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EPILEPSY IN MEDIEVAL ISLAMIC HISTORY

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March, 1999**

**A thesis submitted to the Faculty of Graduate Studies and Research
in partial fulfilment of the requirements of the degree of
Master's of Arts**

c. Paula Jolin 1999



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ABSTRACT

Epilepsy in Medieval Islamic History focuses on the perception, etiology and treatment of epilepsy in the work of four medieval Islamic scholars, Ibn Sīnā, Rāzī, Ibn Qayyim and Ṣanawbarī, while attempting to place their views in the wider context of a medieval Islamic cultural milieu. This work suggests that the understanding of epilepsy in the medieval Islamic period was both porous and flexible. Despite the fact that these scholars believed they were writing in different genres, in fact, they shared both healing techniques and theoretical perspectives. The Islamic culture which shaped all of these writers imbued them with a synthesized world-view which transcends the genre of each work. Medieval Islamic understandings and treatment of epilepsy were undeniably influenced by Greek medicine and the Middle Eastern cultural milieu; nonetheless, they represent a distinct cultural interpretation of the disease.

ABSTRAIT

L'épilepsie dans l'histoire islamique médiévale se concentre sur la perception, l'étiologie et le traitement de l'épilepsie dans quatre auteurs islamiques médiévaux, Ibn Sīnā, Rāzī, Ibn Qayyim et Ṣanawbarī, tout en essayant de placer leur points de vues dans le contexte plus large d'un milieu culturel islamique médiéval. Ce travail suggère que la compréhension de l'épilepsie dans la période islamique médiévale a été poreuse et flexible. Malgré le fait que ces auteurs ont cru qu'ils écrivaient dans différents genres, en fait, ils partageaient des techniques curatives et des perspectives théoriques. La culture islamique qui a formé tous ces auteurs les a imprégnés d'une vision synthétisée du monde qui dépasse le genre spécifique de chaque travail. La compréhension islamiques médiévales de l'épilepsie et de ses traitements ont été indéniablement influencés par la médecine grecque et le milieu culturel du Moyen-Orient; néanmoins ils représentent une interprétation culturelle distincte de la maladie.

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INTRODUCTION

Epilepsy has always been a dramatic disease. The violent and vivid manifestations of a *grand mal* seizure - thrashing, convulsions, foaming at the mouth and collapse - interpreted through fear and ignorance, gave rise to inaccurate perceptions of the condition. Until John Hughlings Jackson's diagnosis of epilepsy as a neurological disorder in the late nineteenth century, nearly every society had its own mythology about the causes of epilepsy, both the immediate physiological changes that resulted in seizures and the more remote physical, psychological and non-corporeal elements that prevented the epileptic's body from functioning properly.

Societal perceptions of a disease affect not only the ways in which others react and respond to the afflicted individual but also the ways in which the individual perceives herself. Any study of the history of disease which attempts to understand the effects of a disease on the individual and on society must analyze that history within a cultural context. The fact that the causes of epilepsy were so obscure for so long means that the victim of epilepsy was particularly vulnerable to a wide range of understandings of what it meant to be epileptic. For example, among the Navajo, who traditionally perceived seizures as the manifest consequence of a family history of incest, epilepsy was often considered the result of a violation of incest taboos. The epileptic might therefore view himself not as a neurologically impaired human being but rather

as physical proof of an individual or family transgression; his treatment, self-perception and world view would all depend on this analysis.¹

In the complex and pluralistic healing traditions of the medieval Muslim world, magical, medical and religious perceptions all vied for the opportunity to present a single, cohesive explanation of the causes, treatments and meaning of epilepsy. Medical scholars took a physiological approach based in Greek tradition, religious writers emphasized *ḥadīth* that insisted illness was an affliction sent by God and magicians claimed that epilepsy was a clear case of jinn possession. An analysis and comparison of the actual medieval texts presents an integration and interaction of medical, religious and magical concepts and methods of healing, however, that both contemporary and later historians as well as the writers themselves have ignored or even denied. I would argue that the Islamic culture which shaped all of these writers imbued them with a synthesized world-view which transcends the genre of each work. Medieval Islamic understandings and treatment of epilepsy were undeniably influenced by Greek medicine and the Middle Eastern cultural milieu; nonetheless, they represent a distinct cultural interpretation of the disease.

The most comprehensive analysis of the history of epilepsy in the West has been produced by Owsei Temkin in his monumental study, *The Falling Sickness*. Temkin traces the etiology and treatment of epilepsy from the ancient Greeks through the Renaissance - touching briefly on the fate of texts involving epilepsy in the hands of Arab physicians and scientists² - and concludes with a chapter on Jackson's research and the discoveries made by his followers earlier this century.³ As thorough as *The Falling Sickness* is, it suffers from a tendency,

1 Jerrold Levy presents an in-depth analysis of Navajo constructions of epilepsy in *Hand Trembling, Frenzy Witchcraft and Moth Madness: A Study of Navajo Seizure Disorder*, Tucson: University of Arizona Press, 1987.

2 Owsei Temkin, *The Falling Sickness*, Baltimore: Johns Hopkins Press, 1945, 127-131.

3 For a survey of the history of epilepsy in the twentieth century, see D.F. Scott, *The History of Epileptic Therapy*, New York: Pantheon Publishing, 1991.

common among medical historians, to treat magical and religious remedies as fanciful or unimportant.⁴ Temkin makes a consistent effort to dissociate ancient physicians from the magical remedies they recommended.⁵ At no point does he acknowledge the social, cultural and psychological roles which magic and religion have played in a traditional understanding of the disease. Temkin is not alone in his wish to attribute earlier physicians with attitudes they may not have possessed. Historians of Chinese, Indian and Islamic medicine have all attempted to vindicate the traditions they study by pointing out how accurate these disciplines are or were in relation to the successes of modern medicine.⁶ The success or failure of a specific remedy provides limited insight into the meaning that disease might have had for an individual or for society. In the case of a disease like epilepsy, whose modern understanding and treatment is a direct result of Jackson's revolutionary approach to the subject in the 1860s and has little connection to previous treatments, it seems less significant to trace the development of an outdated epileptic theory. An examination of the role of epilepsy and the epileptic in society can,

4 "The (above) procedures are but examples of a long and tedious list of remedies which we now consider superstitious. Definitely connected with the names and recorded practices of magicians, they represent examples of almost every type of miraculous cure. In some way or another they are all associated with the belief in the supernatural origin of disease and the cult of the chthonic deities. If, for example, epilepsy is not only averted but also 'cured' by spitting, the logic is understandable, for what keeps demons away ought to drive them away too. Yet in most cases an attempt at a deeper understanding meets with the difficulty of the ambivalent character of the procedures." *The Falling Sickness*, 13.

5 For example, Temkin writes, "Even physicians who believed in a natural causal explanation of the phenomenon of nature could not resist the claims of alleged experience. But if they employed the same remedies and amulets, they tried at least to find a scientific explanation," *The Falling Sickness*, 25.

6 Bala V. Manyam's article "Epilepsy in Ancient India," *Epilepsia* 33 (1992): 473-475 explores only the theoretical understanding of epilepsy in *ayurveda* medicine; that other interpretations have existed in India is indicated in Leo Kanner's article, "The Folklore and Cultural History of Epilepsy," *Medical Life* 37 (1930): 151-220. "Another Hindu theory of epilepsy is related in the Nidnam Sthanam section of Charaka-Samhita...In consequence, again, of their contact with various kinds of noxious creatures and impure objects arose the different varieties of epilepsy." Kanner, 173-174. C.W. Lai presents a similar 'scientific' version of Chinese perspectives of epilepsy in "History of Epilepsy in Chinese Traditional Medicine," *Epilepsia* 32 (1991): 299-302. Again Kanner's article indicates that Chinese culture offered a variety of magical amulets against epilepsy, including salamander and silkworms. Kanner, 195. Any number of attempts to defend Islamic medicine have been published in recent years, including S. Ammar's *Médecins et médecine de l'Islam*, Paris: Tougni, 1984 and Syed Habibul Haq Nadvi's, *Medical Philosophy in Islam and the Contributions of Muslims to the Advancement of Medical Sciences*, Durban, South Africa: Academia, 1983. In their understandable enthusiasm for the vindication of Islamic scientists so long overlooked by Western scholars, however, these authors sometimes present a slanted view of Islamic medicine.

however, provide awareness of both the function of traditional healing practices and the roots of modern indigenous therapies. This doesn't mean that medical theory was unimportant; on the contrary, it often served as a framework for understanding the disease and Temkin's data is valuable in and of itself. It is necessary, however, to remember that in the history of disease and healing, empirical medicine may not have been the primary context for assessment of illness and the remedies physicians recommended may or may not have been the most common form of treatment.

An important article by Leo Kanner, "The Folklore and Cultural History of Epilepsy" provides a useful supplement to *The Falling Sickness*. Kanner is scarcely less contemptuous of magical treatments than Temkin. "To primitive reasoning," he writes, "each disaster, manifesting itself either in the form of meteorologic or geologic catastrophes...appears to be caused directly by the supernatural influence of some deity or demon...Disease is usually considered a punishment which can only be averted or dispelled by the administration of proper magical procedures."⁷ Nonetheless, his study, encompassing a myriad of diverse cultures from ancient Greek to Indian to Arab and Islamic, is valuable for its compilation of various procedures used around the world to invoke magic against the disease.

Although Temkin's work has not yet been surpassed, a number of other scholars including R.A. Gross, K. Dieckhofer and I.D. Melville have contributed recent essays on the subject of the history of epilepsy in the West, all relying heavily on his research.⁸ Other medical historians have attempted to place an understanding of epilepsy within a specific context, such as

⁷ Kanner, 167.

⁸ R. A. Gross, "A Brief History of Epilepsy and Its Therapy in the Western Hemisphere," *Epilepsy Research* 2 (1992): 65-74; K. Dieckhofer, "A Historical Review of Epilepsy," *Historical Medicine* 7 (1976): 43-48; I.D. Melville, "The Medical Treatment of Epilepsy," in F. Clifford Rose and W.F. Bynum, eds., *Historical Aspects of the Neurosciences*, New York: Raven Press, 1982, 127-136.

literary tradition or biblical texts.⁹ Despite a few minor attempts to examine epilepsy in non-western traditions, no work comparable to Temkin's exists for any other part of the world.

This study marks the first attempt at research focusing on epilepsy in the medieval Islamic world.¹⁰ Michael Dols' *Majnūn: the Madman in the Medieval Islamic World* contains some information on epilepsy, but only in cases where it was perceived as insanity or mental illness. *Majnūn* has been invaluable to the completion of this work, both in scope and methodology; however, I believe that my research on epilepsy shows that Dols' thesis, which claims that the victims of mental illness used a pluralistic approach to healing, does not go far enough. Healers of epilepsy shared a common perspective and enough common treatments to link them in a single Islamic tradition; how true this is for other illnesses is impossible to say at this point. Epilepsy's unique position at the crossroads of science and magic indicates their collaboration most clearly. I would venture to suggest, however, that to a lesser degree this interaction is evident in most branches of Islamic medicine.¹¹

Western scholars of the history of Islamic medicine have traditionally maintained that the contributions of medieval Islamic physicians were limited to preserving the works of the ancient

9 See Dieter Janz, "Epilepsy Viewed Metaphysically," *Epilepsia* 27 (1986): 316-322 and I.J. Ozer "Images of Epilepsy in Literature," *Epilepsia* 32 (1991): 185-198.

10 A. Vanzan published an article called "Epilepsy and Persian Culture," *Epilepsia* 33 (1992): 1057-1064, which offers a brief survey of Ibn Sīnā and Rāzī's views on the subject as well as some important information on perceptions of epilepsy in Persian culture. However, the survey is superficial, misconstruing the role of Islam and pre-Arabian practices in the development of the Islamic medical tradition; she claims, for example, that the Qur'ān contains chapters on medical hygiene and that Indian and Persian medical books were required reading for physicians. Although Islamic physicians did incorporate Indian and Persian medical theories and remedies into their texts, there is little evidence that traditional texts played any role in medical education. See A.Z. Iskandar, "An Attempted Reconstruction of the Late Alexandrian Medical Curriculum," *Medical History* 20 (1976): 235-258; also see Michael Dols, *Majnūn: The Madman in the Medieval Islamic World*, Oxford: Clarendon Press, 1992, 116. More importantly, although this work examines both magic and medicine, it treats them as separate genres with no relation to each other.

11 For example, in his in-depth study on birth control, Basim Musallam has shown that some physicians, like Rāzī and Ṭabībī, included magical techniques in their recommendations for birth control. See Basim Musallam, *Sex and Society in Islam: The Sanction and Medieval Techniques of Birth Control*, unpublished Ph.D. dissertation, Harvard University, 1973. (See also the published version: *Sex and Society: Birth Control Before the Nineteenth Century*, Cambridge: Cambridge University Press, 1983. Note however that the unpublished version contains numerous charts, graphs and recipes not incorporated into the published version.)

Greeks; they have denied that Islamic medical practitioners produced original discoveries or developed independent theories.¹² Despite clear evidence to the contrary, many Orientalists insist that Islamic physicians did not make clinical observations or modify the Greek tenets they studied with the evidence presented by the patients they treated.¹³ These views are losing credence among modern scholars. In a recent article, A.I. Sabra points out that the Arabic adoption and adaption of Greek science should be viewed as an active rather than a passive process and defined on its own terms, in the context of its effects on Arabic/Islamic civilization rather than its influence on subsequent European medical culture.¹⁴ Emilie Savage-Smith presents an important overview of recent medical and scientific works in "Gleanings from an Arabist's Workshop: Current Trends in the Study of Medieval Islamic Science and Medicine." She suggests that the traditional text and translation basis of the field is now giving way to a more synthetic analysis of medieval Islamic medicine; by employing methodologies used in

12 Edward G. Browne writes at the beginning of his treatise, *Arabian Medicine*, "When we speak of 'Arabian Science' or 'Arabian Medicine' we mean that body of scientific or medical doctrine which is enshrined in books written in the Arabic language but which is for the most part Greek in its origin, though with Indian, Persian and Syrian accretions, and only in a very small degree the product of the Arabian mind." Edward G. Browne, *Arabian Medicine*, Cambridge: The University Press, 1921, 2. For a more contemporary but similar view, see Manfred Ullmann's *Islamic Medicine*, Edinburgh: Edinburgh University Press, 1978, 23-24: "In the Islamic Middle Ages there was no real scientific research and there was no desire for empirical knowledge of reality. Thus, the doctor too, when dealing with the phenomenon of illness was not trying to discover new knowledge or to reinterpret the processes which go on in the human body or to develop new and more adequate therapies."

13 The one exception to this general condemnation is the ninth century physician Abū Bakr Muḥammad ibn Zakariyā' ar-Rāzī. Max Meyerhof says, for example, that "Rhazes was without doubt the greatest of the very few physicians of the Islamic period who found their way to Hippocrates and the inestimable value of unbiased clinical observation." M. Meyerhof, "Thirty Three Clinical Observations by Rhazes," *ISIS* 23 (1935): 312-322. Rāzī was hardly the only physician adapting his medical theory to the cases he came across in his professional life; on the contrary, many doctors were taking novel approaches to healing people during the classical and medieval Islamic eras, a claim supported by the growth of hospitals and clinics (Michael Dols, "Origins of the Islamic Hospital: Myth and Reality," *Bulletin of the History of Medicine* 61 (1987): 367-390), government stipends for medicine for the poor (*Majnūn*, 125) and anecdotal evidence in literary sources (Usāma Ibn Munqidh, *An Arab-Syrian Gentleman and Warrior*, trans. Philip K. Hitti, New York: Columbia University Press, 1929, 162.)

14 A.I. Sabra, "The Appropriation and Subsequent Naturalization of Greek Science in Medieval Islam," *History of Science* 25 (1987): 3-28, 25.

social history, scholars are able to produce a more authentic understanding of the effects of medicine and science on local culture.¹⁵

All modern scholars agree that the labeling of this tradition is problematic. The movement to translate Greek texts into Arabic began in the ninth century under the direction of the Christian physician Ḥunayn ibn Ishāq. Although Islamic governments and institutions supported the movement financially and politically, Christian and Jewish families continued to produce the majority of medical practitioners long after they were no longer a majority of the population. While calling a tradition based on non-Muslim sources and produced in large part by non-Muslims "Islamic" might seem somewhat absurd, it gives a sense of the overall world view within which the texts were produced. To describe this tradition as "Arabic," as many scholars do,¹⁶ suggests limitations on the scope and breadth of a medical culture that stretched from Spain to Indonesia.¹⁷ The term "Islamicate," coined by Marshall Hodgson to refer to non-religious

15 "Alongside this rather traditional text-bound approach to the history of Islamic science and medicine are some encouraging trends that reflect methods used in social history...Dols and (Lawrence) Conrad, among others, have investigated responses to epidemic diseases, especially the plague, and indigenous traditions and the role of occult and divinatory practices are also attracting serious study. In general, regional diversity and the multifaceted nature of practices have been emphasized more by recent historians of medicine than by historians of the physical sciences." Emilie Savage-Smith, "Gleanings from an Arabist's Workshop: Current Trends in the Study of Medieval Islamic Science and Medicine," *ISIS* 79 (1988): 246-272, 247-248.

16 Edward Browne defends his use of the term 'Arabian Medicine' for the title of his work by explaining that most medieval Islamic works were written in Arabic. Browne, 4. Although true, the inexplicit nature of the adjective 'Arabic' in the English language - referring to language, culture or people - renders the term ambiguous, and perhaps exclusive, implying that works written in Arabic were produced only by Arabs.

17 Michael Dols shows, for example, that Andalusian writers like Ibn al-Khaṭīb and al-Khātima wrote within the Islamic tradition; see Michael Dols, *The Black Plague in the Middle East*, Princeton: Princeton University Press, 1977, especially chapter three. Nancy Gallagher points out in her article "Islamic and Indian Medicine," in Kenneth Kiple, ed., *The Cambridge World History of Disease*, Cambridge: Cambridge University Press, 1993: 27-34, that 'Yunani' (Islamic) medicine in India included feeling the pulse and the use of mercury, clear indications of the Greco-Islamic medical tradition. Some hospitals in India continue to practice Yunani medicine, recognized as distinct from traditional Indian ayurvedic medicine, in the late twentieth century. See Charles Leslie, "Ambiguities of Revivalism in Modern India," in Charles Leslie, ed., *Asian Medical Systems*, Berkeley: University of California Press, 1976: 356-367. The second volume of Marshall Hodgson's *Venture of Islam* provides overwhelming evidence in support of Hodgson's thesis that during the medieval period, a uniquely Islamic culture arose in the lands under Muslim rule that created a shared, synthesized society which Hodgson describes as "held together in virtue of a common Islamicate social pattern which, by enabling members of any part of the society to be accepted as members of it anywhere else, assured the circulation of ideas and manners throughout its area." Marshall Hodgson, *The Venture of Islam*, 3 vol., Chicago: The University of Chicago Press, 1974, vol. 2, 9.

institutions and cultural practices that developed in Islamic lands, is most accurate; unfortunately, the term may be confusing and misleading for the non-specialist. The result is that no consensus has been reached on a label for this tradition and scholars in the field are forced to address the topic every time they write.

A further controversy surrounds the issue of practice versus theory, focused on the question of the definition of the words *ṭabīb* and *mutaṭṭabbib*.¹⁸ Most scholars agree that *ṭabīb* referred to physicians well-versed in Greek medical theory while the term *mutaṭṭabbib*, with connotations less respectful and more working-class, was applied to physicians who had acquired their medical knowledge through apprenticeships to working doctors in the hospitals and possessed little Greek knowledge.¹⁹ I am less convinced by this argument than I once was. A thorough investigation of the life of the ninth century physician Abū Bakr Muḥammad ibn Zakarīyāʾ ar-Rāzī offers conclusive evidence that Rāzī, a scholar so well versed in Greek theory that he produced over 200 treatises on the subject, taught students in the hospitals as well.²⁰ This

18 See Ibn Khaldūn, *The Muqaddimah*, 3 vol, trans. by Franz Rosenthal, New York, Pantheon Books, 1958, where he discusses the profession of the *ṭabīb* in two separate categories, first as a craft (vol 2, 373-377) and later as a science (vol. 3, 148-151). Evidence in the Cairo Geniza documents suggests that doctors (*mutaṭṭabbib*) who practiced in the hospitals were trained through apprenticeships. (S.D. Goitein, "The Medical Profession in the Light of the Cairo Geniza Documents," *Hebrew Union College Annual* 34 (1963): 167-190, 188.) On the other hand, the learned doctors who wrote theoretical texts were trained with individual scholars and sometimes received a *samāʿ* (certificate of audition) attesting that they had read a particular book. (George Makdisi, *The Rise of Colleges*, Edinburgh: Edinburgh University Press, 1987, 143-144.) Many of the physicians who received classical training condemned and vilified physicians with more informal medical backgrounds. (Ibn Jumayʿ, *Treatise to Ṣalāḥ ad-Dīn on the Revival of the Art of Medicine*, ed. and trans. by Hartmut Fahndrich, Wiesbaden: Steiner, 1983, p. 21-25.)

19 The tenth century Iraqi physician Ibn Buṭlān, for example, writes, "According to Galen, only he is a perfect physician who is at the same time a philosopher. He is only a real physician (*ṭabīb*) while someone without philosophical education is only a medical practitioner. The *ṭabīb* must be learned in the mathematical, natural theological and logical sciences." Translated and cited in Joseph Schacht and Max Meyerhof, *The Medico-Legal Controversy between Ibn Butlan of Baghdad and Ibn Ridwan of Cairo*, Cairo: The Egyptian University, 1973, 77. For a comprehensive analysis of the medical profession, see Michael Dols, *Medieval Islamic Medicine: Ibn Ridwān's Treatise "On the Prevention of Bodily Ills in Egypt,"* Berkeley: University of California Press, 1984, 24-42.

