Diagnosis of Miracle or Miraculous Diagnosis? Comments on Early Modern Understanding of Unnaturalness

Černý K.
Charles University in Prague, First Faculty of Medicine, Institute for History of Medicine and Foreign Languages, Prague, Czech Republic

Received March 8, 2009; Accepted April 2, 2009.

Key words: Miracle – Medicine – History – 17th century

Abstract: The paper deals with certain aspects of healing miracles in the 17th century. In the beginning I outline methods recently developed in the history of medicine to deal with unnatural phenomena. I use division suggested by Anne-Marie Korte and comment on sceptical, apologetical and hermeneutical approach. Further I demonstrate difficulties which we face in study of miracles on two specific cases: Our Lady of Foy, and (missing) burning scars of injured brewers. In the end I describe perhaps the most specific contemporary definition of “miraculous” which stemmed from tradition of forensic medicine. For this purpose I use a treaties of Johannes Franciscus Löw ab Erlsfeld, professor of Prague Medical Faculty in the beginning of the 18th century which follow work of famous papal physician of the previous century Paolo Zacchia.
Introduction
I think that I can afford a statement that substantial part of unnatural or supernatural phenomena throughout the human history was related to healing. In my paper I would like to discuss available approaches to the phenomenon of a miracle that is a supernatural event which accompanies the human society since the beginning of times. I will limit my comments on the subject to medieval and early modern European history [1].

In the beginning I should perhaps explain why do I consider this topic to be of importance for modern history of medicine and what creates the link between a medical diagnosis and a miraculous phenomenon. As you probably know there is a huge amount of historical resources related to supernatural interventions. You would find them in books (or lists) of miracles, legends of saints, canonisation documents, they even create a substantial part of concepts of nature in academic ambient up to the 18th century. This means that we have got an amazing quantity and variety of materials which share two features: the unnatural occurrence and the medicine. My research is motivated by a necessity to find an acceptable approach that will join both supposedly incompatible phenomena.

If I speak about a miracle I should frame it in a reasonable definition. As I am going to show later, beyond the limits of nature there is actually much more than just simple miracle. And even though we solved this problem and established a widely accepted definition of miracle, we still have to deal with the background of medieval and early modern medicine, and we still face the problem of retrospective diagnosis.

A Definition of Miracle?
Considering available approaches to the definition of miracle I will adopt division suggested by Anne Marie Korte in her gender related project named “Women and Miracle Stories” [2]. She offers three possible stances called “sceptical”, “apologetical”, and “hermeneutical”. I shall explain them more thoroughly.

The sceptical approach generally means that we try to see a miracle in the context of modern biomedical sciences. The initial premise in this case defines a miracle as a substantial breach of laws of nature. Therefore the only remaining reasonable explanation for a phenomenon called “miracle” could be human error, forgery (trickery) or placebo effect. If a biomedical research comments on miraculous in historical resources, it tends to emphasize its psychological or psychiatristical dimension, marks it as a demonstration of hysteria or communicated insanity.

Let us make one thing clear: Miracles will never comply with double blind clinical study which is considered to be something as a gold etalon of the biomedical relevance and truth.

I can not comment on the sceptical approach in detail, but I will outline three points which render it practically unusable for a historian of medicine:
First, it ignores everything that belongs to the vast array of social and cultural relationships. Miraculously healed patient is seen above all as a physical body. But any historian must acknowledge that mediaeval and early modern society emphasized a role of particular person in complex net of social relations. That is why some historians speak not only about health and illness of an individual patient, but also about health and illness of the whole community, which is treated using many various rituals of self-definition [3].

Second, the placebo effect is probably as uncertain principle as any ordinary medieval magic. Indeed some researchers call it “black box”, because we know that it works, but we do not know, what is inside.

