

6. Alchemy

Jung's rediscovery of alchemy and his prolonged period of work on it cannot be separated from his early period of professional and personal development despite the fact that Jung himself was in his early fifties when he first began his serious study of alchemy.

After the separation from Freud in 1912, Jung began his profound experiment on and in himself. The primary technique he used appears to have been active imagination, which is the name of the technique used for exploring the unconscious mind. In the simplest possible terms, active imagination is akin to conscious daydreaming, really entering a fantasy and following it through to its completion. Sometimes active imagination takes the form of writing (which is obviously what Jung did a lot of), painting, sculpting, dancing or even talking out loud to oneself. In short, active imagination is simply giving form, giving expression in outer reality, of an inner image or reality or series of images that enter the mind following an initial period of having emptied the mind from the trains of conscious thought. The final step in active imagination is what Jungians call the ethical confrontation; that is, taking seriously the content of the active imagination and earnestly seeking its meaning and not simply dismissing it as 'mere fantasy', which is the usual means of dealing with an outcome we do not consciously like.

This self-imposed experimental phase of Jung's, much of which is contained in what is termed the 'Red

Book', began in 1912 and lasted approximately until 1919. It was a period that can be best regarded as a pioneering work in the jungle of the unconscious mind. Whilst these years had the effect of isolating Jung from his colleagues and the scientific and professional worlds, he nevertheless regarded these years as the most important in his life, since it was during these years that he confronted his unconscious. He explored it and came to a profoundly deep understanding of it, which had the effect of indelibly altering Jung himself as a person; that is, it had a transformation effect. This effect, interestingly enough, is the exact effect that has been described as occurring in ancient shamans or primitive medicine men following what has been termed an 'initiatory illness' (a period not unrelated to the mid-life crisis transition). However, it was to be some twenty years beyond the beginning of this self-imposed experiment before Jung was able to understand in some measure the products of his active imagination that he had so assiduously and conscientiously recorded in his Red Book. In his autobiography, he says:

First I had to find evidence for the historical prefiguration of my inner experiences. That is to say, I had to ask myself 'where have my particular premises already occurred in history'? If I had not succeeded in finding such evidence, I would never have been able to substantiate my ideas. Therefore my encounter with alchemy was decisive for me, as it provided me with the historical basis which I had hitherto lacked. (MDR 200)

This quotation, I feel, brings home a point often over-

looked in relation to Jung; that he, like other people, wanted to find support and justification for his ideas, particularly given their personal nature. Jung was, no doubt, left wondering whether other people, perhaps at other times in history, had felt or experienced what he had experienced over that period of intensive self-analysis and the subsequent years. As he stated himself in his Foreword to Richard Wilhelm's *The Secret of the Golden Flower* (a book, incidentally, that was the turning-point in Jung's pursuit of alchemy):

My results based on fifteen years of effort seemed inconclusive because no possibility of comparison offered itself. I knew of no realm of human experience with which I might have backed up my findings with some degree of assurance. (p. xiii)

However, as we have seen so often in this discussion, Jung's professional and personal lives, his being and his theories, are inextricably bound together, the last constituting an attempt to explain and give meaning and order to the former. Also, as we have said before, specifically in relation to Jung's discovery of the collective unconscious, ideas often announced themselves in dreams to Jung long before he had been able to attempt any conscious conceptual elaboration of his ideas.

His introduction to alchemy conforms exactly to this pattern of discovery: 'Before I discovered alchemy, I had a series of dreams which repeatedly dealt with the same theme' (MDR 193). This theme was as follows:

Beside my house stood another, that is to say, another wing or annex, which was strange to me and each time

I wondered in my dream why I did not know this house, although it had apparently always been there. Finally came a dream in which I reached the other wing. I discovered there a wonderful library dating largely from the sixteenth and seventeenth centuries. Large, fat, folio volumes bound in pigskin stood along the wall. Among them were a number of books embellished with copper engravings of a strange character, and illustrations containing curious symbols such as I had never seen before. At the time I did not know to what they referred; only much later did I recognise them as alchemical symbols. (MDR 193-4)