20 Ibn an-Nadīm writes: "He used to sit in his clinic with his students around him. Alongside of them were their students and still other students who were with them. A patient would enter and describe his illness to the first person who met him. If they had knowledge (of what was wrong) good, but if they did not have knowledge, he would pass from them to others. Then if they finally hit upon the diagnosis, good, but if not, ar-Rāzī himself would discuss the case." Ibn an-Nadīm, *The Fihrist of Ibn al-Nadīm: a Tenth Century Survey of Muslim Culture*, 2 vol.,

indicates that the line between *ṭabīb* and *mutaṭabbib* may have been less distinct than many scholars think. Nonetheless, it is important to note that practitioners were divided into categories, whatever their criterion, especially when considering the question of pluralistic healing patterns in the medieval Muslim world.

The question "Who was an Islamic physician?" suggests another, equally important question: "What was Islamic medicine?" Islamic medicine based on Greek science was challenged in the 13th century by a religious movement that called itself Prophetic medicine and, believing that all knowledge had been revealed by God through the Prophet, based its medical diagnoses, prescriptions and remedies on recommendations found in *ḥadīth*. An early manuscript of Prophetic medicine was translated into French in the nineteenth century and C. Elgood has attempted a partial translation of a religious tract written by Suyūṭī.²¹ Ibn Qayyim al-Jawzīya's *aṭ-Ṭibb an-nabawī* was recently reprinted simultaneously in Beirut and Kuwait. J.C. Burgel discusses Prophetic medicine in some detail in an article published in *Asian Medical Systems* in 1976.²²

There are few extant magical texts of the medieval period. Aṣ-Ṣanawbarī al-Hindī's *Ar-rahma fī ṭ-ṭibb wa al-ḥikma* offers valuable information on the treatment of epileptics while the recently edited and translated version of Abraham ibn Ezra's *Sefer Hanisyonot* provides some indication of the magical practices used to heal the ill in medieval Spain.²³ In addition, more

trans. Bayard Dodge, New York: Columbia University Press, 1970, vol. 1. 701-2. The same incident is recorded in Ibn Abī Uṣaybi'a *ʿUyūn al-anbāʾ fī ṭabaqāt al-aṭibbāʾ*, Bayrūt: Dār maktabat al-ḥayāh, 1965, 412. Of course, according to the ninth century physician Ibn Riḍwān, Rāzī was not a great physician and probably not worthy of the title *ṭabīb*: "(Ibn Riḍwān) reproaches him (Rāzī) with having no profound knowledge of either astronomy or of natural science... (he did not) understand the true meaning of Galen." Schacht and Meyerhof, 27.

21 See D. Perron, *Le Médecine du Prophète*, Alger: Tissier, 1860 and C. Elgood, *The Medicine of the Prophet*, Brugis: Osiris, 1962.

22 J.C. Burgel, "Secular and Religious Features of Medieval Islamic Medicine," in Charles Leslie, ed., *Asian Medical Systems*, Berkeley: University of California Press, 1976: 44-62.

23 See aṣ-Ṣanawbarī al-Hindī, *Ar-rahma fī ṭ-ṭibb wa l-ḥikma*, Berlin: Buch u. Kunstdruckerei Sonne, 1928 and Abraham ibn Ezra, *Sefer Hanisyonot: The Book of Medical Experiences Attributed to Abraham Ibn Ezra: Medical Theory, Rational and Magical Therapy: A Study in Medievalism*, ed. with trans. and commentary by J.O. Leibowitz and S. Marcus, Jerusalem: Magnes Press, 1984.

recent anthropological studies including Janice Boddy's study of the Zār cult in the Sudan and Vincent Crapanzano's extensive discussion of the North African Ḥamadsha offer vital evidence of the methods Muslim societies have developed to cope with stress and mental illness.²⁴

No discussion of the interaction of medicine, magic and religion in medieval Islamic concepts of epilepsy could be complete without some reference to the Prophet and to Orientalist depictions of the Prophet as an epileptic.²⁵ This characterization was firmly established by the middle of the nineteenth century when Dostoevsky was able to say, "In his Koran Muhammad assures us that he saw paradise and was inside. All clever fools are convinced that he is simply a liar and a fraud. Oh no! He is not lying! He really was in paradise during an attack of epilepsy, from which he suffered as I do."²⁶ Orientalists probably derived such assumptions from descriptions of Muḥammad's reactions when receiving revelation such as those found in Ibn Sa'd's *Kitāb at-ṭabaqāt al-kabīr*. Ibn Sa'd makes six different references to the physical and physiological changes Muḥammad experienced during his attacks:

"Affan Ibn Muslim informed us: 'Verily, when revelation dawned upon the Prophet, may Allah bless him, he suffered much pain and his face turned dust colored.'"

"Ubayd Allah Ibn Musa al-Absi informed us: 'When the revelation dawned upon the Apostle of Allah, may Allah bless him, he looked fatigued as if overcome by sleep.'"

24 See Janice Boddy, *Wombs and Alien Spirits: Women, Men and the Zār Cult in Modern Sudan*. Madison: The University of Wisconsin Press, 1989 and Vincent Crapanzano, *The Ḥamadsha: A Study in Moroccan Ethnopsychology*, Berkeley: University of California Press, 1973.

25 It is important to note, however, that the connection between prophecy and epilepsy has not been restricted to an Islamic context. Samuel S. Kottek writes, "Every time it is stated in the Bible that someone fell on his face (cf. Abraham, Moses, Bileam, etc.) it has been argued that they were epileptic." Samuel S. Kottek, "From the History of Medicine: Epilepsy in Ancient Jewish Sources," *Israel Journal of Psychiatry Related Sciences*, 24:1 (1987): 3-11, 9. E.R. Dodds points out that prophecy was intimately connected with possession in ancient Greece; see E.R. Dodds, *The Greeks and the Irrational*. Berkeley: University of California Press, 1964, 66.

26 From a conversation recorded by S.V. Kovalevskaya in *Vospominaniya detstva i autobiographicheskie ocherki*, Akademiya Nauk, SSSR, 1945; translated and cited in *The Falling Sickness*, 374.

"Hujayn Ibn al-Muthanna informed us: 'Verily, the Apostle of Allah used to say: The revelation dawns upon me in two ways - Gabriel brings it to me as a man conveys to another man and that makes me restless. And it dawns upon me like the sound of a bell till it enters my heart and this does not make me restless.'"

"Ma'n Ibn Isa informed us: 'The Apostle of Allah said: Sometimes it (revelation) dawns upon me in the form of the ringing of a bell, and that is very hard on me; (ultimately) it ceases and I remember what is said...Ayesah said: I witnessed the revelation dawning upon him on an extremely cold day; when it ceased, I noticed that his forehead was perspiring.'"

"Abidah Ibn Humayd al-Taymi informed us: 'When the revelation dawned upon the Prophet, may peace be upon him, he felt its pressure.'"

"Affan Ibn Muslim informed us: 'The Apostle of Allah, may Allah bless him, experienced great pain when the revelation dawned upon him, so much so that he stirred his lips.'"²⁷

A number of Orientalists have interpreted these statements as descriptions of epileptic attacks. Theophanes, a ninth century Byzantine historian, offered the first diagnosis of epilepsy.²⁸ Eleven centuries later, Duncan Black MacDonald wrote, "But the spirit came upon him in his hours of weakness and solitude...That he was subject to fits of some kind can be open to no doubt. The narratives are too precise and his own fears too evidently genuine."²⁹ J.M. Rodwell simply asserts Muḥammad's epilepsy in the introduction to his translation of the Qur'ān

27 The above quotes are all taken from Ibn Sa'd, *Kitāb at-ṭabaqāt al-kabīr*, 2 vol., trans. Moinul Haq, Karachi: Pakistan Historical Society, 1967, vol. 1, 226-229.

28 Theophanes, *Chronographia*, vol. 1, 334, cited in *The Falling Sickness*, 153.

29 Duncan Black MacDonald, *The Religious Attitude and Life in Islam*, AMS Press: New York, 1970, 4.

as though it were a well-known fact.³⁰ Other scholars find further evidence in biographical tradition. William Muir, for example, interprets the incident of the two men who approached Muḥammad while he was under Ḥalīma's care, split open his heart and removed a black clot of blood, as an epileptic fit.³¹

Epilepsy was not the only medical condition suggested as the source of Muḥammad's unique revelations. Allegations of malaria, hysteria and hallucinations have appeared in Orientalist works as other possible interpretations.³² As Temkin points out, medical evaluations of the Prophet's condition depended heavily on the religious and philosophical perspective of the author as well as contemporary trends in medicine.³³ I would argue that such evaluations have also followed the course of a changing methodology in Islamic studies. No modern Islamicist, to my knowledge, has taken the question of Muḥammad as epileptic seriously. John C. Archer dismisses the case for epilepsy in *Mystical Elements in Mohammed*, claiming that the issue has obscured a consideration of Muḥammad's sincere spiritual experience.³⁴ Most recent biographers (Montgomery Watt, for example, or F.E. Peters) have taken a phenomenological approach to the Prophet's biography, focusing on the meaning of Muḥammad's life for Muslims, rather than

30 "A cataleptic (epileptic) subject from his early youth, born - according to the traditions - of a highly nervous and excitable mother, he would be peculiarly liable to morbid and fascinating hallucinations and alternations of excitement and depression, which would win for him, in the eyes of ignorant countrymen, the credit of being inspired." J.M. Rodwell, *The Koran, Translated from the Arabic*, London: J.M. Dent and Sons, 14.

31 "It was probably a fit of epilepsy; but Muslim legend has invested it with so many marvelous features as makes it difficult to discover the real facts." William Muir, *The Life of Mahomet*, 2 vol., Osnabruck: Biblio Verlag, 1988, vol. 2, 21. Temkin points out that Muir produces no evidence to support his allegations of epilepsy, *The Falling Sickness*, 151.

32 See A. Sprenger, *Das Leben und die Lehre des Mohammad*, 1. Band. Berlin, 1869 for a discussion of malaria and hysteria as the sources of Muhammad's visions; see J. Moreau, *La psychologie morbide dans ses rapports avec la philosophie de l'histoire* for a consideration of the effect of hallucinations on Muḥammad's mind. Both references are cited in *The Falling Sickness*, 372.

33 *The Falling Sickness*, 372.

34 John C. Archer, *Mystical Elements in Mohammad*, New Haven: Yale University Press, 1924, first chapter. "We are convinced, at any rate, that the 'genius' of Mohammad is not epileptic nor psychopathic. No matter what his contemporaries, or even he himself, may have thought about it, it is a question in the last analysis, of the action of Mohammad's own mind upon himself - and upon others." Archer, 22.

attempting to analyze his motives or objectives.³⁵ Considering the notorious difficulty of dealing with the sources for the first hundred years after the rise of Islam, this is understandable.³⁶ The *ḥadīth* recorded by Ibn Saʿd may or may not be authentic; most scholars would agree that it is impossible to tell.³⁷ If we accept Ibn Saʿd's *ḥadīth* as accurate and examine them in the light of modern medical data, it becomes clear that a number of the most conspicuous symptoms of a *grand mal* seizure - biting the tongue, for example, or the extension of the arms and legs - are missing. The symptoms described, pressure and perspiration, the sound of bells ringing and the changing color of his face, may very well fit the category of the less severe or *petit mal* seizure, however.³⁸ Of course, the evidence presented is too slight and too suspect to draw any serious conclusions. For the devout Muslim, the question is irrelevant: if God could work the miracle of revelation through a human being, He was certainly capable of using epileptic seizures as a vehicle for that revelation. The historian of medicine should note two points, however: first, the belief that Muḥammad's revelation produced physiological changes and the charge of epilepsy as the source of these changes were both current ideas among people in the medieval Muslim world and second, the contradictory interpretations of Muḥammad's experience by Muslims and non-Muslims offer a clear indication of how altered states of consciousness have been interpreted and reinterpreted in many different ways.

35 See Montgomery Watt, *Muḥammad at Mecca*, Oxford: Clarendon Press, 1972 and *Muḥammad at Medina*, Oxford: Clarendon Press, 1972, for example; see also F.E. Peters, *Muḥammad and the Origins of Islam*, Albany: State University of New York Press, 1994.

36 The best analysis of the unreliability of the early Islamic sources as historical documents is provided by Patricia Crone in chapter nine of *Meccan Trade and the Rise of Islam*, Princeton: Princeton University Press, 1987. See also the introductory chapter to Peters' book.

37 Joseph Schacht, *The Origins of Muhammadan Jurisprudence*, Oxford: Clarendon Press, 1980, 4.

38 A clear description of the symptoms used to define and classify seizures can be found in Lord Brain and John N. Wilton, *Diseases of the Nervous System*, London: Oxford University Press, 1969, 926-933.

CHAPTER ONE

Only in the twentieth century has the Western medical tradition managed to establish the cause of epilepsy as a neurological disorder in which normal brain functions are disrupted by an electrical disturbance.³⁹ Hughlings Jackson's development of a pathological understanding of epilepsy was based on major medical trends that arose in the early half of the nineteenth century: clinical observation, an appreciation of statistical data, a growing skepticism toward drug treatments and the development of neurophysiology.⁴⁰ Hughlings Jackson's work meant a new and distinct approach to the topic which differed markedly from the theories offered in the past. Prior to the nineteenth century, a variety of disciplines - cultural, religious, medical, etc. - offered any number of explanations for the physical effects of the epileptic condition, ranging from spirit possession to an affliction of the gods to an imbalance of bodily substances. These explanations shared an acknowledgment that the dramatic symptoms of epilepsy must correspond to physical changes or disruptions inside the human body, expressed in vague terms and imprecise

39 Muriel Deutsch Lezak writes, "Epilepsy does not refer to a single disease entity or brain condition but to a large class of symptoms that have in common some form of episodic disturbance of behavior or perception arising from hyperexcitability and hypersynchronous discharge of nerve cells in the brain." Muriel Deutsch Lezak, *Neuropsychological Assessment*, third edition, Oxford: Oxford University Press, 1995, 312-313.

40 *The Falling Sickness*, 303.

descriptions. To a mind accustomed to the modern concept that epilepsy is a malfunction of the brain which can be treated by drugs and surgery, many of the elaborate etiologies developed by trained and educated men appear little more than conjecture or fantasy. In fact, however, an examination of traditional theories can provide important information about the ways in which a particular culture understood healing, medicine and ritual; by addressing issues of cultural relativity, it can also indicate possibilities for increased integration and cooperation between non-Western medical traditions and Western empirical medicine.

Medieval Islamic methods of healing were a complex mixture of medicine, magic and religion. Each approach might be considered equally valid; an afflicted individual could very well consult a religious shaykh, a doctor trained in Islamic medicine and a popular magician, concurrently or in any order of succession.⁴¹ That healers must have differed on the theoretical interpretation of the causes of any disease is self-evident. Certain maladies may have appeared more likely to have originated in one realm than another - a broken arm, for example, appears to have a straightforward medical explanation while a young girl who simply refuses to speak seems to show clear evidence of possession. Nonetheless, it is possible to view these cases from the opposite perspective: the broken arm may have been the result of a jinn lying in wait to trip its victim, the little girl may refuse to speak for complex psychological or physiological reasons.

41 A number of anthropological studies indicate that a willingness to apply a pluralistic approach to healing continues in Middle Eastern societies in the modern period. Morsey points out that these choices often rely as much on the social meaning of the illness as the likelihood of a cure. "The social context in which the label 'sick' is to be publicized is an important consideration in the selection of healers. For example, whereas a barren woman is likely to frequent a healer to obtain such legitimization, the physician is necessarily the choice of an agricultural co-worker who doesn't show up for work." Soheil A. Morsey, *Gender, Healing and Sickness in Rural Egypt*, Boulder, CO: Westview, 1993, 177. See also Evelyn Early "The Baladi Curative Systems of Cairo, Egypt," *Culture, Medicine and Psychiatry* 12 (1988): 65-83, Bernard Greenwood "Cold or Spirits? Choice and Ambiguity in Morocco's Pluralistic Medical System," *Social Sciences and Medicine* 15B (1981): 219-235 and Beatrix Pfleiderer, "The Semiotics of Ritual Healing in a North Indian Muslim Shrine," *Social Science and Medicine* 27:5 (1993): 417-424. Religious healing is seldom limited to a particular sect; Muslims, Christians and Jews honor each other's holy men and women, seeking spiritual advice or healing from them indiscriminantly. Yoram Alia's analysis of Rabbi Yaacov Wazanan provides clear evidence that he treated both Jews and Muslims in Morocco. See Yoram Alia, "A Jewish Healer in the Atlas Mountains," *Culture, Medicine and Psychiatry* 12 (1986): 113-135.

The undefined causes of epilepsy left it particularly vulnerable to the claims of each specialty: medical writers cited black bile and poor diet, religious scholars declared it an affliction sent by God while magicians remained convinced it was an obvious case of possession by the jinn. Yet although descriptions of the cause of epilepsy were separate and distinct, applicable to the agenda of the people who promoted them, medical, magical and religious texts shared a common framework for healing: a medical terminology embedded in Greek tradition, a belief in a multiplicity of pluralistic, at times even contradictory, treatments, a shared pharmacopoeia with similar remedies and an overall Islamic trust in God. Epilepsy presents a unique opportunity to examine the interaction of magic, medicine and religion in the medieval Islamic world. It is undeniable that healers of each persuasion possessed characteristics and traits unique to their profession; nor is it possible to claim that each did not perceive itself as a distinct tradition, superior to the others. Nonetheless, the differences in their theoretical frameworks appear to be superseded by their common desire to care for epileptic patients and cure them.

The Islamic healing tradition represents a mosaic of medical theory and customary practices from a variety of cultural backgrounds. The Qurʾān says little about medicine or healing; it does counsel patience, however, and trust in God.⁴² Although these concepts may have influenced views on healing - particular those expressed by religious scholars and the supporters of Prophetic medicine - the Qurʾān did not provide a foundation for either medical theory or practice. An examination of the Greek theory which the Islamic tradition inherited, as well as the

42 See, for example, Q. 3:200. Q. 17:82 reads: "We sent down (verses of) the Qurʾān which is a healing and a mercy to the believer." The Qurʾān itself is widely believed to have magical powers of healing, both the verses and physical contact with the book. When I was in Yemen in the summer of 1995, for example, a magical healer gave me a piece of paper with a *sūra* from the Qurʾān written on it; as part of a cure for possession, he told me to soak it in water and then drink the water. See B.A. Donaldson, "The Koran as Magic," *Moslem World* 27 (1937): 254-266, for other instances. An older example of the power of holy words is found in the introduction of vol. 1 of R. Campbell Thompson's *The Devils and Evil Spirits of Babylonia*, 2 vol., London: Luzac and Co., 1903.

Babylonian, Syrian and Christian cultural practices in which that tradition arose, provides a context for understanding Islamic healing.

The oldest Middle Eastern source for the study of epilepsy is a Babylonian text which divides epilepsy into a number of different diseases, all of them linked to the word *bennu*, meaning, like the Arabic *ṣaraʿ*, "to fall down."⁴³ Babylonian sources attribute epilepsy to demons,⁴⁴ the gods⁴⁵ and even the planet Jupiter;⁴⁶ their treatments appear mostly magical or religious in nature. Medicine, magic and religion seem to have belonged to a single discipline in Babylon. M.L. Stol points out that "their experts in medicine were primarily theologians and ritualists, something like exorcists because at that time medicine and magic were one and no distinction between religion and magic can be seen."⁴⁷ Some of their magical treatments - fumigation, for example, and the use of a stag's horn - survive in both Greek and Islamic medical works.⁴⁸ That magical treatments were integrated in the development of medicine indicates the fluidity of both disciplines; the Babylonian concept of a synthesized medical, magical and religious tradition may have led directly to the pluralistic understanding of healing so prevalent in the Middle East.

43 M.L. Stol, *Epilepsy in Babylon*, Groningen: STYX Publications, 1993, 7. Stol suggests that "to fall down" may have referred to the disease falling on the patient, rather than the patient falling on the ground. Stol, 11.

44 "The first entry of a section about seizures by this demon states: 'If, at the time it overcomes him, his right eye circles like a spindle, his left eye is full of blood, he opens his mouth time and again, he bites his tongue: Lugal-girra has seized him.'" Stol, 16-17.

45 Epilepsy was often referred to by the term 'hand' linked with the name of a God or possibly a demon; childhood epilepsy was called 'the hand of the God.' Stol, 33. It is interesting that the Greeks called epilepsy "The Sacred Disease" (a discussion of Hippocrates' famous treaty against this concept follows below); both concepts may have influenced the Christian and Muslim assertions that epilepsy was an affliction of God.

46 Stol writes: "Here (in this text) a planet - Jupiter - is seen as the specific source of one disease, this severe form of epilepsy." Stol, 15.

47 Stol, 3.

48 See Stol, 111. See also *The Falling Sickness*, 67 and Ibn Sīnā *al-Qānūn fī ṭ-ṭibb*, Bayrūt: Maktabat al-manār al-islāmīya, 1991, 79. The use of a stag's horn is also recommended in Qusṭā ibn Lūqā's ninth century treatise, *Qusṭā ibn Lūqā's Medical Regime for the Pilgrims to Mecca*, Leiden: E.J. Brill, 1992, 65.