Third, we must not forget that the medicine as it is represented by its “official establishment” today, pursues its own agenda. Although medicine and its practitioners emerged from the amazing advancement of the 19th century as seemingly objective and progressively self-perfecting science, this position has been gradually challenged during the last 40 years from different positions. There are studies which show that behind the seemingly dignified veil of academic medicine is a hidden struggle for economical, political, and social control [4].

The second approach, mentioned in the project of Anne-Marie Korte is called “apologetical”. It is probably the oldest one because there were always those who challenged miraculous claims and others who defended them on religious basis. I will again make just few remarks on the subject:

This approach seldom brings something new to our research perspective. In fact it is often immersed in centuries old arguments with Benedictus de Spinoza or David Hume’s treatise of miracles.

On the other hand there are rising voices which draw attention to increasing role of religion in the Western society [5]. Although we should be cautious about seemingly objective position of modern science, we should also avoid the other extreme especially if we are facing possibility that a future president of the United States will held as truth that the Earth was created six thousand years ago.

There is nevertheless one important point that is connected with the religious stance: A miracle depends on religious context, that is governed by religious authorities rather than scientific ones. If the biomedicine knows not a single verified case of healing miracle, has it any authority to define it? Obviously it does not.

The third way how to deal with subject of miracles in historical texts is called “hermeneutical”. Anne-Marie Korte offers following explanation: “the point is to look for their concrete meanings (of miracles) for various groups of people”. The research is focused on “inner perspective”, or “the words and the meanings attributed to miracles by those most directly involved”. This method has several advantages: It claims no ability to discern “true” nature of a miracle, because it is concerned with meanings and symbols. It focuses on the role of a miracle as social ritual rather than on its theological implications or its position in the system.
of natural laws. Therefore it offers secure operational area for both a historian who believes in (particular) God and for a historian who is atheist.

I am not able to offer a comprehensive interpretation of the hermeneutical approach, however I would like to mention certain important features which (I think) promise interesting results:

There are more than few researchers who emphasize role of memory and its “reinterpretation” of facts after a substantial incident. Namely Ann Carmichael or David Gentilcore show that the process of recollecting of the past is always associated with a self-definition and a search for new explanation of ones personal history [6].

Tightly associated with the question of memory is problem of authority. In other words: if we have (as it sometime happens) various and contradictory stories of witnesses of an event, then whose legend finally prevails? Is it always the one suggested by the official authorities or the Church? And whose authority was the decisive one? The authority of priest, the one of secular magistrate or the one of university educated expert [7]?

Finally I would like to draw your attention to the issue of gender. I practically stumbled upon this problem for the first time when I tried to analyse list of miracles of Our Lady of Klatovy collected in the 17th century by Johannes Hammerchmid [8]. In the beginning of the 20th century this case was re-evaluated by a contemporary historian Jindřich Vančura who held very negative attitude toward baroque Catholicism, and he concluded that the whole miraculous shrine had been a catholic forgery aimed toward credulous women of the city [9]. But if you simply count collected testimonials you will find that there are actually more male witnesses than female ones. The historian was (probably deliberately) wrong. However the link between credulity and woman tells a great deal about historiography in the beginning of the last century. A very interesting modern example of analysis that connects a miraculous event and the issue of gender can be also found in a paper of Laura Smoller concerning canonisation process of St. Vicent Ferrer and in study about Mont Saint Michel by Katherine A. Smith [10].

Parallels between Miracle and Diagnosis
So far I have been trying to comment on methodology associated with modern view of miraculous events. Now, apart from the fact, that majority of miracles are healing ones, is there any other connection between a miracle and the historical diagnosis?

The crucial point is that dilemma of a miracle and that of a diagnosis in the early modern era share their dependence on contemporary view of the system of nature. While miracles are often seen as something unnatural (but only in certain sense), the diagnosis is usually but not always seen as natural and this leads to the question: where are exactly borders of medieval and early modern realm of nature? What we know for sure is that Nature was considered to be a part of
God’s Creation and as such it was working but not perfect and often faulty, which led to whole series of mistakes – unnatural occurrences sometimes even without a religious meaning. Miracles belong to the scope of Church authorities but they can not be fully understood without grasp of early modern medical ideas. And simultaneously a diagnosis in the past does not share only natural features but it has also a religious extent.

