöhnlich aus drei besonderen Teilen, einem Sockel, einem ungefähr cylindrischen Mittelkörper, auf welchem ein Gesicht und Teile der Gestalt eines Menschen in sehr schematischer Weise eingegraben sind, und einem hutförmigen, meist rundlichen oberen Abschnitt. Auch aus San Salvador sind derartige Götzenbilder bekannt.

Pilzförmiges Götzenbild aus Guatemala.

Beistehend ist das besterhaltene dieser Idole (in $^1/_3$ natürlicher Gröſse) nach einer Photographie von Dr. Santiago F. Barberena, dem Direktor des Museums in San Salvador, wiedergegeben. Der obere Abschnitt ist hier flacher als bei den guatemaltekischen Götzenbildern, die ich kenne; das Gesicht ist von einer Zickzacklinie umrahmt, welche neun volle Biegungen und noch eine einfache Linie zeigt. Dr. Barberena hält das Ganze für einen Phallus und glaubt, daſs die neun Biegungen sich auf die neunmonatliche Schwangerschaft beziehen. Diese Deutung erscheint mir aber unhaltbar, da die mittelamerikanischen Indianer seiner Zeit zwanzigtägige Monate benutzten, und wenn sie auch sicherlich daneben die Zeit von Vollmond zu Vollmond (x ji lipó in Kekchi) beobachtet und berücksichtigt haben, so ist doch unwahrscheinlich, daſs sie die Zeit der Schwangerschaft gerade nach der ungewöhnlichen Zeiteinteilung gezählt haben sollten. Auch ist die breite Ausladung des Hutes der Deutung als Phallus entgegen. Immerhin aber sind diese pilzförmigen Götzenbilder so eigenartig, daſs sie die Aufmerksamkeit der Archäologen verdienen, welche vielleicht aus benachbarten Völkerkreisen die Bedeutung derselben zu erklären wissen.

Coban. Carl Sapper.

Bücherschau.

Comte de Gobineau: Versuch über die Ungleichheit der Menschenrassen. Deutsche Ausgabe von Ludwig Schemann. 1. Bd. Stuttgart, Fr. Frommann (E. Hauff), 1898.

Die neue Ausgabe des berühmten Gobineauschen Rassenwerkes in deutschem Gewande beweist, wie sehr die allgemeinen Fragen der Anthropologie und Ethnologie in ihren Beziehungen zur Kulturgeschichte und Gesellschaftswissenschaft heutzutage die Geister beschäftigen. Wenn nach der Meinung des Übersetzers das in den fünfziger Jahren zuerst erschienene Buch in Deutschland im allgemeinen wenig beachtet wurde, so hat dazu nicht zum mindesten die scharfe, wenn auch durchaus urbane Kritik unseres A. F. Pott (Die Ungleichheit menschlicher Rassen hauptsächlich vom sprachwissenschaftlichen Standpunkte. Lemgo und Detmold 1856. 8°.) beigetragen, die Gobineaus Prätensionen „die wirkliche noch unerkannte Basis der Geschichte" aufgedeckt zu haben, auf das rechte Maſs zurückführte.

Wer, wie Referent, das Werk bis jetzt nur nach der Pottschen Besprechung kannte, wird sich nur schwer zu einer Durcharbeitung desselben entschlieſsen, dann aber auch neben allen seinen Mängeln manche geistreichen und interessanten

Digitized by the Hunt Institute for Botanical Documentation

thought. The scheme is comprehensive and well carried out in a brief compass.

Dr. Donath notes several of the prevalent errors in such investigations, as lack of discrimination between a given stage of culture and the psychic faculties of those who exhibit it, the mistake of assuming that mental power is correlated to cranial capacity, and especially the incorrectness of supposing a parallelism between the psychical evolution of a child and the race, as Bucke, Baldwin and others have too literally assumed. ('Die Anfange des Menschlichen Geistes,' pp. 47; F. Encke, Stuttgart, 1898.)

MUSHROOM-SHAPED IMAGES.

THEOBERT MALER and others have published illustrations of stone pillars with mushroom-shaped summits, occurring in Yucatan, Guatemala and elsewhere in Mayan territory.

In the *Globus* for May 28th Dr. Carl Sapper gives a picture of one in excellent preservation, about 30 centimeters in height, from San Salvador. On the shaft the face of a man (or monkey) is roughly outlined. Over it is the umbrella-like expansion.

These have generally been considered phallic emblems. Dr. Sapper doubts this, and in fact there is no evidence for it beyond a vague resemblance. He advances, however, no other explanation.

I would offer a suggestion. They resemble in shape mushrooms or toadstools, and why should not that be their intention? Why should it be? Because the word for mushroom in Maya (Tzental dialect) is *hu*, sufficiently near to the word for moon, *uh* or *yuh*, to recall it in sound, and the night growth of the fungus would strengthen the mythical alliance. They would thus be emblematic of the lunar and nocturnal divinity.

AMERICAN INDIAN GAMES.

THIS subject is treated in an interesting manner from ample material by Mr. Stewart Culin in the *Bulletin* of the Museum of the University of Pennsylvania, No. 3, Vol. I. He selects for analysis the game of dice or tossed staves, which he finds among sixty-one North American tribes. With much ingenuity he compares their implements and the decorations upon them, reaching the conclusion that they were all derived from some center in northern Mexico or near there; the thread of connection which leads him being the throwing-stick, or *atlatl*, of the Mexicans.

This *is* ingenious, but not wholly convincing. One may ask why the *atlatl* might not have drawn its local symbols and trappings from the game, rather than *vice versa*. The symbolism is surely more recent than the game; *atlatls* are found elsewhere without it; and there are simpler explanations of the elementary symbolism of the game in the northern tribes. In the study of development it is usually wiser to begin with the simple and proceed to the complex, rather than the reverse.

D. G. BRINTON.
UNIVERSITY OF PENNSYLVANIA.

SCIENTIFIC NOTES AND NEWS.

PREVENTIVE INOCULATION AGAINST PLAGUE.

M. HAFFKINE made recently an address on the above subject at Poona, in the course of which, according to the report in the London *Times*, he compared the invasion of India by the plague bacillus to the invasion of Australia by rabbits, to the invasion of certain soils in south Europe by the phylloxera, and to the invasion of South Africa by the organism of the rinderpest, and used these analogies to show that there are, in both the animal and vegetable worlds, diseases of which the cause, the morbid organism, can live and propagate outside the patient's body, can grow in the soil, in water, be carried by clothing, bedding, instruments, by any living or dead object. If it happens that the natural conditions of a country are favorable to the life and propagation of such an infectious organism, and as long

[See Watson in Bot. Mus. Leaf. 1963. P. 42]
Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

11 April 1970

NEW YORK CITY:
45, East End Avenue, 10028
TEL: (212) BU-8:2323

Professor B. Lowy
Department of Botany and Plant Pathology
Louisiana State University
Baton Rouge, Louisiana 70803

Dear Professor Lowy:

Sorry you did not get the grant.

Steve Borhegyi changed his mind about the 'aged woman' before a metate after he visited me in New York when I took him around to look at the Namuth artefact. Later, in a letter (of which I retain the carbon copy in my files) to Namuth ordering photos of the artefact from several positions, he says:

> Due to the fact that I am now completely positive that the figure of this mushroom stone represents a kneeling young female working on the metate, I would like to obtain from you .....

