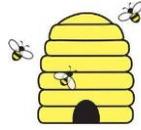


WHAT IS BEING-SUBSTANCE?



*How can we understand what is a conscious beehive—humanity—which produces a substance?
This substance is the only one that can attract the I.¹*

Michel de Salzmänn

Yes, how *can* we understand that? What is this “bee-ing substance”?

A beehive is a structure composed of hexagonal cells made of beeswax. There are two groups of cells: worker cells, which are smaller and found in the lower part; and the larger drone cells in the upper part. There is sometimes a third type of cell, the queen cell.



The hexagonal cells store honey and pollen (food), and house the eggs, larvae, and pupae (the next generation). This “house of wax” is called a “honeycomb,” and is the place of residence of the honey bee colony.



The honey bee is a member of the class Insecta, genus *Apis*, and represents only a small percentage of bee species. The name, *Apis*, is Latin for “bee.” Honey bees, *Apis mellifera* (*Am*) are the lineage from the subfamily of the “Apini tribe,” which produce liquefied sugar (honey). *Mellifera* means “honey-bearing.”

The special wax used for building the honey bees’ amazing hexagonal nest is provided by the worker bees living in the colony. The worker bees are the Builders.

We need to be clear about this. The building materials used for hive construction must be produced by the *gland secretions from inside the workers’ body*. In other words, the worker bees not only build the nest; they also bear responsibility for producing internally the materials required for creating the structure in the first place! The waxy substance comes from the *abdomen*. Madame de Salzmänn spoke about the “irresistible power centered in my *abdomen*.”²

¹ The Next Attention, p. 290-1

² The Reality of Being, p. 143. See also pp. 139 and 150-1

The worker bees bring up small flakes of wax from their **abdominal** glands, and chew them up until they become soft and pliable, and can be used for various purposes. One purpose is molding the wax into hexagonal “bricks” that form the protective walls of the hive. Workers on the “construction team” generally tend to this aspect. This special wax secreted from the **abdomen** also serves the purpose of feeding the larvae. Workers on the “kitchen team” are responsible for this important aspect of maintaining the hive. Other workers, generally the stronger adults, are the foragers; pot-like appendages attached to the hind legs (which are made by the “pottery team”) allow toting the pollen foraged from the field (garden/orchard/grocery store) back to the hive. No matter what “team,” the work of worker bees is hard, and their life span is short, usually around 45 days (approximately six weeks). Nearly all workers bees do the assigned work until they die.

Worker bees are all sterile females, numbering as many as 80,000, and although the smallest of the bees they do nearly all the work in the hive. These infertile females usually do not produce their own eggs, nor do they establish new colonies. However, they do perform important tasks, and the hive cannot go on without them. The sole purpose of the worker bees is to *serve*. For them, “I wish to be” means *wishing to be in service*. The servants exist under a rigid hierarchical structure. Confined to reside in the lower part of the beehive, they mainly operate “below stairs,” in the “downstairs” area of the house. The important tasks they perform include attracting other would-be workers into the colony, and to reorient forager bees back to the colony. The means for attraction is found in the Nassinov (alternatively, Nasonov) gland, which produces a *smell* that attracts the bees. To broadcast their scent, the workers raise their **abdomens** in order to present the tip (the location of the Nasonov gland), and then vigorously fan their *wings*. Both the Movements and (nasal) scent serve as the attractive force.

Most workers are happy to be servants, strongly resent any would-bee that has an uppity attitude, and waste no time in using their *stingers*, located in the sting gland, to put the upstart in its place. The stinger gland not only acts as an alarm system, warning unwanted intruders to beware; it also *wakes up* the bees that are *asleep* in the hive. Female worker bees are social creatures that enjoy *colonization*. Nevertheless, they sometimes are known to display aggressive behaviors (“Your mother is a —, your father is a —, your grandmother is a —”, and so on). Another case in point is that, especially during cold weather, any bees exhibiting drone characteristics are ejected from the colony.

The drone is a male bee.

