

*Appendices*



## APPENDIX I

### BEYOND CHRYSOGRAPHY

IN CHRISTENDOM, from the first to the twelfth centuries, a few writers approached the problem of the internalization of economic form in language and in thought in general. Instead of writing about “moneyed words,” as did the Greeks, they wrote about the practice of writing words in ink of gold (*chrusos*). (See figure 8b.)

Chrysography (golden inscriptions on paper) became a widespread practice among Jews, Christians, and Muslims at the same time as did minting coins (inscriptions on golden ingots), and it began to decline as a serious art in the twelfth and thirteenth centuries, at the same time as the first issuing of negotiable paper (inscriptions on paper exchangeable for gold). Chrysography provided the three peoples of the Book with a topical center for discussing the general relationship between language and money. (*Chrusos* means “money” as well as “gold.”)<sup>1</sup> And it provided a visible enemy for attacking *Gellt*, or gold qua money, as the “language of the devil.”<sup>2</sup>

Among the Jews in the first century, chrysography was already a controversial topic. The *Tractate for Scribes*, for example, explored the intellectual and spiritual implications of writing in gold, as had been done when the Pentateuch was translated into Greek in the third century B.C., and it prohibited chrysographic scrolls for synagogal pur-

1. For *chrusos* as “coin” see Constantinus VII Porphyrogenetus in the tenth century (*De cerimoniis aulae Byzantinae* [Bonn, 1829–40], 379, 20) and Sophronius in the seventh century (in *Patrologiae cursus completus* [Series Graeca], ed. Jacques-Paul Migne [Paris, 1857–66], 87:3597b).

2. For *Gellt* as *verbum diaboli*, see Martin Luther, *Tischreden*, 6 vols. (Weimar, 1912–21), vol. 1, no. 391.

poses.<sup>3</sup> There were practical reasons for such a prohibition,<sup>4</sup> but the Talmudists and the church fathers who copied them had spiritual ones as well. In chrysography, letters, which are the sensible (visible) substance of the written medium of linguistic exchange, are penned in ink of gold, the economically valuable substance of monetary exchange. The rabbis and fathers argued that the monetary value of the written letter should not conflict with spiritual value: the aura of gold should not compete with the aureole of God. (*Aurum* means "gold.") Chrysographic letters draw attention to themselves rather than to the Law, not only because they are beautiful (calligraphic), but also because they are made of the substance of money. Jerome called chrysographic manuscripts "burdens rather than books," and John argued that in chrysography the commodity value of the gold ink can appear to override the spiritual value of the words. Others suggested that the value of ink as commodity can infect the spiritual value of words, and feared that words written in gold would be identical to the gilded words of Dion Chrysostomos ("golden-mouthed").<sup>5</sup>

Chrysography thus provided one of the only traditional foci for discussion of linguistic and monetary values. The discourse about chrys-

3. *Tractate for Scribes* 1. 8, in *The Minor Tractates of the Talmud*, ed. A. Cohen (London, 1966). See also Sabbath 103b, in *The Babylonian Talmud*, ed. I. Epstein (London, 1935-48). The first extant reference to a chrysographic text occurs in Aristaeas (*Aristaeas Judaeus*, ed. P. Wendland [Leipzig, 1900], par. 176). When Ptolemy Philadelphus requested that the Pentateuch be translated into the Greek tongue, says Aristaeas, the high priest of Jerusalem sent him a scroll of the Torah written in letters of gold. It is said that all of the seventy-two elders whom Ptolemy individually set to the task of translating the Hebrew book produced identical Greek translations of the sacred text.

4. "One of the main purposes of luxurious book production in the Byzantine Empire was to preserve copies of the Holy Scripture" (David Diring, *The Illuminated Book* [London, 1958], p. 84). Chrysographic books, however, were often stolen and destroyed for the gold with which they were written.

5. For eight hundred years there has been no serious study of the aesthetic and theological aspects of chrysography, nor even a philological study of the word. For Latin texts see Jerome (Eusebius Hieronymus Sophronius [A.D. 342-420]), especially the preface to his translation of the Hebrew Book of Job into Latin, and his *Letterae familiares* (no. 18). Jerome knew little Hebrew and felt the burden of the past—the golden words that the high priest sent Ptolemy after translating the Pentateuch into Greek. See too Trebellius Pollio (fourth century), *Claudius* 14. 5, in *Scriptores historiae Augustae*, ed. and trans. D. Magie (Cambridge, Mass., 1953). On John Chrysostom see Photius, *Bibliotheca*, codex 277: John Chrysostom, in *Patrologiae* (Graeca), 104:280.

ography helped to connect figuratively the ideology of writing impressed in electrum or gold ingots with the ideology of writing printed on paper that is exchangeable for gold (and, perhaps, with the ideology of money whose only material is electric circuits printed in gold). The visible ink in which letters are written is not a necessary sign of the invisible money of the mind, however, and the theological critiques of chrysography were ultimately distractions from the general problem of the participation of economic form in discourse.

---

For Greek references to *chrysographia* in the Byzantine period and among the church fathers, see the second- or third-century papyrus printed in *Graeci musei antiquarii publici Lugdani—Batavi*, ed. C. Leemans, 2 vols. (Leiden, 1843 and 1885), 10; John Chrysostom (A.D. 344–407); Dionysius Aeropagites (pseudo.) at the close of the fifth century (*Patrologiae* [Graeca], 232:13), esp. “Christon chrysographia” (“writing Christ in gold”); Theodorus Studia (A.D. 749–826), esp. his *Refutatio Poëmatum Iconomachorum* (*Patrologiae* [Graeca], 99:436b); Georgius Syncellus in the ninth century (*Georgius Syncellus et Nicephorus*, ed. Wilhelm Dindorf and Jacques Goar [Bonn, 1829], 517. 8; in *Corpus scriptorum historiae Byzantinae*, 50 vols. [Bonn, 1828–97], vols. 41–42); Meletius Monachus in the ninth century, especially his *De natura hominis* (*Patrologiae* [Graeca], 64:1309); and Georgius Cedrenus in the eleventh century (*Georgius Cedrenus [et] Ioannis Scylitzae*, ed. Immanuel Bekker [Bonn, 1838–39], I, 787. 22; in *Corpus scriptorum historiae Byzantinae*, vols. 25–27). On Dion Chrysostomos, see Menander of Laodicea, *Peri epideiktikôn* (in *Rhetores Graeci*, ed. Leonhard von Spengel [Leipzig, 1853–56], 3:390S).

## APPENDIX II

### LIKENESS AND LIKELIHOOD

HEGEL ignored or deplored the development of calculus by thinkers, such as Leibniz and Newton, who tried to deal with the physics and mathematics of infinity and zero. Yet calculus is motivated in part by dialectical problems involving infinite plenitude and the production of likenesses that approach ever more closely the qualities of the things of which they are likenesses, including their spatial and temporal characteristics.<sup>1</sup> During the period that included the publication of Kant's essay on negative quantities and Hegel's *Logic*, calculus made possible a new understanding of probability that bears on the connections between the economic and metaphysical problems we have considered. Many scientists even argued that there was a logical link between their studies of likelihood or probability (with which problems of likeness and adequation or agreement are associated) and their "moral arithmetic of belief" or "econometrics of marginal evaluation." This link was signalled by the similarity between the item *tossed in* the games of chance that they analyzed using the new calculus (often a coin as material object with two distinguishable but like and equally weighted sides) and the item *tossed for* in the gambling and merchant ventures that they analyzed using psychology and theology (often coin as measure).<sup>2</sup> However, the distinction between coin as material object and as

1. Eighteenth-century expositions of calculus often begin with the problem, frequently posed in Platonic dialogues, of when an imitation becomes so like the original that it becomes the original itself. Cf. Aristotle's discussion of probability and imitation in the *Rhetoric*.

2. Most examples arise from attempts to solve the St. Petersburg Paradox. See Paul Samuelson, "St. Petersburg Paradoxes: Defanged, Dissected, and Historically De-

measure suggests the logical as well as ideological difficulties inherent in such an argument. Moreover, the resort to calculus already foreshadowed the fusion of mathematics with political as well as natural economy that predominates in our time and that Hegelian theory is unable to take into its anachronistic purview.

---

scribed," *The Journal of Economic Literature* 15 (March 1977): 24–55. The paradox is extended beyond gambling and econometrics by Pascal, who discusses, in terms of *croix et pile* ("heads or tails"), whether it is worthwhile to believe in, or gamble on, the existence of God (Blaise Pascal, *Pensées*, pt. 2, sec. 2, no. 3: "Infini-rien: le pari," in Pascal, *Oeuvres complètes*, ed. Jacques Chevalier [Paris, 1954], p. 1213). See William Stanley Jevons, *The Principles of Science: A Treatise on Logic and Scientific Method* (London, 1920), p. 214; cf. chapter 5. For discussion of the many writers who have discussed probability in terms of heads or tails, see John Maynard Keynes, *A Treatise on Probability* (London, 1929).

### APPENDIX III

## THE MONEY COMPLEX OF PSYCHOANALYSIS

“ALL AESTHETICS has its root in repressed anal eroticism,” says the psychoanalyst,<sup>1</sup> but he fails to link his fundamental thesis about money, that lucre is filthy, with his own collection of patient’s funds. Psychoanalysis not only treats patients who have a “money complex,” but also presents itself as a unique money complex.<sup>2</sup> The clearest symptoms of this complex are, first, that psychoanalysis treats money only as

1. S. Ferenczi, “On the Ontogenesis of the Interest in Money,” in *Sex in Psychoanalysis*, trans. E. Jones (New York, 1950), p. 325.

2. For the phrase “gold complex” see Sigmund Freud, “Character and Anal Eroticism,” in *Collected Papers*, ed. J. Riviere and J. Strachey, 5 vols. (London, 1949–50), 2:45–50. The psychoanalytic link between feces and money has been the common theme of M. Wulff, “Zur Neurosensymbolik: Kot-Geld,” *Zentralblatt für Psychoanalyse und Psychotherapie*, Jahr 1, p. 337; Richard M. Griffith, “Dreams of Finding Money,” *American Journal of Psychotherapy* 5 (1951): 521–30; Sandor Feldman, “Interpretation of a Typical Dream: Finding Money,” *Psychiatric Quarterly* 17 (1943): 423–25; Feldman, “Contributions to the Interpretation of a Typical Dream: Finding Money,” *Psychiatric Quarterly* 26 (1952): 663–67; Otto Fenichel, *The Psychoanalytic Theory of Neurosis* (New York, 1945), esp. pp. 487–88; Theodor Reik, “Geld und Kot,” *Zeitschrift für Psychoanalyse* 3 (1915): 183; J. Harnik, “Kulturgeschichtliches zum Thema: Geldkomplex und Analerotik,” *Zeitschrift für angewandte Psychologie und Charakterkunde* 5 (1919): 121–22; Marie Bonaparte, *The Life and Works of Edgar Allan Poe: A Psycho-Analytic Interpretation* (London, 1949); Robert Fliess, *Erogenicity and Libido* (New York, 1957); and Ernest Jones, “Anal-Erotic Character Traits,” in *Papers on Psychoanalysis* (Boston, 1961), pp. 413–37. See too Melanie Klein, “The Development of a Child,” in *Love, Guilt and Reparation and Other Works 1921–45* (New York, 1977), esp. p. 12n; Hans Göppert, *Das Ich: Grundlagen der psychoanalytischen Ich-lehre* (Munich, 1968), esp. pp. 93–99; Ernest Borneman, *Psychoanalyse des Geldes: Eine kritische Untersuchung psychoanalytischer Geldtheorien* (Frankfurt, 1973); and, for a political interpretation of money, Gilles Deleuze and

a material thing (a shiny ingot of gold or silver) or as that thing's supposed counterpart (feces), not as an economic token or sign,<sup>3</sup> and, second, that psychoanalysis tries to disengage concern with money from the politics of the Oedipal struggle<sup>4</sup> and thus shares Queen Gertrude's blind belief that the paternal ghost crown prince Hamlet sees is merely the "coinage of [his] brain."<sup>5</sup> Karl Abraham's unusual attempt to associate money with the Oedipus complex proves interesting for what it observes and what it neglects. Abraham tells a story (a case history) about a patient who,

as a boy, did not play at battles with lead soldiers like other children, but with pieces of money. He got people to give him copper coins, and these represented ordinary soldiers. Nickel ones were non-commissioned officers of various ranks, and silver ones were officers. A silver five-mark piece was the field marshal. This officer was secured from all attack in a special building "behind the front." One side took "prisoners" from the other in the battle and added them to its own army. In this manner one side increased possession of money until the other had nothing left.<sup>6</sup>

Abraham diagnoses the patient as having "a pronounced anal character." Noting that the struggle in the patient's unconscious was against his rich father, Abraham observes that in the patient's mind "money [had] entirely replaced human beings" so that "he took no personal interest in people whatever; only the possession of money and money

---

Félix Guattari, *Capitalisme et schizophrénie: l'anti-Oedipe* (Paris, 1972). On the psychological significance of monetary transactions between patient and psychoanalyst, see G. Angelo DiBella, "Mastering Money Issues that Complicate Treatment: The Last Taboo," *American Journal of Psychotherapy* 34 (1980): 510–22; and K. R. Eissler, "On Some Theoretical and Technical Problems Regarding the Payment of Fees for Psychoanalytic Treatment," *International Review of Psycho-analysis* 1 (1974): 73–101.

3. Carl Gustav Jung (*Psychology and Alchemy* [Princeton, N.J., 1968], pp. 80–81), claiming to base his position in Nietzsche's philosophy, goes so far as to argue against treating dream coins as money and for treating them only as mandala-like symbols.

4. Cf. Géza Roheim, "Heiliges Geld in Melanesien," *Internationale Zeitschrift für Psychoanalyse* 9 (1923): 384–401.

5. Shakespeare, *Hamlet*, 3. 4. 38.

6. Karl Abraham, "The Anal Character," in *Selected Papers of Karl Abraham*, introd. Ernest Jones, trans. Douglas Bryan and Alex Strachey (London, 1948), pp. 387–88.

values attracted him." Yet Abraham neglects to distinguish pieces of money (coins), with which his patient used to play, from money itself, which Abraham claims his patient confused with people. There is one tradition of associating men with coins. (Simmel notes that "one finds [in the twelfth century] the statement that the knight, baron and earl are related to each other as shilling, mark and pound, since these are the proportions of their escheat.")<sup>7</sup> There is a different tradition of associating men with possessions, to which large category coins as commodities belong. Abraham conflates the confusion of people with (coins as) money and the confusion of people with (coins as) commodities. Not surprisingly, he fails to recognize how his patient's manipulation of coins recalls the way German accountants (perhaps the rich father was one) figured their profits and losses by manipulating counters that had neither monetary nor commodity value.

Psychoanalysis usually makes this symptomatic failure to distinguish the material aspect of coins from their denominational, economic role in exchange and accounting, and thus treats coin and paper money as the same kind of symbol. It promises liberation from money of the mind, but the result, as we have observed, is an entrapment of its own: an ideological inability to distinguish conceptually between coin and paper money (which is not shiny) and between coin and money in general, even when embarking on politically ambitious examinations of discontented civilizations.<sup>8</sup> Norman O. Brown defines certain limits of psychoanalysis, and of most other "liberating movements" of our time, when he says, with some despair, that "if we can imagine an unexpressed man—a man strong enough to live and therefore strong enough

7. Georg Simmel, *The Philosophy of Money*, trans. Tom Bottomore and David Frisby (London, 1978), p. 355.

8. The "economy of the libido" in Freudian psychoanalysis is grounded in frequently unexamined ideas about expenditure in the political economy, ideas that resemble conceptions of restrictive input and output like those supposed to obtain in the "closed economy" of Fichte's almost medieval "closed commercial state." Sigmund Freud sometimes seems to overcome this limitation (see *Civilization and Its Discontents* [New York, 1960], esp. pp. 43–47, 60), yet he, too, thinks of economy as a closed system ("The Economic Problem of Masochism," in *Collected Papers*, 2: 255–68). In Freud's "economy of wit" and his interpretation of masochism, moreover, the psychology of pleasure is a simple analogue to the notion of scarcity in Adam Smith's political economy (David Reisman, "The Themes of Work and Play in the Structure of Freud's Thought," *Psychiatry* 13 [1950]: 116), but without Smith's understanding of the role of credit money in the expansion of a capitalist economy.

to die, and therefore what no man has ever been, an individual—such a man, having overcome guilt and anxiety, could have no money complex.”<sup>9</sup>

9. Norman O. Brown, *Life Against Death* (New York, 1959), p. 291. Cf. Freud's remark that “money questions will be treated by cultured people in the same manner as sexual matters, with the same inconsistency, prudishness and hypocrisy” (“On Beginning the Treatment” [“Further Recommendations in the Technique of Psychoanalysis: I”], in *Collected Papers*, 2: 351).