

Shari`ah, Brain Death, and Organ Transplantation: The Context and Effect of Two Islamic Legal Decisions in the Near and Middle East¹

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Introduction

In the early 1980s, comprehensive developments in the public health system as well as markedly improved possibilities for organ transplantation due to the introduction of immune suppressants,² namely, the artificial prevention of organ rejection, led to a sudden expansion of transplantation medicine in the Near and Middle East. Long-term artificial respiration, along with improved and expanded intensive care units, enabled respiration and circulation to be maintained despite the partial or complete loss of brain function. This, in turn, secured the necessary blood supply to the organs until they could be removed. Against this backdrop, a comprehensive process of discussion on the factual connections between postmortem organ transplantation and the criterion for determining brain death developed.

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During the 1950s and especially the 1960s, certain intensive care developments in Western Europe and North America led to a comprehensive confrontation with the pros and cons of brain-death criteria. In Germany, for example, official recognition occurred in 1968.³ At this time, transplantation medicine in the Near and Middle East was practically non-existent due to the predominant general medical conditions. However, this uncontested (intensive care) medical progress, which was fundamentally responsible not only for transplantation for the living but also for the deceased, is not enough to explain why brain death and postmortem organ transplantation became the center of attention at the beginning of the 1980s.

The number of accidental deaths since the 1970s, especially in the Gulf states rose dramatically between 1971-76 (250 percent) and continued to display an upward tendency. At the beginning of the 1980s, a quota that was three times as high as that found in most of the western industrial states was reached. Half of the deceased (most, but not all of whom, were killed in traffic accidents) had serious injuries to the brainstem, which is of central importance for the functioning of one's heart and circulation.⁴ In such cases, intensive care measures focused initially on the artificial reestablishment or maintenance of the person's circulation and respiration. This gave rise to urgent questions regarding the treatment of someone diagnosed with irreversible brain failure ("brain death") and who was, in the view of transplantation medicine, a definite candidate for an urgently needed postmortem organ harvest due to his/her continuously active circulatory system.

Against this backdrop, the law academies of the Organization of the Islamic Conference (IOC)⁵ (1986) and the Muslim World League (MWL)⁶ (1987) commented on the problems associated with legitimizing the brain-death criterion in each case in the form of a *qarar* (decision). The underlying question about being allowed to turn off the respirator due to a diagnosis of brain death had, in the western context, already led to the recognition that the actual question pointed in the opposite direction: Was it permissible to artificially prolong the respiration and circulation of a person who had been declared dead due to the brain-death criteria in order to guarantee a medically flawless organ harvest?⁷ The precise determination of one's transition from life to death was, in each case, necessitated by an intended consequential action.⁸ The resulting bio-ethical and medico-ethical questions especially have occupied Islamic legal scholars and doctors since the early 1980s.

The decision-making processes set up in accord with the framework of the Islamic Fiqh Academy⁹ established by the OIC (hereinafter IFA-OIC) and the Islamic Fiqh Academy¹⁰ established by the Muslim World League

(hereinafter IFA-MWL) initially provided information about the contextual foundations. In the case of the IFA-OIC, this consisted of very well-documented discussions between legal scholars and medical doctors as well as their positions on how they conceived of a human being and death in connection with the brain-death criterion and postmortem organ transplantation. In addition, the available material disclosed how the decision was received and perceived in the particular institutional context of the OIC and the MWL. In addition, the manner in which the conclusions of both fiqh academies confirmed, or rather differed from, the basic relationship of both superior organizations was made apparent.

This raises the questions of how both decisions were perceived by the Muslim public until the end of the 1990s and what this generally says about the public's effect on both academies. The investigation also has to include what kind of influence both legal decisions have had on the further development of transplantation medicine, that is, on both national and transnational programs as well as on the population's actual donating patterns.

The Institutional Context

In 1973, the MWL founded its own *fiqh* academy based in Makkah. Ten years later, the OIC set up its own *fiqh* academy in Jeddah. Thus, by the mid-1980s, the two largest international Islamic organizations issued decrees over institutions that, even if on different levels, were tasked with dealing with questions and problematic issues of Islamic law that had developed due to recent or the latest scientific, technical, or medical advancements.¹¹

The MWL, which came into existence in 1962 as a Saudi alternative in the context of the Saudi-Egyptian rivalry, served – and still serves – predominantly to strengthen political and missionary activities in an internationally oriented institutional context.¹² Even though, initially and on the whole, the idea of creating a scholarly organization in coordination with the MWL was present, it took several years to create the IFA-MWL, where, aside from the above-mentioned solution to contemporary problematic issues via Muslim jurists' (*fuqaha'*) rulings, the theological foundations for the MWL's missionary activities were also supposed to be laid. Moreover, the IFA-MWL's intended efforts were meant to highlight the Shari`ah's superiority over all other legal systems. As a further central founding thought, the IFA-MWL's rejection of cultural intrusion with the aim of westernization should be mentioned, for this perspective was of great significance to the MWL, as the superior institution, as well.¹³

In contrast to the MWL, which was formally supported through individuals and associations, the OIC, founded in 1969, represents an international Islamic state organization that operates mainly at the governmental level and in central units: the office of the general secretary, the conference of foreign ministers, and the Islamic summit conferences that take place every three years.¹⁴ As a generic term for the various projects and activities, the keyword “Islamic solidarity” is used most often. The IFA-OIC was set up in 1983 after a two-year planning period, and from then on met each year for conference sessions.¹⁵ However, its aim differed fundamentally from the MWL-IFA’s, since its efforts were directed mainly toward coordinating the national *fiqh* academies and getting them to cooperate among themselves.

Over time, however, more scientific projects¹⁶ were added. This mutual cooperation and coordination stood in the foreground vis-à-vis the respective national level and the various Islamic and non-Islamic organizations with which it collaborated, such as the Islamic Organization for Medical Sciences (IOMS)¹⁷; the IFA-MWL; the Islamic Educational, Scientific, and Cultural Organization (ISESCO)¹⁸; and the regional office of the World Health Organization (WHO) for the Near East.¹⁹ Membership in the academy was open to scientists from various fields who supported the goal of searching for legal decisions on problematic scientific, cultural, and economic issues to meet the practical needs of contemporary Muslim societies.²⁰

The IFA-OIC’s decisions (*qararat*), however, cannot be understood as legally binding resolutions, for they are no more than nonbinding resolutions or recommendations. Therefore, there is no possibility of sanctions.²¹ In the end, this is also true with regard to the IFA-MWL. While both academies reserve the right to make final decisions “if need be,” each respective case still has to be examined for a truly normative impact (see below).²²

In view of the relationship between the OIC and MWL, it can be ascertained that the cooperation and appreciation of their mutual relationships, always emphasized by official authorities, are only partially applicable. The MWL made sure that its view of the hierarchy of large international Islamic organizations, in which the OIC is not its equal, was maintained.²³ The MWL sometimes expressed regret over the not-yet-optimal (viz., equal) cooperation of both organizations was surely, as will become clear, not always sincere. At the same time, for example, in May 2003 the OIC approved the creation of a principal coordinating committee that will be located within the MWL and is intended to be active in the context of situations of crisis or catastrophe as well as in such central areas as the exchange of information and education.²⁴

Basic Questions

The question of determining the exact moment of death so that the respirator can be turned off in the intensive care area, given that it is the focus of the legal decisions examined here, leads straight to the following problem: If the brain-death criterion gains acceptance, then this would result in permitting (or not) post-mortem organ transplantation (or, put more bluntly: When can the organs of a person who has been declared dead be harvested?).

