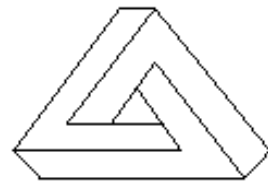
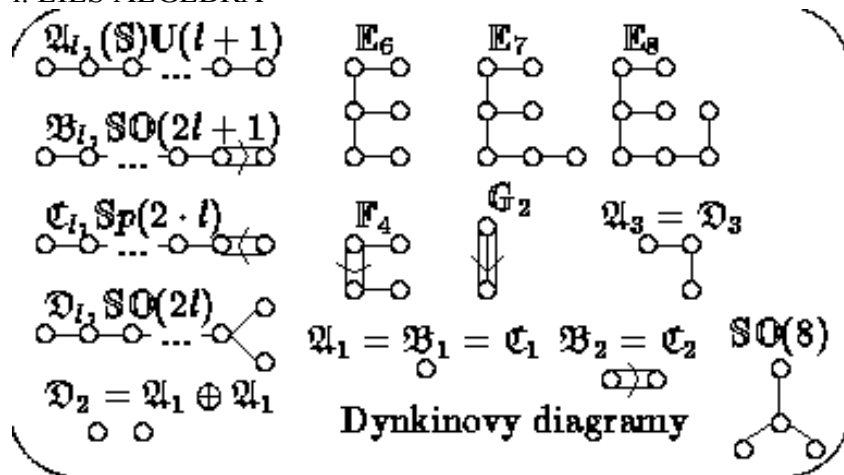


GROTHENDIECK
INEQUALITIES

By Chris Schaeffer

“A different image came to me a few weeks ago. The unknown thing to be known appeared to me as some stretch of earth or hard marl, resisting penetration... the sea advances insensibly in silence, nothing seems to happen, nothing moves, the water is so far off you hardly hear it... yet it finally surrounds the resistant substance.”
-Alexander Grothendieck

i. LIES ALGEBRA



When Grothendieck vanished he turned his back on lie algebra. He turned his back on objects. When he vanished into the Pyrenees.

Grothendieck studied transformations in the wilderness. He moved through stations and passed substance. He listed his mother. Grothendieck took a long march through Galois. He eats pine cones and chops logs outside a cabin.

I heard I could use Grothendieck heuristically so I wandered in the wilderness. I was told I could substitute “thread” and “philosophy” for “substitutes.” I saw him writing lists in a window. I heard he was dead. I heard it on crystal radio

a single circuit touching detector

touching antenna

touching slide tuning coil

touching cat’s whisker

touching galena

aka diode

in the wilderness

Grothendieck brought in sheaves and laid them out.

He burdened a sickle. In the wilderness, parsing sets and creating layers. An open set may have a lot of valences. A may be elaborated on or written over. Grothendieck ranked every living being carefully to choose mutants.

Grothendieck before the cat's whisker receiver. Grothendieck dying in the wilderness. Grothendieck wild with blooming.

When Grothendieck vanished into the Pyrenees he turned his back on non-mutants. He reversed the polarity of a large map of the earth on a cabin wall, which was startling, he assembled a list of mutants.

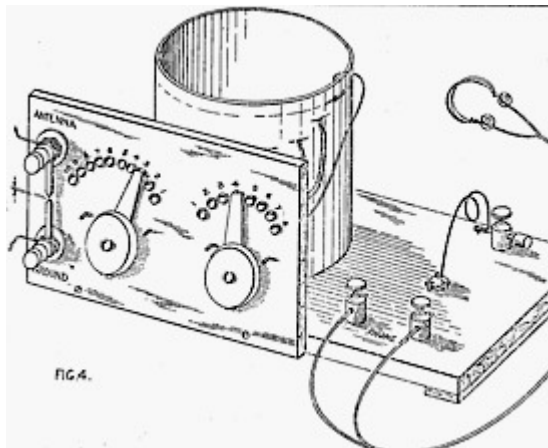
b{1. C.F.S. Hahnemann (1755-1843)2. C. Darwin (1809-1822)3. W. Whitman (1819-1892)4. B. Riemann (1826-1866)5. Ramakrishna (1836-1888)6. R.M. Bucke (1837-1902)7. P.A. Kropotkin (1844-1929)8. E. Carpenter (1844-1929)9. S. Freud (1856- 1939)10. R. Steiner (1861-1925)11.M.K. Gandhi (1881-1955) 12. P. Teilhard de Chardin (1881-1955) 13.A.S. Neill (1883-1973) 14. N. Fujii (1885-1985) 15. J. Krishnamurti (1895-1985) 16. M. Legaut (1900-) 17. F. Carresquer (1904-) 18. ...Solvic (1923?-1943) amerikianischer Arbeiter und kleiner Angelstellter; anscheninend ohne jede esondere Berefung }