Jung goes on to make some brief interpretive comments about this dream in which he says the 'unknown wing of the house' was a part of his own personality, a part of him of which he was not yet conscious, and the library obviously referred to alchemy. Interestingly enough, some fifteen years after this series of dreams, Jung had assembled a library very much like the one in this actual dream. It is still housed today in his home in Zürich and comprises probably the finest and most complete private alchemical library in the world. However, it was a crucial dream of Jung's in 1926, a year approximately after the preceding dream, that anticipated Jung's encounter with alchemy. The dream is as follows:

I was in the South Tyrol. It was wartime. I was on the Italian front and driving back from the frontline with a little man, a peasant, in his horse-drawn wagon. All around us shells were exploding, and I knew we had to push on as quickly as possible for it was very

dangerous. We had to cross a bridge and then go through a tunnel whose vaulting had been partially destroyed by the shells. Arriving at the end of the tunnel, we saw before us a sunny landscape and I recognised it as the region round Verona. Below me lay the city, radiant in full sunlight. I felt relieved and we drove on out into the green, thriving Lombard plain. The road led through lovely springtime countryside; we saw the rice fields, the olive trees and the vineyards. Then diagonally across the road I caught sight of a large building, a manor house of grand proportions, rather like the palace of a North Italian duke. It was a typical manor house with many annexes and outbuildings. Just as at the Louvre, the road led through a large courtyard and past the palace. The little coachman and myself drove in through a gate, and from here we could see, through a second gate at the far end, the sunlit landscape again. I looked round; to my right was the façade of the manor house, to my left the servants' quarters and the stables, barns and other outbuildings which stretched on for a long way.

Just as we reached the middle of the courtyard, in front of the main entrance, something unexpected happened; with a dull clang, both gates flew shut. The peasant leaped from his seat and exclaimed – 'now we are caught in the seventeenth century'. Resignedly I thought, 'well that's that, but what is there to do about it? Now we shall be caught for years'. Then the consoling thought came to me, 'someday, years from now, I shall get out again'. (MDR 194)

This is a very rich and dramatic dream full of extremely rich symbolism. The shells, for example,

Jung interpreted as missiles coming from the 'other side'; that is, the unconscious mind. I think the peasant can be seen as the practical, earthy, purposeful part of Jung, systematically but slowly leading him back to alchemy. Interestingly enough they are going back from the front line, that is back in time perhaps away from the conscious mind of present day. There is also, it seems to me, several symbols of renewal in this journey; back through lovely springtime suggests that retreating from conscious position (present time) will have the effect of renewal of the spirit (that is, new growth). The manor house on the right (that is, consciousness) is a façade, which I feel reflects Jung's anxiety at not having any comparative evidence to back up his theories. Interestingly, the buildings on the left are very real – stables, barns, etc. – and these to my mind refer to working buildings and storehouses of food, symbolically representing the things to be found in the unconscious mind.

Subsequently, Jung found himself reading 'ponderous tomes' on religion and philosophy and some on alchemy, without enlightenment. He states that at this time, 'I regarded alchemy as something off the beaten track . . . rather silly' (MDR 195). The critical turning-point was the book I have already mentioned: Richard Wilhelm's translation of the ancient Chinese alchemical text entitled *The Secret of the Golden Flower*. Wilhelm sent this book to Jung with the request that he write a commentary on the text. This was in 1928, two years after the dream of being locked in the seventeenth century. Jung's response to the text, the origins of which went back to the Tang Dynasty (eighth century), was as follows:

I devoured the manuscript at once, for the text gave me undreamed of confirmation of my ideas about the mandala and the circumambulation of the centre. That was the first event that broke through my isolation. I became aware of an affinity; I could establish ties with something and someone. (MDR 197)

These last words are to my mind very revealing of the human side of Jung, who at fifty-three years of age, despite much respectable professional success behind him, was still feeling the acute aloneness that was so characteristic of his adolescence. This book aroused Jung's interest in alchemy, and to his surprise he found other parallels to his work, particularly the internal work, the self-imposed analysis; that is, confirmation for those arduous and presumably tortuous years following the break with Freud. For example, he found a direct parallel between his discovery of the mandala symbolism in his patients and the Chinese concept in *The Secret of the Golden Flower* of the 'circulation of light'. Here, too, in this very ancient text, the circular movement was intended to set in motion a development of personality leading to individuation. Here, also, was the symbol of Self, of unity, of self-realisation.