The Greek tradition stands in direct contrast to the Babylonian understanding of disease. Numerous Greek physicians criticized magicians, accusing them of fraud and deception.⁴⁹ Religious healing was more acceptable but, when successful, it was classified as miraculous and the result of godly intervention, not the direct consequence of piety and devotion.⁵⁰

The medical understanding of epilepsy was established with the fourth century BC treatise, "On the Sacred Disease," written by Hippocrates. "On the Sacred Disease" refutes the concept that epilepsy was inflicted by the gods in the strongest terms. "Neither truly do I count it a worthy opinion to hold that the body of a man is polluted by god, the most impure by the most holy; for were it defiled, or did it suffer from any other thing, it would be like to be purified and sanctified rather than polluted by god," argues the author.⁵¹ The idea that epilepsy is considered sacred because of its amazing character is clearly absurd to Hippocrates; he points out that many other diseases, not described as 'sacred,' are equally amazing.⁵² He also dismisses magical

49 "And they who first referred this disease to the gods, appear to have been just such persons as the conjurors, purificators, mountbanks and charlatans now are, who give themselves out for being excessively religious, and as knowing more than other people. Such persons, then, using the divinity as pretext and screen of their own inability to afford any assistance, have given out that the disease is sacred, adding suitable reasons for this opinion, they have instituted a mode of treatment which is safe for themselves, namely by applying purifications and incantations and enforcing abstinence from baths and many articles of food which are unwholesome to men in diseases." Hippocrates, *The Genuine Works of Hippocrates*, trans. by Francis Adams, Huntington, NY: Robert E. Krieger Publishing Co., 1972, 347-348. Temkin points out, however, that the attitude of Greek physicians toward magic was by no means uniform, particularly in later centuries. "In the time of the Hippocratics, magic was attacked vigorously. But from the fourth century B.C. on, a great change took place. Only in the works of Soranus, the greatest representative of the methodist school, do we find an outright refutation of such remedies as has been related. The other extreme, that of physicians recognizing magicians and incantations, was probably rare too - at least among scientific physicians. For as far as the latter's works are preserved, incantations do not appear. The majority of physicians accepted various remedies from popular or magician's practices. In doing so, they were probably not always conscious of the magical background but justified their procedure by apparent experience and rational explanations." *The Falling Sickness*, 23-24. Although the physicians who incorporated magical remedies into their texts suggest a pluralism similar to that which developed in medieval Islam, it far from the unified approach to healing revealed in the Babylonian texts.

50 *The Falling Sickness*, 15.

51 Hippocrates, 350.

52 "The quotidian, tertian and quartan fevers, seem to me no less sacred and divine in their origin than this disease, although they are not reckoned so wonderful. And I see men become mad and demented from no manifest cause, and at the same time doing many things out of place...and there are many various things of the like kind." Hippocrates, 347.

prescriptions and incantations.⁵³ Epilepsy is hereditary, he claims, a disease that begins to be formed even while the fetus is *in utero*. It afflicts men and women whose brains have not properly purged the secretions after birth; the excess secretions, accumulating in the brain, cause the individual to become phlegmatic, a condition which leaves her vulnerable to a head full of noise or disease and unable to endure either sun or cold.⁵⁴ Thus, Hippocrates explains, only phlegmatic individuals are vulnerable to epilepsy, not bilious ones. He gives a clear clinical description of an epileptic attack (probably a *grand mal* seizure) including convulsions, frothing at the mouth, loss of speech and consciousness and "kicking with his feet" which might indicate collapse.⁵⁵ Although epilepsy is a result of excess phlegm in the brain, Hippocrates explains that fear, exposure to extreme heat or cold and the blowing of the south winds might precipitate an attack.⁵⁶

Hippocrates' text is the first known medical analysis of epilepsy. Although its central point - epilepsy is a disease produced by the malfunctioning of the human body and not the result of supernatural intervention - clearly influenced subsequent Greek physicians, and through them, Islamic medical tradition, it is uncertain whether or not it was translated into Arabic.⁵⁷ The work

53 Hippocrates, 350.

54 "For the brain, like the other organs, is depurated and grows before birth. If then, in this purgation it be properly and moderately depurated, and neither more nor less than what is proper be secreted from it, the head is thus in the most healthy condition. If the secretion (melting) from the whole brain be greater than natural, the person, when he grows up, will have his head diseased, and full of noises...Or, if the depuration do not take place, but it (the secretion?) accumulates in the brain, it necessarily becomes phlegmatic." Hippocrates, 352.

55 Hippocrates, 353. Temkin adds that, "The symptoms themselves...are introduced in order that they may be explained, and in order to show in this manner the natural conditionality of the sacred disease. This description is therefore not an end in itself and chapter 7 does not purport to give a complete clinical picture of all that the author knows about the epileptic attack. Owsei Temkin, "The Doctrine of Epilepsy in the Hippocratic Writings," *Bulletin of the History of Medicine* 1 (1933): 277-332, 290. Chapter three will discuss symptoms and perceptions in more detail.

56 Hippocrates, 354-355.

57 Temkin points out that both Rāzī and Ibn Sīnā must have been acquainted with "On the Sacred Disease" as they reported that Hippocrates said "the brain of the epileptic: goats, sheep and rams was full of water having a fetid smell." *The Falling Sickness*, 128; see also Ibn Sīnā, 77. Temkin also claims that Ibn Abī Uṣaybi'a attributes a treatise called *Kitāb fī l-maraḍ al-ālīha* to Hippocrates. Ibn Abī Uṣaybi'a actually notes that Galen attributed such a work to Hippocrates ("dhakara jālinūs fī l-maqāla al-ūlā min sharḥ taqaddama al-ma'rifa 'an hadhihi al-kitāb"). Although no extant copy of this work exists in Arabic, it is clear from Ibn Abī Uṣaybi'a's description ("Hippocrates

of the second century BC physician Galen exercised a far more pervasive influence on Islamic medicine,⁵⁸ and it is pertinent to examine Galen's views on epilepsy.

Galen did not invent the theory of the four humors - that viewed the human body as a balance between black bile, yellow bile, blood and phlegm - but he synthesized the theory and expanded it.⁵⁹ Like Hippocrates, Galen believed that epilepsy originated in the brain, either directly or through the stomach or the limbs. In his theory, a cold humor (either phlegm or possibly black bile) filled a cavity in the brain and obstructed the nerve endings, thus preventing the flow of the psychic humors; epileptic convulsions were the result of the nerve endings attempts to shake themselves free.⁶⁰ Galen's theoretical views form the basis for the views on epilepsy shared by the Islamic physicians examined later in this chapter, Rāzī and Ibn Sīnā. The concept of humoral balance and its positive or negative effects on the human body influenced religious and magical writers as well.

A third factor vied with traditional magic and empirical science for influence on perceptions of illness and healing in medieval Islam: a religious perspective. Michael Dols has shown that Judeo-Christian concepts of healing played an important role in the way that the Islamic world understood mental illness.⁶¹ A double edged view of healing arose in Christianity, later reflected in Islamic *ḥadīth*.⁶² One perspective claimed that if God had sent a disease, either

refutes in it those who think that God causes epilepsy; the reason is (that) it is a sickness among sicknesses") that Islamic physicians were well aware of its contents. See Ibn Abī Uṣaybi'a, 57.

58 In Ibn Abī Uṣaybi'a's biographical dictionary of physicians, the entry on Galen consists of more than 49 pages. (Even an extraordinary physician like Rāzī only merited twelve.) Manfred Ullmann points out that Galen's teachings determined Arabic medicine in all essential points from ideas about the humors, the three digestions and the movement of the blood to the teleological thinking that sought to rationalize and explain each organ. Ullmann, 10-11.

59 Owsei Temkin, *Galenism: Rise and Decline of a Medical Philosophy*, Ithaca: Cornell University Press, 1973, 17, 19. Note, however that Galen did invent the theory of the nine temperaments.

60 See S.W. Jackson, "Galen - on Mental Disorders," *Journal of the History of the Behavioral Sciences* 5 (1969): 356-384, 377 and "Galen's Advice for an Epileptic Boy," trans. by Owsei Temkin, *Bulletin of the History of Medicine* 2 (1934): 179-189, 179.

61 *Majnūn*, chapter seven.

62 Muḥammad ibn Ismā'īl al-Bukhārī, *Ṣaḥīḥ al-Bukhārī*, 9 vol., Dihli: Asaḥh al-Matabi, 1938. "The Prophet used to treat some of his wives by passing his right hand over the place of ailment and used to say: 'Oh Allah, Lord of the people! Remove the trouble and heal the patient, for You are the Healer. No healing is of any avail but Yours:

to punish or to test, then it was to God alone that the ill person should turn for succor.⁶³ Opponents of this idea believed that if God permits disease, he also permits a cure through human agents.⁶⁴ These conflicting beliefs were expressed in two trends in early Christianity: the recommendation and use of prayer, both public and private, for healing, and the establishment of hospitals by Christian orders and governments.⁶⁵

Christianity developed in a pagan environment suffused with beliefs about demons and possession; many of these beliefs infiltrated and influenced Christian doctrine. Peter Brown points out in "Sorcery, Demons and the Rise of Christianity: From Late Antiquity to the Middle Ages" that many early Christians viewed their Church as a protection against sorcery⁶⁶ and, among those who did not belong to the Church, the powers of Christianity's founders, Jesus and Peter, and of its clergy, were regularly ascribed to sorcery.⁶⁷ The porous boundaries between religion and magic in the early Christian centuries permitted both to shape the average Christian's understanding of illness and healing. D.W. Amundsen and G.B. Ferngren point out that "while at first Christians thought the traditional magic to be sinful, in many forms it was also regarded as efficacious; it was only a matter of time before some magical practices began to be adopted by Christians."⁶⁸ Amundsen and Ferngren appear to believe there was at some point a "pure" Christianity which condemned the use of magic; it seems more likely, however, that there were

healing that will leave behind no ailment," Bukhārī, vol. 7, p. 428. Other ḥadīths suggest that, in fact, other healing is of some avail: "There is no disease that Allah has created, except that he has also created its treatment," Bukhārī, vol. 7, p. 395.

63 Many people continue to subscribe to this idea in modern society; Christian Scientists and the controversial lawsuits that have arisen in the United States over providing medical care to their children is only one example.

64 D.W. Amundsen and G.B. Ferngren, "Medicine and Religion: Early Christianity Through the Middle Ages," in M.E. Marty and K.L. Vaux, eds., *Health/Medicine and the Faith Traditions*, Philadelphia: Fortress Press, 1982: 96-120, 100.

65 See Amundsen and Ferngren, 102 and 108; see also "Islamic Hospital," 370.

66 "...the Christian Church offered an explanation of misfortune that both embraced all the phenomena previously ascribed to sorcery, and armed the individual with weapons of satisfying precision and efficacy against its suprahuman agents." Peter Brown, "Sorcery, Demons and the Rise of Christianity: From Late Antiquity to the Middle Ages," in *Religion and Society in the Age of Saint Augustine*, New York: Harper and Row, 1972:119-147, 132.

67 Brown, 129.

68 Amundsen and Ferngren, 104.

simply different conceptions of what it meant to be a Christian, some condemning magic while others supported it.

This view is confirmed, to some extent, by the treatment of epilepsy in religious texts. Both Christian and Jewish scriptures offer a surprising legitimacy to the idea of epilepsy as possession. The Hebrew word for epilepsy, *nikhpe*, meaning "to be seized" and the recommendation of amulets and indications by the Sages of the Talmud suggest that they believed in a demonic origin of the disease.⁶⁹ Other Talmudic and midrashic sources offer interpretations that leave no room for doubt: "It happened that someone saw the demon Ketev Meriri, he at once fell on his face and was *nikhpe*."⁷⁰ Although the Jewish scriptures indicate that epilepsy was also perceived as a medical problem - scholars discussed questions of heredity and contagion, for instance⁷¹ - nonetheless, they also permit a clear religious judgment of epilepsy as possession.

An even more specific example is found in the New Testament. Mark 9:14-29, Matthew 17:14-20 and Luke 9:37-43 all record parallel examples of the man who asked Jesus to cure his son of the illness (or possession) which afflicted him. Although not described as epilepsy, the symptoms are clear: convulsions, foaming at the mouth and an inability to speak. The boy was brought before Jesus who "rebuked the unclean spirit, saying to it, 'You dumb and deaf spirit, I command you, come out of him and never enter him again.' And after crying out and convulsing him terribly, it came out..."⁷² In the third century, church authorities asserted their belief that this

69 Koppek, 4.

70 Midrash Shohar Toh, 91; cited in Koppek, 5.

71 Koppek, 6-7.

72 Mark 9:25-26. Matthew 17:14-20 reads: "And when they came to the crowd, a man came up to him and kneeling before him said, 'Lord, have mercy on my son, for he is an epileptic and he suffers terribly; for often he falls into the fire and often into the water. And I brought him to your disciples and they could not heal him.' And Jesus answered, 'O faithless and perverse generation, how long am I to be with you? Bring him here to me.' And Jesus rebuked him and the demon came out of him and the boy was cured instantly." Luke 9:37-43: "On the next day, when they had come down from the mountain, a great crowd met him. And behold, a man from the crowd cried, 'Teacher, I beg you to look upon my son, for he is my only child; and behold a spirit seizes him, and he suddenly cries out; it convulses him until he foams, and shatters him, and will hardly leave him. And I begged your disciples to cast it out but they could not.' Jesus answered, 'O faithless and perverse generation, how long am I to be

account clearly meant epilepsy was caused by demon possession, bending the line between religion and the supernatural even further.⁷³

To place Islamic healing concepts into the context of this pluralistic, multicultural background requires a detailed examination of the texts themselves. Medical texts are most accessible and, in some ways, most revealing. An in-depth look at epilepsy in the work of four medieval writers - two physicians, a proponent of Prophetic medicine and a magician - offers some understanding of the interaction and interconnection of the different methods and theories of healing.

Rāzī and Ibn Sīnā are two of the most well-known Islamic physicians, both for their innovative approaches to medicine and for the long-term use their texts found in western universities.⁷⁴ Rāzī was born in Rayy in the ninth-century; he studied as a musician until a trip to Baghdad and an introduction to medicine changed his life. He then devoted himself to the study of medicine and philosophy, producing over 200 tracts and treatises before he died in the early tenth century.⁷⁵

A number of Rāzī's works have earned him praise and accolades from both traditional Muslim historians and modern Orientalists. Ibn Abī Uṣaybi'a writes: "He occupied himself with learning the craft and he was the Galen of the Arabs."⁷⁶ Western scholars place Rāzī in a clinical category all his own. Max Meyerhof, for example, says that "Rhazes was without doubt the greatest of the very few physicians of the Islamic period who found their way to Hippocrates and

here with you and bear with you? Bring your son here.' While he was coming, the demon tore him and convulsed him. But Jesus rebuked the unclean spirit and healed the boy, and gave him back to his father."

73 *The Falling Sickness*, 91-92. For an alternative interpretation of the meaning of the epileptic boy and his condition, see Janz.

74 For more information on the ways in which European universities and scholars used and transformed these works, see N.G. Siraisi, *Avicenna in Renaissance Italy: The Canon and Medical Teachings in Italian Universities after 1500*, Princeton: Princeton University Press, 1978. Although Siraisi focuses primarily on Ibn Sīnā, she does direct some attention to Rāzī as well; see, for example, 85, 178.

75 Ibn Abī Uṣaybi'a, 421-427.

76 Ibn Abī Uṣaybi'a, 415.

the inestimable value of unbiased clinical observation.”⁷⁷ Although scholars acknowledge the tremendous research that produced works like *A Treatise on the Small Pox and the Measles*, Rāzī's reputation rests mainly on his enormous compendium of medicine, *al-Hāwī*, a 30 volume encyclopedia that collected prescriptions, theories and remedies from throughout the Muslim world and included Rāzī's own observations as well.

Al-Hāwī contains 14 pages on epilepsy.⁷⁸ Rāzī says that epilepsy is generated by the brain; he agrees with Galen on two points: the cause is a thick mixture of phlegm, or possibly black bile, and the disease originates from the brain or from the effects that the stomach or lower limbs have on the brain.⁷⁹ The most notable symptom of the third kind of epilepsy is a cold wind rising from the limbs.⁸⁰ Strong convulsions that appear accompanied by a thick foam or froth at the mouth indicate a thick, cold mixture in the brain. Rāzī quotes Galen, saying that the third stage of epilepsy is similar to a stroke. He also notes that epilepsy may lead to semi paralysis (in the case of excess phlegm) or to melancholy (in the case of excess black bile).⁸¹ The melancholic person may also become an epileptic, indicating the close relation in the perceptions of the two conditions.

Other sources, also following Greek medical theory, claim that the majority of cases of childhood epilepsy are caused by excess moisture in the brain. Epilepsy that comes from vapors, on the other hand, rises from the stomach. Ahrun, says Rāzī, wrote that decomposition of the brain came from bad moisture. Both he and the Arab physician ‘Alī ibn Rabban aṭ-Ṭabarī recorded that great convulsions are an indication of great pain.⁸² Ṭabarī also believed that

77 "Clinical Observations," 312.

78 Rāzī, *Kitāb al-hāwī fī ṭ-ṭibb* (*Continens of Rhazes*), 21 vol., Hyderabad: Osmania Oriental Publications Bureau, 1955, vol. 3, 117-131.

79 Rāzī, 117.

80 Temkin points out that Galen used the term "breeze" to describe the aura that preceded an epileptic seizure; another Greek author, Aretus, referred to "a great rush to the head." *The Falling Sickness*, 39.

81 Rāzī, 127.

82 For Ṭabarī's views on epilepsy, see ‘Alī ibn Rabban aṭ-Ṭabarī, *Firdaws al-hikma fī ṭ-ṭibb*, ed. M.Z. Siddiq, Berlin: Buch-u. Kunst-druckerei, 1928, 63-71.

epilepsy killed women and young boys with thin blood. He, like Galen, claimed that epilepsy resulted from excess phlegm and (rarely) black bile; sometimes it came from moisture in the brain.

Epilepsy could result from the brain alone, or from the brain in conjunction with another organ: the stomach, some of the limbs or the womb; it might accompany a miscarriage. The patient with epilepsy from the stomach should be careful of fasting, an act which might precipitate convulsions. Small children are most vulnerable to the disease; it seldom strikes the aged. If the patient suffers continuous convulsions, Rāzī notes, he will probably die soon. If convulsions affect a child in the time of puberty or a woman during menstruation, it will be more difficult to cure.

Rāzī's work is clearly written within the context of Greco-Islamic medicine; the terminology is unmistakable. Phlegm, black bile, melancholy and semi paralysis are all terms familiar from Greek medical works. Rāzī's debt to Galen is equally evident: epilepsy comes from the brain, the result of the presence of too much black bile; in its third stage it resembles a stroke. Despite the strong imprint left on the text by Greek medicine, however, the work is by no means a mere translation or even an imported theoretical view with no relation to Islamic culture. It is noteworthy that Rāzī quotes half a dozen different authorities, many of whom (including Ṭabarī) are Arab. The significance of this will become clearer in the second chapter of this work, which deals with methods of treatment and remedies. Here it is important to realize that all sources, including Rāzī's own observations, are given equal authority; the Greek works are not listed first, nor necessarily all together.⁸³

Equally important, Rāzī does not appear to have a synthetic view of the cause of the disease. He states unequivocally that epilepsy is a disease of the brain - and then adds that it is a

83 Modern authors who translate or cite *al-Ḥāwī* tend to place the Greek authors first. Musallam writes, for example, "The birth control notes (of *al-Ḥāwī*) have been fettered out by the present editor and arranged according to authority." Musallam, 275. See also *Majnūn*, 50.

disease of the brain and the stomach, and a disease that comes from the lower limbs. Epilepsy is caused by an excess of black bile, epilepsy is caused by an excess of phlegm. Epilepsy may lead to semi paralysis, it may lead to melancholy, it may come from melancholy. These statements may or may not contradict each other according to the medical theories of the Greeks; the more important point is that Rāzī did not perceive them as contradictory. Islamic scholarship took a pluralistic view to the teachings of the Prophet: in some *ḥadīth* collections, *ḥadīth* that contradicted each other were placed side by side. Hodgson points out that the historian Muḥammad ibn Jarīr at-Ṭabarī includes many incompatible statements in his biography of the Prophet; he presents all the information and lets the reader choose to believe any, all or none of the facts.⁸⁴ Rāzī appears to have compiled *al-Ḥāwī* in a similar fashion, far removed from the Greek author who wrote *On the Sacred Disease*, for example. Rāzī's information and terminology may have been primarily Greek but his method of presentation resembles that of the Muslim historian more than the Greek scientist.

Ibn Sīnā, the second important Islamic physician discussed here, lived about a hundred years after Rāzī; he was an eclectic scholar who immersed himself in medicine and philosophy.⁸⁵ His most important medical work, *al-Qānūn fī ṭ-Ṭibb*, represents a more synthesized understanding of medicine than *al-Ḥāwī*.⁸⁶ *Al-Qānūn*'s discussion on epilepsy quotes only Galen

84 Hodgson, vol. 1, 352-357.

85 Numerous works have been written about Ibn Sīnā; perhaps the most recent biography from a medical perspective is Sleim Ammar's *Ibn Sina, Avicenne: la vie et l'oeuvre*, Tunis: L'Or du temps, 1992. For brief, comprehensive biographical information, see Lucien LeClerc, *Histoire de la medecine arabe*, 2 vol., New York: Burt Franklin, 1876, vol. 1, 466-477, the *Encyclopaedia of Islam*, second edition, vol. 3, 941-947, "Ibn Sīnā" and Ibn Sīnā's biography, *The Life of Avicenna*, trans. by William E. Gohlman, Albany: State University of New York Press, 1974.

86 *Al-Qānūn* is divided into five books: the first deals with generalities (anatomies, humors, temperaments and environments), the second with materia medica, the third with special pathology and diseases, the fourth with general pathology and the fifth with drugs. See Alfred L. Ivry, "Ibn Sīnā" in M.J.L. Young, J.D. Latham and R.B. Serjeant, eds., *Religion, Learning and Science in the Abbasid Period*, Cambridge: Cambridge University Press, 1990, 356-359; see also Ibn Sīnā.

and Hippocrates, but it contains a longer and more sophisticated section on medical theory and includes both immediate and secondary causes of the disease.⁸⁷

Epilepsy, says Ibn Sīnā, is a disease which prevents the proper performance of the body's senses and movements. Caused by the eruption of a partial barrier (the result of an excess humor), it prevents the epileptic from standing upright, disrupts his breathing and is accompanied by convulsions.⁸⁸ Unlike Galen and Rāzī, Ibn Sīnā does not attempt to specify which humor creates the barrier; he cites some scholars as claiming that, when phlegm is the cause, it is accompanied by trembling with thick foam, no convulsions and restlessness while others state that black bile blocks the brain completely and is recognizable by restlessness.⁸⁹ He does agree with the earlier scholars on a number of secondary causes, however: southern winds, too much moisture in the brain and, possibly, melancholy. In addition, he places people who suffer from indigestion and women and boys with "little blood" on this list.⁹⁰ He also acknowledges that, although epilepsy is a disease of the brain, it may have its origin in the spinal column; a third form of the disease results from bad vapors which damage the essence of the body, causing the obstruction of the blood and the collapse of the epileptic. A special kind of epilepsy attacks women in the womb.