assembled a list of mutants to ponder in the wilderness

Grothendieck turned his back on poor math he turned his back to the poor math

he watched TV on crystal set

ii.



CRYSTAL SET

two basic examples of Grothendieck universes:

1. the empty set
2. the set of all finite hereditary sets V_ω .

Grothendieck son of an anarchist shaves his head kneeling on the floor scraping lather off the soft space between his ear and his temple. Grothendieck fixing his attention on a postcard of Paris tacked to the wall.

outside Hanoi, emerging from the forest with blood beneath one fingernail. Lecture on category theory, background of firebombs, really really real, really real, set of all sets containing funding, set of all sets obscured by smoke

vanish out of math to blandish, as a body. Grothendieck loses hair, wilts in the center of a pressed shirt, leans against a wall and passes through. set of all sets inhabited by evil spirits. set heard knocking plates and cups to the ground, shifting furniture, pinching, pummeling, tearing out hairs from the arms and legs of mutants

the males and females (the positive and negative principles) are placed alternately; as so many zinc and copper plates in the construction of magnetic batteries. the medium or media have places assigned them on either side of the junction whereat the rope is crossed, the ends terminating each in a pail or jar of cold water... but these new things should be added. the copper wire should terminate in, or be clasped to, a zinc plate; the steel wire should, in the same manner, be attached to a copper plate. these plates should be dodecahedral, or cut with twelve angles or sides, because, by means of the points, the volume of terrestrial electricity is greatly augmented, and its accumulation is also, by the same means, accelerated, which the circle requires for a rudimental aura (or atmosphere) through which spirits can approach and act upon material bodies.

Grothendieck wrenching his teleplasmic hand from under black cloth. *the whole mystery is illustrated by the working of the common magnetic telegraph*

Grothendieck sans math throws body among student girls, goes crazy, does body attached to limbs running down from hot net of nerves, pretty fun for an old man revoked of badges, trophies, sweet williams stuck through pinholes, right?

One fake body buried, nursed unto ease by those cunning Weils, crumbled up biscuits maneuvered into unwilling hypothetical mouth cradled up under Ecole Normale Supérieure, young Bourbaki bawling for coordinates of milk, bits of fact trawled up from the riverbed or skimmed off of the surfaces of things like green scum, then swaddled up and dangled out a window. Anyway, no more of that for Grothendieck. Gone hog-wild in early dotage, yeah man, yeah man, no more hauling berth through brush like homework. No more trajectories ie. rays burning up cheap bed-sheets.

Unpleasant with shirt off though—known around campus for coarse stubs of hair, rib-cage with extra gaps and juts, adam's apple oscillating between throat and ankle at random. still—no time like time inside a body, big juicy hamburger, egg, chocolate w/coconut cream, and asparagus, and a big novelty cup full of beer? First known to math, and still, aging well in the jungle, in the Pyrenees, given leave to consort with mutants, dance, chop through substances. Fiddling with knobs attached to wires attached to a crystal throbbing upwards through the roof towards distant stations.

And after dinner screwing out a piece of meat from between back teeth with the sharp apex of his tongue, drawing blood, and dreaming later of popping his jaw to a gout of red pulp and foul-smelling gristle.

One can do nothing serious without lie groups.

Grothiendeck's body passing through the green hall, bending under material obstructions, Pyrenees indicated in green dye against a background of junk data.

Set of all green blood from a sample group of sap.

Set of all hands referring to Carthage in bad taste.

Set of all sets emerging from the underbrush, set terminating in uncharted territory.

Grothendieck, who may be alive or dead.

Who may be dead.

Grothendieck who melted into green background, into Pyrenees.

Grothendieck who scrubbed the body from all sets of all maps.

