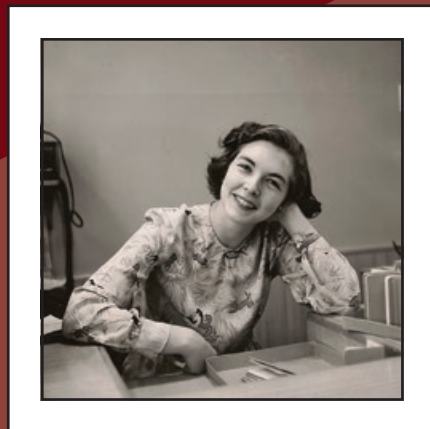
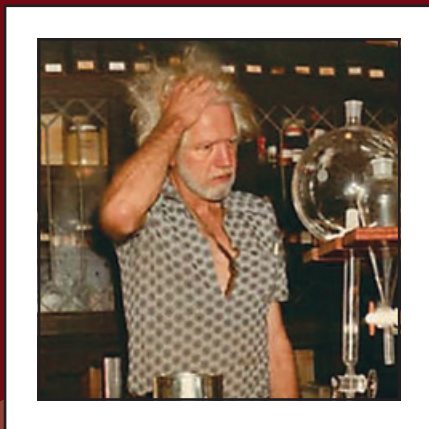
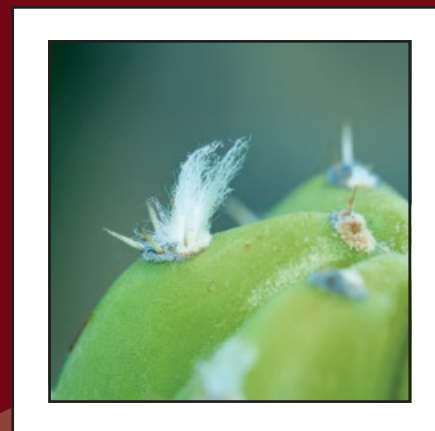
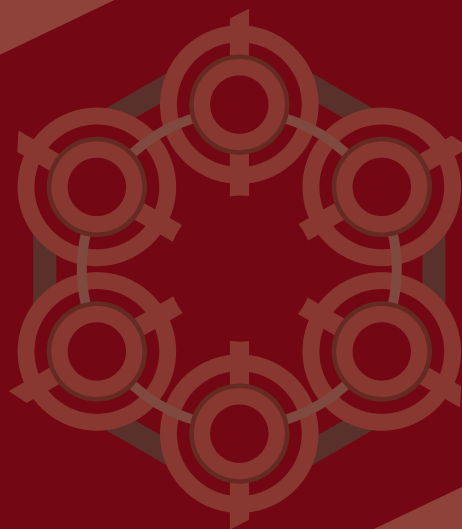
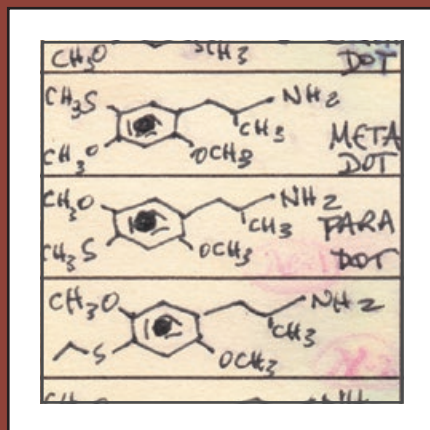


Erowid Extracts

DOCUMENTING THE COMPLEX RELATIONSHIP BETWEEN HUMANS AND PSYCHOACTIVES

February 2016

Number 28



Shulgin Archiving • Life with Sasha & Ann • Sasha's Peyote and Mescaline Files
Faces & Places • The Art of Legibility • The Demise of Shulgin's Folly

THANKS SASHA!

After Sasha Shulgin's death in June 2014, waves of thank-yous were posted to Twitter and other social media sites. Below are just a few showing the impact that Dr. Shulgin had on people's lives around the world.

RIP Alexander Shulgin, a genius, a true philosopher and a great man. #ThanksSasha

— @dantheman1261

#ThanksSasha for having been no less than a revolutionary and introducing us to those marvelous molecules that we too have known and loved.

— @Earthismymother

Shulgin was a scientist of the purest kind. Curious, brave, insatiable for new knowledge. #ThanksSasha

— @veek

R.I.P. Sasha Shulgin, you've changed the lives of many. #ThanksSasha

— @Enso_Botanicals



Adam John Williams (@AdamMacadamia) with a tattoo of a young Sasha. Photo by Fiona Cowan.

I'll be taking o-chem this fall in this man's honor. Rest in peace Alexander Shulgin. #ThanksSasha

— @J_A_Elliott17

#ThanksSasha for opening up my mind & expanding my universe, without you I would not be the same. Your work changes lives.

— @StayStizzie

So sad to see you've gone. Your work has had a profound impact on medicine and other developments. We need more people as brite. #ThanksSasha

— @CitrusFruits23

Over the past months some great souls have passed on to the other side. Dreamers, doers n goers who inspired me to question. #ThanksSasha

— @lxxdoobsxxl

Alexander Shulgin brought simple joys to many, and greater knowledge to us all. #ThanksSasha

— @MarkKriegsman

2C-I opened the door for me to a beautiful and esoteric world of experience. I am genuinely sad that Sasha is gone. #ThanksSasha

— @m3dicin3b0ttle

#ThanksSasha because of you I saw the stars for the first time and found out who I truly was NOT who society wanted me to be.

— @YoCuhCuh

Have just found my set of 'dirty pictures', hand-drawn by Sasha Shulgin!! Time to get them framed. #ThanksSasha

— @mpesce

#ThanksSasha For making electro music tolerable.

— @ScottLumsden

Did some important me-work recently. #ThanksSasha

— @ZenQuagga

Sasha Shulgin's work has provided the world with tools that can be used to discover the truth in us all. #ThanksSasha

— @tRyanTooHard

This week, we say #ThanksSasha to Alexander "Sasha" Shulgin, a man who dedicated his life to researching biochemistry & psychedelics. #bioDFF

— @ravelrie

#ThanksSasha The work of this man has benefited countless. A true visionary who will be missed dearly, words cannot express my gratitude.

— @ryandegrunt

MDMA relieved me of trauma & showed me the path to emotional health, love, openness. #ThanksSasha

— @JasonLouv

#ThanksSasha for showing me a world made of unconditional, infinite love & showing me I've always been part of that world. #universallove

— @cecee_x

#ThanksSasha for enabling love where there might have been none. and for helping the world rage a little harder at EDM shows.

— @BobbyExtraDry

In a few years, when drug-war fear has died down, his contribution to humanity will truly be acknowledged. #ThanksSasha

— @molly4081

#ThanksSasha, just thanks...

— @vplusah

Send correspondence to:
extracts@erowid.org

Please include a name, title, and city/state/country of origin to be published with your letter. Letters may be edited for length and clarity.

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Erowid Center's mission is to provide and facilitate access to objective, accurate, and non-judgmental information about plants, chemicals, technologies, and related issues that affect the mind, body, and culture. Erowid Center supports and trains libraries, publishers, and other information distributors on issues related to these fields.

It is also Erowid Center's goal to support medical, legal, scientific, academic, and independent experts in developing and publishing related resources.

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Image Credits: Photos from the Shulgin Archives, Erowid, Paul Daley, and Tania Manning. **On the Cover:** 1) Ann and Sasha; 2) Chemical Reference Sample Index Card; 3) Sasha's Peyote and Mescaline Files; 4) Flowering Cactus in the Garden; 5) Sasha in His Lab; 6) Ann in Her Late Teens; 7) Chemical Storage Cabinet, Before Cleaning

Erowid Extracts

Number 28, February 2016

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ISSN 1548-8071

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Know Your Body
Know Your Mind
Know Your Substance
Know Your Source

Introduction to the Shulgin Archiving Issue

by Earth & Fire Erowid

We probably don't need to tell Erowid readers how influential Alexander and Ann Shulgin have been to the field of psychoactive drugs, or to Erowid itself. Sasha's innovative melding of novel synthetic chemistry and psychopharmacology made him an academic visionary. Sasha and Ann's crossing of cultural boundaries—through engagement with academics, enthusiasts, businesspeople, and law enforcement—set them apart. Their work in support of unapproved psychedelic psychotherapy changed the course of history and continues to improve innumerable lives.

As a duo, they've inspired us and many others. The publication of their books *PiHKAL* and *TiHKAL*, in which they paired a deeply personal love story with technical chemistry and pharmacology, demonstrated their vision and brought them to the attention of the wider world.

While their books are justifiably well known, there is also a significant collection of their papers, photos, and unpublished writings that can be of enormous benefit to the world. This issue of *Erowid Extracts* is therefore devoted to recent archiving efforts and stories from Team Shulgin.

A lot of archiving work has been accomplished during the last eight years, with help from more than a dozen people. Many projects are underway, and there's much more to come.

Digitizing and cataloging the Shulgins' notebooks and other materials offer insights into their meticulous note taking, their research group, their impact on scientific literature, and the broader historical context for their courageous, visionary partnership.

When Sasha began investigating psychedelic and empathogenic compounds in the 1960s, the bureaucratic hurdles were significantly lower. As his work progressed, there was a steady march towards more governmental control. Additional research restrictions were added, and some of his most interesting creations were banned as Schedule I drugs (with "no acceptable medical use and a high potential for abuse" according to the DEA). Despite this designation, the Shulgins and their research group continued exploring new compounds and documenting their investigations. The archiving process is revealing more personalized accounts, and more detail from these unpublished works.

“The preservation of historical works is integral to societal evolution towards more sophisticated and balanced relationships with psychoactives.” —Erowid Center

Sasha first showed us his handwritten pharmacology notebooks in 1999, and we were appropriately awed. Of course, we immediately asked if we could scan them for posterity. Sasha shook his head and said that they contained too much private information that might put others at risk. He did generously allow us to photograph and scan other documents from his collection. He also repeatedly provided permission for us to archive and publish any factual information he had collected (as long as it had been filtered for privacy). Ann and Sasha had already given the second halves of *PiHKAL* and *TiHKAL* to the online world: they have been available on the Erowid website for nearly twenty years now.