Ibn Sīnā compares the physical bodily actions that cause epilepsy to those that cause hiccups or sneezing; epilepsy, he says, is a very large, very strong sneeze, with the difference that, when sneezing, the body feels a decisive push to the front while in an epileptic attack, the body feels a decisive push to all sides.⁹¹ He also compares the internal physical reaction to the bodily changes felt when the poison of a scorpion is released.

87 Ibn Sīnā, 76-84

88 Ibn Sīnā, 77.

89 Ibn Sīnā, 79.

90 Ibn Sīnā, 80.

91 Ibn Sīnā, 77. J.O. Leibowitz and S. Marcus note that the association of sneezing with recovery can be traced to ancient times. see Abraham ibn Ezra, 38. Abraham ibn Ezra describes a magical treatment for epilepsy that includes forcing a she-goat to sneeze, wrapping the mucus in sheepskin and wearing it around the neck. Leibowitz and Marcus note that this remedy first appeared in the work of Alexander of Tralles.

Ibn Sīnā goes on to list a number of physical and physiological indications of an epileptic attack: anger, blowing in the body, weakness in the movement of the tongue, emotional reactions like fear, psychological ramifications like bad dreams and forgetfulness, and a tightness in the chest. The worst seizures, he explains, begin with great shaking and trembling, followed by continuous and increasingly strong convulsions. Epilepsy caused by phlegm can be distinguished by the color of the froth and the color of the blood and the act of clenching the teeth. Epilepsy caused by black bile (which, he explains, comes from burned yellow bile) originates in black blood and spicy food; it can be diagnosed by the color of the face and eyes, the dryness of the nose and tongue and the fact that it causes natural blood to grow turbid. In examining illnesses of the head, Ibn Sīnā advises other doctors to look for symptoms like dizziness, darkness of the eyes, trembling and a yellow color in the face. From the brain alone, he continues, come maladies indicated by signs like forgetfulness, stupidity and flippancy. The epileptic displays a number of different psychological effects of the disease, including cowardice and fright, laziness, heaviness and forgetfulness.⁹²

Ibn Sīnā's analysis differs from Rāzī's in several important ways. He is less dependent on authoritative opinion, for one thing, and his text is more straightforward, discussing epilepsy in progression - overall causes, immediate causes, symptoms; the final section deals with treatments and cures - rather than adopting Rāzī's approach, placing a piece of random information beside another piece of random information and returning to either pages later in the text, when he happened to think of it.⁹³ He attempts to solve the phlegm vs. black bile debate by considering

92 Ibn Sīnā, 81-82.

93 In Rāzī's defense, however, it must be acknowledged that many scholars - both traditional Muslim historians and modern Orientalists - have viewed Rāzī's work as either a notebook for his own personal use or as a series of notes for a comprehensive work on medicine that he never had a chance to compile. Al-Majūsī writes, "Since I do not deny his (Rāzī's) contributions, nor do I cast doubt on his knowledge of medicine and his ability to write good books, I suspect that, relative to Rāzī's knowledge and wisdom, the problem with *al-Hāwī*, is one of two. Either Rāzī wrote down everything he knew of medicine, meaning it to be a private reference book, to which he may have occasion to resort when an old man and his memory fails him...Or he meant it to be a book for which he will be remembered, and therefore took notes on everything, with the hope of getting back to it." from al-Majūsī, *Kāmil aṣ-*

them different *forms* of the same disease; he takes a similar approach to epilepsy that arises from different parts of the body: epilepsy arising from the limbs, the stomach, the brain, can be understood as having different causes and different symptoms. Nonetheless, while this narrative approach attempts to make sense out of the available information, it continues to offer all kinds of contradictory approaches and understandings. Placing Ibn Sīnā within the context of a coherent Greco-Islamic medical tradition shows that the physician has not removed or replaced any contradictory theories - if anything, he has added his own suggestions about sneezing and scorpions - but has simply attempted to make them compatible. I would argue that this aspect of his writing suggests that Ibn Sīnā wrote within a distinctly Islamic tradition. Medieval Islamic physicians considered Galen's work a complete compendium of the science of medicine, containing all the information necessary to interpret and understand disease.⁹⁴ This appears to be a counterpart to the Islamic perspective of the Qur'ān, which Muslims believe encompasses all religious knowledge. Ibn Sīnā's attempt to synthesize the medical knowledge he possessed and create a single, compatible narrative resembles the attempt of jurists and theologians to make sense of the Qur'ān through concepts like abrogation and *asbāb an-nuzūl*: it is the action of a physician writing in a distinctly Islamic tradition, influenced by Islamic norms and sensibilities.

The movement promoting Prophetic medicine arose several centuries after Ibn Sīnā's and Rāzī's deaths, an effort to stamp out Greek influences and make medical treatment more inherently Islamic. Proponents of Prophetic medicine insisted that the Prophet possessed complete knowledge of all aspects of human life which he had passed on to his followers; anyone interested in treating illness or disease could find the most comprehensive methods of treatment

ṣinṣā, trans. by Musallam and quoted in *Sex and Society*, 242. See also Young, 373 and "Clinical Observations," 327.

94 Ibn Rīdḡān, for example, wrote that "Galen wrote commentaries in order to bring the medical work of Hippocrates to perfection. His abstracts and commentaries have left nothing out. Consequently, later books are superfluous; and to transcribe or reflect on their contents would hinder students from studying medicine." Quoted in Iskandar, 243.

in the remedies the Prophet recommended in *ḥadīth*.⁹⁵ Any number of scholars produced manuscripts including detailed examples and suggestions for following Prophetic *ḥadīth*; probably the most famous of these belonged to Ibn Qayyim al-Jawzīya, a thirteenth century religious scholar with a solid background in *tafsīr*, *ḥadīth* and *fiqh* who was a prominent follower of Ibn Taymīya.

Ibn Qayyim's book *The Medicine of the Prophet* includes a detailed chapter on epilepsy. The chapter begins with a famous *ḥadīth* on a woman with epilepsy:

"Ibn 'Abbās said: 'Do you want to see a woman of the people of Paradise? Yes, I told him. He said, "This black woman came to the Prophet and said to him: 'I have epilepsy and I uncover myself (during seizures). Will you pray to God for me?' The Prophet said, 'If you will bear it with patience, then you will be in Paradise,⁹⁶ or if you want, I can pray to God for you.' The woman said, 'I will be patient. But I uncover myself (during seizures), will you pray for me that I will not be uncovered?' And he prayed for her."⁹⁷

This *ḥadīth* emphasizes the two most important themes of Ibn Qayyim's chapter on epilepsy: epilepsy is an affliction of God that can be most effectively treated through religious means, depicted here as prayer but described elsewhere in the chapter as exorcism and reading the Qur'ān, and the importance of obedience to God's will. Ibn Qayyim links the concepts of health and illness to piety; later in the chapter, he writes, "The treatment of epilepsy which

95 It is interesting that the Prophetic medicine movement began at a time that has typically been labeled 'a period of decline' in Islamic history. Although Hodgson (Vol.2) presents a different perspective, it is nonetheless worth noting that after several centuries of uninhibited adoption and adaptation, Islamic culture began to grow more conservative in a variety of fields, particularly Islamic law (see, for example, Joseph Schacht, *An Introduction to Islamic Law*, Oxford: Clarendon Press, 1964, chapter ten). Whether Muslim scholars felt that new or foreign concepts and ideas threatened Islamic society or whether they truly believed that Islam needed to be purged of its 'unIslamic' attributes is debatable; the result, however, was undoubtedly a less flexible, more narrow minded view of a number of different aspects of society, including medicine.

96 Other *ḥadīths* also claim that the sufferers of epilepsy as well as other chronic diseases will be rewarded with a place in Paradise. (See Bukhārī, vol. 7, 422, for a list of ailments that entitle the sufferer to enter heaven.) Plague is included in the five Muslim martyrdoms; along with those who die in battle, those afflicted with the plague are certain to reach paradise. *The Black Plague*, 113.

97 Ibn Qayyim al-Jawzīya, *aṭ-Ṭibb an-nabawī*, Bayrūt: Maktabat al-manār, 1992, 51.

results in a healthy mind is only possible through the faith that was brought by the Prophet."⁹⁸ The epileptic woman's willingness to bear her illness patiently is marked as an acceptance of God's divine plan and will be rewarded with a place in Paradise.

Ibn Qayyim's beliefs correspond to early Christian concepts of healing and disease: the emphasis on prayer, the use of ritual to protect against illness or evil spirits and the imperative placed on accepting God's will are notable developments in Christian teachings. That Christianity and Islam shared a similar approach to basic healing patterns suggests that either Christian cultural patterns exerted a profound influence on subsequent Islamic society or, perhaps more likely, that both religions inherited a common perspective that linked healing to God. Ibn Qayyim's understanding of the direct causes of the disease, as opposed to his indirect, God-centered world view, is equally revealing. He writes that there are two kinds of epilepsy, the kind caused by evil spirits and the kind caused by a humoral imbalance. He proceeds to examine each kind of epilepsy in turn, beginning with a vehement refutation of the medical scholars who deny the existence of epilepsy caused by evil spirits. In support of his position, he quotes Hippocrates as saying, "This cure will only work for the kind of epilepsy caused by humors and substances; this cure will not work for epilepsy caused by evil spirits";⁹⁹ an extremely unlikely statement to come from the author of *On the Sacred Disease*! He then recounts a brief history of the disease in which Galen and other scholars called epilepsy the sacred disease because it originated in the brain and damaged the purest part of the human being. This view was adopted by atheists (*zanādiqa*) who promoted the idea that the humors were the only source of epilepsy. "And for those with a brain and knowledge, they will laugh at this ignorance and the weakness of their (the *zanādiqa*) brains."¹⁰⁰

98 Ibn Qayyim, 53.

99 Ibn Qayyim, 51. It is interesting to note, however, that both Ibn Sīnā, 79 and Ibn Qayyim, 54 agree that Hippocrates said epilepsy will stay with him (the epileptic) until death.

100 Ibn Qayyim, 52.

Ibn Qayyim goes on to give examples of his personal experiences observing religious scholars cure people of epilepsy by exorcising the evil spirits or reading the Qur'ān. He states, any number of times, the efficacy of prayer and religion in healing this illness. It is interesting to note, however, that the second half of the chapter is devoted to an examination of the rare occasions in which epilepsy is caused by humoral imbalance. Its cause is a thick, viscous humor which obstructs the inner passages of the brain and prevents the execution of the senses and movements; it may also be caused by a wind or bad vapors rising from one of the limbs. The brain reacts by contracting, an act which causes trembling in the limbs; the epileptic cannot stand and falls to the ground.

This kind of epilepsy, says Ibn Qayyim, is chronic; for this reason, he suggests that the woman in the *ḥadīth* probably suffered from humoral imbalance rather than spirit possession. As Michael Dols points out, this permits Ibn Qayyim to link even epilepsy resulting from physical causes to religious healing.¹⁰¹ Since the Prophet offered the ill woman two options - to pray to God or suffer her illness in silence, in exchange for a reward in Paradise - and made no mention of seeking medical attention, Ibn Qayyim implies that the Prophet's followers should accept one of these two options.

Ibn Qayyim's text was written with a different purpose, intent and audience¹⁰² than the works of Rāzī and Ibn Sīnā. On some level, it is clearly a piece of propaganda, designed to discredit the medical physicians and call Muslims to Prophetic healing. Yet Ibn Qayyim's

101 "...he draws the conclusion from it that it is permissible to put aside treatment and medication. The treatment of spirits with prayer achieves what cannot be attained by that of the physicians; the influence and effects of prayer on the body are greater than that of physical remedies." *Majnūn*, 254 (n.).

102 Fazlur Rahman has pointed out that Prophetic medicine with its untechnical vocabulary and simple remedies may well have had a stronger impact among the masses who did not have access to the complicated and sometimes expensive prescriptions and medical care provided by the Greco-Islamic tradition. (See Fazlur Rahman, *Medicine, Health and the Faith Traditions: Islam*, New York: Crossroads, 1989, 154.) This may be accurate for the rural population of the Muslim world, although we have little documentation about their medical traditions; it seems unlikely to be true for the poor populations in the cities who had access to clinics and hospitals that practiced some form of Greco-Islamic medicine. In *al-Khiṭaṭ*, Maqrīzī writes, "The number of admissions to the hospital was not fixed; all had access to it, without distinction between rich and poor." Cited in *Majnūn*, 122.

dismissal of the medical tradition is revealing in itself. He accepts the humoral theory - a theory which he forebears to claim is reported in Qurʾān and *ḥadīth*¹⁰³ - and even accepts its place in the cause of the disease in question; equally significant, he cites a major Greek scholar, Hippocrates, in support of his opinion.¹⁰⁴ What Ibn Qayyim refutes, what he finds "laughable," is the idea that either the humors or Greek medicine can give a comprehensive, complete understanding of the disease. Ibn Qayyim, like Rāzī and Ibn Sīnā, believes that human understanding of disease can only be complex and incomplete. He places his own pluralistic interpretations of the causes of disease - God's will, evil spirits, imbalanced humors - within a framework that is composed of both religious and empirical elements. Note the Islamic terminology, the use of *ḥadīth* and the overall belief in God; note the Greek terminology, the citing of Greek medical scholars and the acceptance of the humoral theory as a frame of reference. No one could claim that Ibn Qayyim wrote in the same genre as Rāzī and Ibn Sīnā; no doubt they were prominent among the scholars he criticized so strongly. Nonetheless it seems clear that all three scholars wrote from within the borders of the same tradition, simply from different perspectives.

The pluralistic healing systems of the modern Muslim world include western medical practitioners, traditional Greco-Islamic medicine¹⁰⁵ and religious faith healers;¹⁰⁶ for the ill, particularly the mentally disturbed, magic provides another option. Ritual healing cults flourish in the Middle East: both the Ḥamadsha in Morocco and the Zār cult in Egypt and the northern

103 Elgood, 2.

104 Suyūṭī writes, "Hippocrates was the chief of this Art (medicine) and his principles in the Art are the correct principles. After him came Galen, who too was a leader in the Art." Elgood, 129.

105 Bernard Greenwood claims that Galenic medicine still survives in Morocco, in a somewhat attenuated form, through Moroccan understandings of health and food. "What remains of the full Galenic physiology of the four humours modified by the four qualities, is practically confined to the opposites of heat and cold. There are hot and cold foods and environmental factors, whose imbalance in the body produces hot or cold illnesses that are treated by foods of the opposite quality." See Greenwood, 220. For more information on Greek medicine as it survives in the subcontinent, see note 17 of the introduction.

106 Joseph Hes, "The Changing Social Role of the Yeminite Mori," in Ari Kiev, ed., *Magic, Faith and Healing*. New York, 1964: 364-384, provides one example of this; Beatrix Pfleiderer provides another. Also see Yoram Alia.

Sudan provide the mentally or emotionally unstable with magical treatment for their illnesses.¹⁰⁷ The majority of this magic presupposes that the jinn are at the root of most mental troubles and treatments take the form of interceding with the jinn or placating them.

A number of important studies have attempted to reconstruct these treatments so that they can be understood within the rational context of western psychiatry. Vincent Crapanzano's work, *The Hamadsha*, suggests that the opportunity to release myriad built-up and repressed emotions allows the mentally afflicted patient to relieve the anxiety that was causing emotional stress.¹⁰⁸ Janice Boddy sees female involvement in the Zār cult as a chance for women to assert the political and social power that patriarchal society denies them.¹⁰⁹ Beatrix Pfleiderer is only one of a number of scholars who argues that spirit possession permits individuals, either consciously or subconsciously, to manipulate situations over which they would otherwise have little control.¹¹⁰

107 Although the origins and development of healing cults in the Muslim world are not well documented, information from Leo Africanus suggests that they were well established by the early sixteenth century. He describes a cult in which women joined a guild of female diviners, telling their husbands that a demon had entered them and they needed to work freely with the guild in order to regain their health. It is interesting that Leo Africanus condemns this cult as merely an opportunity for women to indulge in lesbian sexual gratification; this suggests that, like modern western scholars, he was interpreting the cult in terms that may have made more sense to him than to the women participating. Leo Africanus, *Description de l'Afrique*, 2 vol., ed. and trans. by A. Épaulard, Paris: Librairie d'Amerique et d'Orient, 1956, vol. 1, 217-218.

108 "The patient is given a socially sanctioned opportunity for the stormy discharge of emotions rooted in traumatic experiences of the past or in psychic conflicts of the present and he experiences a reduction of anxiety and a consequent alleviation or elimination of the anxiety which produced his symptoms. He works through or acts out his conflicts or relives his traumatic experiences." Crapanzano, 220. Crapanzano's study, while important, reformulates the experience of the *Hamadsha* - who see themselves as "curers of the devil-struck and the devil-possessed," Crapanzano, 4 - in terms familiar to a western audience that may not have the conceptual tools to understand the *Hamadsha*, much as Native Americans might have called guns they had never seen before 'fire sticks.'

109 Boddy, chapter one. An alternative theory claims that the high percentage of women involved in possession cults is a result of poor nutrition. See, for example, Alice B. Kehoe and Dody H. Giletti, "Women's Preponderance in Possession Cults: The Calcium Deficiency Hypothesis Extended," *American Anthropologist* 83 (1981): 549-561.

110 "My perspective: T's spirit possession had allowed her to refuse the role of being at marriageable age - an external demon was no fault of T. or her family, they were all victims." Pfleiderer, 420. While investigating spirit possession in Yemen in 1995, I came across a similar case: a young girl from the south had been engaged to a much older man against her will; soon after that, she was afflicted by a jinn and her family took her from religious healer to religious healer, none of whom could exorcise the demon. The man who told me this story was a religious healer himself who had recognized that the girl was not, in fact, possessed, and sent her family back to their village. It is interesting to note that at least some religious healers identify certain cases as use and abuse of the prevalent beliefs in possession while accepting the legitimacy of others; as far as I know, there has been no academic research done on this topic as yet.

In accord with this approach, Soheil Morsey examines the case of Ghalia, a young girl in rural Egypt who was diagnosed as suffering from epilepsy by a physician. Ghalia was caught in the middle of a power struggle between her brother, who wanted her to come and work for him in Cairo and her mother, who believed that such work was detrimental to Ghalia's health and future. Ghalia's mother rejected the diagnosis of epilepsy in favor of possession because the latter affliction validated Ghalia's resistance to her brother's wishes in a way that the medical condition did not.¹¹¹ A similar incident, also recorded by Morsey, involved a woman who insisted on describing her son's illness as possession, despite the doctor's diagnosis of epilepsy; her son, however, "who, like his literate peers, tries to distance himself from the 'ignorance' of the *fellaḥīn*, prefer(red) the physician's diagnosis."¹¹² The understanding and interpretation of epilepsy remains flexible in the late twentieth century, able to accommodate the social values of epileptics and their families; when necessary, the same case of epilepsy can be constructed in a number of different ways.

Modern anthropological studies make it clear that the victims of illness and their families approach magical healers when they feel the magical healer is most likely to treat the illness successfully. A number of different elements - belief in magic, symptoms of possession or social considerations - may contribute to this decision. Magical healing is an integral part of the pluralistic healing systems of the modern Muslim world; it is a different branch of healing, perhaps, but nonetheless a respected and accepted part of the healing tradition.¹¹³

111 "...as *maʿzura*, the child's refusal to obey her brother's wishes, mediated by her mother's and the healer's judgment, served as a socially sanctioned way of resisting the relatively powerful brother's demands...such rationalization represents a much more significant line of argument than the physician's shameful diagnosis of epilepsy." Morsey, 140.

112 Morsey, 128.

113 Beatrix Pfleiderer notes with some ethnocentric surprise that among the residents of a Muslim shrine in northern India were a well-educated Catholic couple, both physicians and the parents of a mentally disturbed daughter and son. I would argue that, in fact, it is hardly surprising. Medicine, religion and magic all play an intricate role in healing in the Muslim world; although sometimes the practitioners of one branch denigrate or dismiss those who practice alternate forms of healing, in many cases the different kinds of healing co-exist peacefully and even offer each other referrals. See Pfleiderer, 418. Bernard Greenwood describes the pluralistic healing system in Morocco as one which permits a syncretic diagnosis using concepts and treatments based on the

An examination of the chapter on epilepsy in aṣ-Ṣanawbarī al-Hindī's *ar-Raḥma fī ṭ-ṭibb wa l-ḥikma*, a fifteenth century magical work about healing, indicates that medieval Islamic magical concepts of illness belong to the same Islamic tradition as medical and religious ones.¹¹⁴ Ṣanawbarī begins by locating his work within a Greco-Islamic medical framework: he describes epilepsy as a ruined humor in which the *kaymūs* (combination of humors) has settled in the cavity of the patient's brain.¹¹⁵ He appears to agree, on some level, with Ibn Qayyim's assertion that there are different kinds of epilepsy: the kind caused by humors, which he describes as epilepsy (*ṣarʿ*) or madness (*junūn*), and epilepsy caused by the jinn.¹¹⁶

Ar-Raḥma fī ṭ-ṭibb wa l-ḥikma focuses mainly on epilepsy caused by the jinn, listing a variety of methods of exorcising those jinn.¹¹⁷ It is interesting to note that Ṣanawbarī's treatments discuss not only means of healing the victims of epilepsy but also means of afflicting healthy people (presumably enemies) with the disease. This indicates that Ṣanawbarī is as interested in controlling the jinn as he is in healing illness. Ṣanawbarī is attempting to make sense of an illness that simply doesn't make sense in the context of fifteenth century medical knowledge. Subjugating epilepsy to the jinn and, in turn, subjugating the jinn to the magician, is one way to

different medical systems available: "The ambiguous group (of illnesses) is made up of chronic and largely incurable organic illnesses - stroke, paralysis, neuralgias, loss of sight, hearing or speech, and barrenness - and their explanation and treatment exemplify the society's response to organic illness for which there is no medically effective treatment. It is argued that through the two systems, the outer and inner worlds may be harmonized in the experience of these illnesses by relating both their ecological and cultural aspects to the symptoms and signs." Greenwood, 219.