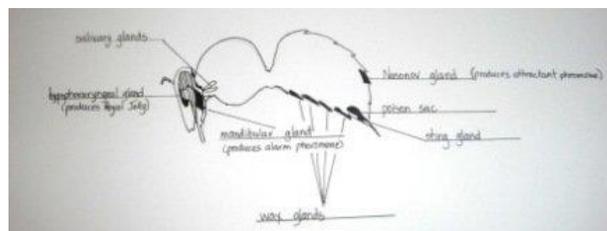
The main area of drone activity is not below in the “colonic” area, but is “above stairs”—that is, in the head region. The drone bees are far fewer in number (around 800 per hive) than the unfertile female worker bees. Drones, unlike workers, do not brood, nor do they gather and store nectar and pollen. And unlike the female bees (including the queen) the male drones do not have stingers. The primary role of the drone is to connect and mate with a fertile queen. The life span of the drone, on average, is longer—generally around three months (90 days); but if successful in mating with the queen (a highly-sought-after-event: “die before you die”) the drone dies almost immediately. Drones are those on the “music team.” In Hindu music, the word “drone” refers to the unchangeable *acala*, the *resting place* without which the entire organization of notes remains in a state of nearly unendurable tension. Some

of the Gurdjieff concert pieces (for example, “The Bokharian Dervish”) employ the compositional device of the drone.

The drone acts as the “tonic” or “tonos,” or alternatively, “tonus,” defined as “the ability of a muscle to expand and contract in response to a stimulus.” Madame de Salzmann connected the movement of tension and slackness with “the overall ‘tonus.’” She said that regulating the balance between tension and relaxation affects the *arising of thought*, and can bring a kind of *mastery over the associations*. (*The Reality of Being*, p 84) As she also wrote (p. 192) “Regulating the global ‘tonus’—the overall degree of tautness of the thinking, sensation and feeling—changes the sense of inner space in which movements of energy take place.” Musically speaking, tension and relaxation are controlled by the tonal relations between the working dominant and resting tonic (drone), respectively.

The drones, contrary to expectation, are the active force that actually sets the tone. They teach, present tense. They act as teachers and group leaders of the community. They arouse thought. The workers in the hive are *taught*, past tense. The peculiar and contrarian relations between the “active” drones (thinkers) upstairs and the “passive” workers downstairs (thought, past tense of think) often lead to skirmishes and sometimes to outright confrontational warfare. But despite the ups and downs, on the whole the two factions manage to exist together in a rather unholy alliance in that residence called the “House of Wax.”

The actual household division into labor and management is made a bit clearer by the picture below



The house is divided into two separate groups, or cells. As to how the two cells operate, each is composed of three glands: group I, group II, and group III. The “tail” part of the organization operates at the Nasonov gland, the sting gland, and the wax glands. The “head” operations take place in the mandibular, hypopharyngeal, and salivary glands. Under the usual conditions, the six groups of glands work separately, as powers of 2, moving clockwise around the circle in the order of 1 2 4 8 16 32. We might term this ordinary divisive linear way of working the “First Series.”

When the work becomes a more concerted effort of real teamwork, all six glands working together, the separate particulate matter (the collected particles of “dust” or “pollen,” as it were) begins, as if by magic, to flow as a stream of liquid. From working in this new way, as a group, the unified glandular system begins to secrete the precious substance, the liquid sugar known as “honey.” This group work is termed the “Second Series.”

The magical action is due to gematria, which transforms the “pollen” (the first series of numbers (1 2 4 8 16 32) into “amber waves of grain” (1 2 4 8 7 5). It is the difference between (dust) particles and waves.

The Second Series takes as its symbol the horizontal figure 8 (lemniscate).

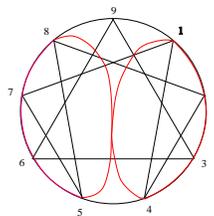


The lemniscate is the mathematical *sign* of infinity. Few men of science who use it, however, realize that it hides an immense secret: the secret of Magic. One sees it above the head of the Magician, card number 1 in the ancient Tarot deck.



Although it is said that there are two types of magic (black and white) Gurdjieff does not hold to that idea, saying that there is only one kind of magic: that of “doing.” The magician is the man who, knowing the law of correspondences (“as above, so below”) can do.