The letter is dated June 14, 1962. In the light of my Juxtlahuaca discoveries -- a doncella or virgen employed to grind the mushrooms on a metate -- I took another look at the Namuth stone the instant I got back to New York. The budding breasts are there. I felt convinced, but on his next visit I took Steve around to see what he thought. At a glance he was convinced as I was. I spelled out the evidence, as you perhaps know, in a paper published in several places that first appeared in the Harvard Botanical Museum Leaflet, Nov. 22, 1963, vol. 20 no. 6, pp. 182-188. Later in Amatlán de los Reyes, Vera Cruz, I recorded on tape the voice in the Nahuatl language of an aged female storyteller. Luis Reyes transcribed the story and translated it. In it the storyteller relates a conversation in which one person inquires whether the mushrooms would be taken whole or crushed on the metate. Thus we have evidence not only of the use of the metate in the Mixteca but also in the Nahua country, as well as the evidence of Steve's miniature mushroom stones and the Namuth artefact. Thus we have a pattern of converging evidence: from Guatemala (the Namuth artefact and the miniature stones), from Juxtlahuaca, from Amatlán de los Reyes, from widely separated areas and periods, all converging to reach the same conclusion. (I have not yet published the text of the woman of Amatlán de los Reyes but plan to do so as soon as I can return to Mexico.)

If Steve had died 10 years earlier than he did, and had left me alone with this evidence, I should have been prepared to interpret it in the same way. I do not give more weight to the utterance of a brilliant man than what it deserves in the light of the knowledge available to him at the time of his utterance. In this case, fortunately, we have Steve's own later utterance reversing his earlier guess.

Digitized by the Hunt Institute for Botanical Documentation

As for the use in the field of a colored photo vs. a specimen, every worker has his own methods. What may suit you need not suit me. A fresh specimen, yes, but a dried specimen, its color changed and the cap grooved with wrinkles, I would find less useful. I know the difficulty in comprehension of a native when faced with a photo, but nowadays the native are usually more sophisticated. Anyway, do as you prefer, of course.

As ever,

P.S.--Thanks for the paper on the mushroom stone. Sapper was the first to see that the mushroom stones looked like mushrooms, and he so called them, but the idea that they truly represented fungi never crossed his mind, did it? It was a term of convenience. In his writings I have never seen a mention of the sacred mushrooms; I dare say he had never heard of it. We are dealing with the last century, when the mushroom cult had been pretty well forgotten.

yes, certainly it must have occurred to him!

Digitized by the Hunt Institute for Botanical Documentation

April 7, 1970

Dear Mr. Wasson:

One of the questions I hope to explore further this summer in Guatemala and Mexico is the attitude of the Indian population regarding Amanita muscaria and other fungi. On previous occasions in Latin America, even when I was principally interested in taxonomic problems, I approached Indians (beginning in 1958 when I was on a collecting trip along the Ucayali river in Peru) with the intent of determining the uses they might have for various fungi.

I am familiar with A. muscaria in North, Central and South America and have photographed it and numerous other fungi during my travels. But rather than use a photograph to show my informants, I prefer to have a specimen at hand and to note their reactions on the spot. Of course if no specimen is available a photograph may serve if used with discretion, as you undoubtedly know. However, your print of A. muscaria showing 3 specimens with characteristic warts and thick stipe, growing in situ, and 3 other thin-stalked "uprooted" specimens one of which has a wartless cap facing the observer, may to the uninitiated, introduce a confusing element.

You may be quite right about the Namuth stone. I have seen only Borhegyi's photograph, but can his interpretation that it "represents an aged woman kneeling before a metate-like object" be summarily dismissed without further supporting evidence ?

I have received notification of the refusal of my grant request. My plans remain unchanged. I want to thank you again for writing in my behalf.

With best regards,

Sincerely yours,

B. Lowy

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

31 March 1970

NEW YORK CITY:
45, East End Avenue, 10028
TEL: (212) BU-8:2323

Professor B. Lowy
Department of Botany and Plant Pathology
Louisiana State University
Baton Rouge, Louisiana 70803

Dear Professor Lowy:

I shall be in Los Angeles, lecturing at Peter Furst's Pan-American Center of UCLA, throughout the first part of June.

I shall therefore write what I had hoped to discuss with you.

I

I am morally convinced that the fly-agaric (Amanita muscaria) is not used as an hallucinogen by the Middle American Indians, but there always lingers a doubt. I send you a photo of these mushrooms for you to take with you and I suggest you display it to the various Indians that you visit, and ask them whether they know that mushroom. Of course it grows in Middle America and the red (or European) variety as well as the yellow. Andrija Puharich published a statement that he has found it being used by the Chatino Indians (around Juquila, Oaxaca), but we had not observed this during our earlier visit to the Chatino country, nor did my guide ('Chico' Francisco Ortega, a Zapotec Indian of Tehauantepec) when he went later to the Chatino country at my bidding for the express purpose of verifying Puharich's statement, armed with a color photo. I have no confidence in Puharich, but do not wish to let that influence me. I recognize that villages separated by only a few miles may have quite different customs, coming down from pre-history.

II

My second request is that you look for concrete confirmation, of any kind, that the 'mushroom stones' were actually mushroom stones used in the cult of a sacred mushroom. My wife and I were the first to suggest this, as Carl Sapper in 1898 had so called them for convenience, not that he believed they represented mushrooms in the minds of the stone carvers. The shape of the pileus in the mushroom stones does not resemble any psilocybe pileus that I know of, and Stropharia cubensis, which it might be said to resemble, has an annulus so conspicuous that I should think any stone carving would have to include it. Furthermore, there are grounds for thinking Stropharia cubensis was introduced from the Far East post-Columbus.

Digitized by the Hunt Institute for Botanical Documentation

I think we have proof, and the proof is of two kinds.

(1) My terra cotta artifact, from the Remolacha culture (c.300 A.D.), in my collection. It represents apparently a curandera in full pronouncement, with her left hand raised as though expostulating and her right hand squarely placed on a mushroom.

(2) The evidence that Steve Borhegyi and I adduced linking the mushroom stones with contemporary anthropological practice. I have written this up in my paper in the Weitlaner Festschrift. In the Mixtec area Robert Ravicz and I found that the mushrooms are not eaten directly as mushrooms, but are first crushed on a metate by a young girl (una doncella, una virgen), and then the pulp is drunk. This was confirmed in Vera Cruz, at Amatlán de los Ríos, where an old woman, a story teller, in narrating a story, inquired whether the mushrooms that were under discussion were to be eaten whole or crushed, as both methods were in use there. We took this down on tape in Nahuatl, had the tape typed out, then translated. (This Nahuatl evidence has not yet been published.) This fits in with miniature metates and mushroom stones described by Borhegyi in American Antiquity, Vol. 26, No. 4, April 1961; and led us to re-examine the Namuth artifact (Fig. 3, op. cit.) and to discover that it represents a young girl before a metate. This mushroom stone belongs to the Late Preclassic of the Guatemala Highlands. I think the miniature stones and this Namuth artifact, taken together, and the anthropological evidence that we have developed from the Mixtec and the Nahuatl areas, taken together, bridge the gap between the stones and the present day usage. But it would be good to have additional evidence, if you can develop it.

Would you send me please a copy of your paper on mushroom stones.