In the 1980s, both *fiqh* academies had to answer this question, due to the situation described at the beginning of this article. This very concrete relevance of the questions tied to the possible acceptance of the brain-death criterion caused these questions to become more central to the discussion, whereas the partially parallel debate of, in general, allowing intensive care medicine found far less interest. This was also true for the discussions about euthanasia, which had developed especially with regard to persons suffering from the severest brain injuries.²⁵

The controversy over accepting the brain-death criterion was definitely connected to an at least partially new definition of the traditional death criterion followed by the *fuqaha'*: the final stopping of circulation and respiration ("cardiac death").²⁶ If one added to this the widely held perceptions of the *fuqaha'* concerning the dying process, then it also became a question of whether this perception as consisting of the separation of one's body and soul would not be disturbed in a most sensitive manner through the possible organ removal on account of the brain-death criterion.²⁷ Initially, however, the most important issues for the *fuqaha'* concerned the tangible indisputability of the brain-death criterion as well as the exact determination of the time of death, both of which would be possible in this context, in view of the resulting legal consequences.²⁸

If one added to this the second professional group relevant to this problem, the doctors, then two fundamentally different perspectives ensued. While the focus was on the critical questioning already presented by the *fuqaha'* regarding a new or expanded definition of death in the context of the relevant legal consequences, the medical perspective concentrated almost exclusively on the improved possibilities of postmortem organ harvesting and transplantation.²⁹

But what kind of possibilities would result if one expanded the perspective beyond the professional groups directly involved in later decision-making processes? What kind of opinions could be detected from within the Muslim public? Even if (at this point) such opinions were still very vague,

nevertheless, certain basic elements could be detected. The doubts repeatedly brought up by the *fuqaha*' regarding the reliability of this criterion, especially in relation to the "idea of return" of an only seemingly dead person, were definitely representative of larger social groups.³⁰ Added to this was the widely held conception, also originating from certain legal traditions, that death should be understood as the (gradual) end of the whole organism, as opposed to the (even if under certain circumstances indisputable) failure of a single organ.³¹ Furthermore, the image of not disturbing the deceased person's dignity played an important role.³²

The Decisions: Foundations and Discussions

The IFA-OIC reached a decision during its third annual session (October 11-16, 1986) about the possibility of removing the respirator in the context of intensive medical care³³: It gave decisive significance to the designation of the exact criteria for determining death, which is central in this context. The decision as such, along with the decision-making process and the underlying testimonials and working papers, are all documented with utmost precision in the Journal of the Council of Islamic Jurisprudence (*Majallat Majma` al-Fiqh al-Islami*).

The doctors' testimonials and studies already show the differences in each perspective. For the most part, the *fuqaha*' used the final cessation of circulation and respiration as the starting point of their considerations, whereas the doctors considered the necessity of acknowledging the brain-death criterion to be out of the question because of the directly related possibilities of organ transplantation.³⁴ The latter position has been supported since 1985 by an IOMS decision that describes the application of the brain-death criterion in the context of organ transplantation as permissible and sensible.³⁵ Furthermore, the doctors' testimonials pointed out that one must not forget, in regard to turning off a respirator, that this machine has to be on until a flawless organ removal has taken place, a procedure that is conditional upon circulation in the organs up to the last moment. This, of course, requires a clear legitimation of the brain-death criterion.

On a more basic level, and lastly beyond purely medical considerations, there is a call to reassess the heart and brain in the progress of brain-death criterion advocacy in favor of the brain's central significance, so that the end of human life is equated with brain death (*mawt al-mukhkh / mawt al-dimagh*).³⁶ This is based on the belief that once the brain is dead, the remaining signs of life can only be considered part of an animal-like existence.³⁷

Already in the approaches to discussion and decision, the context of medical opinions definitively point out that there is a certain artificiality in differentiating between the two possibilities of death (heart and brain death) determination: On the one hand, brain death takes place a short time after the cessation of circulation and respiration, and, on the other hand, circulation and respiration can only be maintained artificially after the brain dies.³⁸

Aside from a fundamental willingness to cooperate with the doctors, the papers and studies presented by the legal scholars contain an obvious skepticism concerning the brain-death criterion in general, and, in particular, with the resulting possibilities of postmortem organ transplantation and the doctors' role in association therewith. People presume that "doctors want to transplant" and that they could, with this in mind, work with deliberate imprecision when determining the brain-death criterion, the reliability of which has already been called into question. The legal consequences of the onset of death are declared to be in the domain of the *fuqaha'*. The consequences in the areas of inheritance, matrimonial law, and criminal law are clearly named, and the rights of the deceased (especially a funeral in conformity with the Shari`ah) also occupy a crucial place.³⁹

As stated earlier, legal scholars tend to hold on to a traditional perspective that fixes death at the moment when respiration and circulation cease. Although certain (individual) positions are mentioned in the context of the studies considered here, which, based on the premise that death means the separation of body and soul, speak of the entire brain's unequivocally determinable death as a possibility for proclaiming someone dead, point undoubtedly in the direction of acknowledging the brain-death criterion.⁴⁰ However, conceptions that continue to be in complete opposition to recognizing these criterion is articulated at least as clearly. In the context of this position, one comes across the legend of the Companions of the Cave.⁴¹ Connected to this, as unlikely as it may seem to doctors, is the idea of a long state of unconsciousness that seems excessive to the human imagination – in words, the possibility of the return of the only seemingly dead.⁴² This gives rise to grave doubts about the brain-death criterion.

However, others want to enable a fundamental adaptation of the legal scholars' positions to the developments of medical advances. M. M. al-Salami, former mufti of Tunisia, advocates the theory that formulating a definition of death based on the precise determination of the point of death is long overdue, since "knowledge develops in an incredibly creative manner." Thus, new insights into the dying process have to be constantly revised.⁴³ Furthermore, some jurisprudential positions presume an aspect that will dif-

ferentiate the IFA-OIC's decision from that of the IFA-MWL: Even though the doctor may turn off the respirator when certain "signs of life" can be determined only through its use, it is, nevertheless, not permissible for certain legal consequences connected to death to come into effect before the occurrence of certain "visible" criteria (e.g., cardiac arrest or the end of respiration). The IFA-MWL's decision also rejects equating heart and brain death (see below).⁴⁴

Aside from the previously mentioned medical and legal studies prepared by individuals, the approaches to the OIC decision the testimonials and working papers of certain institutions that were directly or indirectly tied to the possible acknowledgment of the brain-death criteria. In this regard as well, the *Journal of the Council of Islamic Jurisprudence* [hereinafter *Journal*] offers a precise overview: To start with, the position of the Kuwaiti Awqaf Ministry, stated in 1981, has to be considered. A group of doctors who were seeking information from Islamic legal scholars had asked when it was permissible to turn off the respirator. Initially, the Awqaf Ministry agreed that this could be done after the onset of brain death. But three years later, it revised its position on the grounds that too many questions regarding the accuracy and reliability of the brain-death criterion remained unanswered and that further results of medical research were needed before a definite decision could be made.⁴⁵