Grothendieck whose body rescinds against a burnt blot.

Contacted by amateurs via crystal set.

Through DX sea.

rational ghost through DX sea. consistent sea, ghost,

Grothendieck present through zinc plate

Through copper plate

Through medium of

affordable, easy to assemble & use

set

speak

through

iii.

Some passages are designed to forewarn the reader against serious errors, where he risks falling; these passages are signposted in the margin with the sign \curvearrowright ("dangerous bend")

-Nicholas Bourbaki, *Theorie des Ensembles*

DAN GERO US

BEND

at a certain point, the poem can't surpass
my own fundamental lack of comprehension

the dangerous bend, indicated by a tilted "Z" shape
indicates a swerve at the height of which a student

can careen off into fallacy. I think I careened, at many points
asking the internet for glosses on mute math,

poor mess of symbols in my shitty notebook.
I don't know lie algebra.

Donald Knuth, computer scientist,
introduced Bourbaki's bend into Metafont and teXt,

enter `☡`

enter `\usepackage{manfnt}`
enter `\dbend`

enter `\lhd bend`, `\reversedvideobend`, `\textdbend`, `\textlhd bend`,
and `\textreversedvideobend`.

enter more realistic, fringed in yellow,
(double bend twinned to signal double danger)

Grothendieck and I, best friends in Pyrenees.
We're frolicking in glades, swinging on rope swings,

Grothendieck and I eating rare mushrooms and riding toboggans. Wonderful coordinates,
set of all wonderful sets.

Grothendieck listening to *Samson et Delilah* the needle
skips at *les fleche est moins rapide*, I click back on iTunes

to hear the words over and over. *Redis a ma tendresse*,
Grothendieck, step softly from Hanoi to explain categories

Grothendieck's aria vaulting over red bombs, friendly bombs,
those extras freaking out at the end of "Gloire a Dagon!"

Grothendieck in the greenish dream explains-it-all,
Grothendieck schoolmaster with hooves, like in Euripides,

I think, or Aeschylus, I forget,
revealed as startlingly dumb at all impasses, poor math,

we for whom K-Theory is a lot of confusing bundles,
cohomology imagined as pertaining to best bros,

loose vernacular translation running
Grothendieck! Grothendieck! Juuuuuuh-teeeeeehhhhh-meh!

stuck on math, I concern myself with data loss

I wonder where language goes when nulled,
am told to read a specific Derrida book.

begin forgetting to gloss on logic as soon as I hear it.

translate same poem over and over, recall *a terre* and *derriere*
in “Le Paon.” stuff extra crumbs into an envelope to relay
to the office of mutants. flutter out from forest
little load-bearing officer starling

begin to attempt to vanish into Pyrenees,

re-enter confused and embarrassed 20 minutes later,
soaked and drizzling, stamped

Attempting to find some common ground with the subject of the piece, Grothendieck, I imagine him sitting on a low wall looking at water. When I was 17 I worked for a roofing company, but was very bad at it. I worked on roofs along Chestnut Street, where I could look out and see Hahneman, I think. My job was mostly to scrape away old, deteriorating caulk and then carefully apply new caulk. I was very careful, and very slow, but still no good. I was also clumsy and fell off a ladder several times, and on the way back to West Chester I took naps. Why does this make me think of Grothendieck? My best guess is because I've seen a photograph of him standing with other Bourbaki Group members in front of a very poorly caulked wall. I think even I could do a better job on that wall. My second best guess is that he was initially baffled and blandished by Henri Cartan's famously difficult seminars, so he transferred to the University of Nancy. He did really well there. I'm glad he found his place. But I'm sure almost anyone can relate to that initial feeling. He never got fired from a poorly-paying job but he did quit academia in a rage at the height of his career. I can approach Lies Algebra as a pun or a rather facile metaphor but he could approach it as math.