As time passed, we continued to engage the Shulgins about ways to mitigate privacy concerns, and they gradually warmed to the idea. Lab notebook scanning commenced in late 2007 with Tania and Greg Manning's assistance, and financial support from John Gilmore.

Simultaneously, Transform Press, owned by Wendy Tucker (Ann Shulgin's daughter), is now working on multiple books based on Sasha's lectures, as well as new editions of *PiHKAL* and *TiHKAL*.

After receiving a grant of \$5,425 (USD) towards our Shulgin Collection Archiving Project from Island Healing in January 2015, we pledged an additional \$8,276 to the project from Erowid Center's general budget. In April 2015, Erowid Center became the payroll processor for several part-time members of Team Shulgin who are sifting, cataloging, scanning, and transcribing. Current funding for this project will be exhausted in early 2016, and we are seeking new grants to sustain and expand this work.

2015 was an extremely important year for continuing the Shulgins' legacy. Our heartfelt thanks to Erowid contributors, Team Shulgin, Transform Press, and everyone engaged in this ongoing effort. ●

Infectious Excitement

by Wendy Tucker

Sasha and my mother Ann published *PiHKAL* in 1991. Although I had read some of it before it was published, I was working and living in Japan when I first read it all the way through. I must say, it was quite the strange experience reading about my mother and stepfather in this way! But mostly, I was impressed and exhilarated that they had managed to put out such a daring book. At the time, no publisher would pick it up.

It was too edgy, too risky, and nobody knew how it was going to be received. Tarcher Books considered it, but declined. So Sasha and Ann consulted with friends and were guided through the process of setting up their own imprint. Transform Press was born.

When *PiHKAL* first came out in 1991 it was revolutionary. Publishing chemical syntheses of psychoactive compounds

(and so many of them!) was brave. The truth was, Sasha feared that if he didn't get the information in print, for all to see, it might be destroyed or forgotten, and there might never be a continuation of his work. His ingenious way of working needed to be known by chemists, both underground and aboveground, in order for the discovery of new compounds to continue beyond him. He felt that the mind, so vast and difficult to navigate, was the most uncharted territory known to man, with the depths of our oceans and the far reaches of space its only rivals in novelty. He knew that the compounds he was creating were tools for that purpose, for us human beings to begin to be able to Know Ourselves. To evolve

we must better understand the inner workings of our minds. This idea was exciting to me, so when I returned to the Bay Area in the summer of 1992, I began working more extensively with Sasha and Ann on their follow-up book, *TiHKAL*.

Working with Sasha was always a pleasure. He was patient and kind, and best of all, he was excited about the work he was doing. That excitement was infectious. In his files, which stand brimming with papers, articles, and letters going back many years, there is evidence that he always had this disposition, this excitement. It can be gleaned from letters to colleagues and friends, as well as from his class lectures. He was a fun teacher, constantly intrigued and curious about chemistry. He was in awe of the magic of chemistry, and he helped students see it through his eyes. Transform Press is in the process of publishing some of his lectures and class notes. It's so much fun to "hear" his voice in the printed material that he prepared for his students.

The archiving process, the unearthing of material that Sasha had worked on for years and years, is so very important for the future. As we know, things are opening up in the field of psychedelic research. Over time we'll discover the many uses for these substances. Sasha was just one of the first in this field; with the groundwork that he has laid, there are many more compounds to be discovered.

For now, we are the discoverers, finding precious letters, papers, and information that will help others build on his work. That is what he wanted, that is why he published, that was always his intent. There is a lot to do, a lot to go through. Like any archiving project it is slow and meticulous, but we have already uncovered treasures. I feel honored to be a part of this process, to be a part of this history. ○

The truth was, Sasha feared that if he didn't get the information in print, for all to see, it might be destroyed or forgotten, and there might never be a continuation of his work.

FACES & places

Sorting Photos in the Shulgin Archives

by Stacy Simone

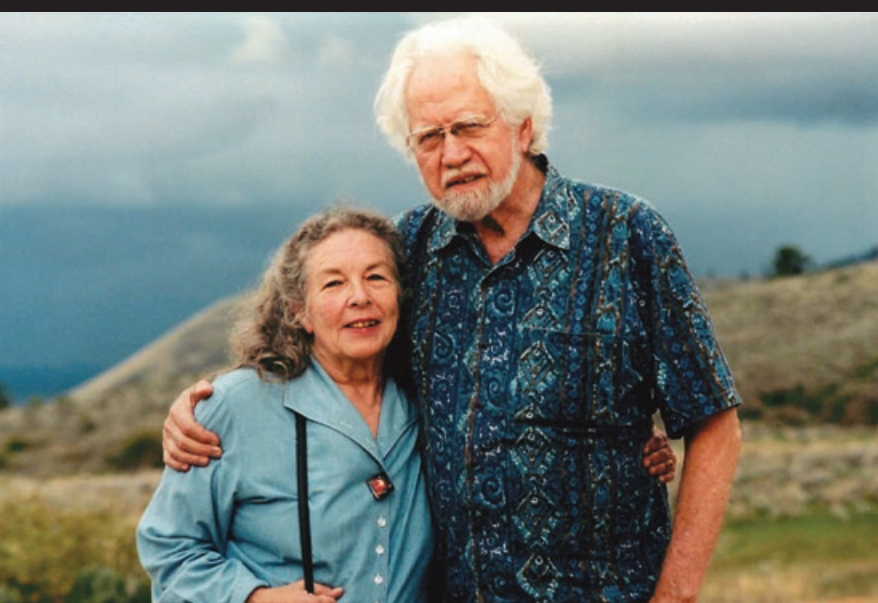
For the past ten months I've been brushing aside dust, cobwebs, stuffed animals, and tchotchkes to discover buried-but-not-forgotten photographs. Some are pasted into albums or sit neatly in their original envelopes with negatives still intact, while others are strewn haphazardly in random boxes, or displayed on shelves.

Whether it's images of Sasha engrossed in laboratory experiments, antique photos of the Shulgins' extended families dating back to the early 1900s, heartwarming baby pictures of newer family members, or perplexing portraits such as a one-year-old Ann holding a young cow on a leash at the beach, each

box or envelope is a surprise—I never know what will surface. While uncovering these treasures, I have gotten to know the Shulgins and their families in a uniquely intimate way, from infancy to their elder years and to Sasha's final days. I have joined them in the raising of children, attending Burning Man, and travelling the world. And most of all, I have joined them in celebrating their life's work, which has been such an inspiration to so many.

Reviewing these photos involves setting aside those that are higher quality, scanning them, importing them into Aperture, rating them for quality, and labeling for faces and

Whether it's images of Sasha engrossed in laboratory experiments, or perplexing portraits such as a one-year-old Ann holding a young cow on a leash at the beach, each box or envelope is a surprise—I never know what will surface.





(facing page) Ann and Sasha—c. 1995; Sasha boating—1978; (this page) Ann and Stacy reviewing photos—2015; Dr. Shulgin in his lab—c. 1990; Sasha and Ann with friends—c. 1980; Sasha with viola—c. 1981; a young Ann with cow—1932; Ann and Sasha with wedding cake—1981



places. Ann and I spend about an hour each week sitting at the kitchen table and going through images, identifying people and moments. Each one triggers fascinating stories and anecdotes.

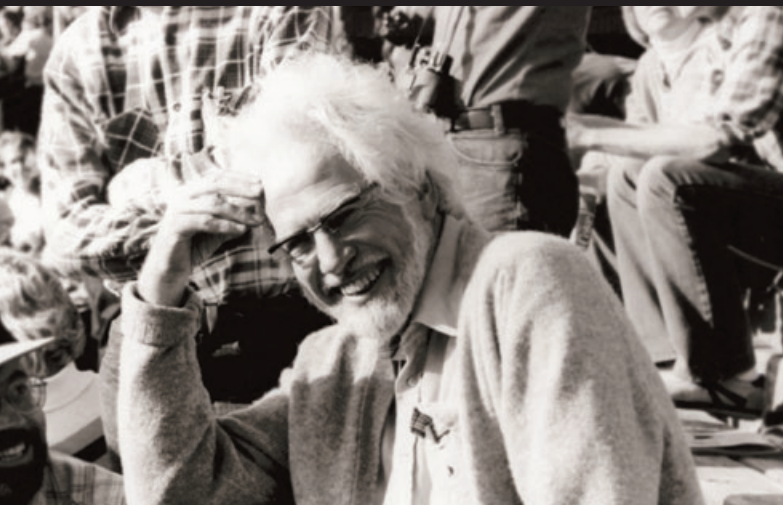
Recently, a few photos of Ann and Sasha at a Giants game surfaced. Surprised to see them at a ball game, I asked Ann if they were secret sports fans. No—apparently this was the only ball game Ann has ever attended. On this outing, they were experimenting with one of Sasha’s creations, the name of which Ann can’t remember “but it was one of the T’s”, she says.

At the game, the substance seemed to have no effect at all. A few weeks later, they consumed the same compound at the same dosage with their research group in Palo Alto. This time, there was a blast of reaction! “The wallpaper in the bathroom was doing amazing things”, Ann comments. That substance “became famous as the non-effective drug that was more than effective.”

Unearthing these jewels of time is like exploring an archeological dig. I look forward to seeing what’s under the next rock! By preserving these treasures, the Shulgins’ legacy will be carried on for generations to come. ○



Ann—1960s; Sasha in his lab—1980; Myron Stolaroff and Mark Kleiman—c. 1995; Sasha and Ann at a baseball game—1983



Out of the Memory Box

Prague 1992

by Ann Shulgin

Last week I went into the office to get my checkbook and saw on the desk a large box filled with what looked like old files—very old files—with tags like “Paris”, “Barcelona”, and “Prague”. I reached for one in the middle of the box, the “Prague” file, as memories flew through my mind. The box, it turned out, was one of several containing notes on conferences Sasha and I had attended over the years. I bundled the olive green file under my arm and took it to the living room, where I began sorting through it.

