I. ARABESQUE & CRYSTAL

The arabesque and the crystal appear as opposites and complements: the yin and yang of Islamic art and architecture. In China this dyadic theme is openly and thoroughly discussed, while in Islamdom it remains tacit and esoteric and must be learned in practice not theory.

The opposition should not be seen as between organic and inorganic, or living and lifeless. Crystals grow just as plants grow, water freezes and melts, everything changes and is alive as manifestation of the divine (tajalli, the “shining-through” of things by spirit). Arabesque and geometric forms are twin aspects of the living materia—flow and stasis, water and bone—and equally of the consciousness that separates and reconciles them.

Islam does not “ban the image.” On the contrary, it symbolizes itself by an image, the crescent and star. Arabesque and crystal are images. But Islam exercises extreme care that the image not colonize the imagination. Indiscriminate imagism opens the floodgates of the trivial and leaves the mind passive to an onslaught of persuasion and unconsciousness. Image becomes a substitute for lived experience; absorption of imagery takes the place of the living creative imagination. Images are parasites that kill the host. (Advertising offers perhaps the most perfect example.)

Vegetative and crystalline forms are not mere “decorative motifs,” but rather the very subject matter of Islamic art and architecture—the images
of a culture that eschews and distrusts imagery. This misunderstanding about decoration leads to a great deal of superfluous writing by Western art historians who judge everything by Western values and categories, thus forcing all flowers toward the sun of realism, even those that bloom in the moon of dreams.

Islamic miniaturists, for instance, do not use perspective. Western art historians have actually accused them of failing to evolve toward scientific perspective, due to the “religious ban” on imagery. But lack of perspective in miniatures represents not failure but refusal. By extending the image in time rather than in space the miniaturist refuses to lure the viewer’s unconscious into the idolatry of mistaking representations for things. The miniature is liberated from the tyranny of a perspective that consequently never appears.¹

In reality the miniature serves a minor decorative function as an embellishment of the book. The central art form in Islam is writing, with the ancillary arts that serve it, especially calligraphy. Writing itself is sacred, and Moslems (like Jews) preserve every scrap of it, not just Koran and Torah, because the Arabic and Hebrew letters themselves are revealed and cabbalistic. Although the Koran was transmitted orally (the Prophet was “unlettered”), it symbolized creation itself as the work of a primordial Pen and Tablet: the writing of being on the paper of becoming: another yang/yin combination.

The mysticism of writing was carried to an extreme in the twelfth century by the sect of the Hurufis (also known as the Abecedarians or Letterists). They traced letters in the shapes of human faces, noble animals, and plants and trees: the alphabet of Revelation revealed in the alphabet of Nature. Hurufi doctrines were condemned as heretical but survived amongst the Sufi orders (especially the Turkish Bektashis), who created a beautiful new art form of calligrams —heraldic devices made entirely of letters.

Western art tends to separate the arabesque from the crystal, the Baroque from the Neoclassical, and even to value one over the other—whereas Islamic art tends toward a coincidencia oppositorum, a mystical reconciliation or harmony. In this it resembles Romanticism. But “Oriental Romanticism” (to coin a phrase) never had to deal with an Enlightenment or react against any “cruel instrumentality of Reason.” Oriental Romanticism is one
of the sources of Western Romanticism but lacks its agonistic aspect, its subjection to history. In Islamic art the rose and the star have never been rendered unintelligible to each other because they are seen as signs of each other.

The Koran describes Nature as “God's Waymarks . . . signs on the horizon for those of discernment.” Nature is a revelation that requires hermeneutic exegesis to uncover its meaning, much like the Koran itself—with one important difference. Alphabetic writing functions as a complete semiotic system in which signs do not change their meaning, while the alphabet of Nature is an incomplete or indefinite system that requires for its “reading” either revelation or esoteric transmission of meanings.

Some forms of writing seem to share elements of both alphabetism and naturalism (for want of better terms). They stand somewhat outside the semiotic in that they use written signs but meanings are assigned by esoteric transmission. In this category belong the Neolithic signs such as the incised rocks of megalithic Ireland and Brittany. The esoteric keys to these writings are lost and they cannot be deciphered. The wampum of the Iroquois was not only money but also writing, and in this case the elders responsible for decipherment have preserved the keys in collective memory. The enigmatic Effigy Mounds of Wisconsin, Iowa, and Ohio, are written on the pages of the landscape, interpreting Nature while becoming part of it. Keys may be preserved amongst certain Winnebago (Ho-Chunk) elders, but they’re not talking to anthropologists and archaeologists. If the keys to European heraldry were lost, its blazons would appear just as enigmatic and tantalizing.

Here meaning seems to hover behind a thin veil in these lost sign systems, in somewhat the same way that meaning seems to lurk behind the scrim of Nature itself. This blind immanence of significance resembles the sensations associated with certain phantastica or hallucinogenic drugs. In fact one theory of the marked stones at the megalithic sites of Newgrange and Gavrinis attributes them to entoptic hallucinations of the carvers, to a kind of Soma Function that is rooted in the body. Entoptic patterns include both arabesque and crystal forms and can be induced by pressing one's closed eyelids. They seem to be common to all cultures, and are patterns which can be enhanced by psychotropic agents.

In the West the doctrine of signatures (or occult correspondences) goes
underground with the failure of hermeticism versus “modern science,” in the paradigm wars of the sixteenth century. It persists in occult circles and resurfaces as aesthetic theory in the Romantic era. Baudelaire and Rimbaud speak of correspondences but few take them seriously. Philippus Aureolus Paracelsus (real name Theophrastus Bombastus von Hohenheim) and Jakob Böhme are all but forgotten; the world sees itself through Cartesian eyes as a brain surrounded by dead automata.

Without synesthesia (the perception of sound as color, for example, or of form as meaning) the imagination could never arrive at a system of correspondences or even at a concept of symbolization. The alphabet itself is deeply implicated in such magical doubling (or splitting) of consciousness. Our Greco-Roman letters are all derived from Egyptian hieroglyphics, and writing itself is a form of magic as “action at a distance.”

Thus even colors can be read for meaning, as in the elaborate series of correspondences in the writings of Charles Fourier, or in Rimbaud’s “Sonnet of the Vowels.” The attempt of Goethe and certain proponents of Naturphilosophie to preserve color as substance rather than accident represents a last-ditch defense of hermeticism against Cartesianism and its disenchantment of the landscape, its denial of the soul of the earth. When Goethe called out on his deathbed for “More light!” was he asking for more Enlightenment or for more luminousness?