The lemniscate (∞) resembles a pair of eye glasses, the spectacles that help us to see. For the magician, the glasses reveal the way to prevent the endless dissipation and running down of the universal machine. (Physicists call it “entropy”). The way is easy: instead of the never-ending line forming the linear, one-dimensional, arithmetic series of powers of 2s (1 2 4 8 16 32 64, etc), the magician knows the way to pull “the two ends of the stick” together into a circle, thus geometrizing them into a plane of two dimensions; and then, by “crossing the lines,” he creates the “eye glasses” shape: 1 2 4 8 7 5. The numbers flow in perpetuity, an endless loop: eternal recurrence. When the powers of 2 are connected around the enneagram circle in the order of 1 2 4 8 7 5, they form just such an iterative “loop.”

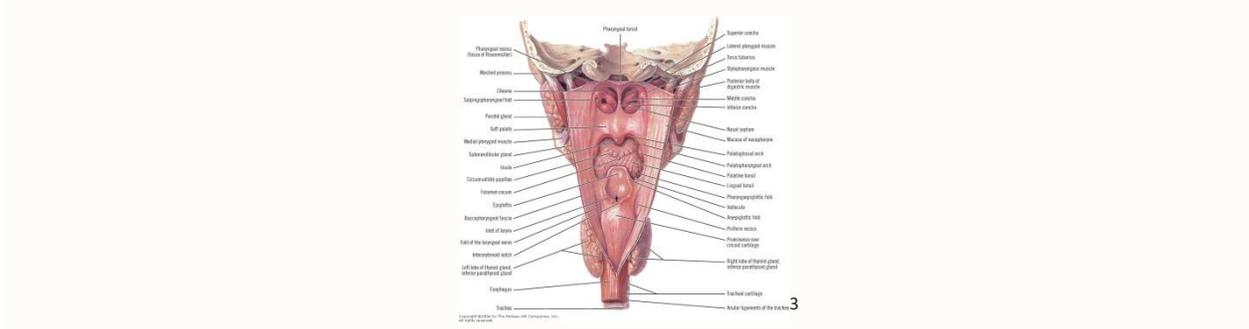


There is something extremely interesting about this sweet honey nectar. On the one hand, it is produced by the female contingent in the region of the cervix, the lower part of the human uterus. The cervix lies at the one end of the stick. On the other hand, this “honey” comes from the cervical region in the *neck area*, anatomically the place in the head and neck where one finds the pharynx (throat) and mandible (lower jawbone) and salivary glands.

It may be difficult for some to swallow, but for one familiar with that special “taste of honey” afforded by the esoteric tradition, it is not too hard to connect (con-neck) the tastes of the two honeys as representing the two types of secretions occurring during the birth process. The one type, cervical honey, is produced in the lower part of the honeycomb and is secreted naturally during the “outer” birthing of ordinary creatures (the “new arisings”). The other type is much rarer, much more secret, and happens only during the extraordinary “inner” birth of the new man. In hermetic teachings this secret substance secreted in the neck region is known as “the nectar of the gods.” Those who have experienced it say it tastes like honey mixed with ghee. Reportedly, only a drop of this honey can bring glimpses of transforming Truth.

The great Hindu saint Paramahansa Yogananda spoke about this extraordinary divine nectar. To actually produce it, he said, requires long inner work. The process is not natural but artificial—that is, it does not happen automatically and unconsciously, by itself, like ordinary birthing; instead, it requires intense and diligent conscious practice. The event (advent) occurs in the back of the mouth, at the place when the tip of the tongue touches the *uvula*. In the instantaneous moment of connection, the positive and negative energies generate a magnetic force of such great magnitude that energy is pulled up from the base of the spine and into the brain. Yogananda was clear that this practice could be dangerous and required a real teacher. One should never attempt it by oneself.

The picture below, which depicts the pharyngeal anatomy, strangely resembles a human face, or perhaps a horned devil. Note that the part termed the “uvula” appears as *the tip of the nose*.