The Prague conference was a rich experience. Not just the conference, but everything around it, in the city. The title of the meeting was “Science, Spirituality and the Global Crisis”, one of the more discreet names given by those in the psychedelic community responsible for choosing ways of alerting interested citizens to what might be coming to their town. Titles of conferences around the western world have ranged from out-loud, blatant ones like “Psychedelics, Science and the War on Drugs”, or perhaps, “Psychedelic Drugs, the Mind and the Soul”, to the quiet, don’t-make-too-much-noise ones like our Prague conference of June 1992. Somehow, no matter how careful the announcement, those most interested in the psychedelic experience managed to make their way to the meetings meant for them.

We found ourselves in this ancient, magnificent city at one of its most crucial moments, when President Hável—a lovely man, an intellectual, poet, philosopher and playwright—was being called on to preserve the integrity of his country (he failed) against the hold-outs of the Soviet system who wanted to separate themselves from those who had thrown the Soviets out (they succeeded). We could only watch and wish him luck, while observing the remnants of the Russian occupation.

Sitting at a table in an outdoor cafe, having coffee and a pastry, Sasha and I and some of our friends from the conference saw several workmen digging into the concrete of the street with loud jackhammers. Bits of white concrete were flying everywhere. We asked, through a translator, what was going on, and were told that the street used to be made entirely of large cobblestones, like most of the city streets, and that one of the first things the Soviets did was to pour

concrete over all the cobblestones, for reasons of efficiency. Or for no reason. Another thing we observed was a multitude of workers scrubbing the walls of large buildings all through the city. What they seemed to be washing off was mostly graffiti. It was explained to us, eventually, that one of the most remarkable things about the Soviets was their disdain for beauty. Beauty in old cities, like cobblestones and the walls of ancient buildings, was considered bourgeois, decadent and meaningless. Now that the Soviets were gone, beauty was being coaxed back to the streets and buildings of Prague.

On our last evening there, Sasha and I, with a small group of friends, took a walk to the end of the Charles Bridge, the major bridge in the city, filled day and night with street musicians, artists and young dancers in elaborate costumes. At the far end was a short walk uphill to the huge castle, which we had explored the day before. This time, we turned around at the end of the bridge and walked slowly back, talking, sharing experiences of the city, and by the time we reached the last few yards, night had fallen and the lights were coming on everywhere. Suddenly, from below the bridge, somewhere on the edge of the Vltava River beneath us, probably from a cafe where a crowd of people—mostly young and enthusiastic, I would guess—had

gathered for the evening, there came a chorus of sound:

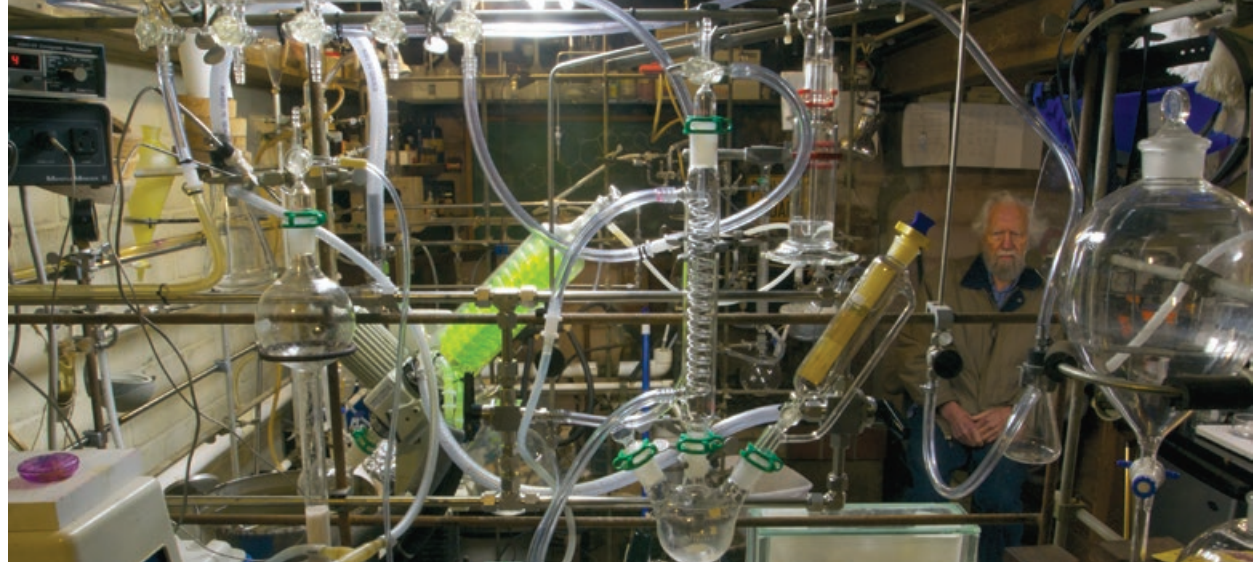
*We Will, We Will,
ROCK YOU! (clap—boom boom, clap)
We Will, We Will,
ROCK YOU! (clap—boom boom, clap)*

We stood there, frozen, as chills spread from coccyx to crown in every one of us. When the triumphant shouts faded, we began to move again. I did my best to hide the tears that were streaking down my face. We were all chuckling, and a few of us were singing the song underneath our breaths as we left the bridge.

The song, as I’m sure you know, is by Queen. It’s still one of my favorite pieces of music in the world. ○

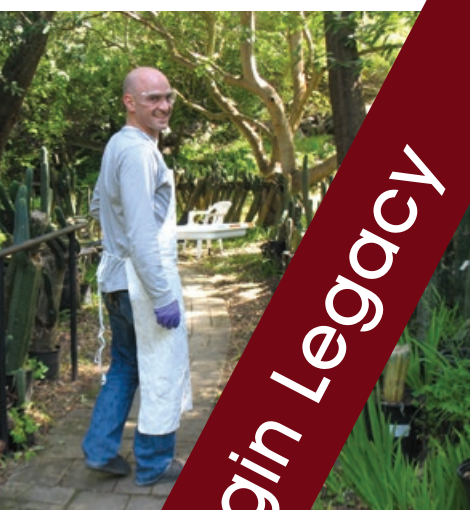


♥ Ann



Chemistry Survival

by Paul F. Daley, PhD



The Shulgin Legacy

“So, would you like to see the lab?” “Well, yeah!”, I said (who wouldn’t!?), and so we walked out the back door of the house, down a dirt path, across a rough-sawn two-by-twelve board spanning a rivulet, and proceeded to a small, cinder block building nestled in a grove of trees. The door was opened, and I walked into an alchemist’s hangout, Sasha Shulgin’s laboratory.

That was in the fall of 1977. I had met Alexander Shulgin that October, and he invited me to visit “The Farm”, after finding out I had just started my PhD program at his beloved UC Berkeley. I had a vague recollection of reading his papers during a research project I’d done some five years earlier on tryptamines in *Phalaris* grasses that were implicated in sheep poisonings. But that job was scant preparation for my future life with Sasha.

Skipping forward to the early 2000s, I began to visit Sasha and the Farm after a long (too long!) absence, helping out as seemed appropriate, fixing his computers, chatting about chemistry, watching the scene. I became a regular at the twice-yearly barbecue potlucks the Shulgins threw for their friends and extended-Bay Area psychedelic community.



Photos by Paul Daley—(facing page) magic stockroom chemicals with unplanned reaction afoot; Sasha in his lab; our mascot!; Mark Martini attired for lab cleanup; Poncho testing stockroom “unknowns” for appropriate disposal; (this page) deteriorated boxes of reference samples; reference samples in new boxes; cabinet of intermediates and reagents at the east end of the lab in October 2007; same cabinet after cleanup; (following page) index card for reference samples; Team Shulgin members Paul, Poncho, and Mark during cleanup.



In 2007 I lucked into an opportunity to work with Sasha, to be his “eyes and hands” in the lab, and to explore continuing his research. Sasha’s eyesight had deteriorated significantly with macular degeneration, and his lab showed the effects of that handicap. In my first months working with Sasha, I cleaned, made minor necessary modifications to bring the lab once again to safe and working conditions, and looked toward the future.

Prior to Sasha’s death, we had begun sorting, cataloging, and moving the contents of his chemical “magic stockroom”, identifying the collection of compounds he had made, and finding the material remains of his chemistry. Evaluation of the stockroom revealed that it was seismically unsound for long-term storage of the wide variety of chemicals Sasha had accumulated.



Poncho (pictured below, center) brought two additional PhD organic chemists, and the four of us did back-of-the-pickup truck analytical chemistry to identify the contents of each bottle or container.

In all, nine people worked on this cleanup for more than seven days. I was a certified hazardous waste site operator for 25 years at Lawrence Livermore labs and my hundreds of hours of training prepared me well to lead the process.

We discovered samples of Sasha's creations dating all the way back to his doctoral dissertation (stable isotope-labeled amino acids!), pesticide precursors from his days at Dow Chemical, and many of the unscheduled compounds described in *PiHKAL* and *TiHKAL*. A lot of these rare or unique compounds were unfortunately stored in less than ideal conditions, and transplanting them to new homes is an ongoing project. To improve safety, seismic survivability, and access, Sasha's supply of stockroom chemicals was moved to fireproof cabinets in a steel shipping container.

Since Sasha's been gone, we've ramped up the cataloging of these materials to improve access for further research. This process has allowed us to identify expired or unstable chemicals and develop a database of starting materials and other oddball compounds in the collection that number in the thousands.

Though there are immense challenges to continuing the Shulgin laboratory as a viable research installation, we are moving ahead, and are keeping Sasha's vision alive. ○

"I have a magic stockroom with 10-15,000 chemicals in it. If [anyone] wanted to reproduce that, they'd be very hard-pressed. I have been collecting materials from a university here and a company there—anywhere they're told by the environmental people, 'Get rid of these things. They're carcinogenic, they're explosive, they're all kinds of negative things, and since you have people employed here, you can't keep this in stock.' So I get a phone call saying, 'We're coming in with a bunch of boxes.' And it's beautiful. It's sort of an idea source. I browse amongst the latest and see what I can do with it."