Incidentally, until my wife and I propounded the idea in 1957 and subsequently, no one had ever associated the mushroom stones with the mushroom rite first described by 16th century Spaniards in the Nahuatl area and rediscovered in the 1930's by Blas Pablo Reko, Dick Schultes, Roberto Weitlaner, and in the 1950's by ourselves. We learned of the existence of the archeological 'mushroom stones' and of the anthropological evidence at the same moment, and immediately saw an association between them.

Sincerely,

R. Gordon Wasson

See Borhegyi in Amer. Antiquity 1961. P. 503. "An effigy mushroom stone in the Namuth Collection in New York ..... represents an aged woman kneeling before a metate-like object."

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

9 March 1970

Professor Bernard Lowy
Louisiana State University
Department of Botany and Plant Pathology
Baton Rouge, Louisiana

Dear Professor Lowy:

Are you going to be in these parts in the foreseeable future? I should enjoy having a talk with you before you go to Mexico or Guatemala the next time. Could you come to Danbury and spend an evening with me? I can put you up for the night.

By the way, you sent to Dick Schultes a xerox of an article by Guzmán Huerta published by the Sociedad Botánica. Could you send me a copy, too?

As ever,

RgW

[NEW YORK CITY: 45, East End Avenue, 10028 – TEL.: (212) BU-8:2323]

Digitized by the Hunt Institute for Botanical Documentation

March 23, 1970

Dear Mr. Wasson:

I very much regret but cannot account for the delay in the receipt of your letter which is postmarked March 9. It was delivered today !

I should be delighted to see you but do not know precisely when I shall be able to avail myself of your hospitality. I expect to be in New York City early in June, perhaps for only a day or two, just long enough to attend the commencement ceremonies at Columbia University where my wife will receive her Ph.D. degree - after a delay of many years. I have not yet been informed of the appointed date, but should it turn out to be after the first week in June, I shall reluctantly have to change my plans and go directly down to Guatemala at the earliest opportunity. In the event, however, that I find myself in New York during the first week of June, would it not be possible for you to join me there ? We could surely spend a few hours talking together and while this would be neither as liesurely nor attractive an arrangement as the one you have so graciously suggested, nevertheless we might both find it agreeable, under the circumstances. Please let me know what you think of this.

Enclosed is a xerox copy of Guzman's paper, which, incidentally, I did not send to Dick Schultes. I sent him a copy of my short paper on mushroom stones (in Bol. Soc. Mex. Micol. 1968.) which he told me he had fowarded to you.

With kindest regards,

Cordially,

Digitized by the Hunt Institute for Botanical Documentation

19 February, 1970

Dr. Harlow Shapley
Sigma XI National Headquarters
155 Whitney Avenue
New Haven, Conn. 06510

Att.: Committee on Grants-in-Aid of Research

Dear Sirs:

I bespeak your support for the research project dated January 29, 1970 submitted to you by Professor Bernard Lowy who holds a chair in botany at Louisiana State University, Baton Rouge.

The value that you place on Professor Lowy's program will depend on the value you give to my own work in the same field, for Professor Lowy wishes to continue in precisely the same field that my wife and I pioneered in -- the role of the fungal hallucinogens among the primitive Indians of Middle America and the study of the 'mushroom stones' in the archeological digs there. In this area there were three precursors in modern times, Blas Pablo Reko, Robert J. Weitlaner, and Richard Evans Schultes. My wife and I immensely expanded their work and published our findings in books and many papers, working later with the famous French mycologist Roger Heim, at that time Director of the Muséum National d'Histoire Naturelle. Much remains to be done. My health and my years do not permit me to do further field work. Gaining access to as many shamanic ceremonies as possible, tape-recording the voices, talking with the shamans and other participants and learning their attitude to the mushrooms, linguistic analysis of the names of the mushrooms and everything about them,--all this offers opportunities for research of great value in the study of the origins of the religious approach to life; or, perhaps more accurately, of the origins and role of the ecstatic approach to religion. This may have an important bearing on the /way studies now under/ concerned with the human psyche.

Professor Lowy approaches his proposed task with boundless enthusiasm. He seems to possess the qualifications that are needed in this field of research. As a botanist he has specialized in the area of mycology -- where the techniques and problems are quite different from the rest of botany. He knows Spanish well and has a linguistic aptitude that will stand in good stead among the monolingual Indians of Middle America. He knows archeology, and can pursue the study of the 'mushroom stones' of Middle America with hope of making important discoveries. Above all, his attitude to the Indians suggests to me that he possesses the gift of empathy: he stands some chance of gaining their confidence and access to their cherished secrets.

Professor Lowy seems to me a good candidate to undertake research in this field. I earnestly hope that your budget will permit you to support his endeavors.

Sincerely yours,

R Gordon Wasson

Digitized by the Hunt Institute for Botanical Documentation

19 February, 1970

Dr. Harlow Shapley
Sigma XI National Headquarters
155 Whitney Avenue
New Haven, Conn. 06510

Att.: Committee on Grants-in-Aid of Research

Dear Sirs:

I bespeak your support for the research project dated January 29, 1970 submitted to you by Professor Bernard Lowy who holds a chair in botany at Louisiana State University, Baton Rouge.

The value that you place on Professor Lowy's program will depend on the value you give to my own work in the same field, for Professor Lowy wishes to continue in precisely the same field that my wife and I pioneered in -- the role of the fungal hallucinogens among the primitive Indians of Middle America and the study of the 'mushroom stones' in the archeological digs there. In this area there were three precursors in modern times, Blas Pablo Reko, Robert J. Weitlaner, and Richard Evans Schultes. My wife and I immensely expanded their work and published our findings in books and many papers, working later with the famous French mycologist Roger Heim, at that time Director of the Muséum National d'Histoire Naturelle. Much remains to be done. My health and my years do not permit me to do further field work. Gaining access to as many shamanic ceremonies as possible, tape-recording the voices, talking with the shamans and other participants and learning their attitude to the mushrooms, linguistic analysis of the names of the mushrooms and everything about them,--all this offers opportunities for research of great value in the study of the origins of the religious approach to life; or, perhaps more accurately, of the origins and role of the ecstatic approach to religion. This may have an important bearing on the /way studies now under/ concerned with the human psyche.

Professor Lowy approaches his proposed task with boundless enthusiasm. He seems to possess the qualifications that are needed in this field of research. As a botanist he has specialized in the area of mycology -- where the techniques and problems are quite different from the rest of botany. He knows Spanish well and has a linguistic aptitude that will stand in good stead among the monolingual Indians of Middle America. He knows archeology, and can pursue the study of the 'mushroom stones' of Middle America with hope of making important discoveries. Above all, his attitude to the Indians suggests to me that he possesses the gift of empathy: he stands some chance of gaining their confidence and access to their cherished secrets.

Professor Lowy seems to me a good candidate to undertake research in this field. I earnestly hope that your budget will permit you to support his endeavors.

Sincerely yours,

RGW

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

February 11, 1970

Professor Bernard Lowy
Department of Botany and Plant Pathology
Louisiana State University
Baton Rouge, Louisiana, 70803

Dear Professor Lowy:

I am preparing my answer to your request. Do I send it in directly or do I send it to you to send in? Please let me know as soon as possible.

Sincerely yours,

R. G. W.

I send the draft to you, for criticisms.