The previously mentioned 1985 decision of the IOMS can be considered a more decisive step in the approaches to the IFA-OIC's decision. Based on a very broadly worded problem (human life: its beginning and end from the Islamic perspective), reference is initially made to the necessity for rethinking the brain-death criterion due to medical progress and the associated challenge to a specifically Islamic perspective.⁴⁶ Then, however, certain conditions for a possible application of the brain-death criterion is quoted, as well as which legal consequences could be put into effect after assessing the brain death-criterion and which must come into effect only after assessing the final stopping of circulation and respiration. This aspect will not be adopted by the IFA-OIC's decision (see below).⁴⁷ In each case, an international Islamic organization speaks out for the first time to the IOMS in favor of the possibility of turning off the respirator on account of applying the brain-death criterion.

Furthermore, there is the 1985 "Jordanian working paper" that refers to the doctors A. al-Kurdi and H. al-Hijazi, both of whom are from Jordan.⁴⁸ Its significance is mainly in the comprehensiveness with which it addresses the conditions for applying the brain-death criterion, along with the necessary

qualifications of the doctors, the necessary medical circumstances, and any other measures needed to avoid any misuse.⁴⁹ This paper is unique in its detailed nature of the investigated decision process and, due to its authors' professional backgrounds, can be considered as a practically oriented guideline. The statement that the named conditions are currently practiced in this manner, however, applies exclusively to Jordan.⁵⁰

The discussions in the *Journal* that followed the testimonials and studies (*munaqashah*) show that it would be difficult for at least the majority of the *fuqaha'* to come to terms with an image of death that differs fundamentally from the previously mentioned traditional conception. Crudely put: As long as respiration and circulation still function (artificially or not), it is difficult to speak of a final death.⁵¹ Even though there were repeated rhetorical attempts during the discussion to limit existing differences to general referrals to *Kompetenzschaltung and Lagerung*, the point, nevertheless, remains. Furthermore, the *fuqaha'* have repeated and specific questions about the possible flaws of the brain-death criterion, a point that is always highlighted when the possibility of organ removal is raised. As a result, the previously mentioned fundamental skepticism remains very present in this regard.⁵²

In this context, doctors can only stress again and again that, in medical terms, this is a perfectly straightforward criterion, especially in the context of the conditions mentioned in the Jordanian working paper.⁵³ In the discussion, the doctors deliberately placed the precise diagnosability of the brain-death criterion into relation to organ transplantation, which, in turn, was presented in the context of improving medicine for the benefit of humanity.⁵⁴ This perspective was further supported by referring to the extreme psychological stress placed on the next of kin when a brain-dead patient's circulation and respiration can only be maintained artificially over a long period of time.

In addition, when realistically considering the existing capacities for intensive care in hospitals, urgently needed bed-space was said to be blocked in an inadmissible manner.⁵⁵ In order to illustrate the definitive character of brain death, especially in regard to the above-described doubters, doctors particularly emphasized the aspect of the brain's extremely rapid decline after the onset of brain death. Thus, it was said that the brain-death criterion was not only exactly diagnosable, but that it was also with regard to a state that is beyond any doubt in its finality.⁵⁶ It was in this context that the IFA-OIC decided that the diagnosis of heart- as well as brain-death authorizes doctors to turn off the respirator and that the legal consequences connected to death in both cases come into effect immediately.⁵⁷

In order to better understand the function and effect of the IFA-OIC's 1986 decision, it is reasonable to continue the analysis initially in the context of the organization's further decisions, especially with regard to a 1988 decision made during a session in which the theme of organ transplantation took center stage. The discussion preceding the decision, fully documented in the *Journal*, is based on the premise that postmortem organ transplantations are done on a large scale.⁵⁸ Furthermore, Muhammad al-Bar⁵⁹ is quoted as saying that Muslim scholars have reached a consensus regarding the acceptance of the brain-death criterion. Most likely he had the IFA-OIC's decision in mind.⁶⁰

It soon becomes apparent, however, that despite the 1986 decision, this manner of presentation is rejected precisely because of its indisputability. Arguments already known from the above-mentioned discussion are taken up and supplemented with new aspects, such as the danger of developing an (international) organ trade caused by intensified transplantation medicine due to the recognition of the brain-death criterion.⁶¹ In summary, it becomes apparent that both the process of discussion and the decision of the previous session are present and are approached from different perspectives. This also means that reservations about the previously made decision were not held back, but rather intensified. The final decision, however, remains, with view of the underlying criteria for determining death in the context of the previous session's decision.⁶²

If one now reviews all of the relevant decisions made by the IFA-MWL, it becomes apparent that they are, initially, in reverse chronological order to the decisions of the IFA-OIC. The first decision, made in 1985, dealt with the permissibility of organ transplantations. This was followed in 1987 by another decision determining death and, in connection with this, the possible turning off of the respirator.⁶³ The 1985 decision includes, even if not as the main point, post-mortem organ transplantations and states that they are permissible, but only under special circumstances, which include, most of all, the donor's permission before death.⁶⁴ Interestingly, more detailed critiques regarding the determination and definition of death are not discussed. The basic tone is comparable to that of the OIC in 1988. This is also true for the decision, in connection with recognizing the brain-death criterion (1987).

However, the IFA-MWL made some distinctions and decisions that are not found in the OIC's decision: The brain-death criterion can be applied only if three doctors agree that brain death has occurred and is irreversible. Furthermore, any legal consequences linked to the determination of death can come into effect only after circulation and respiration have finally

stopped. In other words, cardiac death and brain death are explicitly not equated.⁶⁵ On the other hand, the brain-death criterion is sanctioned in both decisions as a possible way to determine if death has occurred. However, the IFA-OIC's decision-making process, which the *Journal* describes in great detail, is not available in published form for the IFA-MWL. Only the conclusion itself offers a comparatively small amount of information.⁶⁶ The difference in documentation style is more than apparent.

The Public Impact

What actual influence, until the end of the 1990s, did the decisions of the IFA-OIC and the IFA-MWL have on the views of the [Muslim] public with regard to recognizing the brain-death criterion and the inseparably connected postmortem organ transplantation in Islam?

Initially, it is noticeable that the materials researched in regard to this matter always refer to the IFA-OIC's decision, which it describes as an "undoubtedly powerful event."⁶⁷ The IFA-MWL's decision, which came one year later, seems to be, as will be shown in more detail, far less relevant. The earlier IOMS-decision is, at least in part, not yet understood as a direct recognition of the brain-death criterion, for it categorizes brain death as part of the *hukm al-madhbuh*,⁶⁸ a term that applies to the movement capability of hanged or beheaded persons. This sometimes lasts for minutes despite brain-stem death, due to the short-term continuation of certain brain and spinal fluid functions.⁶⁹

The spectrum of tangible perspectives and interpretations is very wide: Beginning with statements that basically presume the recognition of the brain-death criterion, one can find, in part, such categorical statements as "Islam and Christianity accept the brain-death criterion," "Muslim scholars do not have a problem with the recognition of the brain-death criterion," and "The three religions of the Near East have all accepted the brain-death criterion."⁷⁰ Some sources, however, argue that only a majority has accepted this criterion, and thus it is out of the question that the acceptance has been unanimous.⁷¹ Indeed, the IFA-IOC decision was a majority decision, which leads to the conclusion that there was a group – albeit small – of persistent objectors. Some even speak of a mere *shibh ittifaq*⁷² that no longer allows for any distinction of the distribution of power.