— Dr. Shulgin, in a 2005 *High Times* interview with David Bienenstock.

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*“A great library
contains the diary
of the human race.”
– George Dawson*

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- Rosetta Books (2014 – 2016) – 2 carloads

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Sasha's

DEVOTE & MESCALINE PEYOTE & MESCALINE

Files

Excavating and Digitizing the Cactus Papers

by Keeper Trout

My involvement in the archiving process has mostly been limited to scanning and understanding Sasha's mescaline files. These items had once been intended by Sasha to serve as the reference basis for an ambitious first book that he was writing on peyotl and mescaline during the 1960s. Sasha's book on peyote was never completed and instead he repackaged a very abbreviated set of some of its highlights as a chapter within *TiHKAL*.

When many people picture the archiving of historical collections, they imagine conservators with white cloth gloves in clean rooms, protecting rare

and precious originals. The work at the Shulgin Farm is somewhat different. When gloves are involved, they might be to protect the wearer, not the relic.

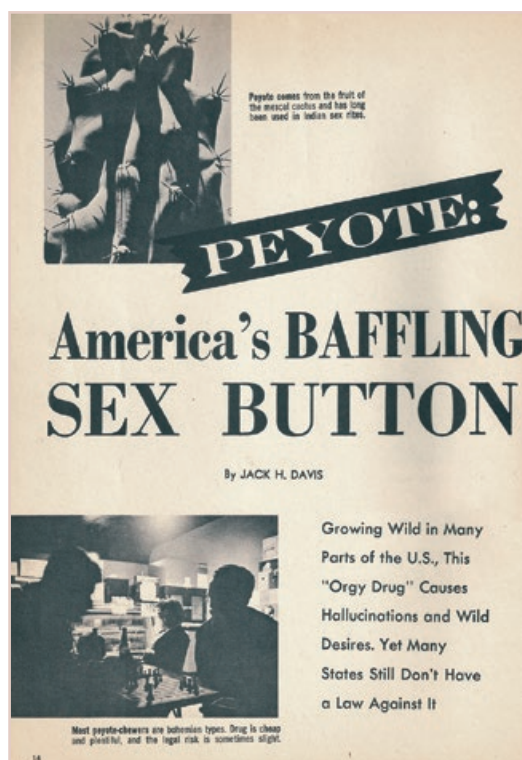
The process began long before I arrived, with Tania valiantly removing more than a thousand staples on my behalf, replacing them with paperclips to make my part of the scanning efforts go more smoothly. During that process, her hands travelled through more than four "linear file feet" of articles, letters, and note pages related to mescaline.

The vast majority of the papers are printed copies of articles from various scientific journals and assorted

nonscientific publications ranging from a Huichol art show portfolio, to Congressional hearings, to a Pentecostal tract damning peyote as a tool of enslavement.

Claims of Peyote Addiction

Among the more outrageous popular accounts in Sasha's files was a 1961 pulp magazine asserting "most peyote-chewers are bohemian types" and claiming that "America's Baffling Sex Button" grew "wild in many parts of the US. This 'Orgy Drug' causes hallucinations and wild desires yet many states still don't have a law against it."



Images by K. Trout,
Team Shulgin,
& Erowid

It is fascinating to note that these erroneous popular-press accounts of peyote's effects historically coincided with legislative attempts to restrict the use of peyote. Just as exaggerated news stories about "new drugs" are used today to influence public opinion and law, Sasha's files document that this had also occurred nearly a century ago, with peyote as the target. When Native Americans, anthropologists, and other professionals opposed anti-peyote laws, Congress took another tack in 1935 and included treatment of "peyote addicts" as part of the stated reason for the creation of the federal Narcotic Farms (*i.e.* prisons).

In a letter from 1945 found in Sasha's collection, Indian Affairs Commissioner John Collier had been told by the Assistant Attorney General that they could find no evidence in their records that the "narco farms" had ever treated a peyote addict during their first decade of operation. Considering all of the words that have been written about peyote's lack of addiction liability, one might think the matter was settled. Nonetheless, in 1997, a judge ruled against Leo Mercado of the Peyote Foundation in a civil case, stating that Mercado had "demonstrated himself to be an addicted user of peyote" who presented himself "as some carny offering cotton candy for any and all to use." Crazy, even in 2015, one can find "peyote addiction treatment" offered by commercial drug treatment services.^{1,2}

Military Files

Sasha's mescaline files include declassified FOIA material concerning the work at Edgewood Arsenal with mescaline, MDMA, and related molecules. The documents contained surprisingly few answers to Sasha's questions as to why they were interested in mescaline and MDMA, or what the US Army researchers had learned. Among the military-related papers were several publications in the scientific literature

about an aziridine that contains a mescaline moiety, as well as a patent issued to the US Army regarding its potential as an "incapacitating chemical weapon agent".^{3,4,5}

Archival Complexities

Only a small fraction of these documents are rare or unique. What I'm digitizing is simply Sasha's personal research library, mostly comprising the output of photocopiers, microfilm printers, and fax machines

Sasha's mescaline files include declassified FOIA material concerning the work at Edgewood Arsenal with mescaline, MDMA, and related molecules.

with a wide range of quality. The best quality prints are generally journal reprints that authors had sent to Sasha.

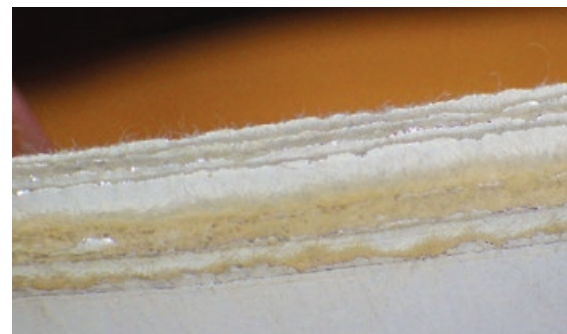
A good portion of the literature is well used or in relatively bad shape for scanning, due to the paper itself, or irregular margins. Some of the photocopies are forty to fifty years old and they show it. A few of the early copies, including reprints, were

printed on tissue-thin paper to reduce the cost of mailing from France, or have darkened dramatically, changing from white to brown over the decades.

A number were printed on a 3M Filmac microfilm reader-printer at the Dow Chemical facility where Sasha worked, using a curiously special paper. These prints, with their irregular manually-torn edges and randomly exposed shiny silver spots, aren't just weird looking; the paper is also electro-conductive and fragile.

So fragile, in fact, that our sheet-feed scanner dug a series of distinct grooves down every page unless a sheet protector was used for each individual sheet. This is the only paper I have ever encountered that came with a warning to avoid contact with electrical circuits.

In 2015 these brittle silvery papers look really archaic. But when Sasha acquired them while working at Dow in the 1960s, this was a new technology (released by 3M in 1958). Somewhat analogous to photocopy devices that use electrostatically charged drums or bands to transfer images, 3M's Filmac process created copies of photographic images by charging an unusual metallic layer located *inside* the "paper" itself.



Some of the pages in Sasha's library are difficult, or in some cases impossible, to read, even with close scrutiny, but we have done the best that we can to faithfully digitize or otherwise record what's been found,

One letter from Sasha to a close friend comments on his having recently invited long-time friend Ann Perry to move in with him. Ann later married Sasha to become Ann Shulgin.

even when the occasional page requires manual transcribing of the contents.

Unique Items

The unique content has been fascinating. I found a scientific paper for which Sasha had served as a peer reviewer. One letter from Sasha to a close friend comments on his having recently invited long-time friend Ann Perry to move in with him. Ann later married Sasha to become Ann Shulgin. There are discussions of many well-known molecules while they were

still in the discovery or development process, such as the TMAs, in some cases even prior to their first synthesis or bioassay.

There was also a special copy of Bruhn & Holmstedt's 1974 "Early peyote research: an interdisciplinary study", that was sent to Sasha by Jan Bruhn. This was obviously a limited edition item, as it was accompanied by a set of black and white photographic plates that had been manually glued into place.

Ann and Sasha's transition in correspondence technologies is revealed in their comments about their "new machines" that rapidly replaced pens and mechanical typewriters. Sasha's practice of correcting typos by typing the letter "X" over the errors became a thing of the past.

The files paint a fascinating portrait of Ann and Sasha's lives and personalities. Sasha didn't just keep copies of the letters he received from friends; he filed them coupled with copies of the letters that he had written to them or that Ann had written.

As curiosities go, I was struck by Sasha's "Drugs of Perception" talk that he presented at a Santa Barbara LSD conference in 1983. The contents of his thoughts in that piece were memorable enough, but a copy of the presentation had been given to Sasha by Michael Horowitz, Timothy

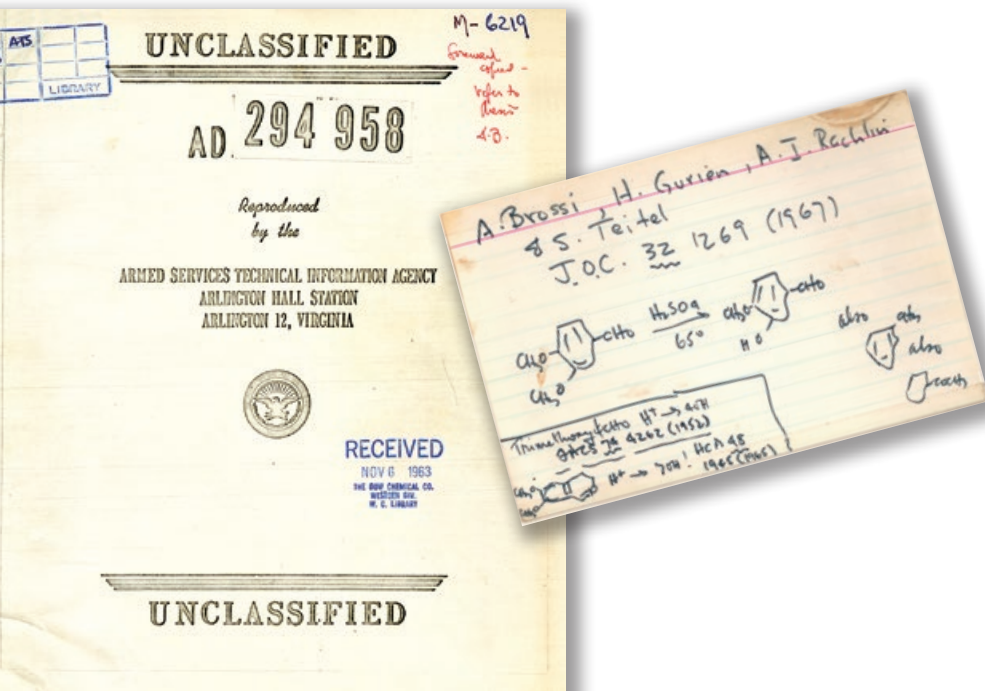
Leary's archivist, after it was, for some reason, autographed by Timothy Leary. The 1983 talk was later referred to in his famous essay "Why I Do What I Do", which was published in 1996 as part of "The Pioneers of Reform" conference proceedings for the 10th International Conference on Drug Policy Reform.