His parents were both anarchists. One was descended from Hassidic Jews, the other was a Protestant, and during the war Grothendieck hid in boarding-houses and pensions. His father died in Auschwitz in 1942. They (his mother and father, I mean) also took part in the Spanish Civil War (supporting roles, not fighting

Contributions to Mathematics (*Maitre Themes*):

as listed, chronologically, in La Vision:

1. Topological tensor products
2. “Continuous” and “Discrete” duality
3. Yoga* of the Grothendieck-Riemann-Roch Theorem
4. Schemes
5. Topoi
6. Etale cohomology (including ℓ -adic cohomology)
7. Motives and motivic Galois group
8. Crystals and crystalline cohomology, yoga of De Rham
9. Topological algebra, infinity-stacks
10. Tame topology
11. Yoga of anabelian geometry, Galois-Teichmuller
12. Schematic point of view or “arithmetics”

**here the term yoga denote
s a kind of ‘meta-theory’ that can be*

used heuristically ; Michel Reynaud

*uses the terms ‘Ariadne’s Thread’ or
‘philosophy’*

as

*effective
equivalents*

13. *La Clef des Songes* called *Les Mutants* called *Die Mutanten* called

iv. THE KEY TO DREAMS

Tout les rêves sont une création du Réveur

particular vision sent as call

du Réveur

implicit in talk, notions of economy
predicated in other textures, other overlays, speech trace
ajouter foi, Glauben Schenken
Grothendieck decided the sound, charted,
God spoke from outside his cabin

Grothendieck dreams he might be sent by the dreamer which
we may ignore entirely

putting his face against a piece of glass to sand his jowls,
cut a pear into a spiral with a small knife
to illustrate a point about sleep

Grothendieck sleeping naked under medals,
rising with eyes closed, frightening
Hanoi locals with his
wet knees
walking to the Pyrenees
in bare feet
he buys milk
he passes through walls

fundamental rhythm described carefully in chapter 12

Dieu est le reveur

the day Grothendieck resigned I fainted
hundreds of miles away in Richmond, Virginia
my hands arrayed on a crystal set passed down
from neighborhood boy scouts
and I dreamt of Grothendieck chewing up mercury
letting it drool slowly onto tablets
which revealed themselves as laws

no, not really

a cataclysm for humanity in Grothendieck's lifetime,
he saw it in dreams, his office in Montpellier
writ over with magic circles, he saw it
leering at the night's salt body,
bombs signed against and warned thereof

he first saw god ("the dreamer") in 1976
(via meditation, in sleep) then

in 1982 through
close-contact revelation w/mutants w/ diode
galena

cat's whisker

slide tuning
coil

Voyage a Memphis (1)

while turning over postcards of Hanoi, Pyrenees, schematics of
Very Own crystal set, stung and swollen and dunked
through water.

I think about re-establishing contact with an outer spirit

if she and I drove around after dark shooting at things

if the inhuman strength derives downward from his hair

if I pluck any string along the length of the contraption,
place a junior apparatus in the space behind his ear,
signal guaranteed to hit the receiver,

transmit signal upwards in permanent fever

mutant thinking elsewhere with fever

Aspects d'une Mission (1)

if I place an apparatus in the space behind his ears,
coo nice sentiments at him, bug the office,
sweep detritus under woven grass mat,
I'll end up chaining Grothendieck to walls,
smash his glasses, cut his hair.

popular in chilly Canada for his lush black locks.

I discovered that night that even if I wasn't a good person,
I was the kind of person for whom it becomes important
to say 'I'm a good person' while wounding irreparably

Grothendieck bellows a calf in half,
rattles at his confinements.

pierced opening out onto night sky,
texture out onto Pyrenees, wild beasts,
if a map draped over the contour of the Pyrenees.

if the union is an element of a union, singly

I inscribed a number on a surface of Grothendieck,
kicked his mutiny,
gave succor to a tent-worm,
gnawed his home, slashed budgets

if donated, as ever, generously

Aspects d'une Mission (2)

*he gives a (convincing) description of a
state*

if I am an element of she, and I an element of Grothendieck,
then
she is an element of Grothendieck.

If she, I are elements of Grothendieck,
then she and I are elements of beasts

the power set of Grothendieck trickling downwards,
weaning set off power set. misplaced anger.
poor calf, poor mooncalf, poor mutant.
poor apparatus burrowing into bone, by now.
must be bone by now

$$\mathbf{c}(U) = \sup_{x \in U} |x|$$

says in French, says it with paving stones
becomes an element of Grothendieck
perched over a nose, soft spot behind his ears
medals in a satchel, under a flap, then--

other examples are too difficult to construct

Voyage a Memphis (2)

Grothendieck dreamed he turned an object over
for enter and

couldn't find an aperture

woke up chewing his transistor,
applying pressure to the soft spot
at the nape of his neck
while trying to remember the term
for 'slipped disc'

little motion to indicate 'moth' he does

at intervals, without thinking

in his memoirs, god appears unmediated

were only based on common tasks,
which blew down,
then died. no data lost.