Interestingly, even those who presume the general acceptance of the brain-death criterion see the meaning of this statement from a perspective of obvious doubt regarding the comprehensive embodiment of the conclusions

(especially in view of its relevance to organ transplantations) in the public awareness. In part, this is explained as being due to not incorporating these legal decisions into public education and erudition, and, in part, to the obviously promoted negative position of some scholars and media.⁷³ Furthermore, it should not be forgotten that the IFA-OIC's decision, as well as that of the IFA-MWL, were made only after a significant amount of time had passed in relation to the relevant medical developments, which only then necessitated or initiated the described decision processes.

The obvious delay and the decisions' reactive character were unlikely to have been particularly productive for the (implicit) intended raising of awareness of the connections between medicine and the Shari`ah. Nevertheless, even opinions that are completely contrary to the positions described so far are part of the public discourse. In this connection, recognizing the brain-death criterion – be it by a majority or absolute – becomes questionable. The deadlock in Egypt is mentioned in this context, for it made the application of both of these legal decisions impossible due to their clear rejection by influential *fuqaha*'.⁷⁴

Such a conflict resulting from a particular nation-state constellation, however, does not explain why one could still find the following statement in the English-language *Muslim World League Journal* at the beginning of the 1990s: "However in Islamic countries the brain death criterion is neither medically nor legally accepted."⁷⁵ This is not only completely contrary to the decisions made by the law academies of the two largest international Islamic organizations, but also renders the information distribution and the mechanics of opinion-forming within the MWL seriously questionable.

Medical and Medical-Political Consequences

These decisions' tangible effects on the development of transplantation medicine in the Near and Middle East since the mid-1980s are best evaluated according to three criteria that are, invariably, of central significance for the successful assembly and development of a transplantation program: comprehensive support from national governments, establishing institutions that specialize in organ provision and distribution, as well as the already considered religious and social acceptance of organ donation and transplantation.⁷⁶

Within transplantation medicine, the IFA-OIC's 1986 decision was considered significant. In the following years, various countries in the region recognized the brain-death criterion in the framework of national legislation.⁷⁷

Against this backdrop, new perspectives and possibilities resulted in view of organ donation by both the living and the deceased as well as in the related transplantation possibilities. At the institutional level, the Middle East Society for Organ Transplantation (MESOT),⁷⁸ founded in 1987, should be mentioned. In 1992, it opened up in Central and South Asian countries as well, due to a change in regulations.⁷⁹ Aside from promoting the transnational exchange of science, efforts concentrated mainly on programs for raising public awareness of transplantation's possibilities, as well as the connected legal and social problems, with particular value placed on the regional coordination of these projects. Throughout the 1990s in particular, it was possible to consolidate and extend MESOT's organizational structures, and therefore the objective of a comprehensive activation of organ donations and transplantation medicine became more achievable. Furthermore, various MESOT member states were active in the Asian Transplantation Society.⁸⁰

However, such institutional associations offer only limited information about the developments that, occurring at the same time, directly affected the daily medical routine. Since the mid 1980s, a steady quantitative increase of organ transplantations has been observed,⁸¹ a trend that was clearly aided by the obvious improvement of existing conditions, especially the founding of transplantation units in hospitals, or rather the expansion of already existing intensive care units, among other factors. Furthermore, the number of postmortem organ transplantations increased so that, for example, in 1995 Saudi Arabia witnessed the transplantation of 274 organs belonging to brain-dead patients.⁸² All this was part of a development that, in the end, was supposed to lead to a greater diversification of transplant medicine in the Near and Middle East.

In reality, however, these doubtlessly positive tendencies fared quite differently from state to state. First, we will deal with those states that have developed and implemented comprehensive transplantation programs. Saudi Arabia is considered a particularly successful example in this regard.

The Saudi Center for Organ Transplantation (SCOT), founded in 1985, developed an efficient program of postmortem organ harvest, or rather organ transplantation, the medical results of which were quickly considered to be excellent on the international level as well.⁸³ The combination of acceptance by legal scholars, legislative embodiment, and governmental support proved to be almost optimal. Specifically, the coordination of SCOT's various transplantation units, its daily country-wide inquiry into potential brain-death cases, and the support furnished by the Saudi armed forces in the areas of logistics and transport all led to nearly perfect conditions.⁸⁴ A further benefi-

cial factor in optimizing transport and logistics for transplantation medicine was that the country's already existing division into various health areas, each of which received its own center for coordinating the events and dates relevant to transplantation medicine, could be used.⁸⁵

SCOT was also responsible for the organ- and information-exchange programs with Oman and Kuwait.⁸⁶ This was still an exception in a region where, by the end of the 1990s, almost all of the governments had at least agreed verbally to expand cooperation in this field.⁸⁷ As regards the cooperation among Saudi Arabia, Kuwait, and Oman, the Saudi-Kuwaiti axis played an important role, since Kuwait had rebuilt its intensive care and transplantation centers within a few years after Iraq's 1990-91 invasion and occupation totally destroyed its national transplantation program. As a result, an already existing program of postmortem organ removal was significantly improved upon by establishing a central coordination post.⁸⁸

Aside from Saudi Arabia, Turkey has established itself as a leader in transplantation medicine. Here as well, the expressed support of postmortem organ harvests by the great majority of religious scholars, as well as the quick passing of a relevant bill, came together during the mid-1980s so that by the mid-1990s, more than 15 centers were available for kidney, liver, and heart transplants.⁸⁹

In light of the above criteria, several other countries can now offer partial successes. Tunisia, Oman, and Kuwait in particular have undertaken comprehensive efforts to explain to a wide public audience the relevance of the brain-death criterion for needed postmortem organ removals and transplantations.⁹⁰ In Tunisia, this takes place via the National Center for the Promotion of Transplantation, an administrative body created specifically for this purpose.⁹¹

At the same time, however, several misguided developments and missed opportunities in the areas of organ donation and organ transplantation have occurred in the Near and Middle East since the mid 1980s that have caused impediments up to the present. First, mismanagement has affected the entire region: The number of donated organs removed post-mortem remains far below the steadily climbing demand⁹² mainly because of the structure of existing health care systems. There are no efficient national or supra-national registration systems, although a supra-national institution of this kind could comprehensively advance the urgently needed regional coordination.⁹³ As already shown, organ exchange programs exist only among a few states, although since the end of the 1990s steps have been taken to reduce existing inter-state bureaucratic obstacles.⁹⁴