This leads us further to another point: division of the early modern world is much more complex than just to a natural and unnatural. There are things that are naturales, mirabiles, supranaturales, praeternaturales, miraculosae and none of those adjectives has the same meaning. What looks like an abstract game of words in fact underlines the necessity to see views of clergy and physicians as a harmonic mutually corresponding system.

Historical records often contain seemingly natural descriptions of diseases, illnesses, injuries, epidemics etc. which nonetheless do not comply with our understanding of physics, chemistry or biomedicine. It is easy to put all the early modern unscholarly world of marvels and myths aside presuming that it lacks an internal logical meaning. But it is not true. Even a medically pointless principle is transmitted, shared or inherited through centuries and it creates meaningful world of its own because it is used as explanatory context of contemporary medicine [11].

A Strange Miracle: Our Lady of Foy and Healed Brewers
To avoid speaking solely about the theory, I would like to present two examples of peculiar nature of miraculous in historical resources. In the year 1609 near the city of Foy in Belgium a large oak tree was cut down to be used for shipbuilding but the carpenter saw to his astonishment that in the mass of the wood, there was a little statue of Blessed Mother of God made from sandstone. How could a statue get inside the trunk of the tree? It was obviously a miracle. The word spread out rapidly, and the place was soon a centre of a cult of Our Lady of Foy. Copies of the stone original were made from the wood of the oak and sent throughout the Europe to support the catholic faith. The Jesuit order was particular supporter of the cult in Belgium, Bavaria and Bohemia [12].

In the middle of the 17th century – some fifty years later – a scholar wrote a treatise of statues and other holy objects that could be found inside a tree. He stated that this happens often and naturally: simply there is a hollow in the trunk, someone puts a statue or holy picture inside, and then the object is encrusted in the bark. Later after the tree is cut down the statue is found and considered miraculous, although all this has a perfectly reasonable natural explanation. This scholar, I am quoting now, even mentions explicitly Notre Dame de Foy as one of examples of this process. On the first sight the explanation looks like an anti-catholic propaganda. But it would be a wrong presumption. The author was
in fact a famous Jesuit, German mathematician and “natural philosopher” Caspar Schott (1608–1666). And the fact that he mentions in his Physica curiosa [13] specifically Our Lady de Foy as something perfectly natural means two things: (a) The natural explanation of the miracle was approved by the censorship of the Society of Jesus, and (b) the event – although a natural interpretation was provided – was still considered to be miraculous. This greatly emphasizes an awkward borderline between naturalness and unnaturalness in religious and miraculous context in the pre-Newtonian era.

The second example involves beer brewing. Accidents in brewery were often associated with burn injuries as results of scald after a fall to the boiling water. Even if the victim survives the accident the burn injury is usually followed by a massive aesthetic defect – burn scar. However various historical accounts repeatedly contain the conclusion that the victim was (as result of miracle) integre sanus – completely healed.

Taking this in consideration I see two possible explanations: The water was not so warm as to cause a permanent damage to the skin, and the situation was seen as serious by the participants simply because of an anticipated possible horrendous result of a massive injury which was surely known to them. I thing that a similar psychological effect of anticipated danger could be observed also in the case of pregnancy. Result of slowly approaching dramatic moment of birth led to rising fear and tension, although actual chance of a fatal outcome (death of either mother or child or both) was rather low – around 1% [14].

Yet there is another possible explanation of the “brewer paradox”. What if the aesthetics of the human body was not seen as a part of health? What if they simply ignored even clearly visible scars and pigment stains? Andrew W. Bates seems to suggest something similar when he writes about a congenital deformity called Down’s syndrome [15]. The syndrome which is result of chromosomal disorder affects both human body and the intellectual capacity of the patient. Bates points out that in the pre-19th century resources a description corresponding to this deformity is virtually non-existent. He concludes that corporal differences between a healthy individual and the one with the Down’s syndrome were not considered to be important enough and therefore they were not recorded by the contemporary observers.

