

The Silent Mentors of Tzu Chi

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This article tells how donors in Taiwan have contributed their cadavers to teach medical students how to respect and cherish the human body. They have signed a will to give up any progressive treatment and donate their bodies for students to learn surgery on them at the Medical School of Tzu Chi University (TCU). Before dissecting them, students are urged to visit the family of the donor and write the donor's life story. This brings home to them that they are not just dissecting a cadaver but dealing with an altruistic and generous spirit. The donors become known as "silent mentors". Students are requested to bow to the "silent mentor" each time they are about to begin dissection. When they have finished using a body the students sew it together again, stitching inch by inch, to reinstate its appearance; they then dress it, and participate in a memorial ceremony. They thus express their gratitude and say a proper good-bye. Such a programme, which combines medical knowledge with humanity, is a model for modern medical education; it also carries more profound meanings.

Introduction

Tzu Chi's Great Body Donation initiative gives death a new meaning. Dharma Master Cheng Yen changes the conception of death from one of gloom, decay, destruction and abandonment to one of purity and dignity, sanctified beneficence and an enhancement of the value of life by means of helping others. Her establishment of body donation has also changed the feelings of medical students towards

cadavers. Instead of treating cadavers as decaying anonymous objects, which they often treat with frivolity because they are afraid both of so stark a confrontation with death and of having to experience repulsive odours, medical students are taught to see them as selfless family members who should be treated with respect, gratitude and care. This positive attitude towards cadavers, as Professor Nuland of Yale University has put it, will stay with the students throughout their medical careers and play a decisive role in influencing doctors to treat their patients with respect and other positive feelings. (Nuland, 1988/1997: 24)

The Evolution of Views on the Dissection of Human Remains

The Chinese refer to a lifeless body as a “smelly leather sack”, implying that the body has no value. They are pragmatists and do not believe in an immortal soul. But what is it that has no value: the decaying body or death itself?

Primitive cultures vary in their beliefs, but they mostly surround the human body with tabus. Dissection cannot be permitted because of various fears, such as fear of coming into contact with evil spirits. The Chinese practised burial, to allow the body to return to the earth. The oracle bone script character for “healing” in the Shang Dynasty incorporates the character for witchcraft; this implies that the combination of witchcraft and medicine was the social norm at the time. (Li, 2009: 134-135) In the early development of human civilization, to investigate the human body was tabu. However, when the light of civilization gradually drew aside the dark curtain that hung over knowledge, the fear that curiosity would bring disaster began to fade away, and scientific medicine was born. Around 500 BC, Greek medicine began to discard superstition. Illness was no longer caused by demonic or divine forces but by natural factors that could be categorised and analysed. (Nuland, 1988/1997: 7) However, though human anatomy began to be studied and understood, for several centuries dissection was rarely practised on humans.

Human dissection may have been practised earlier in China. During the Western Han Dynasty, Chinese knowledge of anatomy was quite advanced. In the section on Bian Que (the earliest known Chinese physician, according to legend) in the book “Records of the Great Historian (*Shi-ji*)”, there were clear, systematic and well categorised descriptions of human dissection procedures. The famous book on Chinese medicine, “Inner Canon of the Yellow Emperor” (*Huangdi Neijing*), introduced formal written accounts of human anatomy, with detailed records of bone structures, internal organs, blood vessels, etc, giving details on length,

weight, size and capacity. Some of its anatomical terms are still in use today. (Li, 2011: 32, 40-42)

Hua Tuo (141-208 AD), the great physician of the Eastern Han Dynasty, was respected as the originator of surgery also had astonishing achievements (Wang 2000: 250-252). He invented *mafeisan*, a general anaesthetic combining wine with a herbal concoction, and used it in cutting open the arm of Guan Yu, a famous general, to scrape poison from his bones. He also became the first person in the world to use a general anaesthetic for abdominal surgery. But legend has it that his consummate medical skill finally led to his death. He suspected that the chronic headache of the ruler Cao Cao was caused by a brain tumour, and prepared to perform open surgery on his brain; but Cao Cao suspected a murder plot and had him killed. (Li, 2011: 54-58)