Our “sorry scientists” (as Gurdjieff called them), continue to be puzzled by this weird piece hanging down into the back of the mouth. They don’t really know why it is there or what it is for. The logical answer is that it directs airflow down from the nose to the voice box, and thus it is implicated in sounds made by the human voice—including the “special” sounds of yodeling (defined as “a sudden shift from the chest voice to the head voice, or falsetto”; a vocal sound associated with high mountainous regions, particularly the Alps), and the rolling the “r’s” (as in some Romance languages). The uvula also gets blamed for that rather unpleasant sound we call snoring (defined as “breathing with a rough harsh noise while sleeping”).

³<https://www.google.com/search?q=pharyngeal&biw=1600&bih=761&tbm=isch&imgil=kq3KzvdWmt006M%253A%253B9LW8btkz2YMIM%253Bhttp%25253A%25252F%25252Fueu.co%25>

In hermetic teachings, this “tip of the nose,” or *uvula*, is called “the little tongue.” By the special method known to advanced yogis, when the tip of the tongue is made to touch the uvula at the back of the mouth, the contact brings the secretion of the secret honey that unifies life energy with cosmic energy. The entire body is *spiritualized*, filled with light—so much so that an actual glow of light may emanate from the physical body, surrounding it like a halo. As stated, it is the connection, the touching of the “little tongue” with the “big tongue,” which establishes the electrical current which draws the prana (life energy) up from the spine and into the brain, enlightening the whole being, bring “cosmic consciousness.” The ancient yogic practice is sometimes called “tongue-swallowing.” The image arising is that of the Ouroboros, the ancient snake swallowing his tail.

Here, finally, is the *objective* meaning of the Ouroboros. The name, in the Greek language, literally means “tail” (*oura*) and “eating” (*boros*): hence, the familiar picture of a snake with its tail in its mouth.



The Greek word for “I eat” is *trogo*. This “tail eater” may be linked to the Trogoautoegocrat, loosely translated as “I empower myself by eating myself.” The word may be one of Gurdjieff’s neologisms, but the ideas surrounding it are not new at all. The ancient practice is called “Raja Yoga,” the royal yoga. The electrical current is the sex energy.

The union of nerves in the “head and tail,” or, alternatively at the tip of the “little tongue and big tongue,” initiates the flow of the “waxy” secretion. The sweet taste (ghee and honey) is an aphrodisiac par excellence; it invokes pleasurable sensations far more intense than that of ordinary physical sex. (As Yogananda said, “Sex seems pleasant to you now, but when you discover the joy of real inner union, you will see how much more wonderful that is”). Unlike ordinary sex, this “internal combustion” process, which flows up and in, does not involve the loss of energy, and the correlative “shortening of life,” but rather it has the effect of heightening energy, and of lengthening life.

In the final chapter in Gurdjieff’s third series of writings, titled *Life is Real Only Then, When I Am*, Gurdjieff speaks about “misunderstandings” and “the possibility of solving the chief problem of our existence.” Only then, from the understanding of what is meant by “The Outer and Inner World of Man” (the actual title of this last chapter of the book) is it possible to solve the “problem of the prolongation of human life.” The meaning of this subject “is entirely lacking in the mentation of contemporary people.”⁴

We might also want to look at the full name of the uvula, which is “palatine uvula,” because of its location on the soft palate. However, given the association with vocal matters and Romance languages, and since the configuration itself rather resembles a “little hill,” it is possible to make a connection to

⁴ Gurdjieff, *Life is Real Only Then, When I Am*, p. 143

the “Palatine Hill,” a place shrouded in mystery and steeped in enchantment. According to legend, ancient imperial Rome was founded on the Palatine Hill, which stands as the highest summit and the center of the seven hills that surround the city. On one side there is the Roman Forum, and on the other the Circus Maximus.