Grothendieck says it will be cataclysmically violent
when it happens

he needs solitude and silence

Grothendieck insists on being fruitful
within limits

the remainder of the chapter is devoted to a description of dream analysis but it is entirely abstract (“we penetrate deeper and deeper into successive layers of our psyche”)

with various metaphors of onion, garlic, etc.

v. THE MUTANTS



*begetting an especially potent intersection of desire and repulsion through the
multiplicity of monstrosities that make his monstrosity itself monstrous*

I swear to god there's no more elegant
way to phrase this

“killer bee.” Currently testing techniques have moved away from external measurements to [DNA analysis](#), but this means the test can only be done by a sophisticated laboratory. Molecular diagnostics using the [mitochondrial DNA](#) (mtDNA) cytochrome b gene can differentiate *A. m. scutellata* from other *A. mellifera* lineages, though mtDNA only allows one to detect an Africanized colony that has an Africanized queen, and not colonies where a European queen has mated with Africanized drones.^[10]

The Western honey bee is native to the continents of Europe, Asia, and Africa. As of the early 1600s, the insect was introduced to North America, with subsequent introductions of other European subspecies two centuries later.^[11] Since then, they have spread throughout the Americas. The 28 subspecies can be assigned to one of four major branches based on work by Ruttner and subsequently confirmed by analysis of [mitochondrial DNA](#). African subspecies are assigned to branch A, northwest European subspecies to branch M, southwest European subspecies to branch C, and Mideast subspecies to branch O. The subspecies are grouped and listed.

He also recounts more extraordinary tales, such as bees creating a shrine to Jesus after a piece of the Eucharist was placed in a beehive, a church that was burnt to ashes while the [pyx](#) containing the Eucharist was still intact, and a woman who found the host transformed into congealed blood after she stored it in a box

mutant selection, aka, Grothendieck tending with hands dangerous selections. mutant a specimen specially fitted to either kill or transcend. in other words, a kind of sovereign that might faint or dissolve. if market is a mutant, repelled by it. if monk lights dancing at the periphery in the Pyrenees, drawn forward, *ravished* as in “transported emotionally by the [a] Holy Spirit” (out of fashion in English by the 1660s, according to the OED)

“For many Thousand Bees were lost.
Hard'ned with Toils, and Exercise
They counted Ease it self a Vice;
Which so improved their Temperance;
That, to avoid Extravagance,
They flew into a hollow Tree,
Blest with Content and Honesty.”

When confronted with their arch-enemy, the aggressive giant Asian hornet, the honeybees will attack it by swarming en masse around the hornet and forming what scientists call a "hot defensive bee ball" – a move unique to their species.

With up to 500 bees all vibrating their flight muscles at once, the bee ball cooks the hornet to death.

adaptive speech, stolen speech, swaddled and smuggled speech

in the Marvel comic-book The Champions, published in the mid-70s, several super-heroes battle 'The Swarm,' a nazi scientist whose disembodied ghost controls an army of bees which cohere around his bare skeleton. he also wears a large purple cape with a hood. defeated by isolating the queen, trapping it in a simple mason jar, at which point the dead war criminal's bones reveal themselves. according to Wikipedia, these bees constitute his body and his relation to the bees is essentially monadic—as he stands to them as god or nature. according to wikipedia, he is not a mutant. although one could say he is a set.

does genetic variance among Africanized bees amount to 'mutation'? I think about Caliban in The Tempest. Trinculo wonders if he is a fish or a man—with fish arms and man legs. a monster, at least. or an atavism. I feel weird picturing his mutant body lying in the sun under his gabardine. an article about cro-magnons. rustic horror in spenser

Grothendieck throws his hat upon the ground.
Record of splendid sights coded for height and extension
green photograph plotted, live in.

Grothendieck latching and unlatching, sulking.
Grothendieck arranging parcels, unpacking, stubbing.
His parking space paved over by white flowers.
His driver's license photo with thick black hair.
Legal document in a safe deposit box, thick black hair.