A further analogy was found in the two concepts of Soul that are discussed in the *Golden Flower*. In this text they are personified by the masculine 'cloud demon' Hun, and the feminine earthbound 'white ghost' P'o, which exactly parallel Jung's concepts of anima and animus. Further, the meditative process spelt out in the *Golden Flower* paralleled the same sort of psychic transformation that Jung himself had experienced and had later come to conceptualise as

individuation. Thus, with his appetite whetted, he pursued the exploration of alchemy, and was soon to discover that here, too, the art was about producing the incorruptible stone, the Self, or the *lapis philosophorum*.

Although Jung started his alchemical studies in earnest from this time on, that is 1928, it was not until seven years later (seven equalling one spiritual year!) that he represented his findings to the public for the first time at what was then termed the Eranos meetings in Ascona, Switzerland. However, it was a further seven years, 1942 (originally published in 1944), before these lectures given at Eranos were elaborated into one of Jung's key works, entitled *Psychology and Alchemy*, which forms volume 12 of his *Collected Works*.

Well, let us now turn to alchemy and briefly discuss what it is and how such a seemingly irrelevant and esoteric art was able to provide Jung with the much needed confirmation and validation of his own views. On the surface, alchemy appears as a fairly unlikely source of such confirmation, since normally it is equated with superstitious nonsense in which cranks thought they could make gold through a process of pseudo-chemical procedure. In a more objective sense, alchemy is regarded not just as the hobby of crackpots, but as the genuine predecessor of modern chemistry. It is certainly true that alchemists did try to make gold, but what is not commonly appreciated is that for some of the alchemists, in their own words, *aurum nostrum non est aurum vulgi*; that is, 'our gold is not the common gold'.

To understand this, we shall have to trace the out-

line of the history of alchemy. Its earliest origins appear to have been separately in Egypt and China. The Egyptian origins are supported by references to various gods, in particular Hermes (Thoth), who was associated with late mediaeval alchemy in the form of the god Mercury (romanised version of Hermes). Chinese origins, as we have already seen, are evident in such early manuscripts as *The Secret of the Golden Flower*, but some evidence of alchemical knowledge exists as early as the fifth century BC in China. Gold, or the making of it, was present in both civilisations. Then there came a Greek-Egyptian era – including the alchemical theories of Plato and Aristotle, focusing primarily on the four elements of fire, air, water and earth. In fact, one alchemical writer, Hopkins, has argued that alchemy as it came to be known from the thirteenth through to the seventeenth centuries in Europe was indeed the child of Greek philosophy.* I suspect that the central basis of this assertion is that Aristotle held that *all* bodies were composed of the four elements, just in differing proportions. Therefore, as a direct corollary of this, one body could be changed or transmuted into the other; for example, water could become air (steam) by simply heating it.

Alongside this belief, in the possibility of all matter potentially capable of being transmuted into another form, was a second belief or assumption that proves to be central to the understanding of alchemy, and that is that all matter was like man, alive and sensitive and having a spirit or life within it just as man (that is, there was no clear distinction between man and matter). A

*A. J. Hopkins, *Alchemy, Child of Greek Philosophy*, Columbia University Press, 1934.

direct consequence of this belief was the further belief that all matter, just like man, had within it, or him, the potential to be perfect, and that the agent of this process was spirit or pneuma. Such spirit can be seen as having the power to change base metals into their perfected form, that being personified or symbolised by 'gold'; hence the alchemist dictum *aurum nostrum non est aurum vulgi*.