II. WATER, PAPER, STONE

Marbled paper was probably invented in China during the Tang Dynasty. The Chinese scholar Tsuen-hsuin Tsien quotes from the Wen Fang Ssu Phu (“Four Implements for Writing in a Scholar’s Studio”) by Su-I-chien (935–996 c.e.):

Sometimes, paste was prepared from honey locust pods mixed with croton tree oil and water, with black and colored inks on its surface. Colors were scattered when ginger was added and gathered when dandruff was applied with a hair brush. The various designs which looked like human figures, clouds, or flying birds were transferred from the surface of the liquid to the paper, and in this way a marbled paper was made. (2)
Unfortunately no samples of these papers survive, though they must have resembled the simple suminagashi marbled papers made in Japan from the twelfth century to the present. No doubt the Japanese learned from China, as with so much else. (3) The Tang Dynasty was very open to foreign contacts and influences compared with other “xenophobic” periods of Chinese history. The celestial emperors received rare and precious treasures as tribute from Southeast Asia, Central Asia, even Europe and Africa. (See The Golden Peaches of Samarkand and The Vermilion Bird by Edward H. Schafer for exhaustive and brilliant studies of the Tang Tribute Treasures.) Some of this material, including much Persian art, somehow ended up long ago in Japan at the treasury repository of the Shosoin in Kyoto. If there exists a strange resonance between Persian and Japanese art, as a few art historians have bemusedly observed (Arthur Upham Pope most notably), perhaps the Tang Tribute Treasures help explain it. China was indeed the “middle” empire of Asia, just as the Chinese always claimed.

Suminagashi appears in Japan around the end of the Heian Period (twelfth century), and was said to have been revealed, by the god Kasugamyojin, to one Jiyemon Hiroba, at the shrine of Nara, on February 1, 1151 (although earlier samples have been found, one dating to 1118). Prior to this, however, Japanese aesthetes played a game in which fresh sumi ink drawings or inscriptions were submerged in water, whereupon the sumi would float to the surface and the inked image could be seen for a moment on the water’s face. The ninth-century poetess Ono no Komachi is said to have known this secret.

After 1151 the Hiroba family was granted a monopoly on the technique of suminagashi and only the royal family was permitted to use it. The Hirobas held on to the process until the seventeenth century, when the Shogun “democratized” marbling and a few new families entered the trade. The fifty-fifth-generation descendant of Jiyemon, Sennen Hiroba (d. 1980), was made a Living National Treasure, and the family still produces suminagashi today.

Of course China invented paper itself, another reason to suppose it also invented marbled paper. Bukhara and Herat were famous for paper because they had ancient Chinese connections via the Silk Route. (Silk was used to write on long before paper.) Above all we can assume China’s precedence because marbling fits so perfectly into the “scholar” aesthetic of the Tang
period, fascinated by marvels and curiosa, wedded to the cult of ink and paper, and obsessed with the mystic cosmography of Shang Ching (“Highest Clarity”) Taoism.

The taste of this erudite alchemizing and refined poetic path (also called Mao Shan) was deeply entwined with a related set of motifs: clouds, mist, dragons, stalagmites, convoluted gemstones and minerals, water, everything swirling, baroque and curvacious. Such forms were thought to reflect nature's Tao at its most Taoist, so to speak, closest to primordial chaos (a very positive symbol in Taoism), inchoate but immensely potent. In Shang Ching dream-yoga (possibly enhanced by cannabis and other psychotropics) one meditates on fairy grottoes sparkling with cinnabar and festooned with magical fungus, dripping with elixirs, haunted by the music of lithophones, cave upon cave winding through the hollow interiors of sacred mountains, peopled with celestial maidens, jade lads, phoenixes, various minor deities.

If paper fails to survive, rock lasts for geologic ages, and the most typical artifact of this Taoist aesthetic is the Scholar's Stone. In theory these stones are not made but found, though some may have been helped a bit. The best ones are carved by water and are full of sinuosities, holes, protuberances, all rounded off by centuries in some rushing stream. Small ones were mounted on carved wooden stands and displayed in scholars’ studios, large ones erected outdoors in gardens. The owner and guests could utilize the stone in Shang Ching meditation, or simply admire its strangeness. Marbled paper looks like cross sections of these stones.

Like the stones, marbled paper is non-representational art or perhaps even abstract art—but if it does not represent, it nevertheless expresses something (in Nietzsche's sense): natural laws perhaps. If these art forms depend to some degree on “chance operations” in John Cage's meaning of the term, they might also bear some relation to action painting—or for that matter to Zen brushwork. The artist collaborates with chance.
III. A SLICE OF CHAOS

Renaissance hermeticism cultivated a very Taoist taste in strange curiosities, leading to the development of the cabinet, the room designed to display one’s collections (and the ancestor of the museum). Rare stones and gems were appreciated for their natural patterns, whorls, liquidities, grotesqueries. ("Grotesque" means “of the grotto” and refers originally to the artificial caves so loved by Renaissance garden builders.)

“Marbled” paper—the occidental term—emphasizes its resemblance to precious marble and other stones rather than to clouds and water. Faux marbre is the technique of fake marbling mastered by fine decorators who can paint walls to look like ancient temples—a craft in itself and one very congenial to the hermetic and alchemical spirit. Glassmakers interested themselves in the art of artificial gems (a sideline of alchemy dating back to its Greco-Egyptian origins); the seventeenth-century Florentine vitrolgist Antonio Neri published secret recipes for faux chalcedony, jasper and agate, which attracted the attention of paper-marblers (Wolfe, 16).

Early suminagashi was always compared to wind-blown white cloth or running streams coursing through meadows. In the fifteenth century marbled papers were used as artworks to be contemplated during the Tea Ceremony; a cloud motif in blue and black was popular. (4)

Staring at certain marblish stones can result in hallucinations or visions. The artist Odilon Redon used to gaze at a crumbling limestone wall outside a tuberculosis hospital where the patients spat blood and sputum and mucus; he claimed the wall was beautiful, like an other world. The 1950s American pulp writer Richard Shaver virtually invented the modern UFO and launched it in Fate magazine. According to him, flying saucers came from inside Hollow Earth (through a hole at the Pole well known to explorers) and were piloted by evil Deros, Nazi-like humanoids of gnomic proclivities. Shaver later went mad (or madder) and began to create paintings based on cross-sectional slices made through certain stones. By polishing the slice he revealed messages and images placed in the very inner structure of the stone by the subterranean Deros. The Chinese scholar, alone and drunk in his misty hermitage, dreamed himself into the miniature cave-cosmos of his prize stones. And the same effects can be obtained in two dimensions, as with the Rorschach inkblots or the finest cloud papers.
An hermetic or mystical air hovers around the origins and early history of marbling, like many other guild mysteries. But marbling seems particularly suited to the interface of craft and magic, evoking the rainbow, the sunset, aurora borealis. The alchemist and polymath Athanasius Kircher described marbling in his book on light and shadow. The marbler Don Guyot (quoted in Chambers, 75) points out that China and Japan both practice a cult of paper (as when prayers and petitions to the gods are burnt in order to “send” them to the spirits as smoke), and that marbling will always be considered sacred because it mimics natural phenomena—and this mimesis (as Walter Benjamin insisted) lies at the heart of all hermetic arts.