[NEW YORK CITY: 45, East End Avenue, 10028 – TEL.: (212) BU-8:2323]

Digitized by the Hunt Institute for Botanical Documentation

September 17, 1969

Dear Mr. Wasson,

During my reading of your latest book "Soma ...", a small linguistic point concerning the interpretation of a Chinese vernacular name, came to my attention. My knowledge of Chinese is extremely limited (I entertained myself with some months of study during my Army service about 25 years ago) but I believe there is at least a moot question involved in a sentence that appears on page 82. The sentence reads: "The early commentators gloss this as meaning an edible mushroom growing on trees, probably what is known in recent centuries as the tree-ear, mu erh 木耳, familiar throughout the temperate zone to those versed in mushroom lore as the oyster mushroom, Pleurotus ostreatus (Fr.) Quel."

The mu erh (might not "wood ear" be a more appropriate translation than "tree-ear"?) has been known to me for many years as the common name (Peking dialect or gwo yü) of edible species of Auricularia, including A. fuscosuccinea and A. polytricha which are widely used in China and elsewhere in the Orient and exported today chiefly from Hong Kong to various parts of the western world. When I wrote my monograph of Auricularia in 1952 I was aware of this Chinese vernacular name but at the time thought it too abstruse a point to mention. In a work on Neotropical Tremellales now in press, I include it. To the best of my knowledge, mu erh is a designation not applied to a gilled fungus (Agaricaceae sensu stricto) and this would include Pleurotus ostreatus. I have recently consulted various Chinese students as well as a professor here, all of whom agree that mu erh refers to a non-gilled fungus and more specifically to Auricularia spp. I think this might also be confirmed in any Chinese restaurant where mu erh is commonly served.

Knowing of your interest in even the smallest matters that touch mushroom lore, your opinion on this question would be of the greatest interest to me even though the consequences of the interpretation may be of something less than world-shaking importance.

With kindest regards,

Sincerely yours,

Bernard Lowy

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

August 25, 1969

NEW YORK CITY:
45, East End Avenue, 10028
TEL: (212) BU-8:2323

Professor B. Lowy
Professor of Botany
Louisiana State University
Baton Rouge, La. 70803

Dear Professor Lowy:

Many thanks for your excellently written review. A great many are scheduled to appear over the next year in the learned journals and some in the mundane press.

I have heard more about what I allegedly owe María Sabina. I have written down to Mexico City to ask advice about how I can put an end to the slanders against poor Herlinda without putting María Sabina out of countenance. I will certainly never go back there again, as long as she is alive. She is paranoid.

I am not going to Seattle.

Sincerely,

R. Gordon Wasson

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

July 28, 1969

NEW YORK CITY:
45, East End Avenue, 10028
TEL: (212) BU-8:2323

Professor B. Lowy
Professor of Botany
Louisiana State University
Baton Rouge, La. 70803

Dear Professor Lowy:

I was pleased to hear from you. The story that you tell me is unbelievable. Through third parties I had heard something of the kind, but not directly. I never promised María Sabina anything. She never asked me for a stipend. We never mentioned a stipend. I paid her what she asked on the spot. Her prices rose from 15 pesos to hundreds of pesos for a performance, and she never abated her charges to me although it was I who made her. She is a fine woman whom I respect highly. It seems that now she is touched with paranoia. Herlinda Martínez Cid I always found honorable in every way, especially in money matters. She has never mentioned María Sabina as in need. I had heard María Sabina has been in jail a number of times, and also taken to Oaxaca and interrogated. She had not heard of marijuana when I was in touch with her. I saw her for the last time in 1962.

I look forward to reading the review in the July-August issue of Mycologia which will come out sometime in the fall, I suppose. What copy did you use for the review? One that you or your university bought or one that Mycologia sent you? With kind regards,

Sincerely,

R. Gordon Wasson

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

February 5, 1969

NEW YORK CITY:
45, East End Avenue, 10028
TEL: (212) BU-8:2323

Professor Bernard Lowy
Louisiana State University
Baton Rouge, Louisiana

Dear Professor Lowy:

Ivan Sechanov haswritten me that for his new edition he needs desperately our Mushrooms Russia & History and asks me how he can obtain it. He says you have written him about it. In principle I should like to give him a copy but the book is long out of print and a projected new edition, amplified and corrected, will come out too late for him. The book sells in the New York second hand market at $900.

Does Louisiana State Univ. have a copy of it? The chapters of chief interest to Prof. Sechanov are the Preface (six pages), Chapters I and II (36 pages), and The Anatomy of Mycophobia, which is Section 18 of Chapter V (I think 16 pages). If you have a copy, I who own the copyright am glad to give you permission to make Xerox copies of the pages in question to send to him. This promotes good cultural relations with Bulgaria and I think is a small step in the right direction. The illustrations do not come out well in reproduction and I should omit them.

I am not at all well and am far out in the country in the midst of snow, ice, and icy winds. I do not have access to a copying machine.

Do write and tell me what you think of my idea.

Sincerely yours,

R. Gordon Wasson

Digitized by the Hunt Institute for Botanical Documentation

February 10, 1969

Mr. R. Gordon Wasson
42, Long Ridge Road
Danbury, Conn. 06810

Dear Mr. Wasson:

When I wrote to Dr. Sechanov (see enclosed copy of my letter) in answer to his inquiry (copy enclosed) concerning the "so called mycophobia among the people of the United States," to which I had referred in an earlier communication, I recommended that he consult "Mushrooms, Russia and History" thinking that the work might be available in some Bulgarian library. Apparently it was not. Luckily, my request that our library purchase the volumes was honored in 1958 and my students and I have been consulting it ever since for our edification and enjoyment. (We have No. 336 of the 512 copies published.)

There will be no problem in making xerox copies of some pertinent parts, as you suggest. I would gladly have sent these to Dr. Sechanov earlier had he informed me that your book was not accessible to him. In any case, he shall have what he requires soon.

With best wishes for a speedy recovery,

Sincerely yours,

B. Lowy, Professor
Dept. of Botany

ljl

Digitized by the Hunt Institute for Botanical Documentation

January 19, 1970

Dear Mr. Wasson:

Last summer when I was in Huautla with Dr. Herrera and others, I was impressed with the need for additional data regarding the contemporary hallucinogenic mushroom cult. In view of the rapid changes that have taken place there and elsewhere in Mexico during the past few years, largely as a result of the intrusion of certain undesireable elements, it would seem proper to study and evaluate more closely the meaning of those changes in terms of their influence on current folkways. This summer I hope to return to Mexico to gather further information on this and related questions not only in Huautla and environs but in other areas as well. The geographical range of Psilocybe spp. is also of considerable interest as shown recently by Guzman. In addition, I am deeply interested in the mushroom stones, some aspects of which Dr. Borhegyi has elucidated in such scholarly fashion. So I hope to return to Guatemala, particularly to localities in El Quiche, Alta and Baja Verapaz to investigate certain leads that I did not have time to pursue during a previous visit.

My reason for outlining my summer plans to you is a selfish one. I expect to apply to Sigma Xi for a grant-in-aid to enable me to travel and would like to solicit your support for this project. If you feel that you wish to assist me in this matter I shall be glad to send you such additional information as you may need. Meanwhile I shall delay sending my application to the Society until I hear from you.

With best regards,

Sincerely yours,

Bernard Lowy

Permanized Onion Skin
100% COTTON FIBER

Digitized by the Hunt Institute for Botanical Documentation

R. GORDON WASSON
42, Long Ridge Road · DANBURY, Conn., 06810
TEL.: (203) 748:0123

January 24, 1970

NEW YORK CITY:
45, East End Avenue, 10028
TEL: (212) BU-8:2323

Professor Bernard Lowy
Department of Botany and Plant Pathology
Louisiana State University
Baton Rouge, Louisiana 70803

Dear Professor Lowy:

Yesterday I received your letter of the 19th. I am delighted to help you in any way I can. Have you asked Schultes? Will Sigma Xi approach me for my opinion?