Sasha's Organization

Sasha's journal articles, handwritten notes and references to other locations in his library were organized in folders. Each folder contained a year or a range of years. In some parts the division was based on the number of papers appearing during that one year, but several folders had such an incredible number of papers crammed into them that it seemed like they would have been subdivided into more manageable sizes. There were also seemingly random insertions of out-of-sequence papers from other years peppered throughout the folders. Perhaps those papers had been placed together based on topical linkages related to Sasha's writing projects.

Papers intended for use in his never-finished peyote book were organized in reverse chronological order, and alphabetically by author. To aid with navigation, indexing, and his own internal referencing purposes, Sasha assigned a four-digit number to each publication that he intended to use in the book. That number was generally written in pen on the top of each article, but in some cases it was assigned to an entire folder containing multiple items.

In the references of a good number of the published articles in his library, Sasha manually inserted his own numbering system alongside citations. He also crossed out references that were not pertinent. Part of this may have been how he kept track of papers that he had in-hand for a particular project versus those he still needed to obtain, but it's also clear that he commonly used those numbers as a form of shorthand to refer to references elsewhere. Some entries in



his files are nothing more than a sheet of paper bearing a note referencing a given number or Chemical Abstracts entry located in some other project file, or a book in his library.

This causes some interesting challenges in photocopying. For instance, Sasha sometimes taped a Chemical or Biological Abstracts entry on top of other text, requiring it be lifted to read the text beneath. In several cases he made such an entry deliberately and included the handwritten instruction to “lift”. These obviously require a separate scan in the lifted and resting positions to read all of the text.

There are also sets of unique hybrid photocopies that had failed to copy legibly on the lower third of the paper. Rather than just replace them with new versions, each missing section had been copied again and taped over the length of the blank part of each page. Printing and photocopying annoyances are multi-generational.

Sasha’s dirty pictures and handwritten notes appear scattered throughout the papers. One of my favorite comments, on “Phencyclidine, lysergic acid diethylamide, and mescaline: cerebral artery spasms and hallucinogenic activity”, simply says, “General Hypotheses, written by idiots”.

Networking

Correspondence about obtaining a reprint of a published paper

Sasha’s dirty pictures and handwritten notes appear scattered throughout the papers.

accompanies many of the papers. A common example might include the abstract that brought the paper to Sasha’s attention, a photocopy of it that he had acquired for use, a copy of a letter or a note or the date requesting



a reprint from the author, and finally, the actual reprint sent to him by that author.

Sasha commonly wrote for reprints even when he already had a copy of the article. He kept a stack of pre-printed reprint request cards on hand for that purpose. He used these as a convenient method of professional introduction to other chemists working in areas of interest to him. Over time, this practice helped acquaint Sasha with almost everyone in the field and he became widely known in the process.

A large number of the reprints include a signature and best regards or sometimes a more personal note from the author. In some cases, a friendship between Sasha and a colleague like Jan Bruhn developed over their years of correspondence.

Sasha’s interest in psychoactive-related court cases is evident in some files; the charges brought in 1987 against the owner of Night-bloomers for selling live cuttings of *Trichocereus pachanoi* was well documented, along with his pleasant surprise at a positive outcome that he clearly did not anticipate.

Correspondence with other chemists was illuminating, especially during the periods of active discovery of molecules like TMA and the pre-scheduling days of MDMA. Sasha’s conversations not only add to the known history of these molecules, but also shed light on the sheer volume of work he was accomplishing and how he approached the process of discovery. In a letter to Thornton Sargent early in 1966, Sasha describes the details of eight projects that he was actively pursuing. He then described project nine as his need to “get started on at least one” of an additional eight projects.

I thought that Sasha’s comment of needing to get “off of the dime and into the vacuum line” in order to complete a pending synthesis was a wonderful phrase.

Accuracy

Among the jewels that have been discovered in this process are some that capture how Sasha regarded the importance of accuracy in information published about new or ongoing research. While reading Sasha’s files,

I was reminded of a conversation I had many years ago with a manufacturer of research chemicals. He emphasized that the first bioassayists pay an inordinate amount of attention to the minutiae of their own early experiences with a substance, resulting in an over-weighting of their observations. We discussed that only when enough people have ingested a molecule enough times that they can actually experience the drug on its own terms does the pharmacology become fully revealed.

Seeing Sasha's notes on the results of his research group supports this, as does Sasha's cautious approach to reporting the activity of new or under-explored molecules. For instance, questions have been raised online about the differences between what Sasha was willing to say about the *Cardon* cactus in print or in public lectures compared to what he said in private conversations or to small groups. His files indicate that he deliberately omitted details from public presentations when he didn't feel they had been sufficiently established.

Lophophine Ambiguity

One curious thread in Sasha's correspondence concerns a molecule named lophophine. Sasha was intrigued by this molecule, due to its apparent absence in peyote. As

it was an obvious intermediate for several isoquinolines, the lack of its detection had caught Sasha's attention. He wrote a friend that he suspected the activity of lophophine would fall in between mescaline and MDMA based on its structure. Then in 1966, he made comments suggesting that subsequent bioassays supported that. In another letter from the 1960s, after describing the results of animal toxicity studies he had commissioned, Sasha commented on finding "a not-unexpected amalgamation of the color-effects of mescaline and the benign lack of anxiety of MDMA."

While noting lophophine to be significantly less potent than mescaline (requiring 50% more material than the typical dose of mescaline), Sasha made an intriguing comment that "it is in the area of the qualitative characteristics that especial note must be made".

The only time that related comments appeared in print was in 1973 when he suggested lophophine was *more* potent than mescaline:

"This compound is active in man at dosage levels of 150 to 200 mg, about twice the potency of mescaline. The qualitative description of its action is quite similar to that of mescaline, in that there is a peaceful elevation of mood, the generation of an euphoric state, and the enhancement of visual perception especially in the color sense.

There are dissimilarities, particularly in that there is little if any nausea and there is no visual distortion. These latter differences disappear at dosages of 300 mg and there is the generation of eyes-closed imagery similar to that observed with mescaline."⁶

Sasha apparently did not explore it further. When discussing it three decades later in

PiHKAL, he referred to lophophine again, this time saying, "It looks as if this compound is not active", and mentioning only two bioassays. One was at 150 mg: "Between two and five hours, very peaceful and euphoric

**Clearly with lophophine
Sasha experienced
ambiguous results that
nonetheless included
something that caught
his attention.**

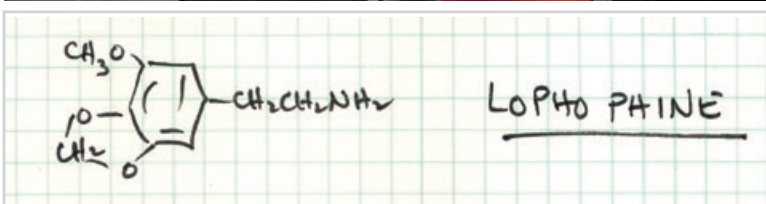
mood elevation, similar to mescaline, but without any visual distortion. Mild enhancement of color perception, possibly a function of mood elevation [...] no eyes-closed vision."

And another using 250 mg: "Possibly something of a threshold effect from 2:30 to 4:30 of the experiment. Intangible, and certainly there is nothing an hour later." In *The Shulgin Index* his comments, citing *PiHKAL*, became, "Threshold oral activity in humans at 250 mg; duration unknown."

I do not believe Sasha's memory was faulty here. I suspect these comments show the limit of what he was willing to put into print without returning to the molecule and performing additional bioassays, or risking the creation of another unintended point of urban drug mythology. Sasha was very aware of the potential of stimulating a mad rush to synthesize and release a novel and, in this case, under-evaluated molecule.

Clearly with lophophine he experienced ambiguous results that nonetheless included something that caught his attention. It is noteworthy that he added a small but tantalizing bit of intrigue and counterbalance to those fairly discouraging comments in *PiHKAL* with the words, "And certainly, it would be reasonable to expect it to be an active psychedelic, and to be as





Assume 930 mg given.

| | Brain | Liver |
|----------|-------------------------------|---------------------------|
| Control. | 61 mg 18.3 / avg 0.020% | 246 mg 147.6 0.159% |
| .5 hr. | 207 62.1 0.067% | 1146 667.6 1.062% |
| 4 hr. | 180 54.0 0.058% | 1110 660.0 0.716% |
| 16 hr. | 103 30.9 0.033% | 415 249 0.268% |
| 24 hr. | 72 21.6 0.023% | 170 102 0.110% |
| dissect. | 276 82.8 0.089% | 2350 1410 1.529% |

interesting in man as its close cousin, mescaline. But, at the present time, LOPHOPHINE is not known to be present in the plant, and *it is not known to be active in man. I am confident that both statuses will change in the future*". (Emphasis added.)