Dissection was common in China from the later years of the Eastern Han Dynasty up to the Sung Dynasty, and Wang Mang, a senior official in the Han Dynasty, even performed live body dissection on his political enemies. However, Chinese medical science then shifted its basis to energy movement, pulse diagnosis and body balance, and placed its emphasis on a holistic view of body and mind. It thus failed to establish a primarily anatomy-based medical system like the western world. (Li, 2006: 4-16)

For many centuries the Christian Church regarded human dissection as blasphemy against God. However, during the Black Death the church did allow it. Pope Sixtus IV and Pope Clement VII explicitly permitted the dissection of cadavers. During the Crusades, a lot of warriors cut up and boiled the bodies of their dead comrades to enable them to be sent home for burial. But this practice weakened the fighting morale of the troops, until Pope Boniface VIII forbade it in 1300. Then some over-zealous priests interpreted that as a general prohibition of human dissection. This may have been due to the belief that God created man in his own image, and the body was the home of spirit, so that believers took the view that the dissected would lose the opportunity to go to heaven. (Hagens, 2003: 9-36)

Meanwhile the Arabs, most of whom were Muslims, inherited the essence of Greek and Roman medicine; on the other hand, they brought from China vast medical knowledge and spread it through Europe as their territory expanded through conquest. The 10th century saw the birth in the Persian empire of Ibn Sina (also known as Avicenna), a figure regarded as great as Galen in the history of medicine. By his death in 1037, Ibn Sina was a renowned philosopher, poet

and physician. In his famous work, *The Canon of Medicine*, Ibn Sina for the first time defined medicine as a branch of science. He had an accurate knowledge of many human body parts and their physiological characteristics. (Avicenna, 1999)

Under the impact of medicine from the Muslim world, in the 11th century Medical School (*Schola Medica Salernitana*) at Salerno in Italy was the forerunner of university medical schools. Founded by monks, the school taught basic philosophy and professional medical subjects, and provided a year of internship for its students. From the 12th century onward, universities were gradually established all over Europe. The traditional practice of medicine by monks gradually passed to medical students and graduates. These university medical schools started to provide systematic medical education. (Nuland 1988/1997: 70-80)

During the Renaissance, which in this context can be said to have begun in the 15th century, artists came to believe that understanding the human body meant understanding the architecture of nature. Medicine and art started to interact, producing drawings of human anatomy and descriptions of the dissection process. Dead bodies were acquired by means such as from executed criminals, deceased family members and friends, and tomb-raiding.

Leonardo da Vinci refused to draw the human body in accordance with Greek aesthetics, but tried to bring life into his drawings by depicting the human body in a realistic and natural way. He dissected more than thirty corpses at a hospital in Florence, of varying age, gender, and occupation. He applied stringent scientific rigour in his drawings of the human skeleton, muscles, nerves and other body parts. When 800-odd of his drawings were revealed, people were amazed at the complexity and beauty of the human anatomical structure. He wrote in his notes:

I have dissected over 10 corpses, analysed all types of organ structures, and separated those tiny pieces of flesh surrounding blood vessels. Apart from the insignificant seeping from the capillary vessels, there was almost no bleeding at all. As a corpse cannot be kept for too long, it is often necessary to dissect a few at one time. Only then can I have complete understanding. Let me repeat. I did that to search for differences. Some would say that it would be better to watch an anatomist at work than to look at these drawings. This is correct. If you want to see all the details from a simple drawing, even with a clever brain, you would not be able to see or extract more information than a few blood vessels. (Karger-Decker, 2001/2004: 108)

However, Galen's old medical theories still dominated the field of medical education for a while. Western understanding of bodies was still based on the anatomical knowledge mainly derived c.200 AD by Galen from pigs and monkeys. This began to change in the 16th century, when Andreas Vesalius (1514-64) challenged the work of Galen, and introduced scientific methods of investigation. While a student, he dared to steal a corpse from the gallows. He boiled the skull and bones, cleaned them, then bleached and dried them under the sun. He then reassembled the bones into what would be the first human skeleton model in history. He became professor of anatomy at the University of Padua at the age of 23. Six years later, this Copernicus of the medical world published his book, *De humani corporis fabrica* ("On the construction of the human body") (1543), a revolutionary breakthrough in medicine and human anatomy. The level of precision and detail in his drawings of the human venous system is truly impressive. From then on, human anatomy made steady progress. (Karger-Decker, 2001/2004: 108)

During the Renaissance, knowledge of human anatomy was widely welcomed. King Henry VIII of England ordered the bodies of hanged convicts be given to anatomists. Vesalius was the first to perform public dissections. Such performances were very popular in 16th century Europe. Even the Roman Catholic Church consented to such acts, which enabled people to appreciate the marvels of God's creation.