Some of the earliest ebru (Turkish marbled paper) in Europe turns up in Hungary in an album of drawings by Dürer on the Passion. Dürer was greatly influenced by hermeticism and worked for the Fuggers, a significant fact that will be elucidated in due course. Easton notes that Dürer’s prints were known and popular in Turkey and even Persia, and that he may have influenced Eastern artists. Was he in direct contact with Turkish marblers and miniaturists through his hermetic connections? Fugger connections with Istanbul through Venice? Turkish Sufis in Hungary or Italy? Quite plausible, I think.

“Paste paper,” similar to marbled paper but using a simpler and cheaper technique (rather like surrealist frottage), was called Herrnhut paper after the headquarters of the ultra-pietist Anabaptist sect that produced it, the bizarre Count von Zinzendorf’s Moravian Brethren—who later migrated to Pennsylvania, where German Rosicrucianism and Böhmenite mysticism had a profound effect on colonial culture.

In France the Order of the Saint-Esprit (founded in 1614 during the Rosicrucian craze) made early use of marbled papers in its heraldic albums. A seventeenth-century recipe for marbling is found amongst the alchemical manuscripts of the Ferguson Collection in Glasgow. Ben Franklin, member of the Hellfire Club, dabbler in various arcana, reputed Rosicrucian, demonstrated great enthusiasm for marbling and used it on paper money printed by him in Philadelphia: a clever device for protection against forgery and counterfeiting (Wolfe, passim).
IV. THE WATER’S FACE

“Three things of this world are acceptable: water, greenery, and a beautiful face.”
—Hadith (attributed to the Prophet Muhammad)

The Persian term abri (Turkish ebru) may be derived from the word abr (“cloud”) (1), or from ab ru (“water/face”). In fact marbled paper is made by floating pigments on the face or surface of a tankful of water, then lifting the colors (making a one-off print of them) by transference to a sheet of paper which is placed onto the surface then gently removed.

A kind of writing on water, to paraphrase Keats’s epitaph (“Here lies one whose fate was writ on water…”). First the papermaker “writes” on water by sprinkling, combing, or otherwise distributing the pigments. Next, a calligrapher uses this paper, the “face of the water,” by writing upon it. Now the marbled paper can be seen as a symbol or even a direct trace of the alphabet of Nature—its “signature”—while the calligraphy represents divine revelation, or transcendence.

Islam’s desert aesthetics makes water not just one of four (or five) elements but a symbol of longing and happiness and life. Every raindrop has its own angel according to a hadith. To be caught outside in a rain shower in Iran is said to be a sign of luck and blessing—the opposite of European feelings about rainy days!—and the emotion is crystallized in such concepts as Ab-i Hayat, the Water of Life.

In the Koran the mysterious companion of Moses, the “hidden prophet” Khezr, brings a dead fish back to life by washing it in a fountain. The prototype myth, to be found in the Alexander Romance tradition, has Khezr himself given immortality by the fountain. Importantly, Khezr found the Water of Life unsought, without suspecting it, while Alexander the Great deliberately sought after it to no avail. Khezr always wears green, and where he walks, flowers and herbs spring in his footsteps. In India he appears as a water spirit; in Islamadom he rescues lost desert travelers dying of thirst, and initiates seekers who have no shaykh or murshid amongst mortal humans. Khezr is the Islamic equivalent of St. Francis, a “patron saint of ecology”; he is also, of course, the immortal Utnapishtim of the Gilgamesh epic (and also Elijah, and St. George, and many others)—and why not, since he lives forever?
All this is relevant because Khezr seems to have initiated a number of marbled paper makers and calligraphers, including the celebrated Sultan ‘Ali of Mashhad and Shaykh Hamdallah of Turkey. Sultan ‘Ali says the calligrapher needs “ink as black as this author’s fortune, a pen restless as eyes that shed tears, and a spirit elegant as the khatt of a beautiful friend.” (Khatt means “script” and also “down,” as in the downy cheek of a young lad.) As the poet Umid says:

_I shall write from now on my letters on cloud paper_
_So that you may become acquainted with the state of my weeping eye._

Not only the Koranic metaphor field of Pen and Tablet but also the theosophy of water helped shape and inform all the arts and crafts connected with literacy. Pens, pen boxes, inkwells, fine bindings, brushes and pigments for illumination and miniature-painting, even a ruler (a cardboard frame with threads to make guidelines for the calligrapher)—not to mention poetry itself, and of course paper: all played symbolic roles in a mystique based on Sufi motifs of wine, rose, nightingale, beloved, cup bearer, minstrel, love—a liquid world of reflections. “Seeing the Moon in the water” means experiencing the divine in the beauty of creation, and especially in the beloved, the one who “bears witness” to the loveliness of reality, and the one who is in turn witnessed by the eye of the heart. The Glance, the Gaze. The poem on the page of ebru is like the Moon on the face of the water:

_Tears on the cheeks of a chaste young woman_
_Are not more beautiful than the tears of a reed pen on a page._
—attributed to a secretary of the Caliph Ma’mun (Baghdad, c.786–833)

_The pages of day ... are sealed by dew drops._
—Mesih (Turkish, seventeenth century)

_A treatise of longing on the page of the heart_
_Writing the complaint of the nightingale on the rose garden_
_With the hand of the morning breeze_
—Ahmad Pasha (Turkish, eighteenth century)

_The Spring cloud makes its ruler from the threads of rain_
_When the air writes the description of the rose on cloud paper._
—Munir Lahori (India, seventeenth century)

_Refuge_, (2004)
_Oil and enamel on paper_
_22-1/2 x 29-5/8 inches (56 x 75 cm)_
Sometimes calligraphic amulets are washed in water and the patient drinks the water as medicine. I knew a Sufi master in Tehran who was also an M.D. Once one of his disciples was sick and the shaykh wrote a prescription for him for some medicine. Later the disciple told him, “I drank it and now I’m cured!”

The shaykh said, “What do you mean, you ‘drank it’?”

“I washed the amulet and drank the ink. Your blessing has saved me, master.”

The shaykh nodded wisely and said nothing.

* * *

Islamic calligraphy is said to resemble water, while Hebrew is like fire. However, early Islamic styles (Kufic) are closer to other Semitic models in that they are angular and severe. The more rounded and flowing forms developed later, via Thulth to the Nasta’liq or “hanging style” of the Persians. The ultimate and extreme version of this tendency is the Shikasta or “broken” style, so graceful and attenuated that it resembles the “grass” calligraphy of China and Japan, typical of Taoism and Ch’an (Zen), expressing spontaneity and the state of satori. The broken style is attributed to Shafi’a of Herat (d. 1676), whose writing resembled “the tresses of a bride.” Schimmel calls Shikasta the most “extreme profane poetical script” as compared with the Kufic, the most sacred and hieratic.