The coordination and cooperation among individual hospitals is impeded by the fact that the internationally recruited surgeons often belong to different schools of transplantation medicine. In the United Arab Emirates (UAE), this contributed to a complete paralysis of its transplantation program.⁹⁵ In addition, the intensive care departments often do not (completely) follow international standards. A lack of standardization, however, has had devastating effects on the outfitting and qualification of mobile ambulance units. Even though optimizing ambulatory care was urgently needed years ago, due to the above-mentioned connection between a dramatically increasing number of accidental deaths and the possible postmortem organ harvests according to the brain-death criterion, emergency ward doctors and ambulance attendants remain ill-prepared for the possibility of later organ harvests.⁹⁶ A further impediment, on a much more general level, is the lack of a comprehensive health insurance system in most countries. This is a fundamental obstacle to erecting and expanding hospitals outside of the most important cities.⁹⁷

If one were to summarize the state of affairs at this point, it would doubtlessly seem as if the same factors that are relevant for developing countries in general prohibit any real progress of transplantation medicine in the Near and Middle East as well: a lack of organization and coordination, bureaucratic obstacles, a lack of attention from policy makers, and giving priority to other medical fields (orphan syndrome).⁹⁸

However, this is only half of the truth. The previously presented information, as well as the decisions by the IFA-OIC's and the IFA-MWL's far-from-finished discussion about recognizing the brain-death criterion in view of a later organ harvest, should not be underestimated in its negative effect. Even if the skeptics are clearly in the minority within the public discourse, media hesitation and the public's restrained donating behavior can be kept alive. In Egypt, for example, did the clear rejection of the brain-death criterion by some legal scholars lead to the result that recognizing the brain-death criterion could not be embodied in a law, thus making postmortem organ transplantations impossible?⁹⁹

The discussion about the dangers and risks of possibly commercializing the transplantation market also has not been finalized. Even though certain distortions and misinformation in the media have aided the consolidation of a general attitude of skepticism toward the brain-death criterion,¹⁰⁰ it should, at the same time, be said that the illegal organ trade, or rather "organ tourism," does play an important role in the region.¹⁰¹ The activities of the World Health Organization (WHO), the International Society for Trans-

plantation (IST),¹⁰² and MESOT have, since the 1990s, referred to the need for decisive action against poverty as a basis for the comprehensive suppression of organ tourism.¹⁰³

In particular, the IST and the MESOT were – and are – concerned about the negative effect of organ tourism in view of the necessary development of donating behavior within the family.¹⁰⁴ Until the mid-1990s, many patients traveled from the Gulf states, in particular from the UAE to India¹⁰⁵ to have locally harvested organs implanted there. This, however, had fatal consequences in the medical and sociopolitical view: While the UAE saw no need to develop an early and comprehensive transplantation program in this context,¹⁰⁶ the operations performed in India, aside from the abominable mechanisms that determine its organ trade, were of dubious quality. For the most part, the organs were insufficiently tested for HIV and the transplantations were rarely medically successful in the long term.¹⁰⁷

Such organ tourism to India was declared illegal in 1995.¹⁰⁸ Although observers cannot agree whether this finally suppressed all organ tourism, in any case the numbers have clearly fallen.¹⁰⁹ Of course, this did not solve the problem of the Gulf states' huge lack of local donors, particularly in the UAE. Thus, in the second half of the 1990s, Iraq became the most popular destination country for organ traders and transplantation tourists. However, no figures are available for the number of operations performed in Iraq itself.¹¹⁰

Conclusion

An examination of the OIC's and the MWL's decisions, as well as the inclusion of various testimonials and conclusions by the *Journal*, show that during the 1980s, law academies responded to new medical advances that, in the end, necessitated a complete reassessment of traditional Muslim views of death. This was approached from the perspective of various questions and problematic issues (e.g., turning off the respirator, the beginning and end of life in the Islamic view, and the determination of death). However, the examined material shows that it was actually always a question of accepting the brain-death criterion as well as the resulting possibilities for organ transplantation.

If one examines the above-mentioned decision processes in view of the cooperation and coordination of various international Islamic organizations, it becomes clear that in each case, previous decisions, existing working papers, testimonials, and other similar material were picked up and included in the following decision process. This is particularly recog-

nizable in the view of the interplay between IOMS, the IFA-OIC, and the IFA-MWL. Without a doubt, certain conclusions that were determined by the decisions of both *fiqh* academies can be made in view of the previously illustrated relationship between the OIC and the MWL. Even if nothing has changed to this day with regard to the hierarchization of the international Islamic organizations, with the MWL still at its top, it nevertheless seems that in the case of the decisions considered here, the much-invoked coordination and cooperation has been put into practice.

On the other hand, in view of the basic relationship between the MWL and the OIC, it is interesting to note that the OIC's decision almost exclusively set the tone for the following discourse, and that its effect was strengthened through reproducing institutions on a national level. For example, the latter is true for a statement made by the Central Council of Muslims in Germany (ZMD), which, due to the IFA-OIC's decision, presumed a wide acceptance of the brain-death criterion in all Islamic countries.¹¹¹ In contrast, the IFA-MWL's decision is not even noted in the context of those scholars and media directly connected to the MWL. The insignificant amount of consideration given to this decision in the following discussions is, no doubt, mainly connected to the IFA-MWL's refusal to equate cardiac and brain death. This is due to the fact that the exclusive connection of cardiac death with the legal consequences resulting from the diagnosed death simply made the decision irrelevant for part of the featured discourse, since no organ harvest could follow on account of brain death. In each case, the basic relationship of the MWL and the OIC, in view of the examined case study, is turned upside down, so to speak.¹¹²

What are the results of analyzing the development of transplantation medicine in the Near and Middle East in view of the cross-connections among the decisions of legal scholars, national legislation, political support, and public awareness?

The fact that the majority of Islamic legal scholars have recognized the brain-death criterion since the mid-1980s has not led, with few exceptions, to entirely convincing structures and programs in any Near and Middle East state in the field of postmortem organ transplantation. If coordination and cooperation, as well as the qualification of affected professional groups, do not comprehensively improve, then the situation is not likely to change in the future. In addition, governments and national institutions so far have shown too little interest in educating the public in an appropriate manner. At the same time, improved public education cannot occur without a comprehensive inclusion of those religious scholars who recognize and support

the acceptance of the brain-death criterion and the resulting possibilities for organ harvest in their social relevance.¹¹³ A demand that targets this, formulated in particular by the transplantation doctors, seems all the more logical, since the scholarly opponents of this criterion still know how to influence the public's donating behavior via certain media.¹¹⁴

Included in the improved public relations work has to be what the analysis of the discussions among legal scholars, or rather between legal scholars and doctors, has disclosed: Hesitation and skepticism in regard to accepting the brain-death criterion is only partially founded on a lack of medical information and knowledge. In particular, fears regarding the commercial organ trade and the intentional disregard of the fixed conditions for brain-death determination by doctors go far beyond the insufficiency of the persuasive powers of certain prognostic or diagnostic methods and point, on a very concrete level, in the direction of ethical-moral reservations and questions.¹¹⁵

Against this background of the examined legal decisions as well as their significance for intra-Islamic discussions and medical-political developments, the assessment that Islam has accepted the brain-death criterion seems problematic, and, in general, cannot be overlooked. If one examines the foundations of such judgments, it quickly becomes apparent that the situation in certain countries (e.g., Saudi Arabia or Turkey) is projected onto the Islamic world as a whole, or that the decisions made by the legal academies of international Islamic organizations are considered to directly set the standard for the entire Islamic world.