The Objectification of Cadaver Dissection, and Recent Reactions to it

For centuries Christians believed that to be dissected after death would mean losing the opportunity of going to heaven. But when science flourished, western medicine may have moved too far in the opposite direction, treating the dead body as a mere object. Its sacredness and dignity have gradually been diluted.

The secularization of dissection and de-mystification of corpses reached a kind of climax with the work of Prof. Günther von Hagens of Heidelberg University. Having invented a process called plastination which arrests the decay of corpses, he took an exhibition of corpses round the world in the years bridging the millennium; 25 million people were estimated to have seen it. (Hagens, 2003: 9-36) Then on 20 November, 2002, at 7 pm, in the Old Truman Brewery in London's East End, Prof von Hagens dissected a cadaver before an audience of hundreds and a film crew. Although pre-warned by Channel 4, a lot of spectators were unable to control their agitation and shock when the organs were passed

around for inspection. After editing, the whole process was broadcast at midnight in a two-hour programme by UK's Channel 4 Television.

The Metropolitan police were sent to monitor the show. At the end, von Hagens was charged by the Health Department for violation of the Anatomy Act. He faced a fine and 3 months imprisonment if convicted, but was finally acquitted. (BBC News, 22 Nov 2002) However, after protests in London, early in 2003 the British government banned such exhibitions.

Although Prof. von Hagens said that he was just doing his best to let people witness death and understand the mystery of the human body, he apparently forgot that what people really care about is whether cadavers have been treated with respect. Is it humane to pass round the cadaver's organs for closer view? Though throughout history societies have had different views, attitudes and methods in the treatment of remains, they all seem to show concern that the cadaver should receive care and respect.

Nowadays, it is common for medical students to attend anatomy classes with detached emotions and even in a flippant spirit. Due to this lack of respect, very few people are willing to donate their bodies after death to medical schools for teaching purposes. Most of the cadavers used are unclaimed bodies. For instance, a student may well get the cadaver of a drowned person, with a swollen head which looks repulsive. Under these circumstances, it is difficult for the student to feel respect for the dead body, thus creating a vicious cycle.

But in recent years, western medical education has started to put emphasis on being humane. Many famous universities, like Stanford, New York University and University of California San Francisco campus, have begun to reconsider the process of handling cadavers. They also actively advocate that medical anatomy be conducted with respect and humanity. Professor Sherwin Nuland of Yale University has put forward a critical analysis of contemporary western medicine. In his book, *Doctors: The Biography of Medicine*, he states:

For what I have tried to do in this book is to describe the evolution of the process by which every doctor of today has come to his or her basic suppositions, and the shared theories by which all of us view the process of disease. The story of medicine is therefore the story of my professional life. [...] all physicians who have ever tried to make a diagnosis and then carry out a plan of therapy and attempt a prognosis, are heirs to the same tradition [...] I have come away from examining the lives of my chosen doctors with a renewed optimism

about the future of our civilization. In these days, when it seems unrealistic to predict a future for mankind that is anything but bleak, I find something in this “procession of characters” of mine that gives me hope. The reverence for life, the zeal for learning Nature’s secrets, the willingness to sacrifice for progress [...] are characteristics that I believe are inherent in our species, notwithstanding the mass of self-inflicted tragedies to which our century has been witness. (Nuland, 1988/1997: xiv-xv)

Japan’s White Chrysanthemum Society: Dissection with Donated Bodies

For a long time Japan was behind the West in anatomical science. In the 17th and 18th centuries, human body dissection diagrams were brought from Europe. As Japan’s doctors had no experience of dissection, upon seeing those diagrams they were anxious to observe the reality. In 1754, the Japanese government for the first time granted permission for executed criminals to be dissected. As a result, some Dutch anatomy books were soon translated. In 1870, under the Meiji Restoration, Japan’s medical world decided to adopt Germany’s medical science, including its study of anatomy. From the late 1930s to the 1950s, Japan used “dead travellers”, people who fell sick and died by the roadside, for dissection. Many medical schools were reluctant to rely on such material for the practice of anatomy, as the wishes of the deceased could not be ascertained.