Knowledge in Black and White

Sasha has commented (in the film *Dirty Pictures*, for example) that it was the rise of public interest and

...Sasha described a Dow legal team visiting him to express concern about the safety of his work—not for his safety but the safety of Dow.

popular drug use during the 1960s that lead to he and Dow parting ways. The archives provide contemporaneous details on this and suggest Dow was concerned about liability.

In a letter to a friend, Sasha described a Dow legal team visiting

him to express concern about the safety of his work—not for his safety but the safety of Dow. This was not said to be due to widespread public use of LSD and other drugs, but rather due to their concerns that Sasha, or psychiatrists who were expressing growing interest in MDMA, might use his molecules in human trials. This concern was limited to any compounds that Sasha might have synthesized at Dow using their facilities. Sasha commented that they did not want certain knowledge to exist in “black and white”, as use of those drugs in humans might place Dow in direct violation of federal law. In his letter Sasha did not know what the outcome would be, but soon thereafter he left Dow on friendly terms and his further research involved products from his own lab.

The act of archiving Sasha’s world is huge, considering that the scientific journal articles alone involve eight file cabinets stuffed with papers. It is not yet clear what else will emerge, but I anticipate that many nuggets will come to light during the archiving process and even more when later researchers have the time to read all of the included materials. ●

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The Art of Legibility

by Shawn Corrado

When I started working on the Shulgin Archiving project in 2009, I didn't know what I was getting myself into. What I knew for sure was that I wanted to give back to Erowid in a way that felt more significant than just giving money, which I didn't have much of. What I did have was time. I browsed around the volunteering part of the Erowid site and noticed they were looking for people to help with transcribing scans of Alexander Shulgin's lab notebooks. Being a huge fan of the Shulgins and their work over the years, this sounded like a great way to kill two birds with one stone—a way to give back to both Erowid and Sasha. Wonderful, application sent.

There seemed to have been a number of volunteers before my participation, but progress had been slow

because the transcription process is difficult and involves highly technical language and drawings. Some initial work had been done on the first (and most complicated) pharmacology lab book, with the text entered plainly into a wiki page, but it didn't look to

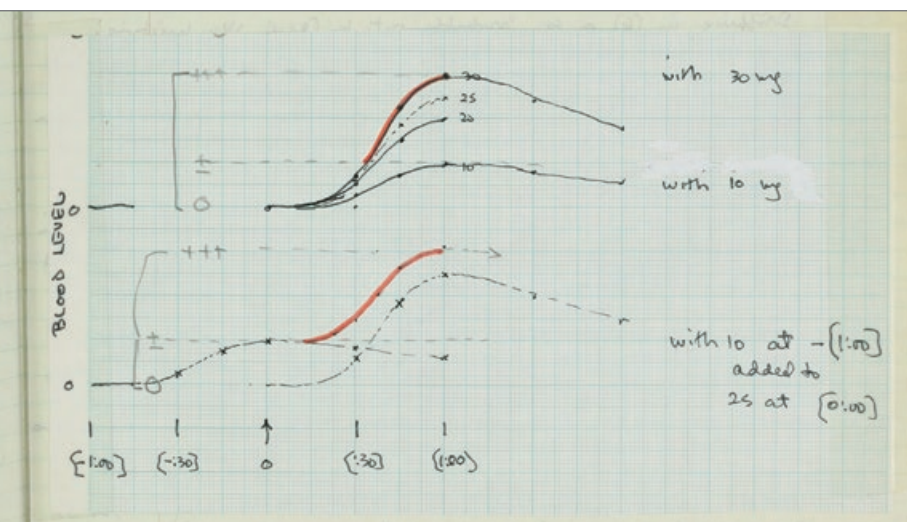
I am now approaching transcribing my one-thousandth page of Sasha's work.

have been touched in some time.

Six years later, here I sit in the middle of the night, two monitors glowing in my face as I peck at my keyboard and squint at pages of nearly illegible handwriting. It took almost two painstaking years before reading Sasha's writing became like

reading my own. Eventually, I began to understand and recognize all of his shorthand with ease. I am now approaching transcribing my one-thousandth page of Sasha's work.

When I joined the project, the task was simply to transcribe the scans into text, but I wasn't satisfied with the final output. I wanted to figure out how to present these books in a readily accessible format that was both machine- and human-readable for ease of searching, while redacting the names of people who had not yet approved being publicly acknowledged. At first I considered using HTML, but due to its shortcomings (and my lack of HTML programming skills), I decided to create PDF documents matching the look and style of the original pages (see facing page).



THIS IS THE REPORT OF
FRIDAY, SEPT. 2, 1983

ALEXANDER T. SHULGIN
1483 SHULGIN ROAD
LAFAYETTE,
CALIFORNIA 94549

MATERIAL: "BOD", 25 mg.
SASHA & ANN (2nd trial for
both of us together; previous
trial at 20 mg.)
BERKELEY,
CALIFORNIA 94701

Time: 8:10 p.m.
Duration: About 10 hrs. before sleep.
Plus: +3.

Friendly, loving although not primarily erotic. Superb for conversation and conceptualization. Translation: We both enjoyed thinking, imagining and talking. Long discussion of Frank Barr's melanin theory, with final conclusions typically inconclusive (typical of everyone who tries to understand the theory), but generally not too positive. Sasha picked out sentences at random and read them out, and I tried to be as objective and intelligent as possible. Result: we both came to conclusions that were not too -- oh, well, anyway.

The onset of the experience was apparent within half an hour, and within an hour, we were both +3. Body load minimal. There was very little visual, compared with some materials. Very interesting eyes-closed, but not continually -- just now and then, an intense vision might flash. Very benign and friendly and pleasant and good-humored feeling. Sleep was deep and healthy.

I had loose bowels, which I often seem to have. Sasha had no problems. Both of us felt reasonably healthy and energetic next day -- S. a bit more than I, since he did not have the slight tummy problems.

All in all, delightful experience. Excellent for group, I would guess.

mild negative attitude toward my present life circumstances.

SMELLS WERE MORE NOTICEABLE

I felt I was turned on when the music sounded especially

The first documents we received from Team Shulgin were redacted scans of notebook pages, but the redacting was inconsistent. What I needed was access to the un-redacted scans of original books. This presented an opportunity that I will never forget as long as I live. Erowid Center facilitated getting me invited to the Shulgin Farm in California, for what must have been one of the last annual Easter parties with Sasha in attendance. This gave me the chance to meet Earth and Fire and the man himself, along with the rest of Team Shulgin, and they were able to put a

face to my email address and know I could be trusted. That day was every bit as great as one could imagine; I spent most of the day in Sasha's lab just soaking it all in, hanging out with Paul Daley, and meeting and talking to a lot of interesting people.

After that, the lab notebook transcribing project was mine—I am still working on it today. It's hard to attract additional volunteers for this task due to its tedious nature, which even to a Shulginophile drug geek is more monotonous than you might imagine. A labour of love for sure! Sometimes I wonder if the only

reason I make progress is out of sheer stubbornness. The number of hours I've poured into these notebooks is greater than I'd like to admit, but I feel I've created something that will provide lasting value to curious seekers in the future. Even if all that comes of it is a permanent online record of Sasha's work, it will have been worth every minute. ○

If you are interested in joining Shawn in transcribing pages from lab books, please contact shulginlabbooks@erowid.org to learn more.

Handwritten notes on a yellowed page with a chemical structure of 2-(3,4,5-trimethoxyphenyl)propan-1-amine. The structure shows a benzene ring with methoxy groups at positions 3, 4, and 5, and a propylamine chain at position 1.

BOD 698

6mg 9:55 AM = 0:00 ATS 3/15/83. [3:30] aware of others (less fun than [1:00] honest ±. At [4:00] still ± or even + [5:00] ± [8:00] baseline. ± - maybe even +!

12mg 11:20 AM = 0:00 ATS 3/18/83 (70) aware [4:45] more aware [6:15] a very friendly tingle [8:30] a peaceful + [9:30] less [10:30] probably out. Ladies night.

20mg 1:05 PM = 0:00 ATS, AP = 3/26/83 [1:00] AS aware for a while, AP quite suddenly. [1:45] to a +, Ted, uhh... [3:00] still 1/2 to ++, AP closer to +++ Erotic would be fine, but much talk - emotion over incident [5:00] still ++ or so - to bed - erotic doesn't quite knit [8:00] back to lab - can't quite get with it. [10:00] ATS largely down, AP -+. Overall, very benign - no dark corners anywhere - practically no visual - talk on phone at all times O.K. +- willing to try 25 or 30 mg - but allow 12 open hours.

26mg 8:10 PM = 0:00 ATS, AP = 9/2/83 - both aware at about [1:00] - develop to an almost certain +++ by [2:00] - no body load! Expected the usual erotic, but got much talk, good structuring of ideas, easy expression of concepts at all levels, with all subjects, continuously and rather inventively. The continuous semicolon. 2 hrs of dissection of Barr's melamine. [4:00] still going. [8:00] some drop? but still going. occasional glimpses of eyes-closed figures, some eyes-open depth enhancement - but basically, everything seen goes to intellectual concept. Probably good for a group experiment if 12+ hours are available. ~ [10:00] some sleep, AP to ~ [11:00] enough, ATS to ~ [15:00] probably not enough. AM - still some sparkle. Overall, very benign, allowing, and with virtually no price to pay. +++

at 15, 1983
26mg 11:20 = 0:00 ATS, AP, 2; 20mg at farm alerts - 1:30 - 1:45. Development slow & quiet from 1:45 to ~ 2:00 - but some on to 3:00. Some body queasiness (AP, NT, AB) - from 3 - 6 on 7. Full ++ to +++ for everyone. All look into equal peace. Some drop at ~ 8-10 - but even at 12 well off baseline. AG, GC drive home - all others stay the night. See page 773

(continued) p. 773

Handwritten notes on a yellowed page with a chemical structure of 2-(3,4,5-trimethoxyphenyl)propan-1-amine. The structure shows a benzene ring with methoxy groups at positions 3, 4, and 5, and a propylamine chain at position 1.

BOD 698

6mg 9:45 AM = 0:00 ATS 3/15/83. [1:30] aware of extreme peacefulness - [1:00] honest ±. At [4:00] still ± or even + [5:00] ± [8:00] baseline. ± - maybe even +!

