Thomas H. Lewis

AN AMAZONIAN DRUGSTORE: REFLECTIONS ON PHARMACOTHER APY AND PHANTASY

My name is John Wellington Wells. I'm a dealer in magic and spells,
 In blessings and curses,
 And ever-filled purses,
In prophecies, witches, and knells.

We've a first-class assortment of magic; And for raising a posthumous shade With effects that are comic or tragic, There's no cheaper house in the trade. Love-philtre—we've quantities of it! And for knowledge if any one burns, We keep an extremely small prophet Who brings us unbounded returns:

If any one anything lacks
He'll find it all ready in stacks,
If he'll only look in
On the resident Djinn,
Number seventy, Simmerv Axe!
W.S. Gilbert
The Sorcerer 1877

I. Introduction

My office is in a medical building in suburban Washington, D.C.
—in Bethesda, named for the Biblical healing pool. All of the

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offices of my building are occupied by medical specialists, representing the most sophisticated training in the application of the scientific method. Downstairs and of service to all of us is a pharmacy, looking for all the world like a research laboratory with its gleaming surface, meticulous cleanliness, micro-balances, records, reference books, and cash register. It is neatly stocked with modern, physiologically-defined preparations of active, predictable drugs. Among the enzymes, hormones, antibiotics, and chemotherapeutics for neoplasm, are a few newly hatched, unfledged remedies, but most are dependable and thoroughly assayed. The intently busy, white-coated, unsentimental pharmacists serve a hard-headed group of practitioners and a neighborhood of upper-class, well-educated patients. It is disconcerting, then, to see the undersurface of this sophistication, the irrational shadows beneath the science. On the front counter of the pharmacy are displayed attractive colored advertisements and pleasantly seductive inducements to self-improvement through diet cults and foods, tranquilizers, energizers, protein supplements, happiness promisers, preparations to enhance sexuality, vitamins artfully combined, and many packeted stuffs of no rational or pretended use whatsoever. "Why," I ask the gimleteyed pharmacist, "do you have this large display of 'Il Wah Genuine Chinese Ginseng, the Miraculous Herb of Life'? Doesn't it violate your university training? Your integrity as a modernist?" "Oh," says he, "ginseng makes you feel better! You have more energy. You can do more! Lots of athletes use it, and people who work too hard and feel exhausted. It's only \$ 3.45 a package. The prescriptions you give me once in a while yield no profit, but I sell a lot of ginseng. I use it myself!" Bemused, I walk back to my office, wondering about the easy abandonment of rationality, and pull down a box of medicinals collected the year before at an open-air pharmacy in the riverside markets of Brazil. The box gives forth deliciously rich forest smells. The packets within contain barks, roots, seeds, all of purported medical value. Other packets have amulets, charms, and protectives. The colorful labels on some of the patent medicines invoke ancient saints and healers, and promise happiness, health, prosperity and power. The essential rationale for their use in indigenous medicine was illusive to me despite many conversations with indigenous healers,

and many times I have gone through the hundreds of items trying to find the key to what Brazilian and North American people fundamentally want from a pharmacy. In both cultures, where does magic stop and science begin? Do shops in both countries vend talismans in the search for the enhanced life, and fetishes against death? How much of all drug use is ritual and inchoate expectation? How can we reduce the mystification and incrementally increase the rationality of our pharmacopeia?

When I look at my library, or the library of my medical school, I find numerous volumes which attempt to define what physicians do. The dates on these respectable books stretch back through the centuries, yet they are ever-replaced by new volumes with new findings and new formulations. If today's great crop of medical books is better than last year's, how is it better? Take for example, a volume by Robert A. Harper, "Psychoanalysis and Psychotherapy" (1959). It describes 36 kinds of treatment in psychiatry, which suggests a kind of non-specificity to the therapist's efforts. What etiology could 36 systems address if etiology is relevant to treatment? And these 36 are but samples, gleaned from many other efforts, other therapies, other philosophies, other recipes. With so many, can they all be as efficacious as implied? Can our theory of therapy have anything to do with our therapeutic effectiveness? Does some good reside in all efforts? Or only in some? Physicians from antiquity to the present have observed that some treatments work sometimes, in some cases, to some degree, and that our particular theoretical constructs about what we do are best preserved by being careful to talk only to colleagues. A wider discourse among therapists might foster an appreciation of the fundamental nature of therapeutic effectiveness.