Grothendieck spits into a cup in shock.

Grothendieck refusing prestigious private grants in moonlight.

*

18 flawless humans figures
constituting a crystalline set

an inorganic compound

a geode set

Grothendieck stewing in his own devices

a mutant is an organism deviating from the “wild type.”

1. C.F.S. Hahnemann (1755-1843)

2. C. Darwin (1809-1822)

3. W. Whitman (1819- 1892)

4. B. Riemann (1826-1866)

5. Ramakrishna (1836-1888)

6. R.M. Bucke (1837-1902)

7. P.A. Kropotkin (1844-1929)

8. E. Carpenter (1844-1929)

9. S. Freud (1856- 1939)

10. R. Steiner (1861-1925)

11. M.K. Gandhi (1881-1955)

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To read Les Mutants is difficult and heavy, but in some sense pleasant. Contrary to Recoltes et Semailles, Grothendieck talks about people that he clearly admires and that he considers models of humanity and spirituality. Therefore a positive undertone is dominant.

The main objective of this essay is to show that Grothendieck wrote philosophical texts of a different nature than Recoltes and Semailles

and La Clef des Songes. In Les Mutants we do not find the aggressiveness and the bitterness of Recoltes et Semailles and not the selfcentredness of La Clef. We meet a Grothendieck in search of men's

destination.

I thank XY, AB, and CD for valuable information

VII. SURVIVE ET VIVRE



Bourbaki

*I too a mutant of biography holed up
in the Pyrenees with political math.
I don't understand and I feel math
receding beyond me.*

*I'm a free ghost in horn-gate
and dream and lazy. killer set,
the subject that grasps its limits,
ghostly hovel and wooden whine.*

my favorite crystal set,
attuned to a forest.
my image, my locks torn
out by state. *I am my own favori*

te Martian

son of Cantor,

son of an anarchist,

*son of fake mutants, Normale,
he lives in a garbage can,*

and from set spake unto

Cantor

its body sleeping,
its body tidied over by forms.
it was only as in books for Cantor
divided by abbreviations, by wind,
recovering, recovering, function and fugue—
bisected by a clean action and laid out
across three or four blocks, before the butcher's,
the pump-house, the new age bookstore, the axel,
the figure moving slightly faster
in the opposite lane—direction a day like this

where he may flirt with any object
merely via diagonal motion—
carving a territory of equivalence
and calling it—

Cantor's legs at optimal speed,
his grey pants-leg, his lift
from other voices, at a motion
and every hour matching hour
under the sign of less exhaustion,
and every month under the sign of less exhaustion,
and the truck that idles and the fact left leaning
on the well-turned frame—

left eating ferocious again
only as in a stretch of line, only
as in a precise braid of line—

Cantor, whom I remember nothing of,
neat beard and infinity and petty theft,
welcome from the forest of ten thousand arrows
moving through a rational set,
burn it down as you will, one benefit
of forest life, burnt down set
and crystal lees laid out—

Cantor dispelled from paradise,
a walk in the woods again before bathtime,
Cantor in the frock sent down by one unbroken beam,
born out of time at a lecture on Shakespeare,

born with silver spokes for eyes--

Pyrene

Pyrene sounded out by Herakles,
as hair poured out from eyes and mouth,
and told a narrative to trees.

She gave birth to a serpent in the country of Bebryx.

Pyrenees, over and over again,
set of all sounds resounded by rock-walls,
set of sounds spit out by wild beasts.

Grothendieck glides back into her woods,
steals out a calf, fauns and goes sighing off.

Pliny the Elder connects the story of Pyrene
with that of Lusitania—which wobbled between “game”
and “frenzy”, Grothendieck chopping at the syllable, Pan.

Set of all girls turned over for rare calves,
inverted for values by set of all funding, Hanoi post-cards

pinned to a knee and torn outwards by wild beasts.
A direction given over to rivers, stone-walls,
what we’d call “the sacred code of hospitality.”

Mistreated, articulate in histories, reverb off crystal sets.

Given birth to mutants.

Riven out towards mutants,
spake over the tops of trees, and riven at by wild beasts.

“The mountains hold onto the wept-over name.”
Grothendieck melting into the Pyrenees.
Pyrenees melting into set, unfounded.