What paper of Guzmán are you referring to? The one that appeared in Ciencia, XXVI (1): pp. 25-28?

Are you particularly interested in what the anthropologists like to call the 'acculturation' process? Will not someone visit remote regions where the mushroom cult may still be carried on untouched by the 'undesirable elements'?

I have prepared for publication the complete text (recorded on tape) of a session held in July 1958 where my photographer and I were the only strangers present and where there were three curanderos. The purpose was to say why a young man, who of course was present, was gravely ill and give the prognosis. María Sabina was the leading curandera. She had not at that time been in contact with 'undesirable elements.'

I am trying to raise the money needed for publication of the extremely complicated package,--the tapes, the transcription in Mazatec, the translation into Spanish and English, Weitlaner's anthropological notes, a chapter on the linguistics involved, a chapter of musicology, an introductory chapter giving the setting, etc.

I am leaving for some weeks in the West Indies and will be inaccessible during my absence.

Sincerely yours,

R Gordon Wasson

Digitized by the Hunt Institute for Botanical Documentation

January 29, 1970

Dear Mr. Wasson:

Many thanks for your kind reply to my inquiry. I have written to Dr. Schultes and he has assured me that he will also support my application for a grant-in-aid.

Sigma Xi instructs the prospective grantee to communicate with three specialists who are willing to lend their support to the project. The Committee aske that letters of recommendation include information on: 1) importance of the proposed investigation; 2) qualification of the investigator.

I believe the best way to answer some questions you may have, is to send you a copy of my grant request which I have therefore enclosed. I would like to have my application considered by the Committee that meets "on or about the first of March", so that if possible, your letter should be in their hands by that time.

I was shocked to learn that Dr. Stephan Borhegyi died in an automobile accidentlast September. An Assistant Curator of the Milwaukee Public Museum informed me of this in response to a letter I had sent to Dr. Borhegyi asking for his support of my summer project. Also enclosed is a copy of a letter I received from Him in 1965 and my reply which is still pertinent to some of the questions I hope to pursue.

Sincerely yours,

Bernard Lowy

P.S.- Yes, the paper of Guzman to which I referred is the one you have noted. I expect to consult with Drs. Guzman and Herrera again this summer.

Digitized by the Hunt Institute for Botanical Documentation

March 16, 1965

Mr. R. Gordon Wasson
Botanical Museum
Harvard University
Cambridge, Mass.

Dear Mr. Wasson:

For some years, in connection with mycological work in the American tropics, I have had some interest in ethnomycology, inspired mostly by the publication of your two volumes, "Mushrooms, Russia and History".

Since 1958, wherever I have traveled in Latin America, I have made inquiries into the mushroom habits of the people. Earlier this year I sent to Dr. Stephan Borhegyi a photo of a mushroom stone which I acquired in Guatemala in the summer of 1963. He has informed me that he has no previous record of this type B tripod stone from Mixco Viejo, a print of which is here enclosed. Knowing of your deep interest in these matters, I have taked this liberty of sending you the accompanying data which fills a minute gap in the archeological record.

Two recent reprints of mine on Guatemalan fungi are also enclosed. If you still have reprints of your 1962 paper entitled "The hallucinogenic mushrooms of Mexico and Psilocybin: a bibliography," (Botanical Museum Leaflets 20(2): 25-73), I would much appreciate receiving one.

Sincerely yours,

Bernard Lowy
Professor of Botany

amk

Digitized by the Hunt Institute for Botanical Documentation

Reichel-Dolmatoff, G. 1971. Amazonian Cosmos: the sexual and religious symbolism of the Tukano Indians. illus. Univ. Chicago Press. $12.50

Sanford, James H. 1972. Tassels, lanterns, mushrooms. Econ. Bot. 26: 174-181. (Dept. of Religion. Univ. N. Carolina, Chapel Hill, N.C.)

Namuth Mushroom Stone
Early Preclassic
Bot. Mus. Leafl. 20. fig. XXXIII.
Wasson - 1962 Ibid. 20. 77-84

QK1
H25

Embodies semen?

Salvia divinorum

Centella — eléctrica. Dícese vulgarmente de la poca intensidad. 2. Chispa o partícula de fuego que se desprende o salta del pedernal herido con el eslabón o cosa semejante.

Relampago → Resplandor vivísimo e instantáneo producido en las nubes por una descarga eléctrica.

Rayo — 3. Chispa eléctrica de gran intensidad producida por descarga entre dos nubes o entre una nube y la tierra.

Thunderbolt - villáncsapás — lightning - villám

Digitized by the Harvard University Botanical Department

Registration

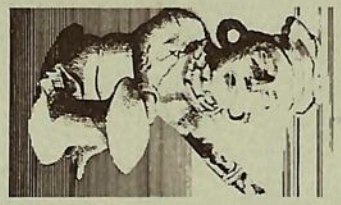
The registration fee is $250 (or $400 for couples, who must share accommodations), which includes tuition, lodging for three nights, and eight delicious and healthful meals. Accommodations vary from luxurious rooms with fireplaces, to plain private rooms and some dormitory beds. We will provide linen and towels. We will give the first applicants the best accommodations. Space is limited, hence it would be advisable to register early. Many disappointed applicants were turned away last year. Registrants will receive full instructions and directions to conference site. We regret that we are unable to refund money for cancelled reservations. To reserve your place, send your check or money order to:

CONFERENCE
P.O. Box 853
Olympia, Wa.
98507

This continuing medical education activity is acceptable for credit hours in actual attendance for Category-II as certified by the Director of the Health Services Division of the Washington State Department of Social and Health Services and the Washington State Medical Association, for the CME requirements of the Washington State Board of Medical Examiners for renewal of license and for the Physician's Recognition Award of the American Medical Association.

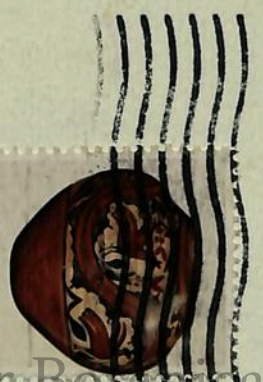
Because much of the material presented will be novel and hence not copyrighted, faculty members have requested that no taping of the talks be allowed.