Thus it makes very good sense that later alchemists believed in the possibility of changing base metals such as copper into gold, since all things, from their point of view, could be changed into all other things simply because all substances were fundamentally composed of the same four basic elements. And secondly, like man, matter had the potential for perfect form within itself. All that was required was a suitable agent for bringing about this transmutation and redeeming the perfect matter, 'gold', from the base metal.

This redeeming or transmuting agent became known under a wide range of terms, and one can see constant reference to it in Jung, from such terms as the *lapis*, philosopher's stone, *lapis philosophorum*, *lapis invisibilitatis*, *mercurius* or the philosopher's gold. In searching for this stone, the alchemist was endeavouring to liberate the spirit he believed to be concealed in matter; that is, to redeem the divine spirit, the perfect form, from the vessel of matter in which it was held captive.

This stone, this spirit, or whatever other name it goes by, is both the starting-point and the goal of the alchemical opus or work, regardless of whatever stage of alchemy one is talking about. It is in this very sentence of the stone being the starting-point and the

goal as well as the transmuting agent or agent of change, that one can immediately see the link that so excited Jung between his theories and alchemy. The direct link is simply that the stone, the *lapis*, the philosopher's gold, etc., is equivalent to the Self, since both are the starting-point, the agent and the goal of the opus, whether that opus or work be alchemical or psychological.

That the stone, the mystical transmuting agent, should be known as a stone in fact related back to Jung's very early life as a schoolboy, when he liked to play outdoors, particularly along the garden wall of his parent's home where there was a slope and, embedded in this slope, a stone, 'my stone' as Jung called it. He says of it:

Often when I was alone I sat down on this stone and then began an imaginary game that went something like this . . . 'I am sitting on top of this stone and it is underneath'. But the stone could also say, 'I and think 'I am lying here on this slope and he is sitting on top of me'. The question arose 'am I the one who is sitting on the stone, or am I the stone on which he is sitting'. (MDR 331)

Here we see in this ten-year-old mind of Jung the archetypal recognition of Self being the equivalent of stone or alternatively as Self being represented by stone in the outer world. Closer to home we can still recognise this powerful link amongst the Australian Aborigines with their Churinga stone, which they believe has the magic life forces residing in it. A contemporary cinematic expression of this Aboriginal

myth can be seen in Peter Weir's film *The Last Wave*. The stone therefore appears to be an age-old symbol for the eternal, the enduring in man, the immortal - the Self. That the alchemist believed that this stone could be produced or liberated from matter in which it was concealed was entirely consistent, as we have already seen, with the lack of any distinction between mind and matter. Such a distinction appears to have come into existence with any clarity only in the latter part of the seventeenth century with the evolution of the subjective and objective worlds as personified and exemplified in Descartes's *Principles of Natural Philosophy*.

However, in pragmatic terms, what this lack of distinction between mind and matter, this Aristotelian principle of unity of matter, meant was that the alchemist drew no conscious distinction between the contents of their mind and the matter that they were experimenting on or with. Thus what they experienced as properties of matter was at the same time the content of their own unconscious mind. The chemical experiments simply paralleled an unconscious psychological experiment for the perfection of their own internal being. That is, the liberation of the 'gold' within themselves as personified and explicated in the liberation of gold from matter. In the alchemical symbolism, what Jung was able to discover was that the stages and the images were of an inner transformation process expressing itself in pseudo-chemical language. Hence the stone, the *lapis*, that the alchemists were trying to liberate from its vessel of matter, was the Self. That is, they were trying to liberate the Self from the chaos and the darkness of the primitive mat-

ter of their unconscious mind.

It was both things in a parallel way, so alchemy was indeed the precursor of chemistry, since it seems that they did do actual chemical experiments and developed certain fundamental chemical knowledge. But at the same time, because there was no distinction between mind and matter, it was, and is in my view, the precursor of depth psychology, in particular Jungian psychology. Thus the opus or work of the alchemist provides in an outside, externalised, projected and thereby totally unconscious form a picture of the work, the difficulties, the dangers and the rewards of the process of individuation. It is as if it is an outside language for an internal process, and Jung needed this historical link to validate what up until then had been his personal and subjective views.