114 In the context of a pluralistic Islamic healing tradition, it is interesting to compare Ṣanawbarī's work, which incorporates religious and medical elements, with Abraham ibn Ezra, who focuses exclusively on magical treatments. See Abraham ibn Ezra's chapter on epilepsy, 153-157. This is not to suggest that either Jewish or Spanish healers were outside the Islamicate healing tradition, but rather to point out that one scholar who was both (and who wrote in Hebrew) may have been less influenced by Islamic tradition.

115 Ṣanawbarī, 173.

116 Ṣanawbarī, 173. Michael Dols writes, "In this regard, one can see the close relationship between 'epilepsy,' characterized by falling to the ground, and insanity, which shares this sign; to exorcise the possessed individual had the sense, then, of throwing down the jinn." *Majnūn*, 286.

117 The jinn often form a point of reference between religion and magic; Jalāl ad-Dīn as-Suyūṭī, whose tract on Prophetic medicine was translated by Elgood, also wrote a detailed explanation of the behavior of the jinn and relations between jinn and men. See Jalāl ad-Dīn as-Suyūṭī, *Aḥkām al-jānn*, al-Qāhira: Maktabat at-turāth al-islāmī, 1989.

exert a measure of control over the supernatural.¹¹⁸ In this, Ṣanawbarī is no different from Rāzī and Ibn Sīnā with their comprehensive medical theories or Ibn Qayyim who subscribes to an all-knowing, all-powerful God. All three world views are simply different ways to interpret and integrate daily occurrences into a synthesized outlook.

Ṣanawbarī extends the concept of a pluralistic understanding of the way epilepsy works beyond the acknowledgment that there are two main causes for the disease: he claims, for example, that a certain talisman, when hung around the neck of a boy, will frighten away the jinn; the same talisman, hung around the neck of a woman, will make her magic useless.¹¹⁹ The pluralistic use of this item indicates a flexible understanding of the causes of the disease: if the same item will work both for and against magic, clearly magic works in multiple, sometimes even contradictory ways. Again, this seems similar to the ways in which Rāzī and Ibn Sīnā view the causes of epilepsy - it is caused by phlegm, it is caused by black bile; it is a disease of the brain, it is a disease of the brain and stomach, it is a disease of the brain and lower limbs - and the way that Ibn Qayyim views epilepsy's origins: the victim is struck by jinn, he is struck by God, he is struck by a bad humor. For the twentieth century historian, it is tempting to dismiss all these views as irrational and to claim that it makes no sense to believe two contradictory things at the same time. Yet I would argue that the twentieth century historian is equally a product of a synthetic world view, based on the concept of empirical knowledge. This world view is no more inherently correct than any other and at times may even be less successful in its explanations: homicidal maniacs, for example, have yet to be explained by modern science, the Bermuda Triangle, death. The greatest value of a synthetic world view is not to reveal an inherent truth, whatever the arrogance of its proponents, but to create a climate that makes sense for its believers.

118 One chapter of Suyūṭī's work is entitled, "The Jinn are Afraid of Men," Suyūṭī, 164-165.

119 Ṣanawbarī, 175. Abraham ibn Ezra's magical treatments focus on amulets hung around the neck; he recommends stones, acorns, peonies, bones and mucus, 153-154.

The use of Greek terminology and the pluralistic approach to cause evident in all three genres indicates a common framework for healing, despite the different synthetic world views of the individual authors. Each genre influences the others, infiltrating at certain points: Ibn Qayyim, for example, quotes Hippocrates in clear imitation of the medical writers, while the emphasis he places on jinn is shared by Şanawbarī. The outward manifestation of Islamic symbols and terminology in the religious and magical texts is repeated in the Islamicized structure of the works of Rāzī and Ibn Sīnā. The porous boundaries between the genres indicates an Islamic culture of adoption and adaption, situated within the context of a flexible, expanding Islam reacting to its encounter with Greek, Christian and Middle Eastern social constructions and medical ethics.

CHAPTER TWO

*"Our neighbor, the cloth merchant in the Street of Lucerne (Darb an-Nafal) suffered from epileptic fits from his childhood; he was slim. So I supposed that his disease was not caused by an excess of phlegm and prescribed to him emetics to take repeatedly. After that, I administered to him a potion which energetically expelled the black bile. Thereupon he was free from epileptic fits for three months and the neighbors in the quarter came to thank us. Hereafter he ate fish and drank much wine; he had an epileptic fit the same night. He again began to take the emetic, followed by the potion as before, and his condition improved. Then he resigned himself to take regularly and without reluctance the emetic and that potion up to the time we left Baghdad. Previously he had been treated at the Hospital with purgations without any success."*¹²⁰

- Abū Bakr Muḥammad Ibn Zakarīyā' ar-Rāzī

Medieval writers were categorized according to the theoretical approach they took towards healing;¹²¹ despite their prominence in the literature, however, these theories served mainly as background for the development of treatments and cures. The medical and religious

120 From Rāzī, *al-Hāwī*, translated and cited in Max Meyerhof, "Thirty-three Clinical Observations by Rhazes," *ISIS* 23 (1935), 321-336. This anecdote has also been translated by Anna Vanzan, see Vanzan, 1059.

121 This remains true for twentieth century healers, western as well as Islamic. A physician, a psychologist and a spiritualist might all recommend quiet and solitude for the cure of a headache; they will be classified on library shelves according to the genre in which they write.

practitioners who heaped derogatory scorn on each other's heads were, of course, ultimately concerned with whose treatments were more likely to be successful. Even the medical theorists who believed that extensive study and memorization of Greek texts was required to initiate any kind of medical practice stressed the benefits such texts provided in treating patients.¹²² Rāzī, for example, promoted book learning and theoretical knowledge over practical experience;¹²³ evidence from his medical works indicates that he was actively involved in treating patients, however.¹²⁴ Theory was never expressed merely for its own sake but rather for its underlying understanding of the causes - and by extension the treatments - of illness. Medical, magical and religious adherents each promoted a world view which, by explaining the cause of epilepsy, enabled them to pronounce its care, treatment and perhaps even its cure.

The theoretical basis of each movement focused on external elements that influenced the body's internal functions. Although the external elements varied in the case of epilepsy (from God to demons to the blowing of the southern winds) the internal functions, related to the physical manifestations of the disease, remained primarily the same. In approaching the task of treating and/or curing the epileptic, healers were concerned with the relationship between the external elements and internal functions in three stages: preventing contact, coping with the presence of something alien to the body and expelling the foreign elements. Within the confines of the different forms of healing and influenced by Islamic cultural patterns of care,

122 Ibn Jumay^ʿ writes, "Many, many people...assume that someone who has spent much time treating the sick without first acquiring this (classical) information...is to be counted among the physicians...But it is not the way they assume: that is, someone in this situation is like someone acting blindly: if he happens to do the right thing, he knows neither that, nor why, nor how he did it." Ibn Jumay^ʿ, 13-14. He points out that a physician who does not know that Hippocrates said that the pains of the eye are eased by a drink of pure wine, a bath, a bandage, bleeding or laxative medicine would be unlikely to apply such remedies. In other words, the main purpose for theoretical medicine is to provide treatments and cures for illnesses.

123 "If it were found that (a physician) were failing in one of these qualifications, it were rather to be wished he were wanting in the practical part...than to know nothing at all of the learning of the ancients." Rāzī, *A Treatise on the Small Pox and Measles*, trans. by William Alexander Greenhill, London: Printed for the Sydenham Society, 1848, 79.

124 See Meyerhof's article; see also, Ibn Abī Uṣaybi^ʿa, 417, Ibn an-Nadīm, 701-702 and Rāzī's own works, particularly *al-Ḥāwī*.

treatment appears to have focused on three specific areas: diet, the behavior of the ill person and the purging of the body. Islamic authors in all three genres adopted and adapted treatments from each other and from a wide variety of sources; they displayed the same willingness to accept divergent and even contradictory treatments as they did to promote variant etiologies of the disease. In treatment, as in concept, medieval Islamic healers from different methodological backgrounds shared a common cultural framework for coping with the physical disabilities and psychological displacement caused by epilepsy.

Care of the sick took place under a number of different circumstances in medieval Islam; only rarely would an ill individual have been taken to a hospital or doctor. The majority of sick people were probably cared for at home.¹²⁵ The most prestigious physicians practiced in the courts of princes and Caliphs; they were obviously called to treat their patients at bedside.¹²⁶ It is not unreasonable to assume that less prestigious doctors treating poorer patients may have also made housecalls. Sufi *tekkes*,¹²⁷ leper quarters and baths,¹²⁸ mosques¹²⁹ and monasteries¹³⁰ also

125 Michael Dols points out that the relative small numbers of leprosaria or leper quarters in the Middle East compared to medieval Europe suggests that many lepers were cared for in their homes. "...it seems that many victims of the disease, especially the less serious cases, did not enter leper communities; they may have only consulted medical practitioners and were cared for in their homes. This was probably common in Islamic society because of a strong sense of familial responsibility, especially for the female members of the family. Familial care goes back to antiquity, before the development of hospitals, and never died out in the Middle East; medical treatment by doctors was simply under the supervision of the *paterfamilias*." Michael Dols, "The Leper in Medieval Islamic Society," *Speculum* 58, 4 (1983): 899-930, 915.

See also *Majnūn*, 135. Lawrence Conrad explains the lack of public health care services in the Muslim World on the closeness of the extended family and its ability to provide for itself. "People tended to seek medical advice and assistance from kin and neighbors rather than to call upon a strange professional. Nakedness, physical infirmity and the privacy of the home were all sensitive matters that obstructed the intrusion of an outsider...a knowledgeable kinsman, on the other hand, would often do what he could free of charge, as part of the continuous exchanges of favors and demands within the family circle." Lawrence Conrad, "The Social Structure of Medicine in Medieval Islam," *Bulletin of the Society for the Social History of Medicine* 37 (1985): 11-15, 12.

126 Some wealthy and/or politically powerful leaders even took their personal physicians with them when they traveled. See Qusṭā ibn Lūqā, 17.

127 See *Majnūn*, 241-243.

128 "Leper," 902-905.

129 See Norman A. Stillman, "Charity and Social Services in Medieval Islam," *Societas* 5/2 (1975): 105-115, 111 and "Islamic Hospital," 911.

treated afflicted individuals at times, depending on the illness and the availability of care. Although there is little historical documentation for the rise and role of ritual healing cults, those popular in the modern Middle East perform both public and private ceremonies, often at the home of the ill person.¹³¹ Mobile hospitals, consisting of a number of physicians carrying supplies on camel or donkey back, were sometimes sent to distant regions, often during epidemics.¹³²

Islamic hospitals have received considerable attention in recent scholarship. Major hospitals with large endowments and professional staff were established in most Islamic cities. The hospitals were funded by Muslim rulers as pious foundations to take care of the city's poor.¹³³ By the early decades of the ninth century, the hospital had become an accepted institution and a

130 Arthur Voobus writes: "All the data we have in Syriac literature as to the care of the sick concerns the monks. We see them visiting the sick in places where the sick were kept. And when the sick people were nursed in the xenodocheia in the towns where beds were reserved also for the sick, they were under the care of the monks. We hear that some monasteries also had their own hospitals." Arthur Voobus, *History of Asceticism in the Syrian Orient: A Contribution to the History of Culture in the Near East*, 3 vol., Louvain: Imprimerie Orientaliste, 1958, vol. 2, p. 372. See also "Islamic Hospital," 372: "One exceptional saint in the Persian Acts of the Martyrs built a house where he gathered together the sick and distressed to care for them, and he created a fund to cover the cost of the patients and the fees of the doctors. Usually the sick were the collective concern of the monasteries, where special rooms were built for their care, and some monks found their calling in ministering to them exclusively."

131 *Hamadsha*, chapter one; Boddy, 160.

132 Martin Levey, "Medieval Muslim Hospitals: Administrations and Procedures," *Journal of the Albert Einstein Medical Center* 10 (1962): 123-126, 123. See also Ahmad Isa Bey, *Histoires des bimaristans a l'époque islamique*, Le Caire: Paul Babbey, 1928, 9-10.

133 Stillman claims that charity in medieval Islam was a religious act for the benefit of the donor's soul rather than a government attempt to care for the welfare of its population. "To a very great extent, philanthropy and providing services for social welfare was in medieval Islam an individual rather than a government concern. Rulers and government officials when endowing hospitals, hospices or extending doles of food or clothing, acted as individuals doing charitable works for the sake of their salvation," Stillman, 105. Conrad corroborates this statement, "Hospitals...were supported by private foundations and did not represent public health or general medical services. When Caliphs, sultans, governors and viziers founded such institutions, they did so by establishing endowments...in their capacity as wealthy Muslim individuals, not as an act of state policy." Conrad, 13. Voobus suggests that monasteries were run on similar principles: "(The biographer) reports that Rabbūlā separated some villages from the possession of the church and put the income of this property at the disposal of the hospital." It is interesting to note, furthermore, that the Islamic hospitals were secular, not religious institutions; the director of the hospital was generally a highly placed government official. Unlike their medieval Christian counterparts, Islamic hospitals included Jewish and Christian staff and treated patients of all three faiths. "Islamic Hospital," 387. Dols suggests that the creation of the Islamic hospital arose out of competition among the Christian doctors at court and between the patrons of Greek and Islamic medicine. "Islamic Hospital," 381-382.

symbol of statesmanship.¹³⁴ Many doctors were trained in the hospitals, both students with backgrounds in Greek theory and apprentices without.¹³⁵

Hospitals were primarily for the poor and the indigent, those without family to care for them or money for medicine; clinics dispensing free medicine were sometimes established in connection with the hospital or in a nearby building.¹³⁶ There were wards for both men and women and nurses who served on staff.¹³⁷ Some of the attendants were women, who probably also played a major role in taking care of invalids at home, especially other women.¹³⁸

Were epileptics cared for in hospitals? Although it is impossible to say for certain, they probably were.¹³⁹ Islamic hospitals contained separate wards for the insane, who were treated

134 "Islamic Hospital," 382. Dols suggests that the earliest Islamic hospital, credited to Hārūn ar-Rashīd, was probably originally founded by the Barmakids.

135 See Sami Haddad, *History of Arabic Medicine*, Beirut: Orient Hospital, 1957, 77 and Ibn an-Nadīm, 701-702 for instances of theoretical physicians teaching in hospitals; see "The Medical Profession," 187 for information on young doctors who sought apprentice positions in hospitals.

136 *Majnūn*, 124, 126.

137 *Majnūn*, 125. See also Levey, 122.

138 *Majnūn*, 123-4, Levey, 122. Ibn Ḥazm claimed that female doctors were popular in medieval Cordoba because of their access to women, see Ibn Ḥazm, *The Ring of the Dove: A Treatise on the Art and Practice of Arab Love*, trans. A.J. Arberry, London: Luzac, 1953; also cited in *Majnūn*, 484 (n.). Ibn Abī Uṣaybi'a mentions a Bedouin woman oculist Zeynab and Ibn Sīnā cites a highly respected woman eye-surgeon. (Isa Bey, 9). That women were practicing medicine, with or without formal education is clear from statements made by male physicians like Rāzī: "Women employ lily leaves for drying the pustules (of small pox) and I have seen them succeed extremely well," Rāzī, *Small Pox*, 113. For further information on this topic, see R.L. Verma, "Women's Role in Islamic Medicine Through the Ages," *Arab Historian* 22 (1982): 21-48. Unfortunately this article, although comprehensive, contains no bibliography or footnotes, leaving the reader to guess at the sources of her information. For example, Verma claims, "The medical school in Baghdad is said to have had six thousand students including female medical pupils. The medical schools of Cairo, Cordova, Toledo and other countries were renowned for imparting medical education without any discrimination of sex." Verma, 26. I have been unable to find any support for this information which directly contradicts other sources. (Jonathan Berkey writes of medieval Cairo: "Women played virtually no role as either professor or student in the formal education offered in schools of higher education and supported by their endowments." Jonathan Berkey, *The Transmission of Knowledge in Medieval Cairo*, Princeton: Princeton University Press, 1992, 165.) The earliest documented medical training for women in the Middle East appears to have been established by a French physician in nineteenth century Egypt; see Laverne Kuhnke, "The Doctress on a Donkey Women Health: Officers in Nineteenth Century Egypt," *Clio Medica* 9 (1974): 167-174.

139 Epileptics in western Europe were often sequestered in prisons with the insane prior to the eighteenth century; at that point, they were given separate quarters and medical treatment. See *The Falling Sickness*, 255.

with music and the smell of flowers.¹⁴⁰ It is not unlikely that some of the patients classified as insane may have actually been victims of epilepsy.

Treatments like music and flowers, obviously designed to soothe and comfort the insane and other ill patients, suggest that medieval Islamic healers emphasized caring for the sick rather than curing them.¹⁴¹ This is perhaps particularly true in a disease like epilepsy, which was chronic, dramatic and poorly understood. Medieval healing texts, whether medical, religious or magical, all presented an eclectic view of complex treatments that would enable epileptic patients to cope with the disease. An examination of the work of Rāzī, Ibn Sīnā, Ibn Qayyim and Ṣanawbarī from the perspective of treatment highlights their emphasis on similar treatments as well as their pluralistic perspective of practical methods of healing.

Ibn Sīnā and Rāzī appear to agree that the epileptic patient, once diagnosed, has some measure of control over his condition. They offer a number of suggestions to help epileptics ward off the onset of an epileptic attack. Ibn Sīnā cautions the epileptic to avoid strong emotions: fright, irritation, loud bells and the sound of loud instruments - trumpets and drums, for example - as well as thunder.¹⁴² He also warns against either too much or too little exercise.¹⁴³ Rāzī agrees that moderation in exercise is important and counsels the epileptic to avoid strong

140 *Majnūn*, 172.

141 This continues in the Middle East today. Crapanzano points out that the Ḥamadsha, for example, generally strive to establish a long-term working relationship between the jinn and the possessed person, rather than simply driving the jinn away. *Ḥamadsha*, 157. See also *Majnūn*, 298.

142 Ibn Sīnā, 82-3. This agrees with Galen's advice: "...the manner of life by which the boy may benefit not a little and may suffer the least harm from unexpected daily occurrences. These one must avoid as far as possible. Sometimes, however, he will necessarily encounter frost and violent heat, strong winds and strenuous baths, repulsive food and whirling wheels, lightning or indigestion, distress and anger and weariness of which the chief characteristic is that they stir up and trouble the body violently, remind it of the disease and cause a paroxysm." Galen, 181. Although I was unable to find a reference for the translation of this work into Arabic, both Ibn Sīnā and Rāzī are clearly familiar with it. Rāzī, for example, quotes Galen as advising the epileptic to avoid "gushing hot and cold, frightening voices and brilliant winds and wheels and waterwheels and dizziness, fevers and choking and sleeplessness and inflammation and anger...this draws the misfortune of illness." Rāzī, 121. This suggests that whether or not this particular letter was available, Galen's advice for the treatment of epilepsy was nonetheless well known.

143 "Do not attract the habit of frequent exercise," Ibn Sīnā, 82.

movements.¹⁴⁴ In addition, Rāzī explains that the epileptic patient should not be exposed to excessive heat or cold and even advises moving to a country with a warm, dry climate.¹⁴⁵ For those who have suffered from epilepsy since childhood, sexual intercourse may be harmful, precipitating an attack.¹⁴⁶ From the medieval medical perspective, epilepsy appears neither unknown nor unknowable, not a dark, dangerous disease but an inconvenience, albeit a serious one. Although the humoral construction of body chemistry suggests that the affliction of epilepsy has less to do with individual behavior than genetic predisposition or heredity, the epileptic nonetheless has several options in attempting to stabilize her condition. In other words, the patient's behavior could influence the course and current of the disease.

This is evident in Ibn Sīnā's and Rāzī's advice to the patient who has just experienced an attack as well. Ibn Sīnā suggests mild exercise while Rāzī mentions cauterization; both recommend vigorous massage¹⁴⁷ and cupping.¹⁴⁸ Despite the fact that both physicians are cognizant of the role which patient behavior can play in the prevention or care of a disease, they confine their advice in this area to simple statements. Diet and purgation receive more serious attention.

144 Rāzī, 122. Rāzī also notes that his own observations have shown that "the foam (which accompanies epilepsy) comes from strong movement," Rāzī, 120.

145 Rāzī, 120.

146 Rāzī, 125.

147 Ibn Sīnā writes, "Beginning with the chest and what is adjacent to it, the hand moves harshly across (the body) until the skin reddens, then moves down to the thigh and the lower limbs...the essence is drawn to the lower part of the sky." Ibn Sīnā, 83. Rāzī recommends massage on page 122. Both physicians appear to be drawing on Galen: "Rubbing is as good as exercise, especially for weaker bodies...at first one must impart to the body a red appearance by rubbing downwards gently with muslin. One starts with the arms and hands, proceeds in the same way to the chest and abdomen, and then rubs the legs a little more in order to draw something from the upper parts of the body in this direction." Galen, 183.

148 Rāzī quotes Alexander of Aphrodisias on cauterization and cupping. "Useful (for epilepsy) is cupping...and the cauterization of the head in the time of the paroxysm." Rāzī, 124. Ḥawadī practices cupping; Rāzī quotes him as saying, "When epilepsy is accompanied by a fullness...I cup him on the back of the head." Rāzī, 127. Ibn Sīnā recommends cupping as well, Ibn Sīnā, 84. It is interesting to note that Galen advised treating the head directly in the case of mental illnesses. "And with the brain as the seat of mental activity, for Galen it followed that mental disorders were the results of disordered bodily conditions that had affected the brain directly, or by sympathy, and that treatment was to be directed to the head," Jackson, 371.