When the Washington Post (January 4, 1977, page 1) ran a featured article on "60 Ways to Health and Peace," describing a two-day conference of the Association for Bio-Cosmological Research on "Healing and Health in the Age to Come," I could shift from pharmaceuticals and physicians to wondering how much could be rational in "60 Ways to Health and Peace"? On another date the same newspaper advertised a CBS newsman's book on Healers, Gurus, and Spiritual Guides "for those seeking a cure or solutions thru unusual power." It wasn't much of a

wrench for me to go back to my box of Brazilian medicines. Somehow they seemed a bit more believable than before. And they had such entrancing shapes and smells and symbols. An exotic drugstore, whose *materia medica* might bear comparison with our own, might divulge something of our mutual thought structure about drugs and therapy, mystery and authority, expectation and effect.

II. Brazilian Indigenous Medicine

Belem, Nossa Senhora do Bethlehem is a port city at the mouth of the Amazon, and, to say it perhaps too simply, is a conjuncture of three old cultures. The colonizing Mediterranean people of the 16th and 17th centuries here mingled with the laborers of western Africa and the Amerindian aborigines who were always here. The persistence of all three cultural elements is nowhere better exemplified than in *caboclo* or back country medicine. The rural people of Brazil are now neither European, nor tribal Indian, nor African, but a new cultural entity, with vestigial aboriginal shamanism and herbal pharmacopoeias, modified Negro spiritual religions (perhaps Yoruban predominantly), and shreds of medieval Christianity, magic, and folklore still discernible in their daily life and beliefs. A historical point of view helps to understand the complexities of their cultural intermixtures, although the intricacies and variations often defy dissection and classification. The wave of Portuguese, Spanish and Italian immigrations with the opening of the New World brought from Europe a people immersed in the long conflict between early Catholicism and the old pre-Christian religions, a conflict which the Inquisition and other institutions had labored long to suppress. Church ritual, music, chant and song, church candles and prayer, and church veneration of a catalogue of saints and images with healing and advising powers soon interdigitated in Brazil with a not-too-different West African pantheon of good and evil gods, guiding powers, drum and chant, rituals and healings. The original Amerindian inhabitants contributed an extensive ethnobotany, as the persisting names of many pharmaceuticals testify. The syncretisms of these three cultures across the centuries have produced major and minor medicinal cults and systems, and a

treasury of folklore and symbol. To the *caboclo* people of the river and forest, my Bethesda medical center is unknown, but their own healers have many interlaced systems and schemes of treatment. Their physicians profess a formal training and a body of received knowledge. They allude to many historical masters, they proceed with professional confidence, and they claim results. Aspects of their beliefs and practices are spread throughout the Caribbean and tropical America. Glick (1967) describes, with eloquence, similar medical manifestations in St. Lucia, for example, and Huxley (1969) describes analogous belief systems in Haiti.

In the tropical riverfront market called Ver-o-Peso (watch your money is one translation) in Belem are 25 small farmácias vending medicinals and health instructions. The curandeiros or doutores de raizes, many of them women, address themselves with commendable aplomb to all the ills that flesh is heir to. They ask the client for symptoms and history, inquire about personality and family, examine the patient or his photograph, formulate an explanation, prescribe a treatment procedure, and supply the required medicines packaged in a bit of paper or a leaf. Their efforts are truly tested in the market place. As evidence, they often welcome return custom.

The practitioners of the *farmácias* recognize a wide range of diagnoses, and the large inventories of medicaments, at first glance at least, are as difficult to appreciate fully in all their multiple attributes, ascriptions, and connotations as the inventory of a Manhattan drugstore. There is nothing comparable to the Physicians' Desk Reference to help understand them, and one must record the conversations with numerous healers and vendors to bring some order to these fascinating substances, some illumination of the systems and rationale of their use, some way to relate them to the culture in which they are imbedded, and to delineate the practitioners and their philosophies. This outline is a beginning:

Magical medicine—prophylactic magic, amulets, spells, charms and curses, talismans, potions, relics,

Empiric medicine—herbalism, doutores de raizes, counter-influences, signatures, panaceas, balneoterapia, osmoterapia, patent medicines,

Ceremonial and Religious medicine—Umbanda, Candoble and other spiritualisms, "Catolicismo brasileiro" and orthodox Catholicism, Terapia ritual do Xapana, etc., Scientific medicine—use of modern drugs and referrals.