Then in this century, just when the medical world in the West began to consider the issue, Japan too started to adopt “respect for dead bodies” as the core value in anatomy education. The White Chrysanthemum Society (*Shiragikukai*) was established in Japan in 1971, with over 20,000 registered donors/members, who are recruited by appeal through various channels. Professor Tatsuo Sato, a leader of that society, commented on current practice: “They might wish not to be dissected, or on the contrary, they might be willing to. I assume most of them don’t wish so. Though they are just lifeless bodies, they should still be shown respect. Such use would create a bad impression on the students, so this practice is not welcome. It would be hard to teach students ethics with those bodies. The bodies now used have all been willingly donated with the implicit message that ‘this is to help you to become a good doctor, please use my body’. Such message

has a very good influence on the students.”¹

This is how the White Chrysanthemum Society operates. Whenever a member passes away, the family notifies the Anatomy Teaching Department. The professor on duty will then put on a funeral black robe, which is kept on the premises, and rush to the funeral. A token contribution of 20,000 Yen towards the funeral costs will be handed over along with a body donation agreement. After that is signed, the body will be delivered to the medical school for study.

Respect for the donors is emphasised. Before the start of each class, the students must observe a moment of silence as a tribute to the donors' contribution. In the classes, the teachers and students must hold the donors in high esteem. On the first day of anatomy practice, some of the society's members are invited to attend and explain why they wish to donate. The students bring a bunch of white chrysanthemums to the first class. White symbolizes mourning, the chrysanthemum denotes nobility. Led by the teaching staff, the students place the flowers at the monument to body donors on the campus. At the beginning and the end of each class, all present must stand in silent tribute. At the completion of the course, each student team places the body they have dissected in a coffin covered with flowers. At some medical schools, the students also help to collect the bones after the cremation. At the end of the course, the students summarise their experience in a book which they send out to the donors' families and society's members; they write of their feelings during dissection, whether their attitudes have been changed, etc.

Many of the medical professors in Japan are body donors because they fully understand that they are walking on the path built by previous donors. Mr. Maruyama, a member of White Chrysanthemum, said: “I always tell the students to be a good doctor because we join the society totally free of conditions and rewards. Please use our bodies for practice and learn well. We hope this will help future generations to become good physicians, good scholars.”

In its early days, Japan's medical community was influenced by the Western way of thinking. Natural science was embraced with the belief that matter was the centre of the universe and that science education was to advocate rationalism. They deeply believed that rationalism in exploring the physical world was the ultimate value in the quest for truth as well as the highest human quality. But by the end of the 20th century, the White Chrysanthemum Society began soul-searching. They proceeded to merge the rational thinking of science with Japan's

¹ 3rd April, 2007; interview with Professor Tatsuo Sato of Tokyo Medical and Dental University.

traditional etiquette. Gradually, body donation is being accepted as a virtue by Japanese society. But the White Chrysanthemum deliberately removes all religious connotations and bases its belief on science. Its aim is not to help deal with death, nor to provide guidance in overcoming the fear of death. It also does not seem to emphasise the sublimation of grief through the donation process. Instead, its aim to maximise the effective use of bodies is based purely on practicality: in the spirit of Jeremy Bentham, the British founder of utilitarianism, they hold that the aim of all social and political institutions should be the greatest happiness of the greatest number. Not only do the students show respect; through donation the bodies have become objects useful to society.

The Establishment of the Tzu Chi Body Donation Centre

In Chinese society, the practice of Pure Land Buddhism prescribes that the body cannot be moved after death for a certain period so as to allow the spirit to have time to ascend to the Pure Land. This belief not only dominates most Buddhists in Taiwan; even non-Buddhists are influenced, and this limits their acceptance of organ or body donation.

Dharma Master Cheng Yen has said: “This body is not mine, but I will leave my love to this world.” She considers the body as just a means for the practice of dharma; the belief that the spirit needs to stay in the body for a certain time before going to the Pure Land is groundless. After death, the body is just a shell. It is a wise choice in life to put useless matter to good use. Death is not an end, but an extension and expansion of love.