Shikasta goes ideally with cloud paper, as its exaggerated liquidity makes the letters flow into the marbled patterns like living veins on the paper’s skin. In the eighteenth and nineteenth centuries Shikasta on marbled paper was used to produce calligraphic pieces meant to stand alone, outside any book, as individual artworks. Sometimes these were framed and hung, but more commonly collected in albums—which the poet ‘Ali Effendi called “rainbows on the sky of the page.” These albums often include elements of collage, decoupage, stenciling, illumination, gilding, varieties of paper, and so on. These assemblages often have more to do with appearance than meaning; poems are not necessarily related to pictures, for example, and in India these techniques were used to produce representational “paintings” from marbled paper and cutouts. A certain delirium and even decadence now appear—an intensification of refinement and connoisseurship, an aesthetic of aesthetes.
Calligraphic practice sheets (mashq) by recognized masters become collectible: repetitions of the same letter, disconnected words, palimpsestic overwritings. (The poet/calligrapher Ibn al-Bawwab jokes that he’s no longer afraid of Judgment Day since he has blackened the page of his copybook so much it cannot be read.) Once these exercise sheets became popular they too were done on marbled paper. Some of them have a very “modern” look and have greatly influenced certain contemporary Middle Eastern painters.

In Tehran in the 1970s I found that such Qajar-era khatt were quite under-valued. (Western art historians generally disdain and even despise nineteenth-century Islamic art.) I bought perhaps a dozen or so examples of Shikasta and mashq, most of them on abri. Unfortunately I lost them all in my very inefficient flight from the mullahs’ revolt in ’78.

In memory of that loss I’d like to say a few words in defense of “late/decadent” eras and their arts.

The Qajar and Ottoman dynasties survived into the early twentieth century, and the Mughal dynasty until 1857. Despite the sneers of purists, Persia, Turkey, and India produced some of their best art in the twilight of these worn-out cultures. Nor were these arts stuck in some imagined glorious past. Many innovations within traditions are carried out even in extremis—tradition is never dead until it’s dead. Major developments in traditional music took place in all three countries around the end of the nineteenth century. The last Mughal emperor Bahadur Shah II presided (under his pen name Zafar) over an impoverished but culture-mad poetry scene in Delhi that produced, among others, Ghalib, the greatest poet of the Urdu language. In Turkey the aesthetic of the so-called Tulip Era (eighteenth century) outlasts its brief incandescence and imbues the whole late Ottoman period with a certain overripe but delicious sweetness (like a persimmon).\(^8\) In Qajar Iran a new style of architecture was created out of mirrors (imported from Europe but broken—shikasta—en route) set in mosaics like tile, inside and outside, until buildings glittered like diamonds and ice.

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Oil and enamel on linen
22-1/2 x 29-5/8 inches (56 x 75 cm)
In decadent periods people become obsessed with graceful but useless things like kite flying, pigeon fancying, opium smoking, poetry contests, elaborate metaphysical systems, dancing girls, dancing boys, wine, book collecting, gardening, alchemy, marbled paper. They tend to avoid “great” and historically important things like aggressive warfare, building huge tombs for oppressive rulers, and forcibly converting whole populations. The decadents simply haven’t the energy for such exertions. They’re living off unearned income, true, but enjoying life, if possible. Barring total collapse, such little worlds seem happier to me than “great” periods, at least for ordinary folks. The grand classical culture has filtered down to our level and taken “popular” forms we can afford to enjoy. (In Delhi I used to see old gents hanging out in perfume shops. For a few paisa they had little balls of scent-soaked cotton stuck in their ears—hookahs and cups of tea—syrabritic pleasures for pennies.)

In “late” Lahore, Delhi, Herat, Shiraz, Istanbul, or Cairo it seems that everyone practices some cultured pursuit or recherché hobby, and the cafés are full of music and storytelling. Mystics and artists are culture heroes, but nearly everyone participates at some level. (In Turkey before the fall of the Ottomans about a third of the population belonged to Sufi orders.) My lost leaves of calligraphy evoked this “lost” world for me—a world that could still be found in out-of-the-way pockets even a quarter century ago.

A note should be added concerning the influence of opium and hashish on these decadent cultures: “Hashish is the teacher,” according to the Turkish poet Fuzuli, the “green parrot” of wit and eloquence, and, when prepared as potable bhang, the emerald wine of mystic insight. Khezr is the patron of bhang drinkers. If marbling in its true form first appears in Turkestan, so does the mystical use of cannabis in Sufism. The plant probably originated in Central Asia and was used shamanistically in the Neolithic, as with the Scythian barbarians in their tents full of smoke described by Herodotus. The influence of cannabis on visual art tends toward an “abhorrence of vacuum” and an elaboration of entoptic patterning effects; and these can certainly be seen in, say, oriental carpets, tilework, and metalwork, especially in late/decadent periods of art when the misshapen or irregular is valued (as in the fascination for the “baroque” pearl, from whence the very concept of the baroque derives).
Opium seems to have a similar influence on vision—perhaps also a tendency toward two-dimensionality—and certainly induces fantasy and association. Coffee (originally discovered by Sufis in Yemen), like any form of “speed,” encourages repetitiveness and stimulates pattern recognition.

If our own culture is alcoholic or Dionysiac that’s nothing to be ashamed of. Each culture to its own poison. Perhaps we owe to wine certain tendencies, such as the development of harmony out of melody; whereas hashish and coffee tend toward melody and repetition. Perspective versus surface. Spire versus dome. Marbled paper entered the West as a specimen of orientalisme (“Turkish paper”), and despite its successes here it always seems to carry with it a taste of the East, Théophile Gautier’s Club des Haschischins, Gérard de Nerval, Walter Benjamin’s “profane illumination”—a touch of psychedelia.

V. THE TRANSMISSION OF EBRU TO THE WEST

Hermeticism can be called a science, but a science that includes the imagination and therefore also an art. Like cooking. In fact cooking itself could be considered an hermetic art, as in the lavish mystical banquets of the Hypnerotomachia Poliphili, or the esoteric “Gastroosophy” of the utopian socialist Charles Fourier. Marbling as a kind of cookery appeals and belongs to the whole ancient tradition of secrets, inherited and encapsulated in hermeticism, including glassmaking, colors, medicines, alchemy, perfumes, artificial gems, strange geology and botany, silk, hallucinogens and poisons—recipes of all sorts (9). Paracelsus collected such secrets from miners, old women, apothecaries, and the like, and he held them in higher esteem than book learning or classical training.