For those who deny that Gurdjieff mentions such things as uvulas and tongue-swallowing, check out *Beelzebub’s Tales* (p. 870), specifically that passage where we read that Beelzebub was now deeply absorbed in thought, and “his look was fixed on the *tip of his grandson’s nose*.” This “tip of the nose” (uvula) is the very place where (precisely as the passage in Gurdjieff’s writing hints), certain “experiments” are carried on by very advanced beings. Prior to this paragraph, Beelzebub laments how the ancient knowledge has been lost to humans (“if anything has remained and reached them of this knowledge, they have forgotten everything that was essential and always for the same reason: the disappearance from their presence of the practice of actualizing being-Partkdolg-duty, the same disappearance which is the very cause of the gradual deterioration in them of the mentation proper to three-brained beings”). Just here, Beelzebub divulges the supremely important royal secret of Raja yoga to his grandson, Hassein. This ancient experimental science, he says, concerns the cosmic knowledge of vibrations.

The long and short of it—life, that is—directly relates to the physicists’ picture of the cosmos: the very short gamma waves and the very long gravity waves. Gamma waves recall the Swiss mathematician Leonhard Euler, and his “cosmological constant,” *gamma*.” Taken straight out of mathematical writings, the formula for gamma is:

$$\gamma = \lim_{n \rightarrow \infty} (1 + 1/2 + 1/3 + 1/4 + \dots + 1/n - 1/n)$$

where the $1/n$ is log to the base e , or natural log,

The natural log brings us directly in contact with the *natural harmonic series*, or “H”

$$H_n = 1 + 1/2 + 1/3 + 1/4 + 1/5 + 1/6 + 1/7 \dots + 1/n.$$

In other words, the successive aliquot harmonic divisions of a vibrating string. The periodic vibrations of the menstrual period . . . At the onset of the menses, there is the potential of producing offspring, of becoming a Mother. . . .

There are actually *three* hierarchies of honey bees. The order, from low to high, is: workers, drones, and queens. There is only one queen bee in a colony of bees, the Madame. She is queen for good reason: her body is the only one with *fully-developed ovaries*. The fertile queen, in essence, serves as an egg-laying machine: on a good day she might lay as many as 1440 eggs at 30-second intervals, or 43200 in one month of 30 days. Without her prolific productions of ova the *colony ruefully* fails to survive. The queen acts as the Mother of the beehive.

There is a second purpose for the one queen, and that is to produce the special chemical scent (“the queen’s scent” or “queen’s signal”) that regulate the activity of the whole colony. The special substance, a *pheromone*, is produced by a certain gland. Only the queen has the capability to produce the scent, called “the queen’s substance.” The effects of the sensory signal (sign) are threefold: (1) energizing the stimulation of work activities: the building, cooking, cleaning, foraging, and so on; (2) maintaining worker solidarity and cohesion, and (3) *inhibition* of worker reproduction: in other words, the queen’s scent is used with the specific intent *to keep the worker bees sterile*.

It makes sense. The queen must maintain control of the kingdom, and she accomplishes this by regulating the sex of her offspring. She alone institutes the rules of organization that allow the hive to survive. Her rules of order concern population control without which the hive falls apart, the colony declines, entropy takes over. The workers stop performing their bee-ing duties and begin laying unfertilized eggs which develop into drones. From the overpopulation of drones and corresponding lack of workers the colony becomes disorganized, dirty, and susceptible to disease. (Bee-keepers identify a queenless colony by listening to the bees, which produce a chaotic incoherent buzzing at a frenzied pitch). The beehive veers toward certain death and disintegration.

The ruling queen is absolutely essential for the sake of the colony. The queen alone holds the two keys that regulate and maintain the proper balance between tense and slack. Her special extraordinary scent does the trick. The queen’s substance *is the only one that attracts the male drones*. When the queen makes her mating flight, she collects sperm inseminated from multiple matings of certain appointed drones, and then stores the sperm in her body for the rest of her life, using it up bit by bit as she lays her eggs. If the queen decides to add sperm to an egg, the fertile egg will produce a female worker; if she chooses to withhold the sperm, the infertile egg will produce a male drone. Thus the queen effectively, if “artificially,” manages population control. Her sensible decisions alter the rate of growth of the hive population.

However, the workers also have some say in the matter since they build the cells where the queen lays the eggs. The queen must find cells big enough to accommodate the unfertilized eggs (male larva is bigger, a stronger force than female larva). By controlling cell size, the workers determine the number of male offspring the queen can appoint. Thus the elected work force of smaller and weaker females, in terms of sheer numbers, can manage to retain the upper hand.