However, in regard to the evidence examined here, a different view is found in the Near and Middle East: In the end, the national context determines the success of programs for promoting (post-mortem) organ transplantations (e.g., as in Saudi Arabia, Turkey, and Kuwait) or their (complete) failure (e.g., as in Egypt and the UAE). The decisions of the *fiqh* academies are, in this context, only one aspect of many. Government support and initiative, assembling and expanding a medical infrastructure, and approval by legal scholars have to come together on a national level. The decisions by the legal academies of the most important international Islamic organizations (viz., the OIC and the MWL) cannot replace any of these factors, even if they are often wrongly understood as the mouthpiece of Islam. Their significance, however, as the starting point of central discourses and as guidelines for discussions directly oriented by social needs is not diminished by these two facts.

Endnotes

1. This article emerged from within the framework of my participation in Teilprojekt 5, "Bioethical Questions in the Context of Islamic Law," by the DFG research group Kulturübergreifende Bioethik at the Ruhr-University of Bochum. I would like to thank Thomas Eich, coordinator of the Teilprojekt, for the many references and suggestions that have greatly enriched this article.
2. T. Schlich, *Transplantation: Geschichte, Medizin, Ethik der Organverpflanzung* (Munich: 1998), 41-43. A more detailed description of the development of immune suppression up to the end of the 1990s can be found here as well.
3. Compare this to the recognition of the brain-death criterion in Germany. See S. M. Schellong, "Die kuenstliche Beatmung und die Entstehung des Hirntodkonzeptes. In *Hirntod: Zur Kulturgeschichte der Todesfeststellung*," in T. Schlich and C. Wiesemann (Frankfurt am Main: 2001), 187-206.
4. M. 'A. al-Bar, *Al-Mawqif al-Fiqhi wa al-Ahlaqi min Qadiyat zar' al-A'da'* (Damascus [and others]: 1994), 35. It has been proven in Saudi Arabia that injuries of this kind were caused by the non-use of seat belts and child seats. Until the mid-1990s, there was no law mandating the use of seat belts. See M. B. Loges de Cordier et al., "Donor Retrieval Patterns in a Saudi Multiorgan Transplant Center," in *Transplantation Proceeding 29* (New York: 1997), 3064-3066, Here: p. 3064.
5. In Arabic: Munazzamat al-Mu'tamar al-Islami.
6. In Arabic: Rabitat al-'Alam al-Islami.
7. For this question's medical-ethical context, see J. Vollmann, "Das Hirntodkriterium heute. Begriffserklaerung und medizinethische Kontroverse," in *Hirntod: Zur Kulturgeschichte der Todesfeststellung*, 56 f.
8. T. Schlich, "Tod, Geschichte, Kultur," *ibid.*, 36.
9. In Arabic: Majma' al-Fiqh al-Islami.
10. In Arabic: Al-Majma' al-Fiqhi al-Islami.
11. R. Schulze, "Citizens of Islam: The Institutionalization and Internationalization of Muslim Legal Debate," in *Law and the Islamic World: Past and Present*. C. Toll and J. Skovgaard-Peterse, eds. (Copenhagen: 1995), 179 ff.
12. J. Reissner, "Internationale islamische Organisationen," in *Der Islam in der Gegenwart*. W. Ende and U. Steinbach, eds. (Munich: 1996) (4., revised and expanded edition), 698-700.
13. See the greeting of the Deputy General Secretary of the Muslim World League at that time, A. al-'Attas, "On the Occasion of Opening an IFA-OIC Conference in 1988. *Majallat Majma' al-Fiqh al-Islami*, no. 4. (Jeddah) (1988): 47.
14. R. Schulze, "Eine islamische Alternative zu den Bloecken? Die OIC in den internationalen Beziehungen," in *Vereinte Nationen* 3, no. 84 (Bonn) (1984): 94 ff.

15. J. Skovgaard-Petersen, *Defining Islam for the Egyptian State: Muftis and Fatwas of the Dar al-Ifta'* (Leiden [and others]: 1997), 193.
16. This is about an index of Islamic books, a dictionary for the terminology of Islamic law, and the like. See www.fiqhacademy.org.sa/brief2.htm.
17. Located in Kuwait.
18. Located in Rabat.
19. www.fiqhacademy.org.sa/brief4.htm.
20. Ibid.
21. E. Moosa, "Languages of Change in Islamic Law: Redefining Death in Modernity," in *Islamic Studies* 38, no. 3 (Islamabad) (1999): 314.
22. R. Schulze, *Islamischer Internationalismus im 20. Jahrhundert* (Leiden [and others]: 1990), 302-04.
23. Ibid., 301 ff.
24. MWL Journal Staff, "MWL Hosts 13th Session of OIC Coordination Committee," *The Muslim World League Journal* 31, no. 5 (Makkah) (2003): 23.
25. B. Krawietz, "Grundlagen und Grenzen einer Hirntodkonzeption im Islam," *Hirntod*, 239.
26. Al-Bar, *Al-Mawqif al-Fiqhi*, 31; A. Sachedina, "Brain Death in Islamic Jurisprudence." www.people.virginia.edu/~aas/article6.htm, p. 1 of 6.
27. Compare H. al-`Amili, *Risalah fi al-Mawt wa al-Barzakh Yaliha Ahkam Tajhiz al-Mayyit Mutabaqah li Fatawa Ayatullah al-`Uzma al-Sayyid Abi al-Qasim al-Khu'i Qudissa Sirruhu al-Sharif* (Beirut: 1996), 20-30; M. Tabataba'i, *Madha ba'd al-Mawt? Dirasah `Ilmiyah `an al-Mawt wa al-Hayat ba'd al-Mawt `ala Daw' al-Qur'an al-Karim* (Beirut: 1995), 29-38.
28. As regards the general discussion regarding the indisputability of the brain-death criterion, see Vollmann, "Das Hirntodkriterium heute," 46-53. The legal consequences from the Islamic point of view will be further elaborated.
29. Moosa, "Languages of Change," 312 ff.
30. T. al-Wa`i, "Haqiqat al-Mawt wa al-Hayat fi al-Qur'an wa al-Ahkam al-Shar'iyyah," *Majallat Majma` al-Fiqh al-Islami*, no. 3 (Jeddah) (1987): 705-09.
31. T. Eich and J. Grundmann, "Muslimische Rechtsmeinungen zu Hirntod, Organtransplantation und Leben," *Zeitschrift für medizinische Ethik* 49, no. 3 (Ostfildern) (2003): 305 ff.
32. For the meaning of the conception of *hurma*, which is pivotal here, see B. Krawietz, *Die Hurma: Schariatrechtlicher Schutz vor Eingriffen in die körperliche Unversehrtheit nach arabischen Fatwas des 20. Jahrhunderts* (Berlin: 1991 (Schriften der Rechtslehre); 145). P. 116-169.
33. This problem at least touched upon in 1985. However, it was postponed until the next meeting (1986). See M. al-Bar, *Al-Mawqif al-Fiqhi*, 39.
34. M. al-Mahdi, "Nihayat al-Hayat al-Insaniyyah," *Majallat Majma` al-Fiqh al-Islami*, no. 3 (n.d.): 559.
35. This decision can be found in *Majallat Majma` al-Fiqh al-Islami*, no. 3, 729-32.