Ibn Sīnā begins his discussion of treatments with a comment on the importance of good nourishment that contains moisture.¹⁴⁹ Moderation in appetite, as in exercise, is healthier for the epileptic who should avoid heavy meat, all fish, all meat except for goat meat and herbs. He cautions patients to avoid spicy foods and certain heavy vegetables as well: turnips, radishes, cabbages, carrots and especially celery. Any foods that produce vapors are better left alone. On the other hand, patients can benefit from coriander, which prevents vapors from forming in the brain, water mixed with honey, vinegar mixed with honey,¹⁵⁰ and wild hickory. Despite Islamic prohibitions against alcohol, Ibn Sīnā notes that a little aged wine is refreshing while too much can provoke an attack. Dill and rue, mixed with a patient's food, can also contribute to her recovery. He recommends fumigation as well, with a mixture of myrrh, ginger, pepper, salt and black cumin.

Both Rāzī's own works and the sources he cites emphasize dietary treatments. Rāzī divides his own treatments into three categories, depending on the origin of the disease: epilepsy arising from the brain should be countered with a drink of black hellebore while epileptics suffering from the disease originating in the stomach should drink a mixture of colocynth. Epilepsy of the limbs should be treated by spreading mustard on the limbs concerned.¹⁵¹ Rāzī offers a number of recipes for dealing with epilepsy. For epilepsy caused by excess phlegm, he suggests the doctor wash the patient with a mixture of cooked camomile and wild thyme.¹⁵² Other recipes to be ingested include one compounded of white hellebore and pepper and another of colocynth and red pepper.¹⁵³ Like Ibn Sīnā, Rāzī proposes that some foods will have positive results for the epileptic: vinegar, honey, squill (*ʿunṣalī*) and honey.

149 Ibn Sīnā, 82.

150 This recipe is also found in Galen, 189. While this is clear evidence of the recipe's Greek precedence, it is interesting to note that honey is strongly recommended as a treatment for illness in the Prophetic *ḥadīth*. For example, "Narrated Jarīr bin 'Abdullāh: "I heard the Prophet saying, 'If there is any healing in your medicine then in it is cupping, a gulp of honey or branding with fire'" Bukhārī, vol. 7, 396.

151 Rāzī, 117. Rāzī also quotes Ṭabarī's recommendation to spread mustard on the limbs, 128.

152 Rāzī, 130.

153 Rāzī, 119.

Food cooked with dill and leek is also beneficial. Other foods, basically the same as the items on Ibn Sīnā's list, should be avoided: lettuce, fruit, chard, carrot, leek, celery; meat, grains and drink (alcohol). Hot mustard, garlic and onion also have negative properties.

The time and attention both physicians gave to questions of diet and nutrition indicate the vital role medieval Islamic physicians assigned to food and digestion in human health.¹⁵⁴ They considered diet an important tool in the control of illness, one which allowed victims of epilepsy to cope with the demands of their disease. Both the simple behavior patterns noted above - massage, for example, or mild exercise - and the dietary prescriptions could easily have been implemented by the patient at home, without the intervention of a physician.¹⁵⁵

The third form of treatment recommended by Rāzī and Ibn Sīnā, purgation, encompasses a number of diverse, sometimes technical procedures including vomiting, laxatives and bloodletting. Ibn Sīnā recommends a mixture of hellebore and plants for evacuating the bowels. He calls vomiting "the purifying of the body" and associates it with gargling.¹⁵⁶ "He (the patient) must begin vomiting the essence, then achieve purity by gargling."¹⁵⁷ Bloodletting should take place in the spring, and is most useful when blood is released from the legs.¹⁵⁸

154 Sami Hamarneh writes that there was a school of medieval physicians who would not use drugs if diet alone could meet the needs of the patient and eventually serve as the means of restoring him. He refers to a treatise by Abu Ḥubaysh at-Tiflīsī (d. 1232) on the requirements of good health. "Throughout this treatise" (writes Hamarneh) "one cannot fail to note (Tiflīsī's) disapproval of and repeated warnings against reliance on drugs, the harmful results of irregular eating habits, indulgence in fatty foods and overeating." Sami Hamarneh, "Ecology and Therapeutics in Medieval Arabic Medicine," *Sudhoff Archives* 12 (1973): 165-185, 169 and 176.

155 This may be an Islamic - or at least Middle Eastern - adaption of Greek medicine. Galen spends nearly a page and a half cautioning the father of the epileptic boy against treating his son without the presence of a proper physician. "I yield in compulsion and write such instructions...they suffice to prevent a layman from making grave and irreparable mistakes in what the physicians prescribe." Galen, 181. Galen appears to assume that a physician will be in constant attendance on the epileptic boy.

156 Ibn Sīnā, 84.

157 Ibn Sīnā, 83. This is for epilepsy that originated from the lower limbs rather than epilepsy originating in the brain.

158 Galen also suggests purging the epileptic in the spring - "My instructions are to purge the boy moderately when spring approaches, for thus one may succeed in moving diseases caused by obstructions." Galen, 181. Although Galen explains that a qualified physician will be present who knows "exactly how to prepare the body for the purgation and what drug to use" it is unclear from the English translation whether he means 'bleeding' by purgation. Rāzī suggests bleeding in the spring, however, for protection *against* epilepsy, see Rāzī, 124 and see below.

Ibn Sīnā says it is necessary to "free the epileptic if he is wearing snakeskin or goat(skin)."¹⁵⁹ In addition, it is important to note that the massage mentioned earlier is undertaken with the idea of drawing the essence out of the brain; this appears to be a kind of expulsion as well.

Rāzī's suggestions for purgation are even more extensive than Ibn Sīnā's. He also links purgation with purification and advises the use of a number of different medications which will induce the desired results. A daily medicine prepared with squill will cleanse the epileptic's body of unwanted substances. The patient is encouraged to vomit, drawing out the phlegm in the brain that is causing the epilepsy; like Ibn Sīnā, Rāzī suggests that gargling, as a follow-up to vomiting, will then draw the excess phlegm away from its source. In addition, he recommends a laxative made of colocynth, and bleeding in the spring.

The theoretical evidence presented in the last chapter shows that Rāzī and Ibn Sīnā both believed that the presence of unnecessary or unhealthy matter - excess phlegm or black bile, for example - causes epilepsy. The emphasis which physicians placed on purgation suggests that on some level they may have seen epilepsy as a disease which is foreign to the body and must be physically expelled. The connection between purgation and "purification" supports this idea; once the body is "free" of the cause of the disease, it can function normally again.

Some types of purgation - most obviously bloodletting - would have required the skills of a trained professional; the recipes for laxatives and enemas are fairly simple and straightforward, however. Many of the ingredients were probably common items in most households. As with diet, most forms of purgation could have taken place at home, without the

159 Ibn Sīnā, 79. This is interesting, because Hippocrates specifically refutes the concept that epilepsy is caused by goat's skin: "And they forbid him to have a black robe, because black is expressive of death; and to sleep on a goat's skin, or to wear it...But I am of the opinion that (if this were true) none of the Libyans, who live in the interior, would be free of this disease, since they all sleep on goat's skin, and live on goats' flesh." Hippocrates, 348. This appears to be one of the rare occasions when Greek popular culture became enshrined in Islamic medical tradition. In addition, Hippocrates suggests that abstaining from goat's meat is beneficial while both Rāzī and Ibn Sīnā recommend abstaining from other types of meat but eating goat's meat, which they say has positive properties for the epileptic. See Hippocrates, 348. Ibn Sīnā, 82 and Rāzī, 130.

intervention of a physician. Although bloodletting was performed by doctors on some occasions,¹⁶⁰ it was often undertaken by a professional phlebotomist with no other medical knowledge.¹⁶¹ Medical care, even within the confines of Greco-Islamic medicine, was flexible, informal and pluralistic; most patients probably received treatment from relatives at home, while those who were attended by physicians could choose from a number of professionals with varying degrees of skill.

As with medical theory, treatment was eclectic, focusing on behavior, diet and purgation, but allowing a wide latitude to the methods used in each area. Some of the treatments, like "freeing" the patient from goat's skin, appear to border on magic or superstition while the results of others - the physical reaction to imbibing emetics, for example - are well documented. The focus on diet suggests that doctors were willing to adapt their treatment depending on its success or failure with any individual patient; the variety and synthesis of different medical treatments shows that both Rāzī and Ibn Sīnā were well aware of the idiosyncrasies of the human body.

The nature of Rāzī's work permits us to note that he recorded prescriptions from Arab physicians like Ṭabarī and Ḥawadī, Christian physicians like Alexander of Aphrodisias and Ibn Masawayh as well as Greek physicians like Galen.¹⁶² It is interesting to note that these physicians offer a number of treatment combinations that do not appear to be linked to a theoretical base. Ḥawadī, for example, claims that epilepsy arises from black bile; he

160 See Ibn Abī Uṣaybī'a, 582, where he describes a son who learned the medical profession by watching his physician father bleed patients every afternoon; see also Max Meyerhof, "La Surveillance des professions médicales et paramédicales chez les arabes," *Studies in Medieval Arabic Medicine*, London: Variorum Reprints, 1984: 119-134, where he describes the equipment a physician was required to possess including "une collection de lancettes à pointes arrondies et à pointes obliques," 132.

161 See Conrad, 12. Eye doctors were also considered a unique profession with separate training; they were frequently uninformed about other aspects of Islamic medicine.

162 Michael Dols, in his analysis of Rāzī's work on insanity, lists a full page of authors as sources for Rāzī's information on mental pathology, mental disorders, lethargy, phrenitis, catalepsy, madness, lycanthropy, delirium and insomnia. *Majnūn*, 49-50. For epilepsy, Rāzī quotes from Galen and Hippocrates, Rufus of Ephesus, Ahrun ibn Āyan al-Qaṣṣ of Alexandria, Paul of Aegina, Alexander (Iskandar) of Aphrodisias, Ibn Masawayh, Ishāq ibn Ḥunayn, 'Alī ibn Rabban aṭ-Ṭabarī and the *Kunnash al-Khuz*, the Syriac medical handbook compiled by the doctors of Gundishapur. Rāzī, 117-130.

recommends bleeding and cupping. Ṭabarī agrees that epilepsy arises from black bile but he recommends rue, squill and rubbing. Alexander, who claims that epilepsy results from too much phlegm, suggests both cupping and mustard. Medieval Islamic physicians understood very well the humoral system and the principle that substances can affect the system's balance. The cacophony of treatments suggests rather, that at least in the case of epilepsy, both theory and treatment were in flux, offering a pluralistic and porable approach to not only the study of medicine and illness but to healing practices as well.

Religious scholars approached the question of the treatment and cure of epilepsy from a different perspective. Ibn Qayyim al-Jawziyya stresses two different techniques: piety and exorcism. In the *ḥadīth* of the epileptic black woman, the Prophet counsels patience; he also indicates, however, that a second route to recovery can be found in prayer.¹⁶³ Ibn Qayyim suggests that the only cure for epilepsy is the faith that came with the prophets: "there is no stronger medicine to recover from epilepsy."¹⁶⁴ Suggesting that the different kinds of epilepsy - which he divides into constant madness, madness interrupted by brief bouts of sanity and sanity interrupted by brief bouts of madness - imply there is no cure, he insists that the epileptics will be in heaven, surrounded by religious people.¹⁶⁵ Ibn Qayyim returns to the subject at the end of his chapter on epilepsy, explaining that this *ḥadīth* is proof that it is permissible to abstain from cures and medicines and leave treatment in the hands of God.¹⁶⁶ He knows many who have tried

163 "If you can bear it in patience you will be in Paradise, or if you want I can pray for you," says the Prophet. (Ibn Qayyim, 55; see also the first chapter of this work.) The Prophet appears to be informing the woman that prayer *will* cure her disease; Muslims who endure their afflictions patiently, without resort to pleading, will be rewarded in heaven. Suyūṭī makes an even more blatant connection between religion and illness: "Verily sickness is the strongest incentive for a Believer to repent, to speak the truth, to do penance for his sins and to raise himself Heavenward," Elgood, 161.

164 Ibn Qayyim, 53.

165 Ibn Qayyim, 53.

166 The placing of medicine and religion in hierarchical positions in relation to healing is also found in Christian tradition. Amundsen and Ferngren point out that Clement's disciple Origen "held that a person seeking to recover from a disease had two alternatives, either to have recourse to the medical art, which he labels as the simple and more ordinary method, or to rise to the higher and better method, namely, to seek God's blessing through piety and

this method and astonished the physicians with the strength of their bodies in recovery while the ignorance of the *zanādiqa* doctors has often harmed their patients.¹⁶⁷ It is interesting to note that while the Prophet informs the epileptic woman that the reward for her patience will be found in heaven, Ibn Qayyim insists that a earthly return is by no means unusual; in fact, those who repudiate doctors and medicine are *more* likely to be cured than those who patronize them.¹⁶⁸ The two contradictory themes of patient endurance and divine intercession allow the afflicted individual a second chance at success: God might cure her and, if He doesn't, she will receive her reward in the afterlife. In the context of medieval Islamic healing the contradiction, of course, was unimportant. Prayer and patience were simply two separate treatments for the same illness; the choice between them would depend on the chemical and emotional make-up of the epileptic.

Like Ibn Sīnā and Rāzī, therefore, Ibn Qayyim pronounces treatments that can be implemented by the behavior of the patient. Ibn Qayyim does not assert that the individual had complete control over the course of her disease, which was naturally in the hands of God. Nonetheless, by a complicated process invoking certain procedures and abstaining from others - paralleled perhaps, by Ibn Sīnā's advice to avoid loud noises and live in a dry climate - the patient could cope with her illness to some degree.

Ibn Qayyim's advice is not confined to patience and piety, however. He recommends exorcism for cases of epilepsy caused by possession of the jinn. This can be done in several different ways, either through human mediation or the use of good jinn. "They know that its (epilepsy's) cure is the meeting of a high, good, noble spirit with that evil, bad spirit pushing out

prayers." Amundsen and Ferngren, 101. See also George Mora, "Mind-Body Concepts in the Middle Ages," *Journal of the History of the Behavioral Sciences*, 14 (1978): 344-361, 354.

¹⁶⁷ Ibn Qayyim, 54.

¹⁶⁸ It is interesting to note that after Jesus heals the epileptic boy in the gospel of Mark, his disciples follow him into the house and ask him why they were unable to cure the boy. He tells them, "This kind cannot be driven out by anything but prayer," Mark 9:28-29.

its traces and showing its doings and negating them."¹⁶⁹ The use of jinn appears to have its origins in the Qur'ān, where the jinn worked as servants and slaves for the Prophet Solomon.¹⁷⁰

Ibn Qayyim gives detailed evidence of one encounter between a good jinn, commanded by a Shaykh, and an evil jinn, caught in the act of possessing an epileptic. The Shaykh sends a message to the evil jinn, ordering him out of the epileptic patient. "If you don't get out and allow the epileptic patient to recover," warns the messenger jinn, "then maybe the Shaykh will come and tell you this himself."¹⁷¹ Apparently the epileptic patient had a seizure at this point, because Ibn Qayyim adds, "Perhaps the demon was rebellious, because he came out (of the epileptic) by beating him, and then the epileptic recovered and did not feel any pain."¹⁷²

Other exorcisms are more straightforward, involving a direct relationship between the Shaykh and the jinn. Simple commands like "get out" as well as pious uses of Quranic phrases including "in the name of God" and "there is no power and no strength except in God" are also effective. The Prophet himself performed exorcisms, Ibn Qayyim informs us, invoking a special relationship with God as he ordered, "Get out, you enemy of God. I am the Prophet of God."¹⁷³ Jinn are also exorcised through the power of the Qur'ān, by reading certain *āyās* into the ear of the possessed.¹⁷⁴ Their hearts and tongues are ruined by the truth of the report; the jinn is

169 Ibn Qayyim, 51.

170 "...there were some jinns that worked in front of him, by the leave of his Lord, and if any of them turned aside from our command, we made him taste of the chastisement, of the blazing fire. They worked for him as he desired, making arches, images, basins, as large as wells, and cooking cauldrons fixed (in their places)." Qur'ān 34:12-13. See also Qur'ān 27:39. (For more information of the role of the jinn in the Qur'ān, see Alford T. Welch's article, "Allah and Other Supernatural Beings: The Emergence of the Quranic doctrine of *Tawhīd*," *Journal of the American Academy of Religion*, 57:4 (1980): 733-758). The idea of the pious man controlling the other worldly spirits does not appear to have a parallel in Christian practice; while saints and other holy men were able to exorcise and expel demons and devils, only sorcerers could command them. See Brown, 137 and H.C. Kee, *Medicine, Miracle and Magic in New Testament Times*, Society for New Testament Studies, Monograph Series 55, New York: Cambridge University Press, 1986. This is interesting because Luke 10:17 has Jesus' disciples saying, "Lord even the demons are subject to us in your name."

171 Ibn Qayyim, 52.

172 Ibn Qayyim, 52.

173 Ibn Qayyim, 52.

174 Ibn Qayyim suggests the verse "Do you think that we created you for play and you will not return to us?" as well as the *āyāt al-kursī*, Ibn Qayyim, 52-53.

isolated, weaponless and unable to respond. These methods, Ibn Qayyim assures the reader, work in all but a very few cases.

In this section of his chapter on epilepsy, Ibn Qayyim clearly perceives the disease and its manifestations as the result of an alien element (or elements) which have entered the body. Successful treatment requires a method of ridding the body of the unhealthy material. Given Ibn Qayyim's religious world view which subjects everything to the will of God, it makes sense that he recommends religious means: reciting the Qur'ān or phrases invoking God's protection, the use of good jinn and the wearing of amulets.¹⁷⁵ Although Ibn Qayyim does not specifically link the purging of the body to purification as Ibn Sīnā and Rāzī do, the immediate recovery of the patient following the exorcism suggests that the body has been completely healed; in essence, purified. Purgation here, as in medicine, requires outside intervention; nonetheless, it appears to be a simple procedure that could take place in the epileptic's home or as an "out-patient" operation, requiring neither long preparation nor special equipment.

Ibn Qayyim divides his remedies into patient behavior and purgation; within this context, however, his approach to healing is as pluralistic as Ibn Sīnā and Rāzī's: an afflicted patient can accept his suffering, counter it with religious rituals or seek the help of a religious healer. These prescriptions are not presented in a hierarchical manner, nor linked to a specific form of the disease - although exorcism is naturally limited to cases of epilepsy caused by the

¹⁷⁵ Ibn Qayyim, 53. Amulets are a good example of the difficulty of drawing lines between magical and religious healing: although they make use of religious texts, they possess magical properties - warding off evil spirits, protecting new born infants from illness, etc. - and the condition of use is often magical: they must be worn next to the skin, for example. Sir James Frazer distinguishes between religion as a propitiation or conciliation of powers superior to man which are believed to direct and control nature and human life, and magic, which deals with impersonal forces. Sir James Frazer, *The Art of Magic*, cited in Edward Westermarck, *Ritual and Belief in Morocco*, New York: University Books, 1926, 4. Whether the amulet functions to invoke the protection of a superior power or ward off an impersonal force is often difficult to determine. Quite probably, they are frequently designed to do both. Georges Anawati provides a good description of some recent talismans in "Trois talismans musulmans en arabe provenant du Mali," *Annales Islamologiques* 11 (1972): 125-156. See also Westermarck, 302-364, Edmond Doutte, *Magie et religion dans l'Afrique du nord*, Alger: A. Jourdan, 1908, chapter four, 143-219, and Brian Spooner, "The Evil Eye in the Middle East," *The Evil Eye*, ed. Clarence Maloney. New York: Columbia University Press, 1976, 76-84.

jinn, Ibn Qayyim assures his readers that piety and prayer are effective treatments for any kind of epilepsy.

Şanawbarī's magical text focuses on exorcism and control of the jinn; he also advocates measures involving diet and religion. The cure for epilepsy caused by a humoral imbalance is to scent the air, oil the patient's head and body with excellent oil and feed him food that is hot and moist.¹⁷⁶ Writing magical signs and words on the skin of a pomegranate or quince is suggested later in the work, indicating that Şanawbarī connected food and magic in some positive way. Other items which medical texts considered either beneficial or harmful to epileptics - rue, for example, and asafetida - are also mentioned in conjunction with amulets, talismans and signs.¹⁷⁷ Şanawbarī appears to be aware of the kinds of treatments available through medical diets, although less sure about the processes physicians prescribed to implement them.

Şanawbarī's instructions of cures for epilepsy caused by the jinn (and others) extend beyond seven pages. Most of these consist of long incantations including names, religious phrases, numbers and terms which will constrain, expel or destroy the jinn. Like Ibn Qayyim, Şanawbarī concentrates on methods of expulsion and exorcism, indicating that he too views epilepsy as a foreign disease which has invaded the victim's body. The violent terms used to describe the expulsion - his manual offers sections telling how to burn, strike, whip and scourge the jinn - are at odds with the actual procedures which generally involve incense and writing magical signs and/or religious texts on the patient's palms or forehead. Şanawbarī's use of violent terms may be intentional, implying that magical healers are more powerful than the jinn, or it may be a reaction to the intense symptoms of epilepsy: if the jinn are causing their victims

176 Şanawbarī, 161. Ibn Sīnā also recommends "good nourishment containing moisture"; he warns against moist fruit, however. Ibn Sīnā, 82-83. Bernard Greenwood points out that in the pluralistic medical systems of modern Morocco, the cause of epilepsy is limited to supernatural elements ('spirits') and is no longer ascribed as either a 'hot' or 'cold' humoral imbalance. Greenwood, 226.

177 Şanawbarī, 165. For medical uses of rue, see above, pages 53 and 57; for asafetida, see Ibn Sīnā, 84 and Rāzī, 130.

to experience severe convulsions and fall to the floor unconscious, it is reasonable to assume that only an equally vehement response can expel them. In addition, as fire often symbolizes cleansing, rebirth and absolution, it seems probable that Ṣanawbarī's frequent references to burning the jinn means that, like other medieval writers, he links purgation to purification.