As a young man Paracelsus (like Dürer) worked for the “very rich Fuggers,” the Rothschilds of the sixteenth century, who made their millions in mines and pharmaceuticals. He worked in their mines and studied alchemy with Sigismund Fugger at Schwatz in the Tyrol. Later, Paracelsus engaged in lawsuits with other Fuggers. He published one of his first books in Augsburg, city of the Fuggers.
In 1521 Paracelsus was in Constantinople, where he received the ultimate secret, the Philosopher’s Stone, from the mysterious Solomon Trismosinus (real name: Pfeiffer), according to a book published in Rorschach in 1598 (perhaps the ancestral seat of Hermann Rorschach, whose preoccupation with inkblots began in 1911—the technique is a kind of crude marbling suited to a less poetic age). The Theosophist Franz Hartmann claims that Solomon Trismosinus was seen still alive at the end of the seventeenth century by a French traveler.

Paracelsus died in 1541. By the 1570s marbled paper made its earliest known European appearances in a number of collections called Album amicorum, or “friends’ books,” in which aristocratic and artistic types bound together sheets of paper embellished with heraldic devices, mottoes, decoupage and collage, poems, et cetera, very like the albums of the Orient with their “Turkish paper,” and rather like elaborate versions of the guest books one still finds today in, say, Irish manor houses.

The fad for these albums centered in Augsburg and especially amongst the Fugger family and their connections. The Fuggers had extensive business dealings in the Ottoman empire, carried on through agents in Vienna and Venice. Some of the albums were compiled by travelers to the Orient, perhaps agents of the family.

About this same time the Rosicrucian manifestos were circulating around Germany and then elsewhere in Europe in manuscript form; they began to appear in print in 1614. The School of Paracelsus (10) had a great deal to do with Rosicrucianism. According to the Fama fraternitatis, Christian Rosenkreutz (the founder) visited the Islamic East to discover alchemical secrets, like Paracelsus; and Paracelsus is praised by Rosenkreutz (except for his famous bad temper) as a great adept and precursor.

Rosicrucianism consisted of an attempt to reconcile and synthesize all known hermetic teachings under the banner of mystical Protestantism, nonsectarian and tolerant (even of “Jews and Turks”), and opposed to all religious strife, especially that between Lutheranism and Catholicism, or Christianity and Islam. Through Rosicrucian influences, Paracelsan alchemy filtered back to the Islamic world, particularly Turkey and Persia.
In 1608 the first known book concerning the secrets of marbling appeared in Istanbul, the Tertib-irisale-i Ebri (“Organized Treatise on Marbling”). We can imagine without difficulty that in the wake of Paracelsus and Christian Rosenkreutz, German adepts were visiting the mystic East looking for secrets, inspired by the anonymous manifestos (not unlike later generations under the influence of Hermann Hesse). Some of them were no doubt agents for the Fuggers. Marbling has an instant appeal to anyone under the hermetic spell: the appearance of some alchemical process at work, natura naturans (Nature nature-ing, active, mysterious, alive) in consort with an initiated artist. At first the adepts brought back Turkish ebru as souvenirs; later someone may have been initiated into the guild in Istanbul and brought the secret itself back to Germany.

The Turkish guilds, as in Islamdom, generally, were permeated with Sufism and hermeticism. Marbling seems to have reached Turkey from Turkestan, from Bukhara or Samarkand, capitals of the Ozbek Turks; Bukhara was home of the Naqshbandi Sufi Order. Marbling appears to have a connection with this Ozbek Tekkesi or School of Uzbekistan, at least in recent times, when the great marblers Sadik Effendi (born in Bukhara, eighteenth century) and his son Edhem Effendi (died Istanbul, 1904) were shaykhs of this order. (11)

The guild masters were no simple craftsmen but were erudite, refined, and interested in calligraphy and poetry and mysticism; their shops no doubt served as athenaeums where interested infidels might share ambergris-scented coffee with Moslem artists and dervishes. Our hypothetical agent/adept from Augsburg may even have “stolen” the secret, as the Byzantines once stole the Chinese secret of silk. (12) The secret of marbling obviously passed around hermetic circles until it surfaced in Athanasius Kircher’s Ars magna lucis et umbrae in 1646, two years after Kircher demonstrated the technique to the English savant and diarist John Evelyn in Rome, “with Dutch [i.e., Germanic] patience,” along with “a thousand other crochets and devices” (Wolfe, 16).

Evelyn later passed on the data to the Royal Society, a nest of crypto-hermeticists in the Newtonian vein. Isaac Newton wrote copiously on alchemy but never published on the subject; in print he appears as Blake saw him, the proponent of “Newton’s Night.” Francis Bacon, another crypto-hermeticist and Rosicrucian, had already given a brief but accurate description of
marbling in Silva silvarum (1627), but Kircher first spilled all the beans. Jesuit, expert on volcanoes (he had himself lowered into the mouth of one just before it erupted), pioneer of Egyptian hieroglyphic studies, archaeologist, collector of curiosa, maker of large and wonderful books, Kircher saw chartae turcico more pingendi as a process involving the great art of shadow and light, and discussed it in the same work in which he announced his invention of the camera obscura.

Of the several European countries with a claim to be “first” in marbling (Italy, England, France, Germany), Germany has the best case. Marbled paper was always called “Turkish” there, suggesting that the true origin was known. The Fuggers, Paracelsus, Dürer, the Rosicrucians, Kircher et al. were German. The alchemical tradition in German marbling was continued by Kircher’s disciple Caspar Schott, and especially by Johann Kunckel von Löwenstjern, glassmaker, mining engineer, court alchemist, ennobled by the king of Sweden, author of Ars vitraria experimentalis (1678), fascinated by marbling (Easton, 55).

Hermetic science goes underground but it never dies. Naturphilosophie itself constitutes a major reemergence of the hermetic worldview, with its emphasis on change and becoming, form, color, chaos, light. The Earth is alive. Goethe had a piece of marbled paper hanging on the wall of his study: it still survives (Wolfe, pl. 1/1).

Seen from the Moon, Earth appears marbled with clouds and the face of water. Romantic science never goes away because it appeals to both sensual and imaginal forces. "Strange Attractors" and fractals such as the Mandelbröt Set, and other discoveries of chaos science, recapitulate the aesthetics of marbling; the Gaia hypothesis (the scientific theory that Earth is an animate entity) restores Earth to its nobility—as a living being.

VI. THE SURFACE TENSION OF CLOUDS

The original secrets of marbling included a knowledge of the properties of certain substances. Modern marblers may conceive of these as “chemicals” but these substances were not really the equivalent of synthetic preparations of their active ingredients, or “chemicals” as we conceive of them today. They contained impurities, and impurities can make a difference in
taste or quality even if the difference cannot be measured. In this sense, we may want to think of these substances not as chemicals, but alchemicals. In making herbal tinctures Paracelsus (unlike other doctors) included the whole plant, not just its “mercury” and “sulphur” but also its “salt” (and even it “faeces”).