CONFERENCE
P.O. Box 853
Olympia, WA
98507

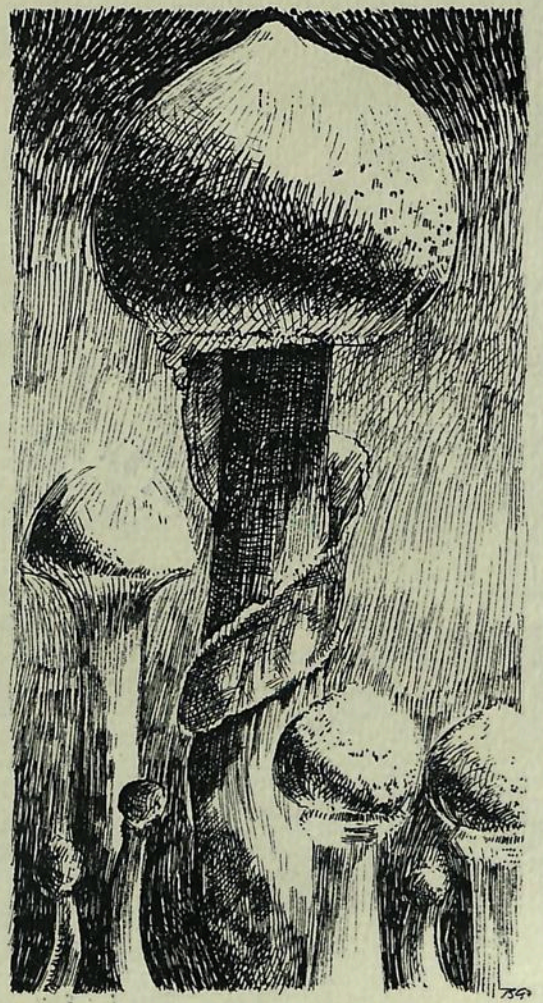


Dr. Bernard Lowy
Botany & Plant Pathology
Louisiana State University
Baton Rouge, La. 70803

OLYMPIA, WA
PM
9 MAY
1977
98



The Second International Conference on Hallucinogenic Mushrooms



October 27-30, 1977

Digitized by the Hunt Institute for Botanical Documentation

A Multi-Disciplinary Conference

Owing to considerable interest generated by last year's meeting, we have organized a larger, more comprehensive conference for 1977. Participants will be able to meet and confer with the experts, the men who discovered hallucinogenic mushrooms and rendered them available to the world. A comprehensive curriculum has been prepared, covering all aspects of hallucinogenic fungi: taxonomy, distribution, identification, cultivation, chemistry, toxicology, history, ritual use in Mexico and Siberia, and modern recreational use. Furthermore, the wider field of plant hallucinogens will be surveyed, and the overall phenomenon of recreational drug use discussed. Courses, with demonstrations, will be presented on microscopic taxonomy and cultivation of hallucinogenic mushrooms.

While this conference will be oriented toward physicians, the material will be presented so as to be exciting and comprehensible to the amateur. Anyone interested in mushrooms and/or psychoactive drugs will find this conference both enjoyable and informative.

The conference will be held at a spacious and comfortable resort facility in a pristine setting on the Olympic Peninsula, in the State of Washington, home of 10 species of hallucinogenic mushrooms. We will convene on the evening of Thursday, October 27, and adjourn at noon on Sunday, October 30. We will provide comfortable accommodations as well as delicious and healthful meals. Recreational facilities are available, including a gym, theater and tennis courts. For entertainment we will present a festival of science-fiction films involving extraterrestrial magic mushrooms. An enjoyable time for all is assured.

Faculty

Mr. R. Gordon Wasson
Honorary Research Associate
Botanical Museum of Harvard University

Dr. Albert Hofmann
Retired Head of Pharmaceutical-Chemical
Research Laboratories, Sandoz Ltd.

Dr. Richard Evans Schultes
Professor of Biology,
Director and Curator of Economic Botany
Botanical Museum of Harvard University

Dr. William Scott Chilton
Professor of Chemistry
University of Washington

Dr. Gastón Guzmán
Professor of Mycology
National Polytechnic Institute of Mexico

Dr. Carl A. T. Ruck
Professor of Greek
Boston University

Dr. Norman Zinberg, M.D.
Professor of Psychiatry
Medical College of Harvard University

Mr. Jeremy Bigwood
Photographer and Ethnobotanist
Chinchecastenango, Guatemala

Dr. David Harnden, M.D.
Emergency Treatment Specialist
Presbyterian Hospital of San Francisco

Mr. Dale Thomas Leslie
Amateur Mycologist
Los Gatos, California

Mr. Jonathan Ott
Freelance Writer and Chemist
Olympia, Washington

Mr. David B. Repke
Research Chemist
Syntex Pharmaceuticals, Inc.

Dr. Andrew Weil, M.D.
Research Associate in Ethnopharmacology
Botanical Museum of Harvard University

Curriculum

Thursday evening 8:00-10:00
Introduction & Orientation

1. Dr. Schultes will survey use of hallucinogenic plants by primitive societies.
2. Dr. Zinberg will discuss sociology of recreational drug use.

Friday morning 9:00-12:00
Psychoactive Amanita Species

1. Mr. Wasson will discuss Soma, the divine mushroom of Ancient India.
2. Dr. Chilton will survey chemistry and toxicology of psychoactive *Amanita* species.
3. Mr. Ott will examine ethnopharmacology of *Amanita muscaria* and *A. pantherina*.

Friday afternoon 2:00-6:00
Psilocybian Mushrooms

1. Dr. Schultes will trace the early study of the Mexican sacred mushroom cult.
2. Mr. Wasson will discuss Mexican shamanism and the mushroom cult.
3. Dr. Hofmann will discuss his isolation and identification of psilocybin and psilocin.
4. Mr. Repke will survey chemo-taxonomy of psilocybian mushrooms.

Friday evening 8:00-10:00
Course Sessions

1. Dr. Guzmán and Mr. Leslie will teach a short course on microscopic taxonomy of hallucinogenic mushrooms. (Participants must bring microscopes.)
2. Mr. Leslie and Mr. Bigwood will teach a short demonstration course on cultivation of hallucinogenic mushrooms.

Saturday morning 9:00-12:00
Toxicology of Poisonous Mushrooms

1. Dr. Hofmann will discuss history and chemistry of the ergot fungus and his discovery of LSD.
2. Dr. Chilton will survey chemistry of toxic mushrooms.
3. Dr. Harnden will discuss diagnosis and therapy of mycetism cases.

Saturday afternoon 2:00-6:00
Medical Perspective

1. Dr. Weil and Dr. Harnden will discuss management of adverse reactions to hallucinogenic drugs.
2. Dr. Zinberg will discuss medical perspectives on recreational drug use.
3. Dr. Weil will discuss ethnopharmacology of use of stigmatized drugs.

Saturday evening 8:00-10:00
Course Sessions

Continuation and completion of both courses.

Sunday morning 9:00-11:00
Panel Discussion

All faculty members will participate in a panel discussion, and field questions from the audience.

Digitized by the Hunt Institute for Botanical Documentation

3:30 **12. Ornamental Plant Utilization in Basic Research**
James A. McArthur, Department of Biological Sciences, Florida International University, Miami, Florida

3:50 **13. History and Use of Milkweed** *(Asclepias syriaca L.)*
Erika E. Gaertner, Department of Biology, Concordia University, Montreal, Canada

4:10 Visit to the Morton Collectanea, of the University of Miami, an information center in Economic Botany.

6:00 Cocktail hour, Holiday Inn, Buccaneer Lounge

7:00 **Annual Banquet and Business Meeting**

Presidential Address:
REFLECTIONS OF A CHEMIST WHO BECAME A PHARMACOGNOSIST
Dr. Norman J. Doorenbos,
College of Pharmacy
University of Mississippi

Tuesday, June 14

9:00 To FAIRCHILD TROPICAL GARDEN, 10901 Old Cutler Road, via Chartered Bus.