Ṣanawbarī also offers invocations that will bring the jinn to their knees, begging for mercy, at which point the magician can demand whatever concessions he chooses. Like Ibn Qayyim, Ṣanawbarī suggests that the magician can control the jinn. He also invokes practices he ascribes to religious leaders: "(To expel the jinn) I have found also in the handwriting of some of the *'ulamā'* if you want to expel the jinn from the person, announce the *fātiḥa* in his right ear seven times...and he (the jinn) will become ignited as if in the fire (hell)."¹⁷⁸ The procedure corresponds to the suggestions made by Ibn Qayyim with a few significant additions: the religious healer is expected to simply recite the verses into the epileptic's ear while the magician is given more explicit directions, which ask him to repeat the verse in the epileptic's *right* ear *seven times*. Both the right side and the number seven have religious significance in Islamic thought: there are *ḥadīths*, for example, in which the Prophet recommends that the person on the right drinks first while the Qur'ān refers to God as "He who created the seven heavens."¹⁷⁹

As in his use of medical items, Ṣanawbarī appears aware of the basic framework surrounding religious expulsions of the jinn but does not necessarily conform to the exact regulations. Despite the discrepancies, however, we can note similarities between the three texts: the emphasis on diet, behavior and purgation, and the acceptance and promulgation of an eclectic collection of remedies. Ṣanawbarī's text is particularly interesting for the wide variety of methods it recommends for expelling the jinn. Any one of these methods would apparently be sufficient; the fact that Ṣanawbarī sees fit to discuss them for seven pages indicates that, like Ibn Sīnā and Rāzī - and, to a lesser extent, Ibn Qayyim with his numerous anecdotes of religious

178 Ṣanawbarī, 167.

179 Q.6:73. See volume seven of Bukhārī, 359.

exorcisms he has witnessed - Ṣanawbarī finds it important to list a complete collection of the remedies he knows. His miscellaneous selection is particularly reminiscent of Rāzī's sometimes repetitious *al-Ḥāwī*.

Ṣanawbarī also shares a sense of simplicity with the other writers: although his treatments require a variety of items ranging from a blue cloth to a large bowl to specific kinds of incense, oils or foods, few are rare or unusual items and none of his remedies involve long term or complicated supervision; the procedures are basic and for the most part can be undertaken in a single sitting. Like his medical and religious counterparts, Ṣanawbarī offers treatment appropriate in the Islamic context of care.

CHAPTER THREE

Reactions to epilepsy have always been based on diverse interpretations of its physical manifestations. In the context of medieval Islam, this meant symptoms that corresponded to both physical ailments and psychological illnesses, classified primarily as possession. The epileptic exhibited periodic seizures that included a loss of consciousness, biting the tongue and foaming at the mouth, all examples of behavior that might be explained by a concussion, great pain or rabies.¹⁸⁰ On the other hand, the very fact that the seizures were periodic may have suggested possession by demons who tormented their victim on occasion, rather than continuously. Other symptoms could be understood as either a body tortured beyond endurance or one striving to expel alien spirits. The fine line between the physical and the spiritual, medicine, religion and magic, led to an ambiguous perception of the epileptic.¹⁸¹

180 This is not to suggest that epilepsy itself might have been misdiagnosed as another illness, but rather to point out that epilepsy was perceived as sharing symptoms with a number of different conditions. As noted in chapter one, both Rāzī and Ibn Sīnā link epilepsy to several different diseases, particularly melancholy, which they believe to share the same humoral causes; in fact, epilepsy can, they claim, lead to melancholy and vice versa. See Rāzī, 127 and Ibn Sīnā, 77; see also *Majnūn*, 72, 81 and 152.

181 This ambiguity is not, of course, limited to medieval Islam. As recently as the mid-twentieth century, 13% of the U.S. population considered epilepsy a form of insanity. See Harry Sands, *The Epilepsy Fact Book*, Philadelphia: F.A. Davis, 1979. Complex perceptions of epilepsy continue to invoke sometimes contradictory medical, magical and religious interpretations of the disease in some modern native American societies. See the in-depth analysis of Navajo constructions of epilepsy in Levy, for one example.

The lack of information on the daily behavior of all but the wealthy and powerful, as well as a scarcity of references to epilepsy in literary and folk sources, makes it difficult to reconstruct common perceptions of epilepsy in the medieval period. It is possible, however, to place epilepsy within the context of medieval illness, and in particular medieval mental illness; an examination of better documented illnesses like leprosy and the plague can provide a reference point for understanding how epileptics were incorporated into society. The four texts analyzed for theory and treatment in the preceding chapters offer valuable evidence in support of the position of the epileptic suggested by secondary sources.

Disease was understood primarily in a behavioral context;¹⁸² someone behaving like an ill person was an ill person, someone behaving well was well. Epilepsy, with its distinct and recurrent behavior patterns, both belonged to this definition and stood outside it; an epileptic gained the label by her seizures, while at the same time experiencing long periods of healthy activity in which she continued to be perceived as epileptic.¹⁸³ Perceptions of epilepsy offered victims of the disease a place in the Islamic world order, limiting their participation in society and freeing them from responsibilities at the same time. For their non-epileptic family and neighbors, medical, magical and religious paradigms all offered theories of behavior that made sense within the context of the medieval Islamic world, explaining actions otherwise incomprehensible. The pluralistic approaches to theory and practice were mirrored in a multidisciplinary perspective on the part of both healers and community that enabled them to perceive the epileptic as sane and insane, ill and well, possessed and in possession of her right mind. Medieval perspectives reflected Islamic healing patterns, suggesting a complex system of intertwined influence and reaction which resulted in the construction of an Islamic concept of epilepsy:

182 This was probably particularly true for mental illness: see *Majnūn*, 475-478.

183 Rāzī, for example, writes in one case, "Thereupon he was free from epileptic fits for three months," and in another, "I followed the case, who during a year remained free from epileptic fits." "Clinical Observations," 331-332. These examples indicate that several months or even a year were insufficient to erase the label epileptic.

Hippocrates offers the earliest known clinical description of epilepsy:

"...when the veins are excluded from the air by the phlegm and do not receive it, the man loses his speech and his intellect, and the hands become powerless, and are contracted, the blood stopping and not being diffused, as is wont; and the eyes are distorted owing to the veins being excluded from the air; and they palpitate; and froth from the lungs issues by the mouth. For when the breath (*pneuma*) does not find entrance to him, he foams and sputters like a dying person. And the bowels are evacuated in consequence of the violent suffocation...the patient kicks with his feet when the air is shut up in the lungs and cannot find an outlet, owing to the phlegm; and rushing by the blood upwards and downwards, it occasions convulsions and pain and therefore he kicks with his feet."¹⁸⁴

Hippocrates' description is reflected most clearly in the works of the Islamic physicians who considered themselves his heirs; Ibn Sīnā, for example, writes that, "epilepsy is a disease which prevents the mental limbs from the performance of the senses and movements and prevents him (the epileptic) from standing upright."¹⁸⁵ He also records convulsions,¹⁸⁶ collapse, contractions and trembling, comparable to Hippocrates' contracted hands, palpitations and kicking. The seizures are accompanied by feeble-mindedness - possibly related to a loss of consciousness - perspiration, thinness and paralysis.¹⁸⁷ Although the latter symptoms are not mentioned by Hippocrates, they are noted by Rāzī¹⁸⁸ who also reports epileptic behavior that

184 Hippocrates, 354; Temkin points out that the symptoms here, although derived from observation, are introduced in order to be explained and in order to prove the author's thesis that the "sacred disease" is a natural condition, rather than a divine affliction. "Their description is therefore not an end in itself, and chapter seven does not purport to give a complete clinical picture of all that the author knows about the epileptic attack. Thus, for example, the falling of the patient, surely the most striking symptom, is not mentioned - not until chapter twelve, when it is presumed to be well-known." "The Doctrine of Epilepsy," 290. Galen offers a slightly less detailed clinical picture which includes convulsions and a loss of consciousness; see Jackson, 77 and *The Falling Sickness*, 71.

185 Ibn Sīnā, 77.

186 Ibn Sīnā connects these to the attempts of the body (specifically the brain), to "push something out," meaning harmful or rotten humors; Ibn Sīnā, 77.

187 Ibn Sīnā, 77-79.

188 See Rāzī, 118; epilepsy is here described as leading to paralysis, however, rather than exhibiting it as a symptom.

includes great pain, frothing at the mouth, agitated movements and contractions throughout the body.¹⁸⁹ Rāzī offers a more exact clinical description as well, "In the time of attack, he (the victim) falls down and cries out and froths (a special froth) at the mouth and releases urine and feces without wanting to."¹⁹⁰ Both Rāzī and Ibn Sīnā mention that epileptic patients may feel a cold wind rise from one of the limbs¹⁹¹ while Ibn Sīnā distinguishes the *petit mal* seizure (which he calls "simple epilepsy") from the *grande mal* seizure ("severe epilepsy"). The victim of simple epilepsy returns to himself quickly while the epileptic who suffers from severe epilepsy experiences great difficulty in breathing, long bouts of trembling followed by long bouts of motionlessness and little cognizance of his surroundings.¹⁹²

The similarities between the Greek and Islamic texts do not suggest that Ibn Sīnā and Rāzī simply copied Hippocrates' description; on the contrary, the addition of symptoms that Hippocrates does not include in his analysis indicates that the Islamic physicians incorporated their own observations into their work.¹⁹³ The detailed depictions do place Ibn Sīnā and Rāzī within a Greco-Islamic tradition that emphasized the use of empirical observation to determine illness however; more importantly, they delineate the limits of behavior acknowledged to result from epilepsy.

Ibn Qayyim situates his discussion of epilepsy within the same parameters, describing epileptic symptoms in some detail in the second part of his chapter. "The brain receives damage, followed by convulsions in all the limbs. It's not possible for the victim to remain standing, (so)

189 Rāzī, 117-128. Rāzī notes that Galen says that the epileptic in the third stage exhibits the same symptoms as a stroke victim, including apoplexy and agitated movements (120) and that Alexander reports that epilepsy that arises from the stomach is accompanied by trembling of the heart and heart palpitations (124). Rāzī also notes less visible symptoms reported by his patients, including a "heavy head," slow movements and retention in the stomach, (124).

190 Rāzī, 129.

191 Ibn Sīnā, 78; Rāzī, 118, gives the example of a hand or a foot.

192 Ibn Sīnā, 80.

193 Meyerhof points out that in addition to Rāzī's own observations recorded in *al-Ḥāwī*, "those of his works which were translated into Latin, particularly his treatise, 'On Smallpox and Measles,' established his reputation as an excellent observer." "Clinical Observations," 321.

he falls down and, in most cases, he froths at the mouth."¹⁹⁴ Ibn Qayyim's description shares a number of elements in common with medical writers: the collapse that would probably been the most striking indication of epilepsy, convulsions, frothing. He places this within a religious context that blames epilepsy on possession, however, and notes that the jinn ordered out of an epileptic's body, came out "by beating him," probably an indication of a seizure.¹⁹⁵ To prove his point, he argues with the medical scholars on the battlefield of the body, accusing them of skepticism: "They (the scholars) don't believe that it (the jinn) has a liking for the body of the epileptic."¹⁹⁶

Şanawbarī's text, with its focus on magical healing, pays little attention to symptomology; he does, however, establish the effects of epilepsy in the first paragraph "The victim has an epileptic fit until he falls to the ground (if he was standing), forgetting his sense of himself, out of his mind, and you see him speak, not understanding, and perhaps answer every person with a quantity of words and he doesn't know it."¹⁹⁷ Şanawbarī, too, accepts the broad outlines of an epilepsy determined by corporeal response. As these responses are not merely behavioral but actual physical manifestations, epilepsy can be located in a category of illness that includes seizures, heart attacks, strokes and apoplexy, all of which may display symptoms of sudden and violent movements, trembling and loss of consciousness. The recognition that all these conditions are accompanied by great pain indicates an awareness that the body's physical malfunction causes the disease. The medieval physician also understood epilepsy in the context of mental and nervous disorders like melancholy, semiparalysis and insanity, pointing out that

194 Ibn Qayyim, 54. In the *ḥadīth* recorded at the beginning of this chapter, the black woman afflicted with epilepsy begins her conversation with the Prophet: "I am epileptic and I uncover myself." Although this does not represent an explicit description, it does suggest that the woman's convulsions were violent enough that she uncovered her body when falling. (Incidentally, it also suggests a number of points about women in seventh century Arabia, including the fact that their clothing must have been worn loosely enough to fall off unconsciously and the fact that they must have mixed with men on a regular basis, if the woman was concerned about becoming accidentally uncovered.)

195 See chapter two of this thesis; also see Ibn Qayyim, 53.

196 Ibn Qayyim, 51.

197 Şanawbarī, 161.

each of these illnesses originated in the dysfunctioning of a specific part of the body, the brain.¹⁹⁸ Not only the medieval physician but also the medieval religious healer and the medieval magician implemented treatments that were applied directly to the body.¹⁹⁹ Many treatments - rubbing, for example, anointing with oil, writing magical spells on the hand or forehead - required the healer to touch the patient's body. The highly visible physical nature of epilepsy meant that, on one level, it could only be perceived as a violent malfunction of the body's natural order. Although both Ibn Qayyim and Ṣanawbarī dismiss epilepsy caused by a ruined humor as unimportant, the fact that they even recognize the existence of this kind of epilepsy indicates the prevalence of epilepsy's perception as a medical illness.

A detailed examination of possession provides an alternate paradigm. Vincent Crapanzano's in-depth study, *The Hamadsha*, offers several clinical descriptions of the effects of possession. "Her (the woman entering a trance, seen to be possessed) collapse is always sudden and involves a large thud, which attracts a good deal of attention. She remains on the ground for several minutes, in a cataleptic state which might have been preceded by convulsive movements. Sometimes, during the paralyzed phase, she exhibits a slight tremor of the hands or feet. Her breath is shallow, her hands clammy and her body cold."²⁰⁰ Crapanzano reports that every first trance experience he saw or heard about was sudden and abrupt, involving collapse.²⁰¹ Janice Boddy's work echoes the importance of movement and falling, outlining possession within the context of convulsions, immobility, loss of consciousness and collapse.²⁰² Crapanzano's physical

198 Rāzī and Ibn Sīnā both adopted Galen's thesis that mental disorders resulted from bodily dysfunctions that directly affected the brain; see note 148. Ibn Qayyim and Ṣanawbarī both accepted the concept that malfunctioning of the brain could result in mental disorders; Ibn Qayyim, 54, Ṣanawbarī, 161.

199 See above, chapter two; note especially page 52 where Ibn Qayyim recommends reciting the Qur'ān directly into the patient's ear and page 54 where Ṣanawbarī's healing techniques include scenting the air, rubbing the patient's head with oil and feeding the patient hot, moist food.

200 Crapanzano, 197.

201 Crapanzano, 164.

202 "Immediately, a young woman starts flailing about on the mats, out of control. She is guided to the center of the midan and left to kneel at the shaykha's feet, 'descending'. The music stops; she continues to move convulsively...But this is not Sitti's Khudra's chant. Some other spirit has seized her. The entranced is censured, she

descriptions of possessed individuals indicate a variety of symptoms. One boy was stricken with paralysis when he laughed.²⁰³ F., a girl of 7 or 8, was struck in the tongue by a jinn. "Every time she wanted to talk her tongue would roll back and she would remain speechless...F. looked at me curiously. Her eyes were wide-open, popping. Her focus seemed out of control; her pupils rolled from side to side. Her gestures, especially with her hands, were clumsy."²⁰⁴ Another boy of 8 or 9, struck by a jinn, fell into convulsions. When he recovered, his hand was paralyzed. Later, at a *Ḥamadsha* performance, "the little boy entered a light trance and attempted to hit his head...after about five minutes the music stopped and the boy fell to the ground."²⁰⁵

A comparison with medieval depictions of epilepsy shows striking similarities. Modern anthropological reports of possession and medieval descriptions of epileptic fits share an awareness that the victim has lost control of her body. Agitated movements, convulsions, a lack of consciousness and feeble-mindedness or a loss of speech, prevalent in both possession and epilepsy, are clear indications that the victim's body is no longer responding to conscious thought. Collapse plays a central role in identifying the cause: it signifies the beginning of seizure or possession, setting the physical responses which follow within specified grounds of cultural understanding; it also functions as a marker, allowing those who witness the seizure or trance to place the afflicted's behavior within an appropriate framework. Although anthropologists and medieval physicians acknowledge rare cases which result in a single incident of epilepsy or possession,²⁰⁶ it appears that repetition of the ill or possessed behavior is a major factor in determining the origin of the behavior as either possession or epilepsy.²⁰⁷ As modern

falls to the ground, (my italics) immobile...The chant is drummed again. Again the woman dances, then falls." Boddy, 128.

203 Crapanzano, 160.

204 Crapanzano, 160-161.

205 Crapanzano, 164.

206 Rāzī, for example, suggests that someone who experiences an epileptic fit during childhood may outgrow this; Rāzī, 124. Crapanzano, in his analysis of the eight or nine-year-old boy, notes that this was his only experience with possession; Crapanzano, 164.

207 Boddy writes, "Once possessed, always possessed: *zayrān* never wholly abandon those they have chosen as their hosts." Boddy, 134. Although Crapanzano acknowledges that the *Ḥamadsha* occasionally drive out the jinn in

neurological explanations of the disease recognize that it is possible for the bursts of electrical disturbances causing a seizure to occur only once,²⁰⁸ defining epilepsy by the repeating symptoms it manifests is based not only on observation but also on a cultural construction that, consciously or unconsciously, shares a symbolic foundation with possession. It is possible to identify other links between behavior patterns displayed by possessed individuals and those attributed to epileptics: large numbers of men and women appear to have their first seizure or possession experience as children,²⁰⁹ for example. Furthermore, the violent slashing at the head performed by men during the rituals of the *Ḥamadsha* may be a kind of corollary to the recognition by medieval healers that epileptic seizures were caused by the brain, requiring treatment directed to the head.

The physical manifestations of epileptic seizures fit comfortably within the range of behavior exhibited by the possessed. That medieval healers recognized these overlapping parameters is clear from even a superficial examination of the texts: Ibn Qayyim argues for the recognition of two different, concomitant causes of epilepsy, Ṣanawbarī's vague definitions permit an acceptance of myriad links between cause and effect; even Ibn Sīnā and Rāzī, despite

a curing process that is a "one-shot affair," he points out that most victims of possession are treated by a symbiotic cure in which "the patient...is incorporated into a cult and, as a member of that cult, he must go through "curing" periodically." Crapanzano, 159. The nature of the treatment recommended by Rāzī and Ibn Sīnā - and, for that matter, Hippocrates and Galen - with its focus on diet, behavior and repeated purgation (i.e., bleeding every spring, see chapter two, 48-49) is designed for the patient who experiences repeated seizures. "In time, he will learn to manage the bad spells," writes Rāzī, 124. He also notes that the cloth merchant "suffered from epileptic fits from his childhood." "Clinical Observations," 341.

208 See Roger J. Porter, *Epilepsy: 100 Elementary Principles*, London: WB Saunders Co., 1984, 14 and W. Allen Hauser and Dale C. Hesdoffer, *Epilepsy: Frequency, Causes and Consequences*, New York: Demos, 1990, 3.

209 Crapanzano offers a number of anecdotes in support of this idea; see pages 162-190. In Boddy's study, most women do not acknowledge possession until after they are married; however, early marriages still permit the original encounter to take place at a fairly young age. Furthermore, the explicit connection between sex, fertility and possession accepted by her respondents and the high premium placed on pre-marital female chastity, may make women unwilling to publicize possession without the protection of marriage ties. Boddy notes that four unmarried women over the age of twenty five privately affirmed spirit possessions that they had never made public. Boddy, 166. Nor is childhood possession unknown among the Zār: "A piercing cry - a uniformed schoolgirl nine or ten years old has sprawled forward into the midan, upheld on all four limbs, body jerking up and down from the shoulders. Immediately, she is led off by some older women, told it is not proper for a child to behave this way at a zār. But she does not stop." Boddy, 130.

their implicit rejection of magical and non-medical origins, recommend purging the body with a vehemence and consistency that suggests they too believed that epilepsy could be caused by outside forces.

The pluralistic approach to healing epilepsy must have been fueled, if not founded, by the ambiguous and varied spectrum of physical reactions experienced by epileptics. The boundaries between science and magic became hazy and unclear when confronted with a disease whose sudden movements, trembling and loss of consciousness identified it with medical disorders at the same time that collapse, repetition and childhood origins linked it to spirit possession. As in the case of the modern Ghaliya, medieval perceptions of epilepsy depended on the social meaning of the disease as well as the situation of the individual and her community; fluid and diverse, those perceptions allowed numerous constructions of epilepsy.

Perceptions of epilepsy arose in an Islamic healing tradition that viewed illness as a long term affliction affecting every aspect of daily life. Patients were often bedridden and unable to attend to their households or businesses.²¹⁰ Illness frequently mandated complete rest and relaxation, interrupting not only the life of the individual patient but the lives of the members of his immediate and extended family as well.²¹¹ Victims of illness and disease required a great deal of emotional and physical attention. In addition to seeking the advice of a number of different

210 S.D. Goitein's examination of the Cairo Geniza documents affords a rare look at events in the lives of the common people. In volume five, he discusses aspects of illness and treatment. An excerpt from one letter reads, "I need not tell you, my lord, what happened to me after your departure: six months of grave illness and hopelessness, during four of which I was confined to bed." S.D. Goitein, *A Mediterranean Society: The Jewish Communities of the Arab World as Portrayed in the Documents of the Cairo Geniza*, 6 vol., Berkeley: University of California Press, 1967-1993, Vol. 5, 104. See also 106-107. In his description of al-Manṣūrī hospital, al-Maqrīzī notes that the sultan "set up beds with mattresses and everything that was needed by the sick," possibly implying that illness was perceived as both long term and bedridden. Aḥmad ibn 'Alī al-Maqrīzī, *al-Mawā'iz wa l-i'tibār fī dhikr al-khiṭaṭ wa l-āthār*, 2 vol., al-Qāhira: Maktabat ath-thaqāfa ad-dīniya, 1987, vol. 2, 406-407. Sufi *tekkes* that treated the insane often required the patient to sleep in the tomb of a holy person for forty days; *Majnūn*, 242-243.