12mg 11:20 AM = 0:00 ATS 3/18/83 [1:30] aware [1:45] more aware [1:] a very friendly tingle [2:] a peaceful + [5:] less [7:] probably out. Ladies night.

20mg 1:05 PM = 0:00 ATS, AP = 3/26/83 [1:00] ATS aware for a while, AP quite suddenly. [1:45] to a + Ted, Manon appear. [3:00] still 1-1/2 to ++, AP closer to +++ Erotic would be fine, but much talk - emotions over Foster's incident. [5:00] still ++ or so - to bed - erotic doesn't quite knit. [8:00] back to lab - can't quite get with it. [10:00] ATS largely down, AP -+. Overall, very benign - no dark corners anywhere - practically no visual - talk on phone at all times O.K. +- willing to try 25 or 30mg - but allow 12 open hours.

26mg 8:10 PM = 0:00 ATS, AP = 9/2/83 - both aware at about [1:00] - develop to an almost certain +++ by [2:00] - no body load! Expected the usual erotic, but got much talk, good structuring of ideas, easy expression of concepts at all levels, with all subjects, continuously and rather inventively. The continuous semicolon. 2 hrs of dissection of Barr's melamine. [4:00] still going. [8:00] some drop? but still going. occasional glimpses of eyes-closed figures, some eyes-open depth enhancement - but basically, everything seen goes to intellectual concept. Probably good for a group experiment if 12+ hours are available. ~ [10:00] some sleep, AP to ~ [11:00] enough, ATS to ~ [15:00] probably not enough. AM - still some sparkle. Overall, very benign, allowing, and with virtually no price to pay. +++

Aquiniga, Letter 5/1/83
HCl mp 185°
tartrate mp 215°
extreme Body odor

at 15, 1983
26mg 11:20 = 0:00 Oct 15, 1983 ATS, AP, GC, AR #: 20mg FB, PB, NT, CT, AG. at farm. alerts- :30 - :45. Development slow & quiet from :45 to -2:00 - but some on to 3:00. Some body queasiness (AP, NT, AB) - from 3 -> 6 on 7. full ++ to +++ for everyone. All look into equal peace. Some drop at ~ 8-10 - but even at 12 well off baseline. AG, GC drive home - all others stay the night. See page 773

(continued) p. 773

The Demise of Shulgin's Folly

by Paul F. Daley, PhD



In 1981, Sasha and his compatriot Peyton Jacob bid on a surplus nuclear magnetic resonance (NMR) spectrometer at the old Ft. Ord Army base in Monterey, California. They soon found themselves in possession of a 1969 model 60-MHz Hitachi NMR that they hoped to use to probe their newly created molecular structures. These large analytical instruments use powerful magnetic fields and radio frequency waves to extract detailed information about the electronic environment around protons or carbon-13 atoms in a molecule, and confirm structure.

Not the sort of equipment usually found in a home!

Sasha's son Ted arranged to have the hefty spectrometer brought in by forklift. After chopping a hole in the roof of what had been Ted's teen-years' bedroom, the magnet was lowered into place by crane.

Only one problem...the NMR had sat idle for too long. Though several technicians worked on restoring it, "all the kings horses and all the kings men" couldn't put the NMR back together again. The roughly two-ton device—soon dubbed "Shulgin's Folly"—occupied the same spot for the next 30 years, succumbing to gradual entombment in the corner of the now catch-all room.

"Basement Four", as the room was affectionately known, also became the home for Sasha's

infrared spectrometer, a tiny workbench, boxes of chemical references, a gas chromatography/mass spectrometry machine, clothing, part of Sasha's library, and lots (and lots!) of papers and memorabilia. Did I mention...lots?

As we were closing in on completion of *The Shulgin Index*, Volume I, in 2010, Sasha's health deteriorated. He became bedridden, and for stretches was confined to a hospital bed in the Shulgins' living room. This arrangement was clearly unacceptable, and the family decided that Basement Four needed to be reclaimed as a bedroom where Sasha could be properly cared for. I took on exposing the boarded-over windows and moving the accumulated stuff to the barn up the hill for safekeeping. But we were left with...The Magnet.

Without disassembly, the NMR was too large to fit through any doorways. After a fair bit of Internet sleuthing (Could it be dismantled in place? Did it have unusual metals?), I finally met an enterprising welder, one Dennis Nelson, and struck a deal: if he could help extract it, he could have it! On the appointed day, we assembled a crew of seven and went at it.

After removing the large beige metal cover, we found the core of the NMR, consisting of a blue stainless-alloy box that supported and shielded two opposed alnico permanent (unpowered) magnets.





Being giant magnets, they exerted an irresistible force on any steel object that came too close. We had to take care not to lose tools or chains to its grasp. The magnet box was supported on wooden blocks (!), cemented onto an angled aluminum platform. We chipped away the wood blocks and slid the assembly down onto wooden rollers, slaves-building-pyramids style, and rolled it down the hall and out the door. Miraculously, we were able to move the core outside without damaging either the house or ourselves. The next day, our savior Dennis had a friend bring his tow truck to winch the core up the hill to the driveway and onward to its final resting place (we didn't ask!). And so, Basement Four became a proper bedroom once again. ◉



Photos courtesy Paul Daley & Shulgin Archives



LIFE

with Sasha and Ann

by Tania Manning

After reading *PiHKAL* and *TiHKAL*, I fell in love with Sasha and Ann and decided I had to meet them. I saw them speak at the 2001 Mind States conference in Berkeley, but since my husband Greg and I actually lived near the Shulgins in Lafayette, it seemed like I should stop by and say hello. We had briefly crossed paths before, but all we knew about the Shulgins was that Sasha was a chemist. Greg encouraged me for a year before I finally went up the hill to re-introduce myself.

I expressed interest in working for them and learned that Ann's daughter Wendy, who had been Sasha's research assistant for ten years, was moving to Los Angeles to be with her husband Jason. The Shulgins hired me in 2003 at the Altered States and the Spiritual Awakening conference in

San Francisco. The following year, I started working as Sasha's research assistant helping him with his last book, *The Shulgin Index*.

A few years later, Greg and I moved to the Farm and were fortunate to witness firsthand Sasha and Ann's continuing love story.

The Workday

Sasha was a great boss and teacher, making it fun to go to play with him every day (as a job!). He answered letters from drug war prisoners and budding young chemists seeking advice on educational paths. He sent free books to people who couldn't afford them and spent time talking with lonely people on the phone. Somehow, in his late 70s, he also kept up with research, created new compounds, and

traveled to numerous events to speak.

In the morning, he would greet me with a cup of coffee and ask me about my life, and then I would ask about his. After a few email exchanges with his friends, usually involving groan-worthy puns, we would get into the research for the book.

Ann would come into the room and Sasha would drop everything, giving her his undivided attention. They would have their morning kiss then we would continue with our work.

Travel

As the Shulgins' assistant, I accompanied them on their travels. We celebrated Albert Hoffman's 100th birthday in Basel, Switzerland in 2006, and Sasha's 82nd birthday the next year in Costa Rica at the Mind States conference. In 2009, we drove to visit Myron and Jean Stolaroff in Lone Pine, California. Jon Hanna and I were on a mission to box up Myron's personal files—stored for years amidst dust and rodent droppings—so that Erowid Center could begin the process of digitizing and publishing them online.

On a speaking tour in the United Kingdom, we were welcomed into the countryside home of Beckley Foundation's Amanda Feilding and her husband Jamie. At the nearby Avebury henge monument, we touched the five-thousand-year-old stones, covered in lichen that seemed even older. We had great fun as Greg tried to follow Jamie driving 80 miles an hour, with Sasha screaming at every turn. (Back



home, whenever I would go through a yellow light, Sasha would mimic a police siren.) I still remember Ann's delight in finding the best fish and chips she'd ever tasted in a pub in the nearby village of Avebury.

Sasha would ask people when their passport expired. He told me if things got really bad in this country he and Ann would move to Barcelona. It was one of their favorite cities in their travels.

Burning Man

I had been to Burning Man twice before Ann and Sasha decided to take the trip with me. Sasha, Ann, Greg, and I went three years in a row. I will never forget Sasha's enthusiasm for getting out of the RV and wanting to follow me in my tradition of walking to the Man immediately upon arrival. When we got there, the Man wasn't finished, and was still closed to the public. But someone recognized Sasha and we were let inside for a peek.

The next year, Greg and I brought our golf cart so we could take Sasha and Ann out on the playa, making it much easier to see the sights. That same year, the documentary filmmaker Etienne Sauret came out to film them at Burning Man. He followed them for five years before releasing *Dirty Pictures*, a movie about Sasha's life and work.

At Burning Man, the Shulgins gave talks and marveled at the art installations. Sasha would bring out his red pen to work on *The Shulgin Index* in the morning as people came out of their RVs and tents. I remember one morning Ann opening the door to their RV and saying, "There is sex after 80!"

Sasha's chemist instincts were always on. In advance of a planned burn involving propane at the Crude Awakening art installation in 2007, Sasha was very concerned, telling us not to breathe if things went wrong.

Sasha was great at holding court: teasing people, asking impossible questions, delivering puns, and educating at the same time. He was a great teacher because he believed

that each person was capable of learning anything. There were no limitations as far as he was concerned. This was contagious for anyone who interacted with him.

There have been several people who shared stories of wanting to meet Sasha all their lives, then somehow finding our camp where they realized their dream.

Collaborations

Ted Shulgin was Sasha's only son by his first wife, Nina. They were part of the original research group. Ted told me that TMA-2 was his first psychedelic, given to him by Sasha. He learned chemistry from Sasha and knew how to synthesize compounds (his favorite was 2C-I).

Ted grew cannabis plants for Sasha in the 1970s, when he was researching it under a government contract. Thirty

Sasha was great at holding court: teasing people, asking impossible questions, delivering puns, and educating at the same time.

years later, Dr. Paul Daley analyzed a sample wiped from a flask stored in the magic stock room and found it contained THC.

