Wer lange lebt, hat viel erfahren, 
nichts Neues kann für ihn auf dieser Welt 
geschehn. 
Ich habe schon, in meinen Wanderjahren, 
kristallisiertes Menschenvolk gesehen.

(There is nothing new on earth 
For a person who lives long and experiences 
much. 
In my years of youthful wandering 
I have seen crystallized people.)

—Goethe, Faust II. ii. 36 (6861–6864)
WATER AND STONES. Those are the unpromising ingredients of two very different endeavors. The first is painting, because artists’ pigments are made from fluids (these days, usually petroleum products and plant oils) mixed together with powdered stones to give color. All oil paints, watercolors, gouaches, and acrylics are made that way, and so are more solid concoctions including pastels, ink blocks, crayons, and charcoal. They differ only in the proportions of water and stone—or to put it more accurately, medium and pigment. To make oil paint, for example, it is only necessary to buy powdered rock and mix it with a medium, say linseed oil, so that it can be spread with a brush. Very little more is involved in any pigment, and the same observations apply to other visual arts. Ceramics begins with the careful mixing of tap water and clay, and the wet clay slip is itself a dense mixture of stone and water. Watery mud is the medium of ceramists, just as oily mud is the medium of painters. Mural painting uses water and stone, and tempera uses egg and stone. Even a medium like bronze casting relies on the capacity of “stone”—that is, the mixture of tin, lead, copper, zinc, and other metals—to become a river of bright orange fluid.

So painting and other visual arts are one example of negotiations between water and stone, and the other is alchemy. In alchemy, the Stone (with a capital S) is the ultimate goal, and one of the purposes of alchemy is to turn something as liquid as water into a substance as firm and unmeltable as stone. As in painting, the means are liquid and the ends are solid. And as in painting, most of alchemy does not have to do with either pure water or hard stones, but with mixtures of the two. Alchemists worked with viscid stews, with tacky drying films, with brittle
skins of slag: in short, they were concerned with the same range of half-fluids as painters and other artists.

That is the first point of similarity between alchemy and painting. There is a second similarity that runs even deeper, and gives me the impetus to explain painting in such a strange way. In alchemy as in painting, there are people who prefer to live antiseptically, and think about the work instead of laboring over it. In alchemy, those are the “spiritual” or “meditative” alchemists, the ones who read about alchemy and ponder its meaning but try not to go near a laboratory; and in painting they are the critics and art historians who rarely venture close enough to a studio to feel the pull of paint on their fingers. Perhaps because they are uncomfortable with paint, art historians prefer meanings that are not intimately dependent on the ways the paintings were made. Consider, for instance, the first of the color plates in this book (COLOR PLATE 1). An historian looking at this painting might recognize Sassetta, a fourteenth-century painter from Siena. Sassetta is known to art history as a late medieval artist who slowly adjusted his work to the emerging sensibility of the Florentine Renaissance. He knew about the important new works that were being made in Florence, and there are echoes and hints of them in his paintings, though in the end he remained faithful to the conservative Sienese ways. We know a little about his life, and about his patrons and commissions; and we can guess at his friends, and the places he visited. Pictures can have many meanings of those kinds, and art history is a rich and complex field. But a painting is a painting, and not words describing the artist or the place it was made or the people who commissioned it. A painting is made of paint—of fluids and stone—and paint has its own logic, and its own meanings even before it is shaped into the head of a madonna. To an artist, a picture is both a sum of ideas and a blurry memory of “pushing paint,” breathing fumes, dripping oils and wiping brushes, smearing and diluting and mixing. Bleary preverbal thoughts are intermixed with the namable concepts, figures and forms that are being represented. The material memories are not usually part of what is said about a picture, and that is a fault in interpretation because every painting captures a certain resistance of paint, a prodding gesture of the brush, a speed and insistence in the face of mindless matter: and it does so at the same
moment, and in the same thought, as it captures the expression of a face.

In Sassetta’s painting little brushstrokes form the face: they are delicate light touches that fall like lines of rain over the skin, coming down at a slight angle over the temples and next to the mouth. Brighter marks spread from the top of the forehead, crisscrossing the canted strokes over the temple. There are larger milky dapples just under the pink of the cheek—almost like downy hair—and curling marks that come around the neck and congregate on the collar bone. Sassetta has clasped three bright rings of sharp white (they are called Venus’s collars) around the neck. The sum of brushstrokes is the evidence of the artist’s manual devotion to his image: for Sassetta painting was the slow, pleasurable, careful and repetitious building of a face from minuscule droplets of pigment. The initial strokes were darker and more watery, and as the contours began to emerge he used whiter paint, and put more on his tiny brush, until he finally built up the forehead to a brilliant alabaster. This is a tempera painting, and in its period many painters used the medium as a way of showing devotion. Sassetta’s lingering patience and fastidious attention remain fixed in the painting for everyone to see: they are a meaning of the method itself.³

Recently, some art historians have become more interested in what paint can say. They suggest that since art history and criticism are so adept at thinking about what paint represents (that is, the stories and subjects, and the artists and their patrons), then it should also be possible to write something about the paint itself. What kinds of problems, and what kinds of meanings, happen in the paint? Or as one historian puts it, What is thinking in painting, as opposed to thinking about painting?⁴ These are important questions, and they are very hard to answer using the language of art history.