The first step in honouring the silent mentor (a name used in Tzu Chi for body donor) is for the students to know his past history². Before the anatomy programme begins, each medical student is required to visit the silent mentor’s family, to get a feel for his life. When a student starts to know about his past, the relationship with the body changes. What is lying on the operation table is no longer a cold cadaver. The student can recall his witty appearance while alive, his happy laugh and his warm hands. He can no longer treat the mentor like a frog for dissection, but conceives of him as a person with thoughts and life who has with dignity offered his body to the students.

²In the rest of this article donors and students are referred to by the masculine pronoun but may be of either gender.

Before they passed away, what would the mentors have asked our doctors? What would they have expected them to learn? Many medical graduates from Tzu Chi University have reflected that the memory of the anatomy course has affected them deeply. The mentors whom they visited in the hospice ward now lie cold in front of them. In the past, the medical students usually did not know the bodies they dissected. When portions of the body dropped on the students' hair, or on the floor, they just threw them away. But now the students have experienced a change in their lives: unlike students before them, they now know about their mentors.

Dr Chang Ch'un-Ming, a graduate of Tzu Chi University, still has a vivid memory of the anatomy course:

The first cut happened on the first day, after the ceremony. It gave me a very deep impression and I was quite frightened. It was my first experience of standing next to a mentor. I felt oppressed by the horror of standing beside a deceased body. And I still had to make my first cut. The classmates in my group were all trying to pass that task on to someone else. I was really scared, as the silent mentor was nevertheless different from a living person. His body was cold. But I still had to cut a body without any warmth. It was quite a terrified feeling.

But this feeling passed quickly. We were taught that the silent mentor was really a person; he was a teacher, not a cadaver. He was the same as us, had life, and now was just using his body to guide us. We also prayed silently, and followed many rituals which helped us pass this barrier quickly. I think that this is the characteristic which differentiates us from other universities. Our university is full of the spirit of humanity. We were told that the mentor is also a teacher who deserves our respect. He is here to help us cross this psychological barrier quickly, so that we can easily follow the class. In the beginning of the course, what we learnt the most and in the least time was from the silent mentor. Regardless of how attractive the illustrations in the books were, they were flat, printed materials. But the mentor was three-dimensional. He was real: you could touch him. What I remember most is those body structures.³

³ 25th May, 2006; interview with Chun-Ming Chang in *Dalin* Tzu Chi General Hospital.

The environment and atmosphere of the conventional anatomy course follow those of traditional Western medical science, which avoid facing the fact that the cadaver was once alive. The students usually treat the unidentified bodies with a casual attitude. Since the bodies are considered as “objects”, they need have no emotional involvement, nor do they experience the guilt or remorse that might occur if they were dissecting someone they knew. Once, an English medical student who was in the middle of dissecting a body found out that the body belonged to his aunt; he nearly broke down, and could not continue with his medical studies. Not to face the fact that the body was once a living person is an approach inherited from centuries of Western anatomy teaching. The students conduct their work in a mood of hilarity; their demeanour is cold and indifferent, so that they can ignore the unease of dissecting a body which was once alive, as well as their fear of death.

After visiting a Tzu Chi anatomy class, the head of a Finnish medical association commented that she found it incredible that Tzu Chi anatomy education enables students to face the cadavers of people whose past lives they know and proceed in such a dignified and respectful manner. She also told us that some medical students make fun with the organs, tossing them around and saying, “This was your liver and this was your heart.” Western science has treated the cadaver as an object; superficially, this is to protect the students’ minds from being hurt, but in reality, it isolates their minds from the body. Such objectification can have a great impact on the student’s subsequent medical career.