Magical Medicine

A large and heterogeneous group of magical procedures aimed at some kind of control over human illness and distress and at victory over circumstances can be gathered under the term feiticarias. Fetishism has many local names—catimbo, cachimbo, obeah (Cascudo, 1962), voodoo, and others. The practice of these systems is sometimes more private than ceremonial-religious magic described below, but the two are more or less inseparable (Martius, 1844). One variant, profilaxia mágica is aimed at forestalling ill-fortune and ill-health, and uses many of the medicaments and magic-bearing materials of the farmácias. Quebranto is a bewitching, as by a jealous competitor in love or any other endeavor, and to break such a dread impediment in living, "to purge humors," to alter moods, depressions, unwanted thoughts and phobias, a descarga is prescribed to undo or neutralize the foreign-to-the-self influence. In addition, a banho, defumação, or ritual, or all three may be needed. A desmancha undoes a charm or spell, or puts off unwanted romance or attention, like an extrapsychic obsession. The figa (fist, fig, penetrated female genitalia) is an ubiquitous charm seen in every walk of life in Brazil, an amulet of simple wood, ivory, bone, plastic or precious metals. Ornamented and expensive figas are often seen in the most sophisticated jewelry shops of the cities. One can buy them in all sizes and colors in the international shops of the Copacabana in Rio de Janeiro, or in unpretentious rural markets. It wards off the evil eye, this little hand with thumb crossed by the forefinger, and is at once the Sign of the Cross and a universal obscene gesture (Tourney and Plazak, 1954). And, in my terms, the ever-present figa is a discouraging indicator of the prevalence and destructiveness of envy, and the fear of it. Countless other talismans of private or common significance are used, although I've not yet seen a bit of the True Cross or a feather from Gabriel's wing, common enough items in the medi-

eval fairs of Europe. The medical observer will recognize the equivalents in these charms of the tranquilizers, anti-depressants, anti-psychotic, anti-anxiety pills and powders, so popular and so heavily used in our scientific medical practice. Indeed, in the effort to alter intrapsychic and interpersonal difficulties, *caboclo* magical preparations and regimens and Western (White) psychotropic medicaments seem to share many parallel aspirations and self-deceptions. And it isn't unfriendly to wonder if sometimes our expensive medical investigative procedures partake more of hopeful magic than of logical expectation.

Empiric Medicine

Any culture group acquires and carries along a body of empiric information, experiential but not necessarily experimental. Herbalists are known the world around, and who knows what they know? After all, from them came many of the potent drugs of the scientific era. Herbalists advertise in the newspapers of New York City and London, Tokyo and Istanbul. Brazil has the herbalisms of Europe, Africa and the great jungle. The doutores de raizes of Belem dispense root-medicine, along with the rest of the plant as well. The root and herb doctors sometimes allude to a Paracelsian doctrine of signatures, that what a plant looks like determines the disease for which it is efficacious, or the body part it best treats. Or, alternatively, a plant characteristic may suggest what it "opposes"—for example, sharp points "oppose" swellings. Some plants thus are considered specific in their action. Some are panaceas. Compounds, and often very complex ones, go into the making of plant banhos and defumações described below. Mass-produced and packaged patent medicines with their ornate boxes and elaborate printed labels can be found in the patent section of North American drugstores. I have one in hand at the moment from Washington, D.C., an across-the-counter, non-prescription tranquilizer and "composing medicine" called Compozine with 14 ingredients, including tincture of passion flower. It purports to calm anxieties of all sorts, to aid in sleep, to relieve depression, to calm the agitations of the wage-earner and to ease the boredoms of the housekeeper. No herbalist could do more. Locally produced and packaged medicines are vended

at the farmácias too. They attract my eye because the labels are, if anything, even more ornate.

