Book Review

Alexandra Lembert & Elmar Schenkel (eds.), *The Golden Egg: Alchemy in Art and Literature*, Berlin & Cambridge, MA, Galda & Wilch Verlag, 2002, 231 pp. [ISBN 3-931397-40-8 and 1-931255-10-5]

This volume is the fourth in the series 'Leipzig Explorations in Literature and Culture'. Several of the titles that have appeared under this rubric have been monographic, while one other, the excellent Lost Worlds and Mad Elephants: Literature, Science and Technology 1700-1990, examined the perennial but stillurgent issue concerning the correspondences and dissonances that exist between literature and science. To a certain extent, The Golden Egg does something similar to that book, though the debate over the relationship between the 'two cultures' is given an extra dimension here by taking as its focus alchemy, which is notoriously irreducible to one or the other - and that is where its chief interest lies today. At their best, the texts collected in *The Golden Egg* explore or deploy alchemy's problematic status as a means of raising questions about contemporary modes of taxonomy, positivism, and relativism, all of which may emerge from its vas hermeticum transformed. At their worst they simply use alchemical concepts as methodological tools with which to make thematic inferences about literature or art.

One of the reasons why alchemy is still attractive to scholars (and increasingly so) is because its study demands an interdisciplinary approach. The editors of *The Golden Egg* recognized this, opening the book with a text by the chemist HELMUT GEBELEIN, 'Alchemy and Chemistry in the Work of Goethe'. Like the others, Gebelein's essay was originally given as a conference paper, and his suffers the most from the translation into print because the performative aspect of the experiments he carried out for the audience has not been edited. While the experiments would undoubtedly have added color to the conference and illustrated Goethe's scientific practice, here they are a distraction from the breezy survey Gebelein offers of the alchemical, alchemy-related, and alchemically-inferable elements of Goethe's work. As a writer and thinker who contributed to numerous fields of knowledge, Goethe continues to command general scholarly interest primarily for the way his approach to knowledge 'denaturalizes' the processes of specialization which still hinder academic inquiry. As noted by Gebelein, "the time of Goethe saw the shift from alchemy to chemistry" (p. 20), and although Goethe helped to promote this transformation, the Enlightenment values which brought it about also initiated a turn towards a greater positivism and stricter classification. Arguing for the epistemological validity of alchemy, Gebelein writes, "alchemy was not an irrational system but a different rational system" (p. 19). Yet, modern science and philosophy have shown that the two amount to the same thing, in so far as the framework we erect to give 'rational' meaning for phenomena is subject to change: Relativity physics and quantum mechanics are 'irrational' by a previous century's standards, and perhaps by those of a future one.

Goethe's avowed interest in chemistry legitimizes Gebelein's interpretation of certain of his writings, such as his *Faust*, through the imagery and ideas of alchemy. The legend of Faust is given a larger alchemical and historical context in a fascinating essay by HELEN WATANABE-

HYLE – International Journal for Philosophy of Chemistry, Vol. 9 (2003), No. 2, 219-224. Copyright © 2003 by HYLE and Gavin P. L. Parkinson. O'KELLY, 'Saxony, Alchemy and Dr Faustus'. Beginning with the appearance of the anonymous text Historia von D. Johann Fausten at a Frankfurt book fair in 1587, Watanabe-O'Kelly goes on to assess the prominence of alchemy in 16th century Europe where it held a position of some importance, particularly in Saxony. This is not entirely original research, but is nevertheless an immensely useful synthesis of material tracking the status of alchemy after the medieval period up to the mid-17th century. The actual and mythic figures of Faust provide the link, for one version of the tale has him as a Saxon, while the legend of his pursuit of knowledge in the Historia is told in a hermetic language that Watanabe-O'Kelly recognizes as alchemical. Importantly, she indicates that the separation between "provable scientific fact" and "intuitive and imaginative concepts which relate rather to the world of the spirit and the imagination" (p. 33) - between what we now call 'science' andthe 'occult' - had not taken place in the late 16th century. Naturally, Newton's name comes up here, for this was still the case in the mid-17th century. While conciliatory efforts were made in the past to seek out parity for science and the arts in their respective endeavors by focussing on the work of Goethe and Newton (e.g., W. Heisenberg, 'Die Goethesche und die Newtonsche Farbenlehre im Lichte der modernen Physik', Geist der Zeit, no. 19, 1941, 261-75; and W. Paalen, 'Art and Science', Dyn, no. 3, Fall 1942, 4-9), the relatively recent research revealing that Newton's alchemical writings far outnumber his mathematical reflections offers an immense field of inquiry which could reframe the relationship between the two cultures as one of symbiosis rather than mutual antagonism.

The theme of bridging the gap between seemingly divergent areas of study extends to BETSY VAN SCHLUN's 'William Godwin's *St. Leon* and the Fatal Legacy of Alchemy'. By opening her contribution with the question "Why would a leading English philosopher of

the Enlightenment, a man of reason, choose to write about alchemy and the occult?" (p. 43), van Schlun challenges the distance believed to exist between rationalist philosophy and the hermetic arts. Placing Godwin's novel St. Leon (1799) in the context of that author's social criticism, van Schlun uncovers a moral tale which works through alchemy's goals of immortality and the creation of wealth on its material and 'spiritual' levels. Learning the secret art of transmutation from a stranger, St. Leon gains immortality too, like Faust. However, the gold and elixir vitae which should bring him worldly success only lead to misfortune. Subsequently, what van Schlun calls a "psychological 'transmutation'" (p. 49) takes place when St. Leon's ill-luck guides him towards an understanding of his wrongdoing. In this way, alchemy indeed is the means by which he fathoms his true nature. This reading, contrasted with an analysis of Godwin's later novel Lives of the Necromancers (1834), draws out the didactic intention of the Godwinian novel and its changing attitude towards alchemy, from "personal greed" in the former to "intellectual refinement" in the latter (p. 58).

Van Schlun is concerned with Godwin's use of the metaphorical resources of alchemy in a pedagogical novel, making measured interpretations of the allegorical functioning of alchemy in the story. Similarly, ANNE HEGERFELDT and DIRK VANDERBEKE indicate the inscription of alchemy into Joyce's Finnegans Wake as a theme. The main line of their essay, which is the best written and most carefully researched in the book, argues that "the linguistic strategies employed on the word level bear some resemblance to the general principles of alchemy [...]" (p. 63). Normally, a statement of this kind would lead to a paranoid interpretation of the text, since alchemy possesses a sufficiently underdetermined set of symbolic codes to explain everything once it is pressed into service as a methodology, as Umberto Eco has argued in Interpretation and Overinterpretation (Cambridge UP, 1992) and elsewhere.

But Hegerfeldt and Vanderbeke are aware of Eco's criticisms of 'overinterpretation', and are sufficiently familiar with the vast literature on the Wake (a book which also has an immense scope and, like a good conspiracy theory, can contain and explain everything) to avoid falling into the predictable traps. In a carefully framed argument, too complex and wide-ranging for me to do justice to here, they fasten onto a passage from the Wake that makes a clear reference to alchemy, drawing out a set of possible meanings to demonstrate that the "basic principles structuring the worldview of alchemy are paralleled by the strategies of linguistic transformation employed in the enigmatic text" (p. 72). Their demonstration that the Wake, alchemy, and postmodernism share in the proliferation and non-closure of meaning is impressive. While their analysis is, at times, insufficiently attentive to Samuel Beckett's caveat concerning Joyce's book (which they quote to different effect), "The danger is in the neatness of identifications" (p. 73), there is much here to reflect upon for those interested in interpretive strategies.

In spite of the general solidity of their essay, Hegerfeldt and Vanderbeke end (deliberately?) on an inconclusive note, preferring not to reflect, after Eco, on the larger ramifications held by the radical relativism they indicate for interpretation in the humanities or its relationship with scientific positivism. Eco's work is brought into play by LILIANA SIKORSKA, too, in her contribution to this collection examining Lindsay Clarke's two-tiered narrative The Chymical Wedding (1989), based in the 19th and 20th centuries. Sikorska's subtle grasp of alchemical thought, which, like Eco, she associates closely with secrecy (p. 95), dramatizes the distance that some believe to lie between the procedures of hermeticism (and the humanities in the wake of poststructuralism) on the one hand, where vagueness and approximativeness are often regarded as positive attributes, and the fundamental aims of scientific practice on the other,

which still claim to disclose 'objectively' the workings of nature.

The two-tiered narrative of Clarke's book is a structural feature shared by the English author Peter Ackroyd's The House of Doctor Dee (1993) as discussed by ALEXANDRA LEMBERT. Through a careful gloss of the alchemic references of Ackroyd's novel, where (typically for this author) factual, historical elements are woven together with fictitious details, Lembert links it convincingly to two novels by Gustav Meyrink dating from the first third of the 20th century. Acknowledging that the respective visions of her two authors are dissimilar (p. 111), Lembert argues, nevertheless, that both "took alchemy as a literal subject while also using it in a metaphorical sense" (p. 110). By this, Lembert seems to be referring to what might be called the two-tiered nature of alchemy itself. For, in spite of the claims made by Carl Jung in the three volumes he published on the subject (whose influence extends over all writing on alchemy today), the fact that alchemists practiced chemistry demonstrates that the 'magic art' was neither *simply* a pursuit of inner wisdom (psychological, 'spiritual,' or religious), nor of knowledge of physical phenomena (scientific), but of both simultaneously. And that is why, as I have argued above, it demands our attention today, as exemplarily interdisciplinary, problem-raising, and conciliatory in terms of contemporary practice.

Jung's work provides some interpretive leverage for NORBERT SCHAFFELD's discussion of the Canadian playwright Anne-Marie MacDonald's Goodnight (Good Morning Juliet) Desdemona (1998). Schaffeld shows that its one-man chorus "introduces analytical psychology as the key concept for our understanding of the play" (p. 118) and claims that this allows us what he calls a 'post-Jungian' perspective on it. To effect this, he introduces Bettina Knapp's 'seminal' study Theatre and Alchemy, which draws upon the writings of Jung and those of the theorist of drama, Antonin Artaud. This book, on the evidence given here, is an

extraordinarily contrived adaptation of alchemy to the creative process in the theatre. The questionable authority of Knapp's book is sufficient to call into question certain assumptions made in Schaffeld's essay. However, as an additional, connected reservation, I would note a concern as to the methodological validity of theorizing about any cultural object by drawing upon another theory (Knapp's) of two other theories (Jung's and Artaud's) of extremely unstable hermetic sources. The unequivocal presence of one of those citations in the play, Jung's reflections on alchemy, makes Schaffeld's reading a relatively mild form of what Eco has called 'hermetic drift', or uneconomical interpretation. I should add that elsewhere in the text, when he discusses gender, Schaffeld has interesting things of his own to say.

Namedropping Thomas Kuhn and Michel Foucault in its introduction, the text that follows by ROBERT STOCK-HAMMER, entitled 'Rosicrucian Radioactivity: Alchemy around 1900', benefits from a more empirical approach than Schaffeld's, recording the belief held by some at the turn of the century that modern physics would complete (or continue) the job begun by alchemy. Constructing a reliable survey of the finde-siècle enthusiasm for the hermetic sciences extending up to the 1920s, Stockhammer makes crucial and searching remarks that will attract the attention of epistemologists, affirming that "alchemy serves as an image-dispenser for theories and practices which present themselves as decisively modern [such as] psychoanalysis, Technikphilosophie, and poetic practices as advanced as those of Ezra Pound or Surrealism" (p. 136). Noting the title of Ernest Rutherford's last book, The Newer Alchemy (1937), Stockhammer gives a compelling and yet selective account of the dissemination of alchemical concepts in the earlier 20th century. Ironically, the rise of quantum physics in the 1920s did nothing to prevent this, and as its discoveries threatened to eclipse chemistry as a discipline, it even helped spread the word. Louis de Broglie casually compared experiments carried out in Rutherford's laboratory with the "the transmutation of elements dreamed of by the alchemists of the Middle Ages" in his Matière et lumière (1937). Stockhammer's commentary on, and analysis of Carl du Prel's Magie als Naturwissenschaft (1899), his coverage of the poet André Breton's reception and untroubled assent to alchemy's resistance to interpretation, his suggestive characterization of alchemy as a "storehouse of undecidability" (p. 145), and his astute declaration that the Austrian author of the 1920s, Franz Spunda, "like most of his contemporaries, makes too much sense out of alchemy" (p. 145) will all engage an audience across the disciplines. His discussion works well in this volume alongside Hegerfeldt and Vanderbeke's perspicacious observations on Joyce, without duplicating them.

The interest shown by Newton and the quantum physicists in alchemy leads ELMAR SCHENKEL to remark in his 'H.G. Wells: Alchemy and Information' that alchemical symbols can "even inspire scientific intuitions" (p. 149), and there is some truth in this. However, there is much less in his claim that "Heisenberg's quest for the world formula, to be continued by Stephen Hawking" was "another example of alchemy's obsession with unity and unification" (p. 149). Buddhism, Hinduism, Hegelianism, Presocratic thought (the last being Heisenberg's favored point of refer-ence), and any number of other religions and philosophies could obviously be invoked to demonstrate the reductiveness of Schenkel's assertion. His text surveys Wells's fiction and nonfiction aiming to prove that "underlying all of Wells's work is a single theme: the quest for an elixir or the Philosopher's Stone" (p. 151), which he equates with "information". Undaunted by the absence of direct allusions to alchemy in that œuvre, he demands we recognize it in Wellsian topoi of invisibility, immortality, and even the fourth dimension. In doing so, Schenkel's appraisal unintentionally acts as a warning that alchemy's

sprawling nebulosity can make it adaptable to just about anything, from ventriloquism to comic book superheroes. Like its modern equivalent psychoanalysis, alchemy is sometimes given oracular status by critics, though its aptness to answer every question ultimately leaves us satisfied with none. Its convenience as an interpretive mechanism is on display in many of Schenkel's qualified generalizations, for instance, "the Morlocks could be seen as late descendents of the blacksmiths whom [Mircea] Eliade links to the beginnings of alchemy" (p. 152); or in his imprudent declaration that Wells the utopian strove "for a kind of purified, non-subjective state much like that the alchemist strives to reach when processing matter with a view to purification" (p. 158). The dislike Wells felt for "isolated events and disconnected details" (p. 157) recalls the anxiety of the conspiracy theorist, not to mention the critical theorist. Schenkel's speculative opening gambit that states "hermetic and alchemical symbols seem to control our subconscious life" (p. 150), in which he characterizes the double helix as "suspiciously mythological", made me wonder (without wishing to encourage the conspiracy theorists) if he would interpret today's ubiquitous @ symbol as an ouroboros.

There is some useful material on profane and sacred magic in Schenkel's essay but he has given far more acute commentaries on Wells elsewhere (see, for instance, his historically contextualized contribution to Lost Worlds and Mad Elephants). If his speculations on alchemical themes add barely anything of value to the scholarship on Wells, neither do those of M.E. WARLICK offer much for scholars of the artist Max Ernst. Hers is another survey-type contribution to this volume, entitled 'An Itinerant Alchemist: Max Ernst in Europe and America'. Warlick aims to extend the literature on Ernst's uses of alchemy and, in doing so, offers thoroughly speculative readings of pictures from across the artist's long career. Unlike Schenkel, she is able to uncover a

shred of evidence that her subject knew something about alchemy (it is undisputed, in fact, that Ernst and the Surrealists read on the topic). Yet Ernst's 1937 definition of collage as "something like the alchemy of the visual image" uses the term in its most generic sense and can hardly be considered the "clear and succinct statement of his interest in alchemy" (p. 176) that Warlick takes it to be. She claims that this interest was stimulated "most likely" (p. 166) by the Viennese psychoanalyst Herbert Silberer's Probleme der Mystic und ihrer Symbolik (1914). This is a fair assumption (though no evidence exists, of course), yet it offers diminishing returns when the output of a whole career is hung from its slender thread. Warlick's overheated reading of material extends to Ernst's work. For instance, she is forced to write of the figure to the bottom right of his photo collage The Punching Ball or the Immortality of Buonarroti (1920) that "the red colour of the alchemical male is suggested by its flayed and muscular surface" (pp. 168-9, my emphasis), because, inconveniently for her alchemical interpretation, the figure in the work is not red. She writes that Ernst's painting Oedipus Rex (1922) "bears a remarkable resemblance to a woodcut image from the Rosarium philosophorum of 1550" (p. 171) (actually, it looks nothing like it), while conceding that the woodcut did not appear in Silberer's book, and that Ernst probably never saw it! Warlick is uninterested in deconstructing Ernst's self-mythologization, and even helps to sustain it, when, after roaming over acres of well-documented biographical material, she waxes lyrically in her painful closing remarks about his "lifelong dedication to the alchemical quest" (p. 180).

Thankfully, her other piece in *The Golden Egg*, looking at how images of women in alchemical texts reflect the gender polarization of its philosophy and the changing social situation of women, is much better. Here, in 'Moon Sisters: Women and Alchemical Imagery', she gives an important account of the roles allowed women in illustrations in alchemical treatises and in paintings after the Renaissance. Offering a valuable commentary upon the complex gendering of alchemical symbolism and its relationship with that of Christianity, Warlick surveys the rich 16th- and 17thcenturies sources with revisionist skill, discovering that "in alchemy's earliest beginnings, women are credited with the invention of the vessels and with many of the practical operations of the work" (p. 189). Women are rarely given positions of prominence in the illustrations accompanying alchemical texts, and yet their teachings are to be found there in emblematic form. Warlick is good on the religious and artistic contexts, tracing the increase in illustrated material in Germany in the early 17th century and the adoption of the "elaborate spatial environments of Renaissance art" (p. 189). While it is excluded, strictly speaking, from the subject demarcated by her line of inquiry, I would have welcomed more material locating the innovations of Dürer, the 16th-century master of the woodcut in the Northern Renaissance, in terms of the technical developments to which she alludes. Warlick's research on the social constraints placed upon women from the late Middle Ages (pp. 191-2) allows a sound foundation for her (re)interpretation of the roles they play in later paintings by Pieter Brueghel the Elder and David III Ryckaert. However, given the essay's strengths, readers of Hyle will be perplexed by Warlick's disclosure made in the course of her discussion of Pérenelle Flamel, wife of the great Parisian alchemist Nicolas Flamel, which nonchalantly repeats an apocryphal story she had hinted at in her text on Ernst (p. 174), claiming that the couple "were able to successfully transmute

both silver and gold in 1382" (p. 195)! This tendency to factualize fiction is part of the self-conscious, performative strategy of FINN RIEDEL's wonderful 'Stuntmen of Eternity – Chinese Alchemists and Literature', which closes *The Golden Egg* on a buoyant note. Riedel's is a witty, author-based survey of some of the great Chinese alchemists and an ironic testimony of the fantastic feats reported about them. All the signs are that Riedel has skimmed a few stories off his ongoing research and distilled them here to present the most entertaining bits. But what he offers - tales of immortality, invisibility, endurance, and Taoist wisdom - are so endearing that they make for a hugely entertaining finale. That undervalued, or rather difficult and uncategorizable quality, humor, is writ large across the writings of the Chinese alchemists. To take only one example, Ge Hong (or Bao Puzi) ends his alchemical recipe irresistibly with some startling advice about the quality of the longed-for end product: "If the gold is too hard, cook with lard. If it is too soft, cook with white plums" (p. 209).

The effortless wit on display in Riedel's essay acts as a huge release after two hundred pages of sober scholarship, and yet it raises again the crucial question of the purposes of alchemical texts. If their transmutational aspect governs all of the writings gathered in The Golden Egg, Riedel's emphasis on laughter and wonder reminds us that the first response to art and natural phenomena should be spontaneous; that is, transmutation is not an intellectual or chemical process but, initially, and maybe only, one of pleasurable and often unexpected finding. And given the breadth of scholarship in The Golden Egg and the very useful bibliographies appended to each essay, readers across the disciplines will find much here. Perhaps the book demonstrates that alchemy is 'only' literature after all, but what literature: pure gold.

Gavin P. L. Parkinson: Courtauld Institute of Art, Somerset House, Strand, London, WC2R 0RN, U.K.; gavin.parkinson@courtauld.ac.uk