**The Forensic Medicine: A Concise View of Miracle**

While we are unable to reconstruct many particular aspects of the healing miracles in the 17th century, there are two professional groups that offer more detailed (but mutually different) understanding of a miracle: priests and physicians. The Church had been studied the subject since the early Christian times and for obvious reasons it produced several elaborate definitions. Miracles were an integral part of Christian faith and their importance was even strengthened on the catholic side during the Council of Trent (1545–1563) which confirmed the relation between
the sanctity and a miracle. Development of the theological nature of miracle was discussed in a number of works and it exceeds purpose of this article [16]. Physicians on the other hand entered the process of definition on a larger scale during the early modern times. There were two incentives that led medical specialists to this involvement. Anyone who is familiar with miraculous stories from the past knows that they often contain a reference to worldly medical practitioners who were unable to cope with patient’s illness. For example Joannes Miller writes in one of his narratives: “anno 1622 ... coniunx Caroli graviter aegrotabat ... voto se S[ancto] P[atri] Ingatio agebatur, ... et praeter quatuor[!] Medicorum spem integre convaluit” [17]. There are numerous similar cases which prove that religious writers repeatedly challenged the academic medicine and found it unable to compete with divine power of Saints or holy shrines. Nevertheless the whole idea of a healing miracle was also based on condition that someone was able to identify whether an illness was serious (preferably deadly) or not. And this “someone” was often an academically educated physician. Therefore the physician is portrayed as both unsuccessful but also competent observer of the illness.

During the early modern period the relationship between religion and medicine was gradually changing and physicians gained self-confidence, in the end the subordinated position of medical science transformed, and it was no longer merely an ancila theologiae (servant of theology). However before the revolution happened the medicine spent nearly two centuries building a scientific apparatus which was intended to work in harmony with contemporary theological views of nature to provide it with medically oriented reasoning.

Perhaps the most significant branch of medicine which was dedicated to study of miraculous was forensic medicine that appeared as an independent area of research in the second half of the 16th century [18]. The oldest treatise which was demonstrably used in Bohemia was an extensive volume published for the first time in 1621 by a papal physician Paolo Zacchia. His Quaestiones medico-legales were repeatedly issued during the 17th century and it creates a basis for the first book on the subject written by a Czech author: Theatrum medico-juridicum of Johannes Franciscus Löw ab Erlsfelden [19].

Theatrum medico-juridicum was published in 1725 and it relies heavily on Zacchia’s text (in fact there are numerous passages which copy Questiones word by word). Johannes Franciscus Löw of Erlsfelden was the most important medical authority in Bohemia since 1680s until his death in 1725 [20]. His text offers a unique opportunity to look into contemporary intellectual view of a healing miracle and we know that his works were used as textbooks by students of Prague University. Furthermore Löw was asked to provide his expert medical opinion in case of canonisation of St. John Nepomuk and in addition he himself was miraculously healed after an accident in the year 1704 by virtue of prayers to St. Ignatius of Loyolae [21].
For purpose of this study the most important part of Löw’s book deals with various contemporary views of God’s intervention. Czech physician (in accordance with Zacchia a century sooner) states that majority of miracles is not miraculous at all. It is caused by the fact that uneducated people (literally idiotae) consider everything extraordinary to be miraculous without a thorough study of laws of nature [22]. They are not aware that demons, devils or their servants (with permission of God) are able to perform deeds of the most curious nature and thus delude true Christian believers. Löw therefore proclaims that the only authority that has the power to verify miraculous nature of an extraordinary event is the Catholic Church. It should however respect opinions of academically educated physicians because “a physician incessantly dedicates himself to study of nature and therefore he is able to discern what is natural and what exceeds the boundaries of nature” [23].