This is where alchemy can help, because it is the most developed language for thinking in substances and processes. For a “spiritual” alchemist, whatever happens in the furnace is an allegory of what takes place in the alchemist’s mind or soul. The fetid water that begins the process is like the darkened spirit, confused and halfrotten. As the substances mingle and fuse, they become purer, stronger, and more valuable, just as the soul becomes more holy. The philosopher’s stone is the sign of the mind’s perfection, the almost transcendent state where all
impurities have been killed, burned, melted away, or fused, and the soul is bright and calm. Alchemists paid close attention to their crucibles, watching substances mingle and separate, always in some degree thinking of the struggles and contaminations of earthly life, and ultimately wondering about their own souls and minds.

It was the psychologist Carl Jung who first emphasized this aspect of alchemy, and since then everyone who has studied alchemy has either followed the outline of his interpretation, or rebelled against him. I am not a follower of Jung, and I do not agree with his singleminded pursuit of spiritual allegories, or with his theories of the psyche. But to me what is wrong with Jung is not the basic idea that some alchemists saw their souls in their crucibles, but the fact that he made alchemy virtually independent of the laboratory. There is much more to the experimental side of alchemy than Jung thought; alchemical procedures vary from routine formulas for soap to ecstatic visions of God. Even today there are recipes using straightforward ingredients that are so intricate they cannot be reliably duplicated by chemists. What mattered to all but a very few purely spiritual alchemists was the laboratory itself, and the manipulation of actual substances. The laboratory made their ideas real, and had a grip on the imagination that no speculative philosophy could hope for. Jung’s reading slighted the everyday alchemists who imagined they were making medicines or becoming rich: they were just as much enthralled, and took just as much of the meaning of their lives from their crucibles, as the spiritual alchemists who wrote so beautifully about darkness and redemption.

The moral I take from this is that neither alchemy nor painting is done with clean hands. Book-learning is a weak substitute for the stench and frustration of the laboratory, just as art history is a meager reading of pictures unless it is based on actual work in the studio. To a nonpainter, oil paint is uninteresting and faintly unpleasant. To a painter, it is the life’s blood: a substance so utterly entrancing, infuriating, and ravishingly beautiful that it makes it worthwhile to go back into the studio every morning, year after year, for an entire lifetime. As the decades go by, a painter’s life becomes a life lived with oil paint, a story told in the thicknesses of oil. Any history of painting that does not take that obsession seriously is incomplete.
So this is not a book about paintings, but about the act of painting, and the kinds of thought that are taken to be embedded in paint itself. Paint records the most delicate gesture and the most tense. It tells whether the painter sat or stood or crouched in front of the canvas. Paint is a cast made of the painter’s movements, a portrait of the painter’s body and thoughts. The muddy moods of oil paints are the painter’s muddy humors, and its brilliant transformations are the painter’s unexpected discoveries. Painting is an unspoken and largely uncognized dialogue, where paint speaks silently in masses and colors and the artist responds in moods. All those meanings are intact in the paintings that hang in museums: they preserve the memory of the tired bodies that made them, the quick jabs, the exhausted truces, the careful nourishing gestures. Painters can sense those motions in the paint even before they notice what the paintings are about. Paint is water and stone, and it is also liquid thought. That is an essential fact that art history misses, and alchemical ideas can demonstrate how it can happen.
NOTES TO THE INTRODUCTION


2. This was first argued in John Pope-Hennessy, *Sassetta* (London: Chatto and Windus, 1939), 149.


source is Cristophe Glaser, *Traité de la chymie, enseignant par une brieve et facile méthode toutes les necessaires préparations*, 2nd ed. (Paris: d'Hory, 1673 [1663]).

7. Only the most determined “puffers” or “spagyrists”—alchemists who took the day-to-day recipes literally, and understood everything at face value—would think only of the laboratory. Most understood that the exotic materials and odd names were ciphers, pointing vaguely at something beyond. But the exoticism of the subject cannot be burned away, leaving the indelible spiritual core, without also losing the texture and fascination of everyday work. That is why I return to the literal sense throughout this book: without it, the actual textures, weights, and smells of the laboratory (or the studio) tend to evaporate in the name of a transcendental goal that cannot make sense without their support. Some readers—practicing alchemists, and especially “spiritual” alchemists—have objected that I spend too much time with literal-minded recipes. This is the defense: that to understand the fascination of substances, it is necessary to take them—for a while, and with reservations—exactly as they present themselves. Without that attention to the grain of everyday life, the essential tension between substance and sign is prematurely broken.