Although many substances found in the traditional marbler’s atelier must be brought from far away and prepared with elaboration, none was ever very rare or expensive. Because these substances are volatile or subject to decay or affected by temperature and other factors, variable in quality and purity, or simply recalcitrant and mysterious, marbling will always remain an art and not an exact science or even a craft. Hence the relative prestige of the metier in the East: the marbler is not just a paper decorator but an artist.

In suminagashi (and perhaps in the lost Tang-era Chinese marbling technique) colors were floated on water, but only on certain kinds of water. The colors were mixed with paulownia-tree ash, pine resin and alum (or tobacco in later days). In “Turkish” and modern marbling, however, matters are more complex: the substances fall roughly into three categories. First the bath of water or “size” needs to be thickened or rendered viscous so that the pigments will not sink. Gum tragacanth (“gum dragon”) imported from Turkey was usually considered the best, but others included “gum hog” (karaya), goat-thorn gum from Smyrna, salep (orchid bulbs) from Persia, mallows (marshmallow), coltsfoot, fleabane, ithyphallus, quince seeds, and even potatoes. The gum is stirred into water with a whisk of hyssop.

In an alchemical lexicon these soupy substances would be called coagulants. They involve a mucilaginous, gelatinous or viscous effect, and produce a colloidal fluid with increased surface tension, capillary movement, and Brownian movement (the constant, random, zigzag motion of small particles dispersed in a fluid medium, caused by collision with molecules of the fluid). In short these substances belong to the mysterious interface between solid and liquid that Nick Herbert (a quantum physicist from California who sometimes writes under the name Jabir ibn Hayyan) calls “slime.” A great deal of terrestrial life consists of slime or depends on it in some way. In the nineteenth century a European marbler discovered that carragheen, a type of seaweed known as Irish moss, made an ideal sizing agent. The Irish used it to make milk pudding, and also resorted to it
as “famine food” in 1848. In Paracelsan terms, the size or coagulant would represent the “sulphur” of the marbling process.

The “salt” or body of the process would consist of the pigments, many of them derived from plants and earths, pounded in mortars, and mixed with certain dispersing agents or “solvents” in alchemical terms. Solve et coagula is often given as a definition of the entire alchemical process. These agents prevent the colors from running into each other.

Mrs. Easton notes that the pigments in Turkish marbling have an alchemical flavor: gold and silver, safflower blossoms, quince seeds, almond leaves, azurite, dyewood, indigo, apple leaves, corn poppies, henna, cochineal, red lead, arsenic sulphide, iris flowers, vermilion, orpiment, lamp black, and ochre from Hormuz, the all-red island in the Persian Gulf, often considered a possible site of the Garden of Eden. In Persia lapis lazuli and rose petals were used.

The dispersing agents (what makes the colors spread on the surface of the bath) are the “mercury” of the marbler’s spagyric art. The basic traditional substance here is ox gall, a bile with a very nasty smell. “Whoever it was who had the notion to employ the gall of oxen for this purpose must have stood in compact with the Devil,” as a European marbler once marveled, not only because it seems so counterintuitive but also because it stinks of hell. The gall of fish (pike) can be used but is harder to come by. Ox gall can still be smelled on old marbled paper, and the marblers’ bazaar was probably isolated (like the leather tanners’) because of its horrid effluvia.

Bile of course is the “humour” of Melancholia, the occultist’s and artist’s disease—and perhaps the marbler’s as well. Other dispersing agents include milk, egg yolk, milkweed sap, rosin, shellac, and the oils of almond, poppy seed, and hemp seed.

Human urine was sometimes added to the pigments. Urine plays a minor but important role in alchemy. Paracelsus prepared vitriol of gold with urine. Virgin boy’s urine was preferred. (In Ireland and Indonesia both, boy’s urine was used to temper metal in making magic weapons; some alchemists claim a red-haired boy’s is best.) Phosphorus was first produced from urine by alchemists. According to the alchemists the materia prima could be found “on any dunghill.”
Fish glue was also added to the pigments, as well as honey, beeswax, or castile soap. Brandy and stale beer have also been used in marbling—though not in Islamic marbling.

Paper for marbling used to be treated with ahar, a mix of rice powder, starch, quince kernels, egg white, et cetera (like gesso). The paper was then burnished with agate or with a “crystal egg.”

Chemicals, compared to substances, lack poetic associations. Substances have stories. The oldest trade good in the world seems to be Baltic amber, a petrified tree gum. (Amber, ambergris, and musk were often mixed with ink in the Islamic Orient.) The old romance of trade involves a poetics of substance in the style of the French philosopher Gaston Bachelard, who discussed the poetics of fire and the theory of phlogiston, the substance of fire, a theory now discarded by orthodox science. The romance still haunts oriental bazaars with their hundreds of smells all mixing together somewhere between nose and brain into a single complex poem of sensations and associations. Charles Fourier believed that the sense of smell is the central human sense, closest to the Passions. In his utopian future everyone would be able to detect more scents than a French perfumer. It might be said that the subject of alchemy is a vast luxury or pleasure—a kind of bliss of substances.

Marbling is both a product and a sign of this bliss.

VII. THE MYSTERIOUS MARBLER

“Imagination is the beginning of the corpus of a form, and it guides the process of its growth. The Will is a dissolving power, which enables the body to become impregnated with the ‘tinctura’ of the Imagination.” — Paracelsus, De virtute imaginativa

Since the Enlightenment we have come to believe that if a physical process can be described and repeated then it is a scientific fact, with a purely material explanation. The materialist assumes that physical events not yet understood in this manner will eventually be explained: no magic is involved in the universe.
But surely to describe an event is not to explain it. Quantum theory tells of events at the point where matter itself seems to be dematerializing. But it cannot explain these events, at least not in any way accessible to human reason. The physicists themselves are reduced to using words like “strange” and “weird,” and some even resort to the language of mysticism.

Some scientists have no interest in sweeping metaphysical presumptions. Some of them consider that true scientists reserve judgment, and that only journalists and spoiled humanists would presume to explain anything in terms of a dubious nineteenth-century enthusiasm such as atheistic materialism. A few scientists—Nick Herbert, Ralph Abraham, those of the Gaia school (James Lovelock, Lynn Margulis)—seem to go a bit further than this tepid but honest agnosticism. For them it sometimes seems that the purpose of science is to offer not explanations but marvels. They’re awed by the sheer inexplicable grandeur and unfathomable complexity of physical existence. One might call them illuminated agnostics. Sometimes they find themselves drawn to the spirit of the Renaissance hermeticists or seventeenth-century Rosicrucians. Nick Herbert feels inspired by Sufism and Islamic alchemy. Ralph Abraham has investigated the mathematical aspects of John Dee’s angelic alphabets. And the Gaia hypothesists, whether they know it or not, sound like Cusanus (Nicholas of Cusa), or Giordano Bruno, when they speak of a living Earth. We could even call scientists like them “neo-hermeticists” and we might hope that the “old mole,” the hermetic worldview, may once again be poised to reappear on the surface as a model of discourse.