From Löw’s point of view human understanding of God’s miracles resembles a triangle: the most important apex is the opinion of Church which is supported by the second one – the expertise of a medical specialist, but both are constantly challenged by belief of ordinary people that have to be continuously educated and supervised. It is important to be aware that failures of simple-minded are not only result of heresy or diabolical influence but also stem from an unguided religious zeal. An unknown cause of a natural event is then seen as a proof of divine intervention.

Löw does not offer more detailed insight to popular belief. Nevertheless he provides us with an official perspective which was in accordance with teaching of the Catholic Church and was approved by contemporary censorship. Whether this version was commonly accepted and how much it differed from beliefs of an ordinary citizen in the 17th century remains to be seen.

Let us take a look on Löw’s explanation. In the beginning he states that the exclusive source of miracles is God, thus no Saint, angel or demon is able to cause a miracle on his own. Saints or angels only intervene in favour of a prayer. Daemons are able to perform extraordinary deeds because of their profound knowledge of nature. A daemon is therefore a splendid physician or apothecary who knows the best cures for human ailments although he is unlikely to use it for good of a patient. This view of devil as a perfect natural scientist has actually rather long tradition [24].

Czech physician explains several conditions which define a true miracle. The explication is divided in two parts: the first one treats miracles as general phenomenon and the second one is related specifically to healing miracles.

Miracles do not share the same quality. They can be divided to three groups according teaching of St. Thomas Aquinas: miracles against the nature (contra naturam), miracles which surpass the power of nature (supra naturam), and miracles outside the nature (praeter naturam). Furthermore they can be divided according the scale of God’s involvement:
1. “Absolute miracles” caused directly by God.
2. Miracles performed through an agent (usually a Saint or an angel).
3. Miracles performed through an agent but only by means of reinforcing his/her otherwise natural abilities to unnatural level.
4. Miracles performed through an agent with natural abilities, while God only changes *modus operandi*.

From this list it is obvious that miracles were understood in context of a hierarchical structure; in other words: there were greater miracles and smaller ones. The most prominent miracles are those mentioned in the Scripture because they usually belong to the first category. This hierarchy of unnaturalness is important for our understanding of local cults of miraculous shrines, statues, or paintings which sometime lingered on the verge of official acceptability. The least significant wonders could be very inconspicuous and this fact opened a margin for popular interpretation of holiness and God’s deeds.

Professor Löw also enumerates conditions which identify a miracle:

- The effect of miracle must be undoubtedly extraordinary.
- The effect must be clearly a result of divine intervention. Mere “unnaturalness” is not sufficient.
- The effect must not be result of “power of words” (*ex vi verborum*). It rules out specific situations like consecration which happen outside the order of nature as a result of God’s grace but lack certain features typical for miracles: namely unpredictability. For example transubstantiation (transformation of bread and wine to Body and Blood of Our Lord) happens every time when certain conditions are fulfilled which is in stark contrast to a miracle.
- The result of a miracle must be perceptible by human senses.
- The miracle must be in compliance with teaching of the Catholic Church and it must lead to salvation of faithful and greater glory of God.
- If a miracle is a process then it must happen much more rapidly than a natural occurrence and without interruptions. (This condition does not apply to all miracles, but it is particularly significant for healing ones.)
- A healing miracle must happen without pain. (Pain was relevant means of healing in the past.)
- The last but the most important condition is that the occurrence must be perfect without a flaw.

Regarding healing miracles Löw has to face awkward diagnostic power of contemporary medicine. This leads him further to another set of conditions:

- The illness must be incurable or at least very difficult to heal.
- The patient’s state of health must be grave. The illness can not be trivial.

Černý K.
(Majority of healing miracles describe either patients on their deathbeds or those with a permanent disability – blindness, deafness, paralysis etc.)