Tzu Chi requires the students to have feelings about the cadaver lying before them, to appreciate that it was once a noble spirit full of love. This not only prevents the body from being looked on as mere matter, but also deepens the students’ respect for life. Dr. Yang Ya Wen has described her feelings when performing dissection on mentors in a Tzu Chi anatomy course:

When I opened her body, my classmate and I found her intestines had unusual mucus and there were also some lumps. We only then realised that those lumps had spread from the lung cancer which caused her death. I felt very sad. In her last days, she must have suffered a lot of pain. I then probed around the intestines, and remembered the pain she suffered. I could feel her pain. I would have liked to ask her if I was being too rough. Though I knew she could

no longer feel, I still worried that I might hurt her, or do something wrong. Then... I really could not express how bad I felt.”⁴

In 1998, a body donor, Mr Lee He Cheng, refused chemotherapy so that he could preserve his body for donation. In a meeting with the students before his death he said:

The pain usually hit at midnight. When a person suffers, his will power may be destroyed. Sometimes I would really like to battle with the illness, take the operation or chemo, and see if it might ease the pain. I am counting my days now. But those treatments would not be of any help to my illness. I only hope to render my body in a perfect form for you to study so that it might be helpful to mankind. It's just my humble wish. The Dharma Master said that a sick body was like a house in need of repairs. Rather than keeping such a house, it would be better to grasp the present moment. I wish to pass away quickly so I can reincarnate soon. Therefore, when you are cutting my body that is also the moment when my wish comes true. You can make wrong cuts ten times, a hundred times, even a thousand times on my body, but in future please don't make even one mistake on your patients. (Yeh, 2004: 182)

Several weeks later, when the students dissected the mentor's body, how could they not be touched by his words still fresh in their minds? How could they fail to dissect his body with seriousness, respect and care? How could they not work diligently to learn the body's secrets so as to accomplish the mentor's wish that they should not make any mistakes on the patients?

Many silent mentors had dedicated their whole lives to Tzu Chi, like the prominent entrepreneur, Mr. Lee Chung Ji; some are acclaimed professionals, and loving Tzu Chi sisters. When the students realise that the donors had devoted themselves to the well-being of society, and offered their bodies for experiment, they come to admire the donors as role models. What the students learn from the mentors is not just medical knowledge; they also acquire a more altruistic character. This is an example of holistic education. What they are expected to learn is the donors' selfless and generous spirit.

⁴2nd June, 2006; interview with Ya-Wen Yang in Hualien, Taiwan.

Medical Students' Feelings Toward Dead Bodies

Dr Sherwin B. Nuland of Yale University once commented: “The impression a medical student has when facing the cadaver for the first time will determine his attitude towards his patients in future.” If the student dissects a rotten unidentified corpse, or a criminal’s body, the disgust he feels may stay with him and affect his attitude towards patients’ bodies in future.

When an anatomy student first sees a dead body, he will naturally feel fearful. To ease such fears, the classroom is designed to be spacious, with no atmosphere of gloom or isolation. The anatomy room at Tzu Chi University was therefore located at level 2, next to the main classroom. In 1994, when the Tzu Chi Body Donation Centre was being set up, Dharma Master Cheng Yen requested the university to provide a bright and comfortable space for the students. She said: “The anatomy course will be on level two of the building, which provides open space and a good view. This is different from the majority of medical schools in Taiwan, which place their anatomy departments in the basement or at the far side of the buildings.”

Besides using space to dispel the gloom of death from students’ minds, Professor Wang Yue Ran, (Dean of Anatomy at Tzu Chi University), has explained that the deceased’s families are also of great help in overcoming their fears.

When the course programme was about to start, we would send an invitation to the deceased’s family. The third year medical students are mostly in their twenties; such an age group would still feel apprehensive toward cadavers. Not everyone can hold a scalpel and cut the body. We invite the families to come for two purposes. The first is to notify them of the programme’s commencement. And the second is to have their encouragement and support for the students – to encourage them to learn well and not be scared. It is more for interaction between the deceased’s families and the students, to achieve a sense of proximity for a normally remote field of medical education.⁵

Dharma Master Cheng Yen’s emphasis on respect towards the silent mentors is also shown in the way the dissecting techniques are applied. Tzu Chi University takes great care in handling the donated bodies. After being frozen, they lie peacefully on the beds as if they were asleep. Compared to Western surgery performance of some medical schools in the past, Tzu Chi’s attitude towards the ca-

⁵ 20th February, 2005; interview with Yueh-Jan Wang in Tzu Chi University.

davers is strikingly different. Certain medical schools in Germany and the United States hang the cadavers from the ceiling, like cattle in an abattoir. This shows people that the cadavers are just bodies ready to be cut up. In Tzu Chi, they are teachers who, through their own bodies, show the students how to use the scalpels so that they will not harm their future patients. We can foresee that if a student can handle a deceased body respectfully, he will be more respectful towards his future patients.