Banhos (Balneoterapia): Bath-therapies. The ancient and enduring cult of St. John, related to medical and nursing care, has left its mark on European and North and South American folklore, on the names of plants, and in the annual ceremonies still observed in many parts of the New and Old World. The banhos of Brazil continue this tradition and constitute a widely popular series of rituals and materials, and St. John is often invoked in their use. Banhos may be prescribed and compounded by a curer. or purchased in trade-marked packages containing mixtures of herbs, barks, flowers, oils, and resins of good augury, purported to ensure happiness, health and fortune. They are mixed and applied with meticulous ritual. One popular brand contains 21 ingredients. Another has 16 plants. Multiples "increase the power," which may, of course, be advisable in serious conditions. The ingredients of banhos are steeped, applied at dawn or other specific times on specific days (St. John's Day, Christmas, New Year's Day, Hallelulia Sabbath, Resurrection Sunday, and Ascension Day, for example) and allowed to dry on the skin. They are used as parts of individual therapy or in magic, and especially in preparation for initiation ceremonies in Candoble religion. One of these, Banho Sete Linho (Linhas) (Seven Forces Bath), is prescribed in Catimbo healing rites. It is composed of acacia root, white mallow, sweet basil, mint, rosemary-with-doubleleaves, rue and holy grass. These are boiled, strained, allowed to stand in open air for three nights, stirred and used early the following morning. Another "precious formula" called Palaquira is prepared with corimbo, chama, precious bark, pririoca, marjoram, orissa aromatica, catinga de mulata, Japanese bark, vai-evolta, boissu, umiri, cipiuira, bergumot, vanilla and Cango. The ingredients are macerated, made into an infusion, and used in the open air at midnight.

In Belem, vendors of *banhos* are called *cheiro-cheirosa*. They supply *banho* ingredients, magic, formulas, and all associated instructions and advices.

Defumação (Osmoterapia) purports to cure illness or interpersonal difficulty by the inhaling or bathing in the smoke of substances pleasantly aromatic or pungently penetrating (Sa Me-

nezes, 1957). A defumador, like a banho, may be prescribed by a healer. The patient purchases the ingredients and prepares them according to instructions and with prayers or verbal magic formulas. A commercially prepared defumador, like a patent medicine, is often attractively packaged. Illustrations of saints or guiding spirits may be on the box. Smoke therapy (incense therapy) requires meticulous preparatory rituals and application, and close attention to detailed instructions. Either the patient or his domicile may require defumação, and the defumadores are used in magic, in *Umbanda*, and (as incense) in church. It is difficult to distinguish the magical, religious, ceremonial, and simply pleasurable elements in osmoterapia. A letter from R. Molina and Company, Rio de Janeiro, advised me that one brand, Defumador Pretos Velhos Africanos, is prepared "from resins and medicinal plants of the Brazilian Flora according to ancient cults for the treatment of osmoterapia, to immunize the ambient contaminated by malign influences, and for scientific treatment Astro-Patologia Terapéutica." The letter also states that "articles African, Indian, and Amazonian are available as well as fruits, seeds, defumadores in sweet liquid and as powder, plants, roots, resins, incense, and myrrh."

Ceremonial and Religious Medicine

Umbanda is a religion of Brazil with many regional variations such as Candoble (candoble baiana, religiao del caboclo), Macumba (of Rio de Janeiera), and Babassue (of Para). Umbanda is a spiritualism based upon a Supreme God who cannot be address directly, and a group of intermediary deities, the orixas, who are invoked with candles, drum, prayers, offerings and sacrifices. The priests and celebrants seek intervention of these spirits in the crucial human affairs of health, happiness, and control. The "seven lines" of influence of Umbanda are ruled by 14 orixas, each with a Yoruban name. Oxala is the primary power. He directs all other orixas and is an avatar of Christ. Yemanja lives in the sea and is goddess of the oceans and all their contents. Offerings to her are made at midnight on December 8. She is equated with the Virgin Mary. Ogun (Ogum, Ogan) was the Yoruban (and now Umbandan) god of war, strife, and weapons.

He is the son of Yemanja, who supervises his actions. He is especially venerated by the negro cult of jej-nago, where he sometimes has aspects of a horned personage or a wild man of the forest. He is also the principle orixa of the Iorubana cult, the grupo negro sudanese. He is equated with St. George, and is sometimes represented in armour, killing the dragon. Xango/ St. James is concerned with lightning and storms. He can dissolve (desmanchar) curses and open paths of opportunity and cure. "To open a path" frees one from obsessive doubt, dilemma, indecision, or sorcery and is the principle object of much ceremonial and magical effort, analagous, one may suppose, with the aims and efforts of psycho-analysis, psychotherapy, and mental health counselling. Omulu/St. Lazarus is a graveyard spirit who can protect against disease and death. Orum/St. Catharine inhabits rivers and lakes. Oshossi, originally the African god who aimed arrows for warrior and hunter, became Oxissi in Brazil. His Christian avatar, object rather than archer, is St. Sebastian of the Arrows. He is still concerned with hunting and with safety on journeys into the forest, Exu/Lucifer (Ze Pilintra) is represented by horned images or by black skulls and black candles. He is invoked in *quimbanda* (black magic) and in all malevolent and vengeful actions. The Caboclo of the Seven Arrows is a native spirit guide sometimes represented by an Indian with a seven-feathered headband. Ze (Jose) Pelintra is a popular personage with attributes of "fire-passion." He is somewhat disreputable, somewhat admirable, somewhat like Porgy of Porgy and Bess. He is penniless, footloose, unscrupulous, self-indulgent, brassily-assertive, enjoys life, is lucky, mercurial, well-dressed, flashy, charming, and sexually passionate. He is sometimes equivalent with the Devil, perhaps because he is so dependably successful!