CONTRIBUTED PAPERS

Session III
Presiding – *Dr. W.H. Tallent*

9:30 Welcome and Introduction to the Fairchild Tropical Garden.
Dr. John W. Popenoe, Director

9:45 **14. Lethal Yellowing of Coconut and Other Affected Palms**
Dr. John W. Popenoe

10:15 Coffee Break

10:30 **15. The Cycad Collection at the Fairchild Tropical Garden**
James E. Eckenwalder, Taxonomist, Fairchild Tropical Garden

11:00 **16. Plant-Bird Relationships in South Florida: An Overview.**
Randy Breitwisch, Department of Biology, University of Miami, Coral Gables, Florida

11:20 **17. Some Folk-Medicine Plants in Central American Markets**
Julia F. Morton, Director,
Morton Collectanea, University of Miami
Coral Gables, Florida

12:00 Box Lunch

1:30 Tour of Fairchild Tropical Garden

4:00 Return to Holiday Inn via bus.

Wednesday, June 15

8:30 Leave Holiday Inn via Chartered Bus.

9:00 Tour of USDA Subtropical Horticultural Research Unit, 13601 Old Cutler Road, Miami.

12:00 Box lunch picnic with tropical fruits.

1:15 Leave via bus for visit to the ORCHID JUNGLE, 26715 S.W. 157 Avenue, Homestead, Florida, as guests of proprietor, Mr. Thomas A. Fennell, Jr. View of meristem laboratory directed by Thomas A. Fennell, III.

3:00 Tour of University of Florida, IFAS, Agricultural Research and Education Ctr., 18905 S.W. 280 St., Homestead, Florida (more tropical fruits).

4:30 Return to Holiday Inn.

COVER ARTWORK

Dr. Frank D. Venning

POISON PLANT EXHIBIT

Courtesy: SHAW NURSERY AND LANDSCAPE CO.
8510 S. W. 57th Avenue
South Miami, Florida

Hura crepitans Linn.
SAND-BOX TREE
Euphorbiaceae

Eighteenth Annual Meeting of

The Society for Economic Botany

JUNE 11 – 15, 1977

Co-hosted by
The Morton Collectanea of the University of Miami
and the
Fairchild Tropical Garden,
Coral Gables, Florida USA

Digitized by the Hunt Institute for Botanical Documentation

PROGRAM

Sunday, June 12, 1977

Otto Richter Library, Brockway L. H.

8:30 a.m. Registration

9:00 Opening Remarks

9:05 Welcome

CONTRIBUTED PAPERS

Session I
Presiding — *Dr. Charles Heiser*

9:40 **1. The Development of Plant Galls for Plywood Production**
William Lazaruk, Prof. of Botany
Fairfield University

10:00 **2. Glucosinolates and Derived Products in Cruciferous Seed Meals and Vegetables**
M.E. Daxenbichler, Natural Toxicants Research
USDA Northern Regional Research Center,
Peoria, Illinois

10:20 **3. Another Look at the Origin of the Sweet Potato**
Daniel F. Austin, Florida Atlantic University
Boca Raton, Florida

10:40 Coffee Break

11:00 **4. A Field Guide (And Cookbook) to the Edible Wild Plants of Central Texas**
Debbie J. Reid, Dept. of Biology,
Texas A&M University, College Sta., Texas

11:20 **5. Agave Beverages**
Abraham D. Krikorian, Dept. of Biology,
State Univ. of New York, Stony Brook, N.Y.

11:40 **6. Methylazoxymethanol Content of Cycad Plant Parts and Food Preparations**
Howard J. Teas, Biology Dept., and
Julia F. Morton, Morton Collectanea, University of Miami, Coral Gables, Florida

12:00 Lunch at Student Union

SYMPOSIUM — Part I
Presiding — *Dr. A. Douglas Kinghorn*

1:30 **An Overview of the Problem of Toxic Plants**
John M. Kingsbury, New York State Veterinary College, Cornell University, Ithaca, N.Y.

2:15 **Mushroom Toxins**
G.A. Hatfield, College of Pharmacy, University of Michigan, Ann Arbor, Michigan

3:00 **Toxins and Teratogens of the Lily and Nightshade Families**
R.F. Keeler, USDA, Agricultural Research Service, Poisonous Plant Research Lab., Logan, Utah

3:45 **Pokeweed and Other Mitogens**
Alexander McPherson, Dept. of Biological Chemistry. The Milton S. Hershey Medical Center, Pennsylvania State University, Hershey, Pennsylvania

6:00 **Council Members dinner and meeting**

Monday, June 13

SYMPOSIUM — Part II
Presiding — *Dr. Ara Der Marderosian*

9:00 **Toxic Household Plants**
Ara H. Der Marderosian, Dept. of Biological Sciences, Philadelphia College of Pharmacy and Science, Philadelphia, Pa.

9:45 **Cocarcinogenic Irritant Euphorbiaceae**
A. Douglas Kinghorn, Dept. of Pharmacognosy and Pharmacology, University of Illinois at the Medical Center, Chicago, Illinois

10:30 **Poisonous Anacardiaceae**
H. Baer, Bureau of Biologics, Division of Bacterial Products, HEW, Food & Drug Administration, Bethesda, Maryland

11:15 **Allergenic Compositae**
G.H.N. Towers, Department of Botany, and J.H. Mitchell, Division of Dermatology, University of British Columbia, Vancouver, Canada; and E. Rodriguez, Department of Development and Cell Biology, University of California, Irvine, California

12:00 Lunch at Student Union

CONTRIBUTED PAPERS

Session II
Presiding — *Dr. Dwayne Ogzewalla*

1:30 **7. A New Psilocybin Containing Species of Copelandia**
R. Arnold Weeks, Department of Pharmacognosy and Pharmacology, College of Pharmacy, University of Illinois at the Medical Center, Chicago; Lee Hearn, Department of Pharmacology, University of Miami School of Medicine, Miami; Rolf Singer, Instituto Nacional de Pesquisas, de Amazonia, Manaus, Amazonas, Brazil.

1:50 **8. Saponins and Triterpenes from the Button Cactus, *Epithelantha micromeris***
Leslie G. West and Jerry L. McLaughlin*,
Department of Medicinal Chemistry and Pharmacognosy, School of Pharmacy and Pharmacal Sciences, Purdue University, West Lafayette, Indiana

2:10 **9. Constituents of *Eremanthus Elaeagnus***
Schultz-Bip. Robert F. Raffauf, Philip W. LeQuesne, Mary D. Menachery and Thomas F. Brennan, Departments of Chemistry and Medicinal Chemistry and Pharmacology, Northeastern University, Boston, Massachusetts

2:30 **10. Ashes — Aid to Man's Advancement**
Ava Bush, Dietary Consultant,
Grapeland, Texas

2:50 **11. Teaching Economic Botany in Texas Through the Market Places and Industrial Plants**
John J. Sperry, Texas A&M University,
College Station, Texas

3:10 Coffee Break

Digitized by the Hunt Institute for Botanical Documentation

Registration

Registration is limited to 130, and is on a first-come-first-served basis. The registration fee is $35.00. Receipt of your check or money order will reserve your place. We anticipate a large number of applicants, therefore it would be advisable to register as early as possible. We regret that we are unable to refund money for cancelled reservations. To make your reservation, send your check or money order to:

CONFERENCE
P.O. BOX 853
OLYMPIA, WASHINGTON
98507

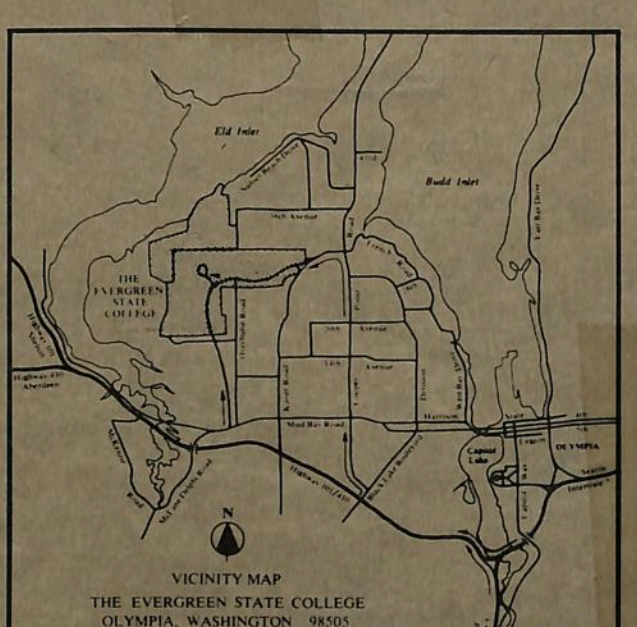
Please reserve me ___ places. I am enclosing $ ___ ($35.00 per person).

Send check or money order to: CONFERENCE
P.O. BOX 853
OLYMPIA, WASH. 98507

Name _____

Address _____

Directions to the College



VICINITY MAP
THE EVERGREEN STATE COLLEGE
OLYMPIA, WASHINGTON 98505

PSYCHOTROPIC FUNGI: CONFERENCE AND FORAY

CONFERENCE
P.O. BOX 853
OLYMPIA, WASHINGTON
98507

OCTOBER 29-31, 1976

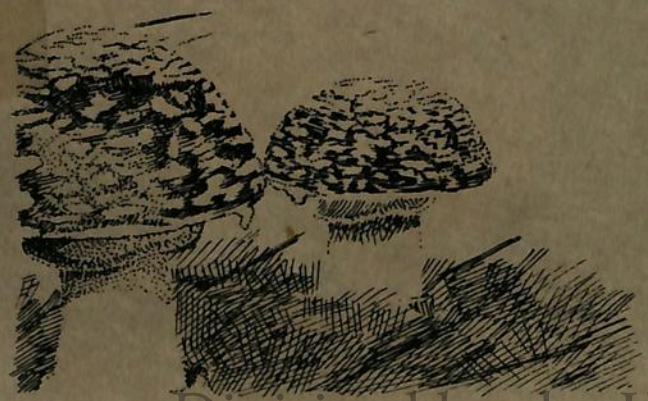
Digitized by the Hunt Institute for Botanical Documentation

Psychotropic Fungi: Conference and Foray

We will present a weekend-long foray and conference on psychotropic fungi. Participants will attend lecture sessions covering all aspects of hallucinogenic mushrooms: their history, ritual use in Mexico, chemistry, taxonomy, toxicology, modern recreational use and sale on the black market. There will be two four-hour lecture sessions, illustrated with slides. Although all lecturers are engaged in research on hallucinogenic mushrooms, they will direct their remarks toward the interested amateur. One half day will be spent in the field collecting specimens of hallucinogenic fungi and allied genera. Expert identification of all collections will be provided.

The conference/foray will be held on the weekend of Friday October 29 through Sunday October 31. Registered participants will meet at the campus of The Evergreen State College in Olympia, Washington at 5:00 p.m. on the afternoon of Friday October 29 (see map). We will provide transportation from Evergreen College to the conference site, a campground in western Washington, and will transport participants back to Evergreen on Sunday afternoon. Parking will be available at Evergreen.

Accommodations will be provided at the campground, including beds in small cabins, bathrooms with hot water and showers. We will furnish three meals on Saturday; breakfast and lunch on Sunday. Participants need only bring a sleeping bag, warm clothing, rain gear, and baskets, sacks, etc. for collecting specimens.



Conference Faculty

R. Gordon Wasson
Honorary Research Associate, Harvard Botanical Museum
Author of: *Soma: Divine Mushroom of Immortality; Mushrooms, Russia & History; María Sabina and her Mazatec Mushroom Velada;* and numerous articles and papers on ethnomycology.

Dr. Gastón Guzmán
Professor of Mycology, National Polytechnic Institute of Mexico
President of Mexican Mycological Society and Editor of *Boletín de la Sociedad Mexicana de Micología;* author of numerous papers on taxonomy of *Psilocybe* and *Panaeolus.*

Dr. Lynn R. Brady
Dean, School of Pharmacy and Professor of Pharmacognosy, University of Washington; author of numerous papers on chemistry of psychotropic fungi.

Dr. William Scott Chilton
Professor of Chemistry, University of Washington
Former Vice-President of Puget Sound Mycological Society; author of numerous papers on the chemistry of toxic fungi.

Dr. Steven H. Pollock, M.D.
Research Associate in Pharmacology, University of Texas at San Antonio; author of numerous papers on modern use of psychotropic fungi.

David B. Repke
Research Chemist, Syntex Pharmaceuticals; author of numerous papers on phyto-chemistry of fungi and higher plants.

Dale Thomas Leslie
Amateur Mycologist; specialist in cultivation of higher fungi; author of papers on chemistry of hallucinogenic fungi.

Jonathan Ott
Research Associate in Psycho-Mycology, National University of Mexico; author of *Hallucinogenic Plants of North America* and numerous papers on chemistry and use of hallucinogenic mushrooms.

Jeremy Bigwood
Student at The Evergreen State College; former Director of the Fitz Hugh Ludlow Memorial Library; former President of Church of the Tree of Life.

Paul Stamets
Student of Mycology at The Evergreen State College.

Schedule

Friday, 5:00 p.m.
Participants will meet at Evergreen for transportation to conference site. The evening will be spent getting settled and fraternizing informally.

Saturday morning
After breakfast participants will sally forth with sack lunches in search of specimens.

Saturday afternoon
All psychoactive species collected will be sorted and displayed. Mushrooms will be identified by Drs. Guzman, Chilton, Pollock and Mr. Ott.

Saturday evening
Dinner will be followed by a lecture session from 6:00 to 10:00 p.m. The following talks are scheduled:

1. Mr. Ott will discuss the history of hallucinogenic mushrooms.
2. Mr. Wasson will speak on ritual use of hallucinogenic fungi in Mexico.
3. Dr. Guzman will discuss the taxonomy of psychotropic fungi.
4. Mr. Leslie will speak on artificial culture of psilocybian mushrooms.
5. Mr. Stamets will discuss ultrastructure of hallucinogenic fungi as viewed with the scanning electron microscope.

This session will be followed by a panel discussion during which lecturers will field questions from the audience.

Sunday morning
After breakfast we will hold the second lecture session. The following talks will be presented:

1. Dr. Chilton will discuss chemistry and toxicology of psychoactive *Amanita* species.
2. Mr. Repke will talk on chemo-taxonomy of psicybian mushrooms.
3. Dr. Pollock will speak on chemistry and toxicology of psilocybian species.
4. Dr. Brady will discuss *Gymnopilus spectabilis, Claviceps purpurea,* and other hallucinogenic fungi.
5. Mr. Bigwood, Dr. Pollock and Mr. Ott will speak on modern recreational use of hallucinogenic mushrooms.

A panel discussion and question period will follow the lectures, during which lunch will be served.

Sunday afternoon
Participants will be transported back to Evergreen.

Digitized by the Hunt Institute for Botanical Documentation