The beehive undeniably exhibits a definite caste system, the commoners below perceiving the drones to be lording it over them above, the drones responding to the queen. In fact, one might compare the factions to the British House of Commons and the House of Lords, ruled over by the Monarch.

However, the real question remains: what determines the selection of the queen bee herself? Does the queen rule by “divine right?” Who or what gives her that right? Researchers previously believed that the would-be queen was the “chosen one,” selected from the larvae to receive the substance known as “royal jelly.” In the beginning, this special substance is fed to all bee larvae—drones (males), workers (sterile females), and queens (fertile females). However, after three days, the worker and drone larvae are no longer given royal jelly, but instead, for the next six days, are fed on pollen (solids) and honey

(liquids). Only the queen larva continues to be fed the special royal jelly (aetheric gas) throughout development. That is all well and good, but it still begs the real question: who or what determines which larva are to be fed that special food?

It has long been believed that royal jelly is what makes an ordinary bee into a royal queen. New research has altered that opinion. Now scientists think that queens are born to be royals. They are not queens because of what they are fed, but rather they continue to be fed the precious rich substance because *the queens alone have the type of metabolism able to tolerate it*. Worker bees reject the precious substance, actually preferring the coarse common particles of field pollen. Lords prefer the sweet drops of liquid honey whose properties afford fashionable “show” as well as “taste,” unlike the finer impressions of the nearly-invisible aetheric matter. The queen alone favors the royal jelly, and in fact turns away from other foods. Her refined *palate* which determines her caste evidently is present from the beginning, even before birth.

The effect of the gelatinous substance is truly remarkable. It turns what is apparently an ordinary specimen into “Her Majesty,” a bee that grows to nearly twice the size and double the weight of the rest of the females in the hive!

Royal jelly’s astonishing *energizing properties* have fascinated mankind for millennia. In fact, the elixir was believed to have such an invigorating effect on human life that it was considered a universal miracle cure, a magic potion. The jelly contains an “active” protein, called *royalactin*, which apparently is a factor in the caste differentiation, although the exact mechanism remains unknown.

Another amazing property of the nectar is its godlike ability to *prolong life*. Although lifespans vary, the queen lives in terms of years, while the other females, the workers, survive only a matter of weeks! Thus the royal jelly has the notable effect of lengthening life. (Remember the final chapter in Gurdjieff’s *Third Series*, where he writes about prolonging life).

The protein royalactin is involved in carbohydrate and energy production, and affords a type of metabolic enhancing action which gives the queen the advantage of an “active mentation”—the type found lacking in the rest of the worker bees. The queen regulates how the colony functions. She operates from the higher vantage point of the “queen’s cell,” which rules both the small worker cells in the lower hive, and the larger drone cells in the upper part. From here she gives “the Queen’s Speech,” the opening *words* spoken to the convened houses of Parliament. Her remarks set out the governing agenda for the coming year.

Perhaps it is “Agenda 21.”



According to Wikipedia, “Agenda 21 is a non-binding, voluntarily implemented action plan of the United Nations with regard to sustainable development.” Presumably the “21” refers to the 21st century. However, there may well be a more occult reason for that number. As I have revealed in my previous books, the number 21 defines the number of *harmonics* at the close of the third series of the canon.

The Queen’s number (142857) comes about from the “transfiguration” of the lemniscate (124875). Once it is redrawn, it can “attract the I.”

The First Series

$.285714/.142857 = 2$	C to C	2/1	
$.428571/.285714 = 1.5$	C to G	3/2	
$.571428/.428571 = 1.3333333$	G to C	4/3	
$.714285/.571428 = 1.25$	C to E	5/4	
$.857142/.714285 = 1.2$	E to G	6/5	
$.999999/.857142 = 1.1666667$	G to Bb	7/6	
$1.142857/.999999 = 1.1428571$	Bb to C	8/7	= 1