Herakles, feeling bad about it, melting into the Pyrenees.

Impossible set foreground against a background of wild beasts.

Samson et Delilah

I insist it's a wonderful opera
about the loss of the set of all thick black hair
foreclosing my understanding set theory.

I slur and say *Samson* is *Delilah*.
On the record, *Delilah*, *Delilah*, *je t'aime*.

In trying to understand set theory I somehow came across an article on 16th century French novels about hermaphrodites.

Which, to conservative satirists, offered a metonymy
for offensive outliers to social sets—as figured by, perhaps,
religious dissenters, natural philosophers, etc.

I picture Grothendieck bound to his chair with crystal,
his thick black hair removed by beloved mutants.

I picture him brushing his teeth in a bathtub,
looking out on a ravine in Hanoi, an amorphous
black blot of forest in the Pyrenees.

He is laying his hands on a crystal set,
he is vanishing bald and helpless into the line of woods,
young, he is vanishing hawk-faced and perfect.

Signaling imminent category crisis, with metals on the floor.

Barefoot, leaking from an aperture, covered by ivy,
set of all mutants slaking off rough garments of sets.

Grothendieck

Grothendieck was set up in a post-office box.
He tore through the streets hitting men in the mouth.
Grothendieck peels off the body of Bourbaki
as a film shedding off the form of wild beasts. His is the long set.

an animal underwater breaking a surface
as described in the prayers of Nantucketers,
traveling north on vacation, admiring the canvas.
Geryon coughing moon-calves. two foxes tied.
His father was a one-eyed bird of prey.

he instituted
a lecture
series
at the IHES a name and
influence

“they had a song together”
dietary restrictions ascribed to choice,
Judaism, or Buddhism

a professor of statistics at an important university

capable of having certain *properties* and having certain *relations* among themselves or
with elements of other sets
a “windowless” element with no internal structure
he was a thorn in the side of an academy he was a tensor in prison he gazed at the
Pryenees from a plane ascribed in many memoirs the descriptor *hell-like* he was *he was*
like

upon his return
Grothendieck becomes
Buddy Rich’s 1967 version of ‘The Beast
Goes On’ in which Cathy his daughter
is twelve years old, drunk, and won’t stop
howling at the microphone—

I lived for many years in filth
for no good reason
he explains

they made pleasant conjecture.
they used clever tricks to locate a small town

[if I can believe his most recent visitors
he is obsessed with the devil
whom he sees at work everywhere in the world

destroying the divine and harmony and replacing
300,000 km/sec with 299,887 km/sec

as the speed of light]

When I contacted Grothendieck's relatives I was told
[Grothendieck] is probably dead

at this writing, the mathematician is alive

Notes

*“Lies Algebra” incorporates language from W. Scharlau’s “Die Mutanten,” as well as the same author’s German translation of *Les Mutants*.

*“Crystal Set” quotes from Jeffrey Sconce’s *Haunted Media: Electronic Presence from Telegraphy to Television*, as well as from Andrew Jackson Davis’ 1853 *The Present Age and Inner Life*.

*“Dangerous Bend” makes use of the Alexander Grothendieck Wikipedia phrase for its use of an otherwise untraceable Michel Raynaud quotation.

*“The Key to Dreams” draws on both the French original of *Les Clef des Songs* as well as an anonymous English gloss located at

<http://www.math.jussieu.fr/~leila/grothendieckcircle/Clefsummary.pdf>.

*“The Mutants” borrows language from Wikipedia entries on “killer bees,” “honey bees,” “mutation,” “bleeding hosts,” “Caesarius of Heisterbach” and “Swarm (Marvel Comics)” as well as from Bernard Mandeville’s *Fable of the Bees* and a March 2012 Reuter’s article entitled “Japanese Enemies Cook Enemy in ‘Hot Defensive Bee Ball.’” I also draw again from W. Scharlau’s “Die Mutanten.”

*In “Survivre et Vivre,” “Pyrene” quotes from Wikipedia’s gloss of Pliny the Elder in its article on “Pyrenees.” “Grothendieck” repurposes language from Amir D. Aczel’s *A Strange Wilderness*, as well as Bourbaki Group member Pierre Cartier’s recollections of Grothendieck (recounted in Aczel’s book).

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