The “Silent Mentor” Programme

Tzu Chi Medical School in Hualien was founded on 16 Oct 1994, and the faculty immediately needed to acquire cadavers for the anatomy class. In 1995 Master Cheng Yen began to promote body donation as a selfless contribution to human welfare which made meaningful use of the body after one's death.

Professor Tseng Kuo Fan arrived in 1997. He has since been Head of Research and Development at TCU. Being in charge of the scientific processing of donated bodies, he has been working for years on techniques of body preservation and dissection procedures. The aim is to achieve the level of respect for the bodies which is expected by the Dharma Master. He has suggested the use of epidermal injection instead of formalin in order to avoid its odour. He has further observed that traditional preservation techniques cause the breakdown of protein in the body, giving it a totally different feel from that of a living body, thus limiting the connection of basic anatomy with a real clinical environment.

To justify the donors' complete trust in Tzu Chi, Prof. Tseng has continuously conducted research on how to utilize such valuable resources. Upon learning that the Huston Medical Centre in Texas has, due to delays in processing procedures, occasionally frozen unpreserved bodies for future pathological study, he was inspired to broaden the meaning of body donation and introduce the snap-freezing technique. This technique involves sterilizing the body within 8 hours after death and then snap-freezing it at minus 30°C. The body will look as if it is sleeping. After being stored for a few months or even a year, all it needs is defrosting three days prior to use. It can then be used for four days at room temperature. Aside from having no blood flow, heartbeat, pulse, breath or warm body temperature, the cadaver's body structure, organs and elasticity are no different from those of a living body. When the students practise surgical techniques, they can observe the body structure and organs accurately, and simulate clinical treatments and surgical techniques. Professor Tseng once said to his students that he will teach

his last lecture as a body donor lying on the anatomy table for them to conduct the dissection. He hopes that students can fulfil his ultimate wish.

26 May 2002 saw the commencement of ground-breaking “simulated surgery with human bodies” under the co-operation of surgeons and teaching staff in anatomy. Its first incision turned a new page in the history of anatomy teaching in Taiwan, for advances in technology allow the donated bodies to respond like real patients. Just as da Vinci explained the beauty of human bodies with science but demonstrated it through art, anatomical studies now offer the same combination. Dr Chang Ch’un-Ming has recounted his experience of dissecting donated bodies in his 7th year at TCU:

Dissection of donated bodies was the most interesting lecture in my whole Year 7 programme. Why? I find human bodies beautiful. After you open up a body, you can see the organs inside all brightly coloured, saturated and pretty. I treated those bodies as good paintings which offered me dissection opportunities, cutting and mending. As I also like artistic creations, I found that very interesting.⁶

The Influence of Body Donors on the Characters of the Medical Students

This association of art and technology not only allows medical students to have a pleasant memory of their first encounter with human bodies, but also exposes them to noble minds; beyond the bodies were lives of a love that did not expect rewards. In the future, the students will retain this awareness when they treat live patients: the human body is noble; it is beautiful; it is full of love.

After performing dissection, the students must carefully place every organ back in its original position and then sew up the bodies. To show due respect to donors and their families, each stitch must match and be equally spaced. What the students have learned during the year from these teachers is particularly precious. Their first impression of human bodies will last throughout their medical career, reminding them to respect life and handle sick bodies without fear.

Wang Yue Ran of TCU’s Anatomy Department has said,

This is one of the most important steps for the students to show their respect to the body donors. They do not view the bodies as mere objects, because at the end they have to restore the teachers’ faces

⁶See fn.3.

and bodies completely. The restoration is a process of showing appreciation.... When we were studying in earlier times, organs were normally removed and placed in containers. Years later, those organs might still be taken out for teaching purposes. At TCU, we require all such organs be returned to their bodies and even the skin to be sewn up. We consider this a very meaningful act.

When they have sewn up the bodies and seen the appearance of their teachers restored, the students feel relieved. Restoration after dissection is also a relief to the donors' families, because they do not need to worry that the bodies of their loved ones may be broken up and scattered.

After restoring them, the students will wrap the bodies in white cloth, put on white gowns, and then place the bodies in coffins. Seeing this, the donors' families are at ease. It is this