The Second Series

$1.285714/1.142857 = 1.125$	C to D	9/8	
$1.428571/1.285714 = 1.111111$	D to E	10/9	
$1.571428/1.428571 = 1.1$	E to F#	11/10	
$1.714285/1.571428 = 1.090909$	F# to G	12/11	
$1.857142/1.714285 = 1.083333$	G to A	13/12	
$1.999999/1.857142 = 1.076923$	A to Bb	14/13	
$2.142857/1.999999 = 1.071428$	Bb to B	15/14	= 2

The Third Series

$2.285714/2.142857 = 1.066666$	B to C	16/15	
$2.428571/2.285714 = 1.0625$	C to C#	17/16	
$2.571428/2.428571 = 1.058823$	C# to D	18/17	
$2.714285/2.571428 = 1.055555$	D to D#	19/18	
$2.857142/2.714285 = 1.0526316$	D# to E	20/19	
$2.999999/2.857142 = 1.05$	E to F	21/20	
$3.142857/2.999999 = 1.047619$	F to F#	22/21	= 3

The Third Series brings us to the value “pi,” the Archimedian value (or was it that learned Greek Xenophon?) of which is 3.142857. This number is a compound, both a whole number and a decimal—one might say it is the “compound result of consciousness, subconsciousness, and instinct.”⁵ **The words in quotes are Gurdjieff very definition of the “I.”** Significantly they first appear in the chapter titled “The Arousing of Thought.”

Are we coming closer to understanding what is meant by “the conscious beehive of humanity,” whose purpose is to “produce a substance,” this substance being “the only one that can attract the I?”

⁵ Beelzebub’s Tales, p. 38

The importance of the idea is iterated in the chapter “Beelzebub’s Fourth Sojourn on the Earth,” where we hear of “thought tapes” and “materialized thought” and “common cosmic harmonious movement,” and learn about that saintly “Eternal Individual” Belcultassi” and the establishment of “genuine objective science.”⁶ It was Belcultassi who founded the Society of Akhaldans, whose stated aim was “The striving to become aware of the sense and aim of the Being of beings.”⁷

Getting back to the beehive, the “Being of beings” would be the queen. How to strive to become aware of her *sense and aim*? We know she is the ruler of other bees in the colony. We know it is her astonishing substance, the queen’s scent,” which “controls the population.” Without her, the colony becomes dirty and disorganized, and eventually disintegrates and disappears. The queen, remember, manages birth control artificially. She does so by her *scent*, *her aim* being to mate with the drones.

In that regard we might want to consider that the number pi is actually an “irrational” number, approximately equal to 3.14169. . . In its decimal representation it is a “neverendingnumber,” an Endlessness. The decimals never repeat and the digits appear to be random, without rhyme or reason. Being irrational, it cannot really be expressed as a ratio of two integers (i.e., 22/7).

Even so, the number “pi” may be written objectively and scientifically as:

$$\pi = \frac{C}{D} \text{ (circumference)} \\ \text{D (diameter)}$$

Symbolically, so to say, it might also be formulate in “binary code,” simply by taking the zero as the circumference, 0, and 1 as the diameter, thus:

$$\pi = \frac{0}{1}$$

Thus comprehending the whole “pie,” as it were, requires only the two symbols, 0 *and* 1. How peculiar that the word “and,” spelled backwards, is DNA. Could the pi series encode the secret of genetics, our hereditary lineage from “our grandmother”? The genetic code has its roots the little word “gene,” which is the complete chemical unit of a chromosome, the actual carrier of heredity. How symbolic that the “grandmother of the Work,” the carrier of that particular esoteric lineage, is also a “Jeanne,” that is, Madame *Jeanne* de Salzmänn.

Now look at the situation as three separate series: (1) the never-ending linear powers of two; (2) the six “hexed” numbers, 124875, that can’t get out of the circle; and (3) the spiral of periodic decimals, formed by “fractalizing” 1/7.

The DNA (deoxyribonucleic acid) is described as a chain-like molecule of long length, high molecular *weight*, and its appearance is that of a *spiral staircase*. Unlike the closed circle, the spiral brings about the possibility of escape from prison. In the Work, it is termed the possibility of “evolution.”

⁶ Beelzebub’s Tales, see pp. 293-314

⁷ Beelzebub’s Tales, p. 297