Thus alchemy provided the illuminating parallel to the individuation process. As products of their times and cultural environments, alchemy and the individuation process differ greatly. But what both have in common, regardless of time and cultural differences, is that they are attempts to lead man to self-realisation. Hence the language of alchemy has to be read in *both* its exoteric form (that is, as a primitive and simplistic chemical language) *and* in its esoteric or mystical form as a symbolic language for the development of Self, that is the individuation process. The making of gold is the making of Self, the Soul-making that we discussed previously. In this sense, as Jung says in the Preface to a catalogue of alchemical books issued by the antiquarian bookseller Kelvin Andrew Zeigler of Zürich: 'Consequently alchemy gains the quite new and interesting aspect of a projected psychology of the

collective unconscious and thus ranks with mythology and folklore.'

In discussing alchemy it is also important to take note of Jung's view that alchemy as such existed in a compensatory relationship throughout the Middle Ages and mediaeval periods to orthodox Christianity. Since, within the orthodox view, it was man who needed to be redeemed, but within the alchemical model it is God, the perfect form, hidden and contained in matter, that needed to be redeemed by man. In this sense we can once again see the law of compensation, or the law of balance operating within the psyche of man; alchemy providing the compensatory view to the consciously held one of redemption.

The alchemist undertook this task of redeeming, from what was termed the primitive material, the first material, or *massa confusa*, the chaos, the spirit that was imprisoned in it. The production stage by stage of the alchemical 'treasure' corresponds therefore to the deliverance or bringing to consciousness of the Self, from the darkness and primitive chaos of the unconscious mind. That it, alchemy, stood in a compensatory relationship to Christianity can be seen in Jung's statement that:

The Christian opus is an operari in honour of God the Redeemer undertaken by man who stands in need of redemption, while the alchemical opus is the labour of Man the Redeemer in the cause of the divine world Soul slumbering and awaiting redemption in matter.*

*'Relations Between Ego and the Unconscious', CW 12:456-7.

Hence this represents the antithesis or the opposite of the Christian belief system, that God redeemed man; and thus the alchemists were apt to be persecuted by the Christian church, and this has been given in some places as one possible reason why even the enlightened alchemists, who seemingly knew what they were on about was not chemistry exclusively, but a mystical journey, continued to use chemical language as a means of avoiding persecution. The notion of redemption also related to the previous chapter, where I pointed out that Jung, in my opinion, has restated the redemptive process in psychological terms, substantiated by alchemy, and rescued redemption from the institutionalised sterility of organised Christianity; that is, from its lopsided consciousness.

Where one can see that the ancient alchemist projected the problems of redemption into matter, along with the projection of good, bad, dark and light, modern man can be seen as having projected the problem of redemption onto 'God' (aided and abetted by orthodox Christianity) and good and evil onto other people or nations. Hence the work remains the same; alchemy merely gives us an objectified account of redeeming the perfect form within ourselves.

ALCHEMICAL STAGES

Although the alchemical texts show many variations and indeed are very complex, there appears to be general agreement that the philosopher's stone or philosopher's gold is produced in three stages:

1. Nigredo: darkness or blackening.
2. Albedo: whiteness or whitening.
3. Rubedo: reddening or colouring of gold.

Nigredo

The work began with what has been termed the *mass confusa* or *prima materia*, which in actual matter form, was often composed of four common base metals, in particular, lead, tin, copper and iron. If these are, for the moment, seen in a slightly broader context and related to the astrological view of the world, which can be considered as pre-dating the alchemical view, then one can immediately see an interesting relationship in so far as Saturn represents lead, the metal of Jupiter is tin, of Venus is copper and of Mars is iron. Taken one step farther, symbolically Saturn represents limitation, whereby Jupiter represents expansion and hence a pair of opposites. Venus represents love and Mars aggression, another pair of opposites. So in fact at this stage, if you like, the beginning of the black mass is a pair of opposites, and thereby is highly symbolic of man's psyche. The opposites are all mixed up and producing a black mass, that is an undifferentiated, disintegrated, unconscious mind. Hence what happens in the nigredo phase is that this black mass, this *prima materia*, is first *calcinated*. Within this process the alchemist simply heated the material, the basic metals, that symbolically we now see as being composed of the opposites of expansion and limitation and love and aggression to reduce it to a state of fine powder. The next stage of the alchemist's process was that it was then *putrefied*. That is, the calcinated material that had been reduced to a state of fine powder was separated out into an inert mass. This was followed by a form of washing, sometimes called solution, involving or resulting in the purification of matter. Finally in this nigredo phase comes the *distillation*.

process. This consists of boiling the liquid and reconvert-
ing the vapour into a liquid again by cooling it. This
phase has sometimes also been referred to in the
alchemical literature as 'the rain of purified matter'.

Alchemists referred to this nigredo or blackening
phase as a dangerous stage in which poisonous vap-
ours often could develop. Lead or quick silver (mer-
cury) poisoning could occur, as also could explosions,
since all of this took place in a retort or furnace.
According to the old text, there lives in lead 'an impu-
dent demon who can cause a sickness of the spirit or
lunacy'. This nigredo phase has its psychological paral-
lel, its 'internal parallel', in the first stage of individua-
tion, that is the integration of the shadow and the rec-
ognition of the opposites within us. At this stage there
usually exists in the beginning only a black mass, a
mass of confusion with all the opposites mixed up, half
of them projected onto other people and the shadow
aspects of Self quite often disowned. The calcination
that occurred in the physical world in matter can be
seen as occurring symbolically or internally as a heat-
ing up and transforming of the shadow through emo-
tion. That is, it is only when we find ourselves
repeatedly having emotional outbursts with others,
heating ourselves up so to speak psychologically, that
we first have cause to reflect upon what it is within us
that drives us to such behaviour. We know from a pre-
vious chapter that it is the shadow aspect, or the dark-
ness within. The putrefaction that occurred in the
physical world can then be seen psychologically as the
beginning of separating these black or shadow aspects
out from each other, the beginning recognition, if you
prefer, of them psychologically as a prelude to their

integration. The final steps in the nigredo phase of solu-
tion and distillation are refinements of the shadow, the
cleansing via the process of bringing them into uncon-
sciousness and recognising them, thereby washing
them clean from the darkness of the unconscious mind
and the projection of them onto other people.

However, as the old alchemists pointed out, this
nigredo phase, this working on the dark shadow
aspects of Self, on the black mass within ourselves,
has implicit in it certain dangers. The most prevalent
one, alchemically speaking now, appears to find its ori-
gins in the 'impudent demon that lives in lead'. Trans-
lated psychologically or symbolically, one can take this
to mean depression. Since what we know from the lit-
erature of symbolism is that lead is equated with
Saturn, and Saturn with limitation, and it is often
acquainted with a depressive or leaden feeling. In fact,
one often says of people who are depressed that they
feel weighted down. This makes sense psychologi-
cally and clinically, since when a person begins in
therapy to recognise their shadow aspects, to start to
withdraw some of their dark side of their personality,
there is often a depressive reaction; that is, the 'impu-
dent demon' causes a sickness of the spirit or psyche.
A simple explanation of this is, as we have already
seen, the withdrawal of projections, the bringing back
from the outside world the parts of ourselves that
were previously disowned and put onto other people.
This process can very often leave people with a painful
and at times depressing feeling that whatever is wrong
with the world or others is actually wrong in them-
selves. For some individuals this results in a shattering
of self-illusions that can create in its wake a feeling of

having lived a totally phony and hypocritical life, and hence they can feel much despair about themselves and therapy. We can see in this a direct parallel to Jung's own life in that period between 1912 and 1919, when he explored in depth his own shadow side and had many and prolonged, depressive experiences.

Albedo

The second stage, as already indicated, is the albedo or whitening phase. In the alchemical work the nigredo was usually followed by the albedo phase or stage. Here the main operation was nowhere near as strenuous as the nigredo and consisted mainly of regulating the heat in the retort stand in the outer world, and keeping it at an even and regular temperature, making sure that it was neither over-heating the material, which would result in drying it up, or under-heating it, thus allowing the ingredients to cool down too much and to return to the basic black mass. Psychologically the albedo or whitening phase represents the first transmutation and integration of the inner contrasexual components, the anima in the man and the animus in the woman.

This inner union of opposites, this marriage between opposites, is called in alchemy the *hieros gamos* or sometimes referred to as the 'mystical marriage' or alternatively the 'chymical marriage'. In essence it is, I believe, not just the union of the contrasexual components, but also the beginning of the union and ultimately the transcendence of all the opposites within us. The contrasexual union, the union of anima and animus, in the albedo phase is in my view the prototype of the union of opposites that is to follow. It is,

I suspect, the psychological parallel to the albedo phase that is at the basis of so many marital problems when couples in which anima and animus are respectively activated; and people often characterised by a simultaneous attraction and hatred for each other.

Obviously the manifestation of the projection of the opposite sex component onto their partners lies behind this conflict. Just as in alchemy, keeping an even temperature becomes a major problem in most marital and close personal relationships! The outcome is very often an over-heating as exemplified by arguments and over-emotional outbursts, resulting in a drying up of the personal relationship, or alternatively an under-heating shown in passive aggression and withdrawal, leading to a cooling down and a returning to the black confusion so characteristic of marriages in which psychological development has been stagnated or curtailed. More of this will be discussed in the chapters on marriage and anima and animus.

Rubedo

According to the fifteenth-century alchemist Norton, 'red is the last in the work of alchemy'; and, according to Aristotle, 'the philosopher's stone [red] is the grand finale of the system – the final cause that can reproduce itself'. In the rubedo phase the alchemist's work comes to an end; he opens the retort and hopefully the philosopher's stone begins to radiate a cosmically healing effect. In psychological terms, with reference to the individuation process, the opposites can be seen as being united or alternatively in precise Jungian terms, a reconciliation of the opposites has occurred, and in so doing the Self is brought into being or consciousness.

In alchemical terms the 'philosopher's gold' has been produced, the stone has been produced, the starting-point and the goal of the opus has been completed and, in Marie-Louise von Franz's terms, one can have that experience of standing on solid ground inside of oneself.

AB In alchemical language the final stage and indeed the goal is contained in the Latin formula *solve et coagula*, which can be paraphrased as meaning 'out of dissolution unity'. More precisely, according to the French alchemist Piobb, the formula refers to the task of analysing all the elements in yourself, dissolving all that is inferior in you, even though you break in doing so, then with the strength acquired from the preceding operation congeal (that is, crystallise). Thus it becomes clear that alchemy was the necessary historical link for Jung and provided the necessary validation of what I have already stated several times is the essence of Jungian psychology; that is, the reconciliation of opposites within. It is this reconciliation and the binding together of the fixed and volatile principles that produces the stone. That is, the recognition, the acceptance and the integration of opposites leads to their transcendence and the experience of Self – the production of the philosopher's gold, the gold that is not common gold. The pursuit of 'common gold' is the pursuit of literality, and the denial of life as a symbolic process. NB However, regrettably, contemporary man seems obsessed with literal gold as he avariciously pursues materialism. As James Hillman says 'literalism is sickness. Whenever we are caught in a literal view, a literal belief, a literal statement, we have lost the imaginative metaphorical perspective to our-

selves and our world.'*

The denigration of alchemy as mere superstitious nonsense by modern rational thinking represents such a loss, and is symptomatic of the sickness of literality, so pervasive and characteristic of the last two centuries of Western civilisations.

*James Hillman, *Loose Ends*, Spring Publications, 1975, p. 3.