Every Sunday, Peyton Jacob came to the Farm for time in the lab, working together with Sasha. They were a great duo. When Sasha introduced me to him, he said, "Tania, this is Peyton. Everyone thinks I'm the great chemist but he's the great one." They worked well with one another, creating the 2C



series and beyond. On Monday nights they would go to Round Table Pizza after a day at San Francisco General, where they were working on nicotine studies. They would draw dirty pictures on napkins over slices and cheap red wine.

When Sasha's health began to decline and he required round-the-clock care, the tribe came together to help provide money for caregivers and top-notch medical care. Donations of all kinds poured in; there was one envelope with no return address and a five-dollar bill in it. I could not possibly name all the people who gave of themselves to take care of Sasha. Thank you for your love, kindness and generosity. Thanks to all of the volunteers who help with the preserving of Sasha and Ann's life's work and maintaining Sasha's cactus garden.

It's great to be archiving Sasha's files and finding insights into the man before and after he met Ann. They really brought out the best in one another. ○

Shulgin Patronyms & Family History

by Scott Bodarky

Archiving work at the Farm has unearthed more about Sasha's family history, genealogy, and naming traditions.

Sasha's father, Theodore Stevens Shulgin, was born in Russia on the eastern slopes of the Ural Mountains. He attended military school and became a second lieutenant in World War I. During the Russian Revolution, Theodore fought for the White Army. When the Red (Communist) Army was victorious, he was forced to flee Russia, traveling 3,000 miles on horseback across Siberia to China, and then to the United States.

Buried deep in a cardboard box I found two photos, apparently of Theodore's father. In one (facing page) we see a white-bearded man with three girls. On the back of the photo are

handwritten the names: Grandfather "Stevens" Alexander Shulgin, with Nadja, Valja, and Anna.

There is another photograph (not shown here) of Fedor (Theodore) Shulgin's visit back to Russia in 1968, standing with Petr Stepanovich Shulgin, Roman Stepanovich Shulgin, Anna

named Theodore Stevens Shulgin. Sasha's full name was Alexander ("Sasha") Theodore Shulgin. Following in this tradition, Sasha named his son Theodore ("Ted") Alexander Shulgin, using his own father's first name as his son's first name and his own name, Alexander, as his son's patronymic middle name.

The photograph that got me interested in trying to understand the family names is one showing "Stevens" Alexander with a younger woman, standing by a plain wood coffin containing the body of an older woman. Her head rests on a pillow and the coffin is lined with straw.

On the back of the photo is an epigram in Russian, which translates to "A keepsake for our dear children Fyodor, Genrieta, and grandson Aleksandre."

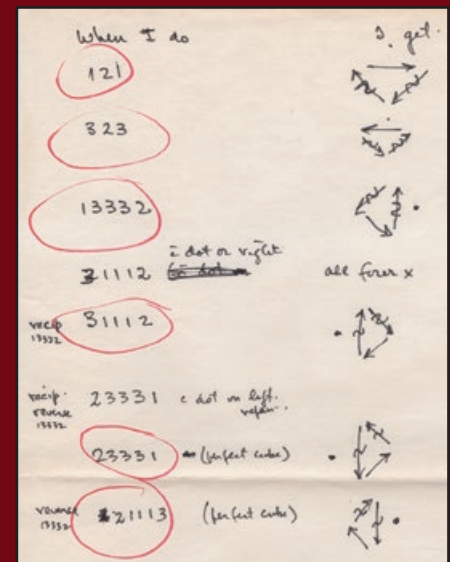
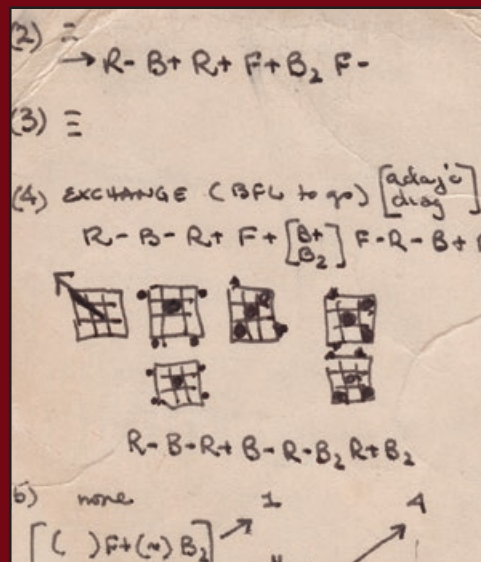
- Stevens Alexander Shulgin (Sasha's grandfather)
- Theodore Stevens Shulgin (Sasha's father)
- Alexander Theodore Shulgin (Sasha)
- Theodore Alexander Shulgin (Sasha's son)

Stepanovna Shulgin, and Valentina Stepanovna Shulgin.

In Eastern Slavic naming convention, the first name is given by the parents. The middle name is patronymic and is based on the first name of the father. Sasha's grandfather was "Stevens" Alexander Shulgin. His father was

Rubik's Cube Era

In a box, I found a yellow envelope containing Sasha's many pages of detailed notes, illustrations, and analysis of the Rubik's Cube. There were also two popular books of the day proffering solutions to the Rubik's Cube, which leaves us with the enigma of whether or not Sasha actually "solved" the Cube himself. This mini-collection gives a glimpse into one of Sasha's many momentary avocations and his detailed, problem-solving approach.



Fyodor would be Theodore, Genrieta would be Henrietta (Sasha's mother), and of course Aleksandre is Dr. Shulgin himself. The inference I draw is that the dead woman is Sasha's grandmother.

In another box I found a letter from Sasha to his grandmother from 1935, when Sasha would have been about ten years old. The letter does not conclude, and, given that it is located at the Farm in California and not in Russia, it is not clear that this letter was ever sent. It reads:

Dear Grandma,

Yes it's true that we have bought a farm. 9 acres in all a garage, store room, and a house with a sun deck. About 200 yards from the house down hill is the spring. I have a lot of fun shooting birds. Once quite a time ago I and a friend of mine set part of the farm on fire. Our farm is about 6 miles from Uncle Harold's farm.

I'm now in the low sixth grade which is just about the end of elementary. Why don't you "COME UP AND SEE ME SOME TIME".

Today I went out to the farm a little early. George, this friend of mine who has freckles, red hair (and quite self-modest) went out with us. When we arrived I shot like a bullet into the farm-house and got my gun and a little bit of ammunition. We played about for about half an hour with the gun. Then we were called upon by my father to do a little bit of work. [...]

This letter appears to answer the question of when the Shulgin family moved from Berkeley to the farm near Lafayette. The letter is dated Dec 1, 1935 and return-addressed on Spruce Street in Berkeley. The family had purchased the farm but had not moved there yet; presumably that happened in 1936. The house they moved to on the farm is not the one that stands there now; it burned down some years later. Sasha's lab was constructed in the basement of this destroyed house. ○



Dec 1 35
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VERBATIM

“Psychology, unlike chemistry, unlike algebra, unlike literature, is an owner’s manual for your own mind. It’s a guide to life. What could be more important than grounding young people in the scientific information that they need to live happy, healthy, productive lives? To have good relationships?”

— Daniel Goldstein (b. 1969)

“I try to show the public that chemistry, biology, physics, astro-physics is life. It is not some separate subject that you have to be pulled into a corner to be taught about.”

— Neil deGrasse Tyson (b. 1958)

“[T]he chemist creates original molecules, new materials and novel properties from the elements provided by nature, if indeed entire new worlds, that did not exist before they were shaped at the hands of the chemist, like matter is shaped by the hand of the artist.”

— Jean-Marie Lehn (b. 1939)

“Chemistry begins in the stars. The stars are the source of the chemical elements, which are the building blocks of matter and the core of our subject.”

— Peter Atkins (b. 1940)

“Remember to look up at the stars and not down at your feet. Try to make sense of what you see, and wonder about what makes the universe exist.”

— Stephen Hawking (b. 1942)

“Chemistry is necessarily an experimental science: its conclusions are drawn from data, and its principles supported by evidence from facts.”

— Michael Faraday (1791–1867)

“Nothing can be more certain than this: that we are just beginning to learn something of the wonders of the world on which we live and move and have our being.”

— William Ramsay (1852–1916)

“Every aspect of the world today—even politics and international relations—is affected by chemistry.”

— Linus Pauling (1901–1994)

*Und doch kann das
was aus Erfahrung
stammt, durch
Erfahrung wieder
vernichtet werden.*

[that which is gained from
experience can again be
nullified by experience]

— Heinrich Hertz
(1857–1894)

“It’s not an experiment if you know it’s going to work.”

— Jeff Bezos (b. 1964)

“To think is to practice brain chemistry.”

— Deepak Chopra (b. 1947)

“If one learns from others but does not think, one is still at a great loss. If, on the other hand, one thinks but does not learn from others, one is in peril.”

— Confucius (551–479 BCE)

“The power of Thought—the magic of the mind!”

— Lord Byron (1788–1824)

“Life is too short not to experiment.”

— Jamelia (b. 1981)

“A fool is a man who never tried an experiment in his life.”

— Erasmus Darwin (1731–1802)

“When the chemistry is right, all the experiments work.”

— Gregory Benford (b. 1941)

“There has never been any great genius without a spice of madness.”

— Seneca (4 BCE–65 AD)

“Sanity is a madness put to good uses.”

— George Santayana (1863–1952)

“It isn’t physics that will make this a better life, nor chemistry, nor sociology. Physics may be used to atom-bomb a nation and chemistry may be used to poison a city and sociology has been used to drive people and classes against classes. Science is only an instrument, no more than a stick or fire or water that can be used to lean on or light or refresh, and also can be used to flail or burn or drown. Knowledge without morals is a beast on the loose.”

— Dagobert D. Runes (1902–1982)

“Nature is trying very hard to make us succeed, but nature does not depend on us. We are not the only experiment.”

— R. Buckminster Fuller (1895–1983)

“Science is a way of thinking much more than it is a body of knowledge.”

— Carl Sagan (1934–1996)

“The truth is libraries are raucous clubhouses for free speech, controversy and community.”

— Paula Poundstone (b. 1959)