36. For the necessity of making a conceptual distinction between *mawt al-mukhkh* and *mawt al-dimagh*, see N. M. N. al-Daqr, *Mawt al-Dimagh bayna al-Tibb wa al-Islam* (Damascus: 1997), 153-95. The majority of the analyzed literature, however, ignores this distinction.
37. A. Ibrahim, "Nihayat al-Hayat al-Bashariyah," *Majallat Majma` al-Fiqh al-Islami*, no. 3 (n.d.): 602.
38. Al-Sharbini, p. 584.
39. Enumerations can be found in Krawietz, "Grundlagen und Grenzen einer Hirntodkonzeption im Islam," 240-41; `A. M. `Abdallah, "Nihayat al-Hayat al-Insaniyyah," *Majallat Majma` al-Fiqh al-Islami*, no. 3, 629-32. date??
40. M. N. Yasin, "Nihayat al-Hayat al-Insaniyah fi Daw' Ijtihadat al-`Ulama' al-Muslimin wa al-Mu'tiyat at-Tibiyah," *Majallat Majma` al-Fiqh al-Islami*, no. 3, 648-54.
41. For this legend, see R. Paret, "Ashab al-Kahf," *The Encyclopedia of Islam* (new ed.). Ed. comm.: H. A. R. Gibb, J. H. Kramers, et al. (Leiden: 1960): 1:691.
42. Moosa, "Languages of Change," 323-25.
43. M. al-Salami, "Mata Tantahi al-Hayat," *Majallat Majma` al-Fiqh al-Islami*, no. 3, 687.
44. The IFA-MWL's 1987 decision can be found at www.muslimworldleague.org/fiqh_res.asp.
45. M. S. al-Ashqar, "Nihayat al-Hayat," *Majallat Majma` al-Fiqh al-Islami*, no. 3, 665 ff.
46. Compare this with *Majallat Majma` al-Fiqh al-Islami*, no. 3, 629-32. For the IOMS' assembly and goals, see www.islamset.com/ioms/contents.html.
47. *Ibid.*, 631 ff.
48. "Waraqat al-`Amal al-Urdunniyah," *ibid.*, 751-64.
49. *Ibid.*, 755 ff.
50. *Ibid.*, 758.
51. "Al-Munaqashah," *ibid.*, 785-88.
52. *Ibid.*, 801 ff.
53. *Ibid.*, 802.
54. *Ibid.*
55. Of course, these are not specifically Islamic questions. Regarding the limiting nature of culture, or rather the cultural independence of intensive care questions, see R. D. Fitzgerald et al., "Support for Organ Procurement: National, Professional, and Religious Correlates among Medical Personnel in Austria and the Kingdom of Saudi Arabia," *Transplantation Proceedings*, no. 34 (New York) (2002): 3043 ff.
56. "Al-Munaqashah," 805.
57. "Al-Qarar," *Majallat Majma` al-Fiqh al-Islami*, no. 3, 809. Furthermore, the finality of brain death has to be confirmed by an undisclosed number of medical specialists.

58. "Al-Munaqashah," *Majallat Majma` al-Fiqh al-Islami*, no. 4 (Jeddah) (1988): 443. Unfortunately, the exact geographical area regarding this statement is not mentioned. However, it can be presumed that due to the timeframe, the reference is predominantly to North America and Europe.
59. M. al-Bar (b. 1939) is one of the key-figures of the Islamic discourse of brain death and transplantation. Aside from teaching in the Department of Islamic Medicine at the King Abdelaziz University in Jeddah, he is a member of the IFA-OIC and a consultant for the IOMS.
60. "Al-Munaqashah," (1988): 443 ff.
61. *Ibid.*, 458 and 491 ff.
62. "Al-Qarar," *Majallat Majma` al-Fiqh al-Islami*, no. 4 (Jeddah) (1988): 509.
63. www.muslimworldleague.org/fiqh_res.asp.
64. *Ibid.* However, the Hanafi legal school rejects control over one's own body even after death. In this context, it becomes apparent why, in 1989, the Fiqh Academy of India decided to declare all organ donations mentioned in a person's last will and testament as illegal. Compare the decision in "RLR Report: Islamic Fiqh Academy of India: Developing a Religious Law in Modern Times," *Religion and Law Review* 1, no. 1 (New Delhi) (1992): 177-79, with the rejection of organ donations mentioned in a person's last will and testament in Krawietz, *Die Hurma*, 194 ff.
65. www.muslimworldleague.org/fiqh_res.asp.
66. *Ibid.* Reference is made to oral and written text bases (among others, to the OIC decision), as well as consultation with specialists from different fields.
67. A. S. Daar, "The Response to the Challenge of Organ Shortage in the Middle East Region: A Summary," *Transplantation Proceedings*, no. 29 (New York) (1997): 3215.
68. Al-Bar, *Al-Mawqif al-Fiqhi*, 36; al-Daqr, *Mawt al-Dimagh*, 217.
69. Al-Bar, *Al-Mawqif al-Fiqhi*, 36.
70. A. S. Daar, "The Evolution of Organ Transplantation in the Middle East," *Transplantation Proceedings*, no. 31 (New York) (1999): 1070; U. H. Körtner, "Hirntod und Organtransplantation aus christlicher, jüdischer, und islamischer Sicht," *Transplantation: Organgewinnung und -allokation*. F. S. Oduncu. Göttingen 2003 (Medizin-Ethic-Recht; 2): 115 ff.
71. A. S. Daar, "An Overview of Transplantation Issues in the Middle East," *Transplantation Proceedings*, no. 30, 3638.
72. A. al-Daqr, *Mawt al-Dimagh*, 216. The statement, however, considers the position of a few brain-death opponents, who support the switching off of the respirator in the case of brain-dead patients, despite a rejection, in principle, of the brain-death criterion without further assessing this group quantitatively.
73. F. A. M. Shaheen et al., "Current Issues and Problems," *Transplantation Proceedings*, no. 33 (New York) (2001): 2621.
74. A. S. Daar, "An Emerging Transplant Force: Developing Countries: Middle East and the Indian Subcontinent," *Transplantation Proceedings*, no. 29 (New York) (1997): 1578.