211 Goitein, vol. 5, 109-110.

healers, the family of the victim prepared special foods, medications and living arrangements for the sufferer.²¹²

An analysis of medieval texts shows that epilepsy, like other diseases, was perceived as long term. Strict attention was paid to diet and to the body's intake of fluids and herbs. The patient was never explicitly confined to bed; however, the advice of physicians like Rāzī and Ibn Sīnā to "avoid strong movements" suggests a prohibition against overwork and overexertion.

Although the concept of illness as a punishment from God was current,²¹³ it was not widespread.²¹⁴ Illness was more likely to be perceived as martyrdom or an affliction to be endured than as a retribution for sins. Nowhere in the four texts analyzed here is the victim of epilepsy presented as a sinner who deserves his fate. On the contrary, both Ṣanawbarī and Ibn Qayyim make it clear that appeals to God are the most effective means of warding off and healing epilepsy and Ibn Qayyim promotes the idea that patient endurance will earn the epileptic a place in heaven.

An examination of medieval perceptions of the leper and the victim of the plague, diseases whose contagious nature made them more visible than a personal ailment like epilepsy, permits some preliminary conclusions about the ways in which the ill and disabled were incorporated into Muslim society. Lepers had access to hot baths and natural springs, believed to

212 Goitein, vol. 5, 110-111. See also "Clinical Observations" and *Majnūn* especially the section on familial care, 135-157.

213 At least in the Jewish community. Goitein points out that some of the letters found in the Cairo Geniza documents express the concept of illness as a retribution of sin. One reads: "As to the illnesses that have befallen me and their permanence, I ask God to accept my sufferings as an atonement and to grant me pardon." Goitein, vol. 5, 108. However, as Goitein also notes, "while a person afflicted by illness might regard his plight as a punishment or atonement, his friends and admirers writing to him would describe it as a visitation by a loving God who tries the pious and saintly who are most near him." Goitein, vol. 5, 109. Michael Dols notes a different dichotomy in Muslim perceptions of the plague: the plague was sent as a martyrdom for the Muslim community and a scourge for the infidels, thereby avoiding any inherent contradictions between God's omniscience and His justice. See *The Black Plague*, 112-113.

214 See *Majnūn* 215; see also O.M. Ozturk, "Folk Treatment of Mental Illness in Turkey," in Ari Kiev, ed., *Magic, Faith and Healing*, ed. New York, 1964: Free Press of Glencoe: 343-363, 359.

have special powers for healing leprosy;²¹⁵ sometimes, but not always, they were confined to special quarters or certain sections of the city.²¹⁶ In other places, they were allowed to roam freely. Beggars would sometimes simulate leprous sores in an attempt to attract attention, pity and money.²¹⁷ Muslim society appears to have been torn between a recognition of leprosy as a contagious disease and an acceptance of lepers as the innocent victims of a cruel and debilitating disability. The medieval European concept of leprosy as a punishment for sin and immoral behavior had no Islamic counterpart.²¹⁸

In medieval Europe, victims of the plague were often abandoned as frightened friends and family fled in horror; in the lands of medieval Islam, however, pious traditions which forbade Muslims from fleeing a plague stricken land meant that victims were more likely to receive medical attention than their European counterparts.²¹⁹ Treatments offered by medieval Islamic healers included bleeding, excising the buboes and smearing the boils with Armenian clay, water and vinegar, oil of roses, apples, mastic or myrtle; when the boil broke, it was bathed with camomile, dill or other delicate ointments. Violets were recommended, both to be taken internally and rubbed on the body, and Ibn Sīnā suggested any medicine that would strengthen

215 See "The Leper," 903-905. Dols points out that waters with religious significance were visited by Christians, Muslims and Jews, regardless of religious affiliation, offering examples like the Jordan river and the Well of Job.

216 "The Leper," 910-911. Carsten Niebuhr, an eighteenth century traveler to the Middle East, noted that "...there is a quarter in Baghdad surrounded with walls and full of barracks, to which lepers are carried by force, if they retire not there voluntarily; but the government does not seem to be provided with any care for the maintenance of those lepers. They came out every Friday to the marketplace to ask alms." Carsten Niebuhr, *Descriptions of Arabia*, 2 vol., trans. by C.W.H. Sealy, Bombay: Government Central Press, 1889, vol.2, 276.

217 See C.E. Bosworth, *The Medieval Islamic Underground*, 2 vol., Leiden: E.J. Brill, 1976, vol. 1, 24, 84, 100. Europeans also simulated epilepsy to beg for alms, *The Falling Sickness*, 165-166. Lepers in Islamic societies were not always forced to resort to begging: a number of pious foundations provided for their care. See the *Encyclopaedia of Islam*, second edition, vol.1, 1222-1226, "Bīmāristān."

218 On the contrary, patient endurance of leprosy, like epilepsy, would earn its victim eternal spiritual reward. Dols writes: "Al-Jahiz maintained that physical ailments are not social stigmas but what may be called signs of divine blessing or favor...The afflicted were spiritually compensated by God. As a consequence, al-Jahiz attached special merit to the lives and works of these more sensitive souls." "The Leper," 902.

219 The prohibition against flight appears to be a pragmatic medical principle, designed to limit the spread of the plague. *The Black Death*, 110. Of course, some Muslims did flee, despite the prohibitions. For a re-interpretation of Dols' arguments, see L.I. Conrad, "Arabic Plague Chronologies and Treatises: Social and Historical Factors in the Formation of a Literary Genre," *Studia Islamica* 54 (1981): 59-97 and "Ṭā'ūn and Wabā' Conceptions of Plague and Pestilence in Early Islam," *Journal of Economic and Social History of the Orient*, 25 (1982): 116-130.

the heart.²²⁰ Michael Dols points out that "the urban survivors responded to the plague pandemic by trying to protect the living and by caring for the dead and dying."²²¹ Magical and religious practices, large-scale funeral services, burials and mass visits to the cemeteries outside the cities indicate a culture of care; rather than blaming victims of the plague or obsessing about an imminent apocalypse, medieval Muslims were concerned with the conditions and standard of living that surrounded those unfortunate enough to contract the plague.

Perceptions of leprosy and plague indicate that Muslims approached the concept of illness from a gentler, more community-oriented perspective than their European counterparts.²²² Although Muslim society remained well aware of the dangers that the leper and victim of the plague represented to both individual and community, Islamic concepts of the role of God, contagion and predestination²²³ as well as the Muslim sense of brotherhood and piety, worked against any construction of disease that blamed it on the individual and her sins. The ill person was first a human being and a Muslim and only second, a Muslim afflicted with disease.²²⁴

220 *The Black Death*, 105-109.

221 *The Black Death*, 253.

222 For an analysis of European approaches to illness that show that the European community frequently perceived illness as the result of the victim's sins, with consequent exile and ostracism, see P.R. Doob, *Nebuchadnezzar's Children: Conventions of Madness in Middle English Literature*, New Haven: Yale University Press, 1974 and Judith S. Neaman, *Suggestion of the Devil: The Origins of Madness*, New York: Anchor Books, 1975 on madness; S.N. Brody, *The Disease of the Soul: Leprosy in Medieval Literature*, Ithaca, NY: Cornell University Press, 1974 on leprosy and Johannes Nohl, *The Black Death*, London: G. Allen and Unwin, 1961 and Raymond Crawford, *Plague and Pestilence in Literature and Art*, Oxford: The Clarendon Press, 1914 on plague.

223 A number of *ḥadīth* refute the concept that contagion as pestilence is from God alone, including one in which a Bedouin asked the Prophet; "Oh, envoy of God, how do you explain that my camels were as healthy as gazelles and then a mangy camel comes, mixes with them and makes them mangy?" The Prophet replied, "Who infected the first camel?" Bukhārī, *Le Recueil des traditions mahometanes*, vol. 4, 55, cited in *The Black Death*, 119. See also Bukhārī, vol. 7, p. 409. Of the many medieval treatises on the plague, only Ibn al-Khaṭīb defended the concept of contagion, although others, like Ibn Khātima, reported evidence clearly in accord with this concept: see the section on "Medical Interpretations," 84-109, in *The Black Death*.

224 Comparing the Muslim world to European Christendom raises questions about the Christian and Jewish communities in the Muslim Middle East. Dols points out that "Fear of the Black Death in Europe activated...a European stereotype of fear; the collective emotion played upon a mythology of messianism, anti-Semitism, and man's culpability for his sins" which had no Islamic counterpart. Suggesting a connection to the fact that Islam has no Quranic basis for apocalypse comparable to the Book of Revelation, he notes that Revelation was the least popular book in Byzantine and Greek Orthodox theology. *The Black Death*, 294-295. H.R. Trevor-Roper writes that "the Greek Orthodox Church, unlike the Catholic Church, built up no systematic demonology and launched no witch-craze." H.R. Trevor-Roper, *The European Witch-Craze of the Sixteenth and Seventeenth Centuries and*

Islamic society accommodated and incorporated the victim of illness, including the epileptic. That the epileptic was at least occasionally viewed as an annoyance is clear from Rāzī's clinical notes: "Thereupon he was free from epileptic fits for three months, and the neighbors in the quarter came to thank us."²²⁵ The epileptic was noticed, therefore, but not segregated; the very fact that he'd been allowed to annoy the neighborhood for so long (the man had been an epileptic since childhood) indicates a remarkable tolerance in the limits of acceptable behavior. Most treatments for epilepsy were long term and implemented at home, indicating the epileptic's position within society: a special case, requiring individual care and attention, but afforded personal freedom and unrestricted movement. The madman in the medieval Islamic world was only restrained in cases where excessive violence endangered his own life or that of others; for the most part, the insane were allowed to wander without restraint, often seen as wise or holy by virtue of the very insanity that differentiated them from the rest of society.²²⁶ The epileptic's special relationship with the jinn may have placed her in a position of power; modern studies suggest that possessed individuals are regarded with a complex mixture of respect and condescension.²²⁷ At the same time, the epileptic's position as an invalid would have elicited concern and distress from the family and subjugated her to the strictures of the physician, religious healer and/or magician.

Other Essays, New York: Harper and Row, 1969. Speros Vryonis draws a parallel between Muslim fatalism and the Byzantine concept of blind and arbitrary *tyche* that directs the affairs of men. See Speros Vryonis, *The Decline of Medieval Hellenism in Asia Minor and the Process of Islamicization from the Eleventh through the Fifteenth Centuries*, Berkeley and Los Angeles: University of California Press, 1971, 409, 418. Cultural behavior is a complex pattern of religion and tradition but I would suggest here that Eastern Christians and Jews responded to the plague with behavior more in keeping with the context of their cultural milieu than the scriptural references that blamed the victims for disease.

225 "Clinical Observations," 341.

226 *Majnūn*, especially chapters twelve and thirteen. For a very different experience, see Temkin's analysis of reactions to epilepsy in medieval Europe, *The Falling Sickness*, chapters four through six.

227 See Boddy, chapter six, for examples of women who are respected in the community due to their interaction with the jinn; men, on the other hand, are scorned for forming relationships with the jinn, which is seen as a feminine activity. See also Crapanzano who notes that the possession of some women takes the form of their squealing and grunting like pigs; these women are treated with disrespect and some repulsion. Crapanzano, 161.

In Islamic law, insanity was defined as the inability to understand²²⁸ and an individual classified as insane was not allowed to testify in court or dispose of property.²²⁹ In most cases, the insane were not held responsible for infractions of religious law or serious crimes, including adultery and murder.²³⁰ Although the insane could not contract their own marriages, they could be contracted into them by a guardian; insanity constituted legal grounds for a husband's divorce of his wife and, sometimes, a wife's divorce of her husband.²³¹

The epileptic might have been classified as insane, depending on the situation and the school of law. The Shāfi'ī and Ḥanbalī madhhabs express vague definitions of insanity, referring to a self-evident condition that evokes automatic interdiction.²³² The Mālikī consider the insane legally analagous to a child whether deprived of reason permanently or temporarily; the latter category includes epileptics. The Ḥanbalī, on the other hand, classify the insane with children only when exhibiting symptoms of mental illness; during rational periods, they possess their full

228 This definition is based on Qur'ān 4:6 - "Test well the orphans, until they reach the age of marrying; then, if you perceive in them right judgment, deliver to them their property; consume it not wastefully and hastily ere they are grown" - and Qur'ān 2:282 - "And if the debtor be a fool or weak, or unable to dictate himself, then let his guardian dictate justly." The key discussion centered around the question of right judgment (*rashīd*) which, though interpreted to mean upright in religion, was extended in different ways. Someone who used vulgar language or confused buying with selling, needed further testing before being confirmed as *rashīd*. For an in-depth analysis placing insanity in Islamic law within a historical context, see *Majnūn*, 434-455.

229 Joseph Schacht writes, "The highest degree of legal capacity is that of the free Muslim who is sane (*ākil*) and of age (*bāligh*); he is fully responsible (*mukallaḥ*)...The insane (*majnūn*) and small children (*ṭifl*) are wholly incapable but can incur certain financial obligations; the idiot (*ma'tūh*) and the minor (*ṣabī*, *ṣaghīr*) have, in addition, the capacity to conclude purely advantageous transactions and to accept donations or charitable gifts." *Islamic Law*, 124-125. Individuals classified as insane had a trustee to protect their property; this might be a *wāliyy* who exercised much the same function as a guardian assigned the custody of children (see the *Encyclopaedia of Islam*, second edition, vol. 3, 16-19, "Ḥaḍāna") or a judge. Dols points out that Ibn Khaldūn claims the judge's supervision of the insane developed during the early period of Islam; see *Majnūn*, 441 and Ibn Khaldūn, vol. 1, 455.

230 "Because the mentally disturbed lacked deliberate intent, they could not be held liable for criminal offenses, but they, or their guardians, were liable for damages," *Majnūn*, 442. Schacht explains the centrality of the concept of *nīya* or intention to the development of Islamic law on pages 116-117 of his *Islamic Law*; also see the entry on "Nīyya" in the *Encyclopaedia of Islam*, second edition, vol. 8, 66-67.

231 Seymour Vesey-Fitzgerald, *Muhammadan Law: An Abridgement*, Oxford: University Press, 1931, 40. In early twentieth century Palestine, a wife whose husband went insane had the right to ask a judge for a divorce, which would be granted if the husband were irrevocably lost. S. H. Stephan, "Lunacy in Palestinian Folklore," *Journal of the Palestinian Oriental Society* 5 (1925): 111-118, 4. See also Lelah Bakhtiar, *Encyclopedia of Islamic Law: A Compendium of the Major Schools*, Chicago: ABC International Group, 1996 who notes that divorce by an insane person "is not valid, irrespective of the insanity being permanent or recurring," 499.

232 *Majnūn*, 436-7.

rights under the law.²³³ In this case, epileptics would be legally dysfunctional only during a seizure. In terms of marriage and divorce, epileptics appear to be under the same injunctions as the insane; a modern *fatwa* permitted a man to divorce his wife after she exhibited signs of epilepsy.²³⁴ Nonetheless, the perception of epilepsy appears as undefined in Islamic law as in other aspects of Islamic society: sometimes the epileptic is classified as insane, sometimes she is not. No clear legal injunctions agree to place the epileptic either within the contours of mental illness or outside it; once again the question of epilepsy is left undecided, able to take shape within a number of different frameworks, depending on the situation.

Two final incidents illustrate the contrasting reactions that epileptics evoked in the medieval Islamic period. The historian Ṭabarī describes in detail an incident in which a specter began haunting the grounds of the palace of the Caliph al-Muʿtaḍid. He concludes:

On Saturday, Ramaḍān 7, 284, (Saturday, October 8, 897) lunatics and exorcists were assembled and brought to al-Muʿtaḍid's Thurayyā palace, because of the specter that was appearing to him. When they were brought in, al-Muʿtaḍid went up to a chamber on the upper floor and observed them. While he was looking at them, an insane woman had an epileptic fit, became disturbed and uncovered herself. Al-Muʿtaḍid turned away from them in disgust. Reportedly, he had five dirhams given to each of them, following which they were sent back. Before he had observed them, he had sent / / someone to ask the exorcists whether it was possible for them to find out about the specter that had appeared to him. One of them mentioned that they might cast a spell upon one of the lunatics and, when he fell down, ask the jinnī what the specter was. However, when al-Muʿtaḍid saw the woman have the epileptic fit, he ordered them sent home."²³⁵

²³³ Abd ar-Raḥmān al-Jazā'irī, *Kitāb al-fiqh 'alā l-madhāhib al-'arba'a*, 2 vol., Cairo: Wizārat al-awqāf, 1993, vol. 2, 478-479.

²³⁴ Verdit Rispler-Chaim, *Islamic Medical Ethics in the Twentieth Century*, Leiden: E.J. Brill, 1993, 134-137.

²³⁵ Muḥammad ibn Jarīr aṭ-Ṭabarī, *The History of al-Tabarī*, xxxiii. *The Return of the Caliphate to Baghdad*, trans. Franz Rosenthal, Albany, NY: State University of New York Press, 1985, 66.

This incident provides evidence that epileptics were classified with the insane, at least on some occasions. More interesting, it suggests that even the Caliph recognized that the insane (including epileptics) were able to wield some kind of power over spirits and jinn. Furthermore, the vague description of the woman's seizure prevents a final conclusion that she was, in fact, an epileptic. "... (she) became disturbed and uncovered herself" could refer to any number of mental, physical or psychological conditions. That the phrase "she had an epileptic fit" is attached to the other details in the context of a search for an otherworldly specter reveals the intimate association between epilepsy and jinn.

Despite the tacit admission that epileptics possessed some kind of power, public displays of epileptic symptoms caused embarrassment and discomfort: witness the Caliph's disgust and dismissal. In this incident, an acknowledgment of power and a willingness to ostracize are reported side by side, a clear indication of the multiple reactions and perceptions of epilepsy.

The second occurrence took place between the Umayyad general al-Ḥajjāj and a man of Medina. When the man, unaware of al-Ḥajjāj's identity, offended him by placing the blame for the city's poor conditions on al-Ḥajjāj's execution of Ibn Ḥawāra, the general flew into a rage and threatened to execute him. The shaykh defended himself with the claim of epilepsy; he experienced epileptic fits five times a month, he said, and his madness was now beginning. Al-Ḥajjāj accepted this explanation and dismissed him.²³⁶

Although this man was not an epileptic, he was able to protect himself by accessing the cultural ideas he and al-Ḥajjāj shared about epilepsy; it was a chronic condition that afflicted patients over a long period of time, a repetitive disease that struck month after month. Epileptics were not responsible for their behavior when experiencing the symptoms of epilepsy. Al-Ḥajjāj's reaction stands in clear contrast to al-Mu'taḍid's: he is not disgusted by the seizure, nor does he turn away; rather he expresses compassion and spares the man's life. The two incidents express a

236 an-Nisabūri, *Kitāb 'Uqālā al-majānīn*, Miṣr: Maktabat al-'arabiya, 1924, 41-42.

complex relationship between ideas of the epileptic as powerful and powerless: both capable of controlling unseen forces and incapable of controlling his own behavior, the epileptic occupied various positions ranging from benefactor to the acceptance of alms.

CONCLUSION

Ibn Sīnā, Rāzī, Ibn Qayyim and Ṣanawbarī each wrote from a distinct perspective. They lived at different times, in different places; they had divergent aims and competing agendas. In this study I have tried to suggest, however, that all four authors belonged to the same discursive tradition; a tradition they helped to shape, even as their work and works were shaped by it.

This review of epilepsy in medieval Islamic medicine suggests that medieval Islamic medical practitioners shared a common framework for healing: a medical terminology based on Greek tradition, an acceptance of multiple, pluralistic, at times even contradictory, treatments, a shared pharmacopoeia and an overall Islamic trust in God. Within the confines of the different forms of healing and influenced by Islamic cultural patterns of care, these authors directed their treatments to three specific areas: diet, behavior and purgation. The writings of these four scholars offer considerable evidence that healers in all three genres adopted and adapted treatments from each other as well as from a wide variety of sources; they displayed the same willingness to accept divergent and contradictory treatments as they did in acknowledging multiple causes for the onset of epilepsy. The popular medieval perception of the epileptic mirrored the unstable, everchanging view of epilepsy found in the works of healers: the epileptic was neither ill nor well, at times possessed, at times the victim of a terrible disease,

both insane and in possession of their senses. Part of this was certainly due to the very nature of epilepsy as a disease with intermittent, but extremely visible seizures. Part of it also seems, however, due to a cultural milieu that allowed and accepted a more nuanced view of disease than can be found in a single, all-encompassing paradigm.

In the complex and pluralistic healing traditions of the medieval Muslim world, magical, medical and religious healers appeared to offer distinct, coherent and incompatible explanations of the causes, treatments and meaning of epilepsy. Ibn Sīnā and Rāzī, for example, took a physiological approach based on Greek texts, Ibn Qayyim emphasized oral traditions that referred all illness to the ultimate arbitration of God and Ṣanawbarī viewed epilepsy as a clear case of jinn possession. In fact, however, a detailed analysis and comparison of the texts suggests that not only their patients but the authors themselves functioned in a shared healing environment, formed by the integration and interaction of medical, religious and magical concepts and methods of healing. In other words, the Islamic culture which shaped all of these writers imbued them with a similar world-view which transcends the genre of each work.

I am not suggesting that Ibn Sīnā, Rāzī, Ibn Qayyim and Ṣanawbarī were not profoundly affected and moved by influences outside the realm of the Islamic healing tradition, or that each scholar was not responding as an individual to the complex society he lived in. I am suggesting, however, that it is possible to make some conclusions about the nature and effect of the discursive tradition which influenced their work, even as they contributed to its continued existence and development. The solid basis of an Islamic sensibility, the terminology of a Greek tradition, the Middle Eastern cultural milieu which directed understanding of disease toward a God-centered perspective framed a tradition that offered and accepted multiple, flexible understandings, perceptions and treatments of epilepsy.

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