- The early modern medicine assumed certain course of disease. Löw points out that miracle must not happen in a stage when the illness already should recede.
- Change of patient’s status must be quick and complete.
- The sick person must not contract another disease immediately after healing.
- The procedure of miraculous healing must in no case resemble a medical treatment.
- The recovery must not follow an evacuation (defecation, emesis, exudation, etc.) because that alone was in the 17th century sign of a natural healing.

Only if all those conditions are fulfilled the physician can according to Prof. Löw legitimately suggest to a Church authority that the healing was miraculous.

**Conclusion**

In the beginning of this paper I tried to point out that modern study of unnatural phenomena must not be based on conservative ideas of faith as something contradictory to reason. History of medicine must focus on up-to-date methods: gender, social ritual, memory or authority.

Furthermore I believe that the idea of a miracle as something rather straightforward that has to be outside the laws of nature in the 17th century is incorrect because it does not correspond with historical accounts. Miraculous narratives describe complex historical reality and although we will never be able to tell apart the truth hidden behind those texts, we can study individual or group motivations or use them to gain insight to early modern understanding of world both natural and supranatural.

Although forensic medicine of early modern times imposes rather strict rules on miraculous deeds, other sources (natural philosophy, popular belief) present different definitions. We can not draw a clear line between a miracle and a natural event. The hierarchy of miracles based on the teaching of St. Thomas Aquinas in accordance with Aristotelian natural philosophy grants sufficient (and perhaps intentional) uncertainty to cover wide range of unusual incidents.

The Catholic society was obviously unwilling to eradicate signs of divine miracles from everyday life of ordinary people. Nevertheless I suggest that the Church was not motivated by necessity of conservation of uneducated and ignorant (and thus easy to govern) society but that there were other motives, among others a tendency to use power of faith as a potent instrument which could decrease suffering of patients.
References


11. For example idea of humoral pathology or whole system of aristotelian view of nature approved by Council of Trent as it is described in HELLYER M.: Catholic physics. Jesuit natural philosophy in early modern Germany. University of Notre Dame Press, Notre Dame (Indiana), 2005.

12. See National Library of the Czech Republic, Department of Manuscripts and Old Printed Books, manuscript XXIII C 104: MILLER J.: Historia Provinciae Bohemiae S. J. ab anno D. 1555 ... ad annum 1723 ... conscripta anno 1723, Vol. I–VI, page 1151 (volumes are paged continuously). There were several effigies of Our Lady of Foy which were brought to Bohemia when the former Austrian province of the Society of Jesus was divided into Czech and Austrian one. In Prague 1630 in the Jesuit church of Holy Saviour a miracle happened that helped to proliferate the cult of those copies. A wooden copy of Virgin Mary fell on the floor of the church and shattered to pieces but

Černý K.
immediately (as a result of proper prayers) the wood healed itself and the relic became instantly one piece again. There is obvious parallel between healing power over the human body and the body of holy statue. The same thing reportedly happened in Prague once again with famous statue Infant Jesus of Prague. See HAMMERSCHMID J.: Prodromus gloriae Pragenae. Prague, 1723, 91.


16. For details see words in endnote 1.

17. “in the year 1622 ... the wife of Charles [noble Charles of Haugwitz] fall gravely ill ... [but as soon as] she promised a votive donation to Our Father Ignatius, she was comletely headed despite the anticipation of four physicians”. MILLER J.: p. 1167.


20. Johannes Franciscus Löw of Erlsfeld (1648–1725) was repeatedly dean of Faculty of Medicine and rector of Charles-Ferdinand University in Prague. He was not only successful college teacher but also famous practitioner popular among inhabitants of the Czech capital. For details see HLAVÁČKOVÁ L., SVOBODNÝ P.: Biografický slovník pražské lékařské fakulty 1348–1939. II. (L–Ž). Karolinum, Praha, 1993, 45.


22. Theatrum 635.

23. Theatrum 635.