75. E. Kazim, "Death, *Ruh* (Soul), and *Nafs* (Self)," *The Muslim World League Journal* 19, nos. 1&2 (Makkah) (1991): 41.
76. F. A. M. Shaheen and M. Z. Souqiyyeh, "Factors Influencing Organ Donation and Transplantation in the Middle East," *Transplantation Proceedings*, no. 32 (New York) (2000): 645.
77. Daar, "The Response," 3215.
78. Shaheen et al., "Current Issues and Problems," 2621. MESOT is also affiliate member of the IST (International Society for Transplantation). See "A Brief History of MESOT." www.esot.org/links/mesohistory.html.
79. Ibid.
80. Daar, "The Evolution of Organ Transplantation in the Middle East," 1071.
81. Ibid.
82. Daar, "The Response," 3215.
83. A. A. al-Khader and F. Shaheen, "Strategies for Increasing Transplantation: The Saudi Experience," *Transplantation Proceedings*, no. 31 (New York) (1999): 3278. Unfortunately, there is no documentation about how SCOT's creation in 1985 was connected to the IFA-MWL's decision in the same year about organ transplantation. However, this is probably the backdrop that explains why the IFA-OIC's 1986 decision was apparently not needed.
84. Shaheen and Souqiyyeh, "Factors Influencing Organ Donation," 645 ff.
85. Decisive impediments are found in other areas: In Saudi Arabia, still only one-third of the deceased's next of kin give their consent that his/her organ(s) can be removed. However, this is the legal prerequisite for a post-mortem transplantation. Al-Attar et al. "Brain Death and Organ Donation in Saudi Arabia," *Transplantation Proceedings*, no. 33 (New York) (2001): 2629-31.
86. Such an exchange also exists, to a lesser extent, with Qatar and Bahrain. See Al-Khader and Shaheen, "Strategies for Increasing Transplantation," 3278.
87. Daar, "The Response," 3215 ff.
88. Daar, "An Emerging Transplant Force," 1577.
89. Ibid., 1578.
90. Ibid., 1577 ff.
91. A. S. Daar, "South Mediterranean," 1993. The International Society for Transplantation has repeatedly listed Israel as an exemplary country for transplantation medicine. However, there is no cooperation with the neighboring Arab countries, which is hardly surprising given the political circumstances.
92. Daar, "The Response," 3215. This problem is also relevant in Western Europe. In Germany, for example, in 2003 only 3,300 transplantations occurred, compared to 11,000 requests for transplantation organs. See N. Siegmund-Schultze, "Zwischen Hirn- und Herztod," *Frankfurter Rundschau*, no. 258 (5.11.2003), 8.
93. This failure was only partially an issue of financing, since the Gulf states were equally affected. See A. Naqvi and A. Rizvi, "Registries in the Middle East: Problems and Prospects," *Transplantation Proceedings*, no. 33 (New York) (2001): 2640.

94. Daar, "South Mediterranean," 1994; Daar, "The Response," 3215 ff.
95. Shaheen et al., "Current Issues and Problems," 2622; Daar, "The Evolution of Organ Transplantation," 1070.
96. Shaheen and Souqiyeh, "Factors Influencing Organ Donation," 646.
97. Shaheen, "Current Issues and Problems," 2621 ff.
98. Ibid. For the orphan syndrome, see A. S. Daar, "The Evolution of Organ Transplantation," 1070.
99. In Pakistan and Iran, it was impossible to develop a comprehensive program for post-mortem transplantations until the end of the 1990s, since, despite the clear approval of influential legal scholars, no national law was formulated and/or legislated. See Daar, "An Emerging Transplant Force," 1578; Daar, "South Mediterranean," 1993.
100. In this context, some rather unholy alliances were formed between politics and the media, which only strengthened such skepticism. As a result, at the end of the 1990s in Egypt, the criminal prosecution of an orphanage director suspected of involvement in the organ trade was made nearly impossible, since local politicians and Egyptian members of parliament twisted the case to suit their respective interests. This was correspondingly exploited by the media. See S. Shehab and G. Essam El-Din, "Allegations of Horror Shelved," *Al-Ahram Weekly*, no. 423 (1-7 April 1999). www.weekly.ahram.org.eg/1999/423/eg5.htm.
101. Daar, "The Response," 3216; Daar, "An Overview," 3638.
102. The International Society for Transplantation.
103. A. Naqvi and A. Rizvi, "Against Paid Organ Donation," *Transplantation Proceedings*, no. 33 (New York) (2001): 2628.
104. The negative effect of commercial transplantations on post-mortem donation behavior remains a matter for discussion. The experiences of the UAE and other Gulf States, which are unambiguous in this context, cannot, given that they are "isolated cases," convince everyone of the existing cross-connection. Ibid.
105. However, states outside of the Gulf region were also affected. In the early 1990s, about 200 patients from Syria came to India exclusively kidney transplantations. That transplantations from outside the family are forbidden in Syria should have been very significant in this context. A. A. Riad, "Current Issues and Future Problems of Transplantation in the Middle East: Syria," *Transplantation Proceedings*, no. 33 (New York) (2001): 2632.
106. Daar, "The Response," 3216; Daar, "The Evolution of Organ Transplantation," 1070.
107. Daar, "The Response," 3216; Daar, "An Emerging Transplant Force," 1578.
108. In the UAE, organ trade and tourism has been illegal since 1993. Y. I. M. El-Shahat, "Islamic Viewpoint of Organ Transplantation," *Transplantation Proceedings*, no. 31 (New York) (1999): 3274.

109. For several years, India has tried to develop a government-controlled system for organ procurement. K. D. Shukla et al., "The Domino Procedure: A New Phase in the Saga of Kidney Transplantation in India," *Transplantation Proceedings*, no. 34 (New York) (2002): 1143.
110. Daar, "An Emerging Transplant Force," 1578.
111. Körtner, "Hirntod und Organtransplantation," 115.
112. In the mid-1980s, however, the previously illustrated relationship of both organizations was confirmed in the context of the discussion about artificial insemination. The IFA-MWL's 1985 decision, which prohibited using the genetic material of people who were not legally married, was adopted by the IFA-OIC in 1986. T. Eich, "Schoene neue arabische Welt," INAMO, no. 36 (Berlin) (2004):27-30.
113. In Saudi Arabia, for example, doctors have found it helpful to show the appropriate fatwas to the next of kin of brain-dead individuals in order to obtain approval for a post-mortem organ donation. This shows quite clearly that doctors, who without any doubt already for practical reasons represent the decisive link between donor (or rather, the donor's next of kin) and the recipient, cannot manage without the legal scholars due to the problem's multi-layered implications. Al-Khader and Shaheen, "Strategies for Increasing Transplantation," 3278.
114. To the beginnings of a cooperation with this aim in mind between doctors, scholars and Saudi television. Ibid.
115. Survey results from Kuwait and Saudi Arabia for 2001-02, which refer to the basic attitudes toward brain death and post-mortem organ transplantations by doctors and caregivers who work in intensive care institutions, are available. Interestingly, it seems that, in part, the presumption exists among the majority that the religion is actually opposed to post-mortem organ harvesting on account of the acceptance of the brain-death criterion. What this means for daily work (in both countries, post-mortem organ transplantations have been carried out successfully!), however, has so far not been examined. But in any case, this certainly has to be kept in mind with regard to future discussions. For Kuwait, see M. al-Mousawi, M. Abdul-Razzak, and M. Samhan, "Attitude of ICU staff in Kuwait regarding Organ Donation and Brain Death," *Transplantation Proceedings*, no. 33 (New York) (2001): 2634-2635. For Saudi Arabia, see Fitzgerald et al., "Support for Organ Procurement," 3042-44.