A variant folk-religion and healing cult in Surinam, a northern neighbor of Brazil, are the *Winte* (*whintij*) dances of the Creole. They were and sometimes are prohibited by regulation, and are therefore conducted "in the boosh," far from town and police authority, and in areas difficult of access because of swamp and forest. The "wind" or spirit ceremonies are given on specific dates of significance to the cult, one being July 2. An observer gave this description:

"It is hard to get there, through the swamps and heat and far from the road. There is a compound and a shed with an iron roof. There is a Koina, a leader. They have a kitchen and everyone has a glass with a name on it for to drink strong rum. The players (musicians) beat on the leg of an upturned chair, and a drum, and a log. The music is very fast, twotime drums, and the songs are of the caiman. The dances are in a circle. The women wear bandanas or shawls wrapped around their hips and tied in front. After a while someone begins to twitch. The woman take her shawl off her hips and put it over her head. She sways and staggers, uttering caiman sounds and pouring sweat. She has violent muscle twitching. Her eyes are glazed and she is possessed by the caiman spirit. She bends forward, dancing very fast. Women bring her a glass of liquor covered with a cloth. She takes it for the Caiman Spirit. Then all are offered it, some take it, some don't. The music is louder and softer, up and down. The man who is leader goes around holding their heads in his hands, to calm them when the spirit takes someone. The others stop dancing but keep the beat. When the drums stop they slow down, exhausted, and remain a long time in the trance. When the music starts again, they sing until someone takes the spirit. Then a woman begins shouting and rushes out. She is chased. She runs back in again, covered with dry banana leaves. There is wild dancing then, and much laughing. The spirit is a dirty (evil) one, and lives underground. The spirit is always hidden in banana leaves. The dancing goes on many hours. That's why whintij dances are illegal. They are too upsetting."

III. RELATIONSHIPS WITH SCIENTIFIC MEDICINE

The farmácias and indigenous healers do not operate in ignorance of uptown scientific medicine. They recognize its power in the most direct way, by imitation. Used medicine vials and bottles are recycled into the inventories of the shops and stalls. The new printed labels use adaptations of the phrases on more pretentious containers—"purity guaranteed," "powerful and efficacious," "beware of imitations." More than this, a consultation with the curandeiro or cheiro or doutor may lead to a referral to a drug store in city-center for the universally respected penicillina. Anything by injection seems more than respectable, and indigenous physicians, nurses, or a friend can send a patient to the druggist for his antibiotico. Since most drugs are sold

over-the-counter without formal prescription, such referrals are no problem to anyone. The *farmácia* healer or vendor sometimes makes use of such written prescriptions in his practice, and he offers something more than a prescription. One patient we interviewed said, "The *camelos*, who sell medicine on the streets say it is good for 10 diseases, or 15. Maybe I have one of them so it's good for me, too. The *camelo*, or the *farmácia* make an interaction with me, a rapport much better than a (medical) doctor. They ask me how I feel, and so forth. People without a reasonable salary are frequently ill and (to) go to a *farmácia* is less expensive."

To compare the philosophical base of prescription and practice in different cultures, one might begin with a comparison of the effort of many healers to devise and define specific therapies. Sometimes the "specific action" is a fiction sustained by labelling, with all other physiologic results ignored until "side-effects" insist on recognition. The herbalist, among others, falls easily into this notion of "simples" as he puts disease and medication together in paired combinations, their supposed beneficient interaction fueled by hope, authority and tradition. The magical therapist is more complex and more ambitious. He perhaps feels that the herbalist's and drug therapist's simple linear causalities are tedious, and he proceeds in a more abstract, less-focused fashion. Many of the preparations in the farmácias are used with a broad-spectrum, holistic intent not unlike the Tennessee countryman's phrase, "It's good for you, and will help you too." A similar careless optimism and inadvertent mystification in drug use is a significant problem in modern drug therapy. That serious misuse arises from mystification is, of course, inevitable, and is much belabored in our medical literature.