Historians of science usually pay attention to figures like Paracelsus only as precursors, as primitives striving to evolve into real scientists. Paracelsus invented the mercury treatment for syphilis despite the fact that he was a credulous visionary; above all he failed in not having been born in the twentieth century, when knowledge supposedly reached perfection and the “end of physics” loomed into view.

A good phenomenologist would avoid such presumption, and might even go so far as to wonder whether the triumph of the Enlightenment (“Newton’s Night”) may have suppressed certain valid modalities of consciousness by categorizing them as nonexistent, delusive, or downright insane. The Cartesian ego locked in the brainpan of a miserable monad, and convinced that everything around it is dead, may in fact not constitute the
most reliable witness of the “real.” What if Imagination and Will actually exist in some way and truly are implicated somehow in nature (whatever that might be)? In which case, mere materialism would provide an inadequate explanation of reality.

Walter Benjamin proposed a solution to this problem with his concept of “profane illumination.” As I interpret it, he meant that only something like mystical experience could overcome the catastrophe of meaninglessness. He saw the affair in terms of a crisis of consciousness. Modalities of awareness had to be liberated from the death grip of organized religion and also from the death sentence of Reason’s cruel instrumentality. One possible means appeared to be available in the phantastica, the hallucinogens: mescaline, hashish. The “drug protocols” carried out in Berlin in the interwar period were serious undertakings worthy of old German spagyric traditions; and Benjamin’s “On Hashish” joins a golden chain of transmission linking Böhme, Paracelsus, the proponents of Romanticism and Naturphilosophie, the surrealists, and other spiritual anarchists and heretics. In our time, perhaps Joseph Beuys best embodied this shamanic tradition, a thorn in the side of the postwar triumphalist historians of the Enlightenment ideologies (capitalist and communist versions of materialist rationalism) who simply erased the Romantic Left from their history books. Fifty years later the triumph was looking a bit shaky. Ideology itself was declared dead, replaced by money. Finally, science itself seemed to have betrayed us, sold itself to the corporation/state, and abandoned all hope of ethics or poetics.

Perhaps this constitutes above all a failure of imagination.

The astral currents created by the imagination of the Macrocosmos act upon the Microcosmos, and produce certain states in the latter, and likewise the astral currents produced by the imagination and will of man produce certain states in external nature, and these currents may reach far, because the power of the imagination reaches as far as thought can go. The physiological processes taking place in the body of living beings are caused by their astral currents, and the physiological and meteorological processes taking place in the great organism of Nature are caused by the astral currents of Nature as a whole. The astral currents of either act upon the other, either consciously or unconsciously, and if this fact is properly understood, it will cease to appear incredible that the mind of man may produce changes in the universal mind, which may cause changes in the atmosphere,
winds and rains, storms, hail, and lightning, or that evil may be changed into good by the power of faith. Heaven is a field into which the imagination of man throws the seeds. Nature is an artist that develops the seeds, and what is caused by Nature may be imitated by Art. —Paracelsus, “De Sagis et eorum Operibus”

Here in a nutshell is the Romantic revolutionary project as proposed (much later) by Blake, Novalis, Shelley, and (even later) the surrealists. When Paracelsus says “Art” he means not only what we mean by that term, but also what we mean by “science.” Art as will to power, in Nietzsche’s phrase. Or to paraphrase Marx: the philosopher talks about the world, the artist changes it.

* * *

Mumia or “mummy” was a kind of ultimate substance in hermeticism. Outwardly, mumia is an exudation of balsams, resins, and residues distilled from actual Egyptian mummies, which were looted and exported in great numbers to medieval and Renaissance Europe, and to the wizards of the Orient as well. Mumia was considered a sovereign remedy, a component of the elixir vitae, and sold for exalted prices. But Paracelsus tells us that mumia is also a spiritual principle, or rather that there exists a spiritual mumia:

A wood-carver takes a piece of wood, and carves out whatever he may have in his mind; and likewise the imagination may create something out of the essence of life. The Mumia is the corpus of which the imagination makes use for the purpose of taking some form. It is lifted up and expanded by the power of the faith, and it contracts and sinks into the mind by being impressed by the will. […] The imagination is the cause that beings may be created out of the ‘Mumia spiritualis,’ which may possess great powers. —Paracelsus, “De Virtute Imaginationae”

In other words, out of “dead matter” in its apparent ultimate state of inertia and decay there springs new life: natura naturata becomes natura naturans, the fixed becomes the volatile. Alchemic resurrection of the body, or “pal-ingenesis,” offers experimental proof of this process—if we believe Paracelsus, that is.
Palingenesis. If a thing loses its material substance, the invisible form still remains in the light of Nature...; and if we can re-clothe form with visible matter, we may make that form visible again. All matter is composed of three elements—sulphur, mercury, and salt. By alchemical means we may create a magnetic reaction in the astral form, so that it may attract from the elements... those principles which it possessed before its mortification, and incorporate them and become visible again. —Paracelsus, “De Resurrectionibus”

The strangest aspect of materialism is the way it seems to dematerialize everything. Is matter a particle or a wave, a solid lump or a pattern of energy? Does the atom bomb represent the suicidal reductio ad nihil of a science devoid of value and meaning? Are genetic manipulation and cloning a kind of denial of life and sexuality? If the computer represents the reduction of knowledge to mere data, are we therefore sunk in a crisis of epistemology? We seem to be involved in a radical disembodiment, which is at the same time a disenchantment of the world’s body.

According to the hermeticists matter “loves” form and wants to embrace it—a theory recently resurrected half jestingly to describe the new science of chaos with its fractals and Strange Attractors.

We’ve already considered marbled paper as a kind of evidence of the jouissance of substances—in effect, as the trace of a kind of mumia spiritualis. In 1687 the pioneer of marbling Athanasius Kircher “resurrected a rose from its ashes in the presence of Queen Christina of Sweden. The astral body of an individual form remains with the remnants of the latter until these remnants have fully decomposed, and by certain methods known to the alchemist it may be reclothed with matter and become visible again” (Hartmann, 205).

In other words, not only does matter love form, form also loves matter. Even the print or fixation of energetic patterns in marbling bears witness to this Tantric physics. As Avicenna said, the Spheres move because their Angels are moved by desire. This constitutes the secret of Kircher’s rose.

Peter Lamborn Wilson
May 2004
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NOTES

1. “Scientific” perspectivalism in the West is an hermetic invention, meant to open the image into three dimensions of space while fixing it in time. Like many hermetic inventions it caused problems when it fell into “profane” hands, locking vision for centuries into a camera obscura of mere naturalism. Add “idolatry” and you get propaganda and advertising, as Ioan Couliano pointed out in Eros and Magic in the Renaissance.
2. This is the only mention of dandruff as art material known to me, although the classic painting manual *Mustard Seed Garden* recommends rubbing earwax into calligraphic ink while preparing it on the inkstone. Japanese marblers used a brush of human hair. The human body is directly involved in marbling—a certain diffused sexuality is implied.

3. Woodman Taylor (in *Christopher Weiman, a Tribute*) points out that the “free, unworked, ‘smoky’ style of marbling” in Islamic art closely resembles suminagashi and may have been produced by a similar technique, thus reinforcing the supposition that China influenced both traditions.

As for the Moslems, they had no doubt about their debt to China, or rather their rivalry with the artists of China, who “mixed their paint with heart’s blood.” The Imam Ali, founder of Sufism and of many arts, alone possessed the genius to outshine those Chinese. Vladimir Minorsky believed that one of the “seven modes of painting” referred to in Islamic texts, called abri, referred either to marbling or to the Chinese style of painting “wisps of cloud” adopted by Islamic miniaturists.

The best paper was from Samarkand and was called Khita’i or Chinese:

> For writing, slightly tinted paper is suitable
> That it should be restful to the eye.
> The red green and white colors
> Strike the eye like looking at the sun.

So says the calligrapher Sultan ‘Ali, quoted in *Calligraphers and Painters* by Qadi Ahmad ibn Mir Munshi (around 1606). Qadi Ahmad’s own master, Maulana Mohammad Amin of Mashhad, “had no peer in ornamental gilding, no rival in the art of repairing books (vassali, which may also mean the making of albums), gold sprinkling, and tinting of paper, especially in various abri (style of marbling).” Moreover, he was a “perfect darvish” or Sufi, like all the best calligraphers and artists.

4. See Easton; and also Chambers, *Suminagashi*.

5. Schimmel notes that the idea of colored paper may have Manichaean origins. Mani was known as an artist and the books of his religion were always beautifully made and illuminated. The Manichaean-influenced Sufi Mansur al-Hallaj (executed for heresy) wrote his letters on colored and gilded papers. During the Tang and Sung dynasties Manichaeanism flourished in Central Asia from Khorasan to China, thus entering the world of the Silk Route and its arts and crafts.

6. The technique of painting clouds in later (post-Timurid) miniatures comes from China, as we’ve already noted, along with other motifs and methods. (“Clouds and rain” is a code for sexual intercourse in Chinese poetry.) The effects of marbling reminded the Persians of painted clouds, which in Sufism represent the divine potentiality and the primordial state of matter.

According to H. Taherzade Bezad (in Pope’s *Survey of Persian Art*) abri can also be translated as “shadowed” or “variegated,” or, in the words of an early European traveler to Persia, “chamleted or veined.” Bezad remarks that the taste for “fused polychromy uncontrolled by fixed design or outline” first appears in Tang Dynasty splash-glaze ceramics. Of course such techniques are not utterly random. Whether working with arabesque or crystal the artist chooses, nudges, urges, discards and tries again, exercises taste, knows when to stop, et cetera.

7. Schimmel culled the divans of Persian and Urdu poetry for references to marbled paper. Here are a few more:

> The river like a scroll of marbled paper.
> —Abu Talib Kalim (Persian, seventeenth century)

> On a cold winter day the ducks look like designs
> Of cloud paper on the white paper “ice.”
> —Abu Talib Kalim (Persian, seventeenth century)

(In other words, a decoupage or collage of marbling on a sheet of pure white paper.)

The problem of the stingy person is the imitation of the generous one—
What good is cloud paper, when only clouds have real rain?
—Bedil (Mughal, seventeenth century)

8. The Tulip Era has its direct influence on marbling in the person of the Hatep (“Preacher” at the Aya Sophia Mosque) Mehmet Effendi, who invented or popularized a method of depicting flowers in marbling (by delicate dripping and combing techniques), rediscovered and perfected in modern times by Necmeddin Okyay (Easton).

9. Marbling was discussed in books belonging to this tradition of “secrets” such as Het Natuurlyk Tover-Bok (ca. 1685) by “Simon Witgeest” (the “wit-souled Simon,” as in Simon Magus); or the Curiosa arcana of Sieur Lamery, apothecary to the French king (1674); and even James Sumner’s The Mysterious Marbler (1854), which speaks of gall as giving “life to the colors,” and describes rainwater as “Nature’s own elixir.”

10. Paracelsus himself inherited a basic concept from the great Islamic (probably Shiite) alchemist Jabir ibn Hayyan, namely the dyadic principle sulphur/mercury. Paracelsus added a third term—salt—thus setting up a true dialectic. Although his thinking seems trinitarian it was adopted enthusiastically in Ottoman and Persian alchemical circles, and in North Africa, where it remains canonical till today, as can be seen from Holmyard’s research in Morocco, or as I myself learned from an alchemist in Isfahan in 1974.

11. See “Brief History of Marbling” by Arkin Ilicali in Petek (1996). Shaykh Edhem was a polymath who mastered so many skills he was called Hezerfen, the Magician. The Eastons visited the tek-kesi not many years ago and found it a quaint old wooden building in classic Istanbul style with a beautiful garden where Edhem is buried and his tomb revered by descendants and marblers. The Eastons obviously had a splendid time in Turkey and Mrs. Easton has given a wonderful account of Turkish marbling.

12. The great English marbler Charles Woolnough, as a boy of thirteen (around 1826), was accidentally allowed to witness the jealously guarded secret of marbling and “was so stricken with wonder and admiration at the sight that I determined not to rest till I had found out how to do it.” Later he gave “great offense to the fraternity” by speaking in print about secrets he’d independently rediscovered (Wolfe, 78).

13. Kircher failed to crack hieroglyphics because, like all the Renaissance magi, he assumed that they were occult symbols rather than phonetic signs, a discovery reserved for Champollion. The “failure” of hermetic hieroglyphic theory, however, led directly to the theory of emblems (image/text combinations with moral or mystical or alchemical content) and the great tradition of the Emblem Books. It also produced Giordano Bruno’s hermetic science of emblems, perhaps his single most important contribution to epistemology and imaginal magic. But even today Renaissance hieroglyphology remains unstudied—Kircher’s books have never been edited or translated from the Latin—because it “failed.”

14. Surface-tension studies had an early proponent in Benjamin Franklin, who studied the effects of oil on water (it suppresses waves) and investigated what we might call the physics of marbling.