

which distinguished the medicine of Paracelsus (skilled as he was in that); rather, it was the novel conception that each disease represented a specific entity, or better, a specific disordering process spread by a specific form of "seed"—this centuries before the development of the germ theory of infectious disease. Obvious as this may seem now, in its day this was a most subversive doctrine, challenging the authority of Aristotelian medicine which declared all disease to be simply an "imbalance" of the mythical four bodily "humors." Prevailing treatment therefore sought simply to drain off the presumed excess humors (by bleeding or induced vomiting), or to supply the deficient ones (by the appropriate compounding of herbal and other medicines—generally useless). Paracelsus and his theories were suppressed in their time, but a century later, bore fruit in the founding of modern chemistry by Jean-Baptiste Van Helmont, who with his students, produced and named the first known gases (as distinct from the Aristotelian "element" called "air"); proved digestion to be a chemical process (not the Aristotelian "cooking"), dependent on substances now known as enzymes or catalysts (then called "ferments"); initiated a program of experimental physics and chemistry first outlined by Nicolaus of Cusa; and established the first university chemistry laboratory.

However, just as Hayum calls the astrolabe an "astrological" rather than an "astronomical" device, so Paracelsus has been termed a "magician" or "alchemist" rather than a chemist and physician. Therefore, when Gruenewald incorporates "alchemical" representations into his painting, as Hayum demonstrates, we can reasonably conclude that his intentions are not magical at all, but strictly scientific—which she does not recognize (or recognizing, does not allow).

In fact, Paracelsus himself spent two years at Colmar, a mere 15 years after Gruenewald's work had been completed, and otherwise frequented much the same Rhineland circuit. Like Gruenewald, he was skilled in industrial technologies (otherwise referred to by Hayum as "alchemy, that occult branch of science dealing in material transformations"), processes under intensive study and development at that time by Leonardo in Italy, and by the metallurgical establishments of Germany. Therefore, it is most intriguing, that the "alchemical" symbols in the Isenheim altarpiece occur in the middle of the three sequential forms of the painting. Whereas the herbal medicines are shown in the first, outer portrayal (the meeting of Saints Anthony and Paul, and St. Anthony's Temptation), the "alchemy"—the processes of material transformation at the cutting edge of science and technology—are shown within the sequence from Annunciation through Incarnation to Resurrection (which are also the panels with the most incandescent colors). In other words, we can see these panels as the unity of those processes which transform both man and the universe from lower to higher levels, both in man's ability to transform nature, and in the transformation of man himself through Christ. That, indeed, is the vital legacy of Christian Humanism.

Books Received

Peace Without Hiroshima: Secret Action at the Vatican in Spring, 1945, by Martin Quigley, Madison Books, Lanham, Md., 1991, 173 pages, hardbound, \$22.95.

Inquisition: The Persecution and Prosecution of the Rev. Sun Myung Moon, by Carlton Sherwood, Regnery Gateway, Washington, D.C., 1991, 705 pages, hardbound, \$29.95.

Silent Coup, The Removal of Richard Nixon, by Len Colodny and Robert Gettlin, St. Martin's Press, New York, 1991, 507 pages, hardbound, \$24.95.

A Very Thin Line, The Iran-Contra Affair, by Theodore Draper, Hill & Wang, New York, 1991, 690 pages, hardbound, \$27.95.

Cold Warrior—James Jesus Angleton: The CIA's Master Spy Hunter, by Tom Mangold, Simon and Schuster, New York, 462 pages, hardbound, \$24.95.

Iraq: Military Victory, Moral Defeat, by Thomas C. Fox, Sheed & Ward, Kansas City, Mo., 1991, 192 pages, paperbound, \$9.95.

The Crisis Years: 1961-63, by Michael Beschloss, HarperCollins, New York, 1991, 816 pages, hardbound, \$39.95.

Too Hot to Handle; The Race for Cold Fusion, by Frank Close, Princeton University Press, Princeton, N.J., 1991, 376 pages, hardbound, \$24.95.

Watching America; What Television Tells Us About Our Lives, edited by Stanley Rothman, Prentice Hall, New York, 1991, 322 pages, hardbound, \$24.95.

In Search of Human Nature, by Carl N. Degler, Oxford University Press, New York, 1991, 400 pages, hardbound, \$24.95.

The True and Only Heaven: Progress and Its Critics, by Christopher Lasch, W.W. Norton, New York, 1991, 591 pages, hardbound, \$25.

Intervention or Neglect, The United States and Central America beyond the 1980s, by Linda Robinson, Council on Foreign Relations Press, New York, 1991, 223 pages, paperbound, \$14.95.

Transition to Democracy, by the National Research Council, National Academy Press, Washington, D.C., 1991, 93 pages, paperbound, \$19.