In our present age of potent psychotropic medications, almost any human condition or experience is considered open to alteration, treatment, or prevention. When one counts the number of substances in a Ver-o-Peso shop which are clearly psychotropic (that is, aimed at altering mood, behavior, or mode-of-relating to others), 32 medicines have that purpose. Of the others, there are 35 preparations aimed at somatic disorders and 11 of doubtful aim and doubtful classification. Similar counts from an inventory taken at O Bahia, an *umbanda farmácia* in suburban Belem,

yielded equivalent numbers of 14, 22, and four, and from farmácias in Recife, Brasil, 14, 22, and four. Comparison studies of the medicinals of pre-conquest Sioux warriors of North America (Lewis, unpublished) indicated very few psychotropic preparations, as if, excepting a few hallucinogens, nomadic hunters needed no tranquilizers. Post-industrialization caboclo medicine, and our own system, have a very different emphasis.

Martin (1978) described macumba medicine in Rio de Janeiro, comparing its elements with those of modern Western psychiatry. Some of us perhaps will cringe—or laugh—at the importance to both systems of ancestor worship (portraits of previous great healers and savants, displayed on altars or on office walls), symbols of healing and authority (the macumba cigar and the physician's pipe, framed degrees and certificates), the emphasis on respectable training and experience, the solemn and careful selection of suitable patients and suitable problems (even if they have to be reshaped and redefined to fit the system), the importance of the evocation of deep emotional involvement (the therapeutic contract, transference, splitting, the possession by tutelary spirits), and the dynamics of the fee. He explored the rational/irrational balance in the two systems, a subject dealt with extensively by Torrey (1972). The uses of authority were described further by Dr. A. H. Chapman (personal letter) in discussing the practice in Bahia of curandeiros who "invoke the aid of deceased practitioners to guide them by giving them knowledge and skill. They may state they are in league with the spirits of deceased famous European physicians." (How many medical consulting rooms have a tasteful portrait of Freud or Osler or Halstead? Do portraits do more than presence can to justify the doctor's ways to man?)

The explanatory value of any body of medical knowledge and belief has been discerned by anthropologists and others. Huxley is especially eloquent in his studies of voodoo healers in Haiti (1969) concerning the benefits accruing to the patient from having a recognized structure in which to understand his pain. The healer, the shaman, and the priest must be able to provide this. And sometimes it is all he has to offer.

Some Western physicians ponder—some do not—on the dynamics of the physician-drug-patient interaction. Perhaps it

helps in this difficult pondering to look at some of the mental constructs we share, from time to time, with the river market therapists, and here I return to my title—reflections on pharmacotherapy and phantasy. The first shared phantasy is of specific drug actions. The simplistic pairing of symptom-and-medication invites the conclusion that effective treatment involves a titration of a disorder by a measured dose of an antagonist. Most disorders and most medications are obviously more complex than that. The second phantasy is that all human discomforts, intracorporeal, intrapsychic, or interpersonal, are drug-treatable. I have patients who seem to feel that I hold the keys to a vast number of correctly labelled drawers, each containing an antidote for a given problem of living. Their task is to coax or coerce from me the code and key to the right drawer. I feel uneasy in the role of providing single-link cures, yet I know colleagues busy at eliciting a key symptom and writing the indicated prescriptions for antidotes. One says, for example, "All illness is depression. Skill lies in prescribing the right antidepressant." And he is less than cordial when I protest, "But she is depressed because she has overdrawn her checking account and is afraid her husband will discover it!" The third phantasy is that correct drug prescription is the equivalent of problem resolution. I presume no one will argue too much about whether Valium has a physiological effect. Or that latofa de pulmãon tastes sweet. Both "do" something. Neither addresses the patient's presenting problems with unclouded rationality, or leads to understandings that fit the criteria of science. The fourth unsettling, shared, and too-common phantasy is that the expectations of the physician and the patient are equivalent to the actual physiological action of the medicine.

The reader who has followed my argument so far, and who is willing to agree however hesitantly that these easy assumptions sometimes obscure the pathways to comprehension of therapeutic interactions, is entitled to ask for clearer directions and to take note of better navigational aids. He is entitled to recall that one common hazard, authority, is composed of some sturdy materials, and some shaky assumptions, traditions, and myths, and is not invariably a trustworthy base for accurate calibration. It merits respect and periodic testing. The reader is entitled to be aware of the notion that Western medicine is based firmly in science.

The footing is there, and is extended steadily, but if all we did in medical practice was scientific, we would do very little. There is a false dichotomy between science and magic, and although we profess to stand on one, we slide untidily onto the other from time to time, and we had best be aware of that.

With all these warnings in mind, where can we chart a course to a tentative understanding of drug therapies in medical systems so different as in tropical Brasil and urban Europe-America? With the help of all our thoughts, let us try thus. In ancient times the arcanum arcanorum was the secret name of the ultimate secret, the secret behind alchemy, astrology, and magic, the formula so powerful that it could protect, transmute, or destroy. Perhaps the arcanum arcanorum of healers, their common therapeutic principle, is composed of these "precious ingredients":

- 1) that the healer and client have a culturally sanctioned interaction.
- 2) that this includes a mutually agreed upon structure of belief which has explanatory powers for both,
- 3) that intermediate objects, rituals, and medicaments exert non-specific forces at least as importantly as specific ones,
 - 4) that expectations precede (and sometimes obscure) results,
- 5) that effectiveness is as often immeasurably subjective as measurably objective,
- 6) that the position of prestige and regard achieved by the healer is commensurate with his ability to absorb, without evident toxicity, the anxiety of the client.

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BIBLIOGRAPHY

ARAUJO, Alceu Maynard. 1961. Medicina Rustica [Premio Brasiliana] (1959). São Paulo, Companhia Editora Nacional, 395 pp., 31 figs.

BAKER, Charles E. Jr., Publisher. 1979. Physician's Desk Reference 1979 Edition 33, Oradell, New Jersey, Medical Economics Company, 2047 pp.

CASCUDO, Luis da Camara. 1962. Dicionário do Folchere Brasileiro. Rio de Jacobian Lacina Mainteán de Educação Cultura Segunda.

neiro, Instituto Nacional do Livro, Ministério da Educação e Cultura, Segunda Edição, 2 vols., 795 pp. Illus.

GLICK, Leonard B. 1967. Magic, Science, and Religion in a St. Lucian Pharmacy (read at 66th annual meeting of the American Anthropological Association, Washington, D.C., December 3, 1967).

HARPER, Robert D. 1959. Psychoanalysis and Psychotherapy: 36 Systems. Spectrum Press.

HUXLEY, Francis. 1969. The Invisibles: Voodoo Gods in Haiti. McGraw-Hill,

LEONARD, Henry L., EPSTEIN, Leon J., BERNSTEIN, Arnold and RANSOM, Donald C., 1971. Mystification and Drug Misuse: Hazards in Using Psychoactive Drugs. San Francisco, Jossey-Bass, 133 pp.

MARTIN, Roberto D. 1978. "Modern Psychiatry and the Macumba Ritual", Psychiat-

ric Annals, pp. 82-89.

MARTIUS, D.F.T. Von. 1844. Natureza, Doenças, Medicina e Remédios Dos Indios Brasileiros, Tradução Prefácio e Notas de Peraja da Silva. Série 5ª. "Brasiliana" Vol. 154. Biblioteca Pedagógica Brasileira. 1939. Rio de Janeiro, Companhia Editora Nacional, 235 pp.

MATTA, Alfredo Augusto da. 1913. Flora Medicinal Brasileira. Imprensa Oficial. Mota, Afredo da. (no date). Vocabulário Amazonense. Rio de Janeiro.

Orico, Osvald. (no date). Vocabulário de Crendices Amazonicas. São Paulo.

RAMOS, Artur. 1943. O Negro Brasileiro, in: Introdução a Anthropologia Brasileira. Vol. 1, Rio de Janeiro, CEB.

RODRIGUEZ, Nina. 1932. Os Africanos do Brasil, São Paulo.

SA MENEZES, Jayme de. 1957. Medicina Indigena (na Bahia) Livraria Progresso Editora.

St. Clair, David. 1972. Drum and Candle. Garden City, New York, Doubleday & Co., Inc.

Torrey, E.F. 1972. The Mind Game: Witchdoctors and Psychiatrists, New York,

Emerson Hall, Inc., 236 pp.
Tourney, Garfield and Plazals, J. D., 1954. "Evil Eye in Myth and Schizophrenia", *Psychiatric Quarterly*. Vol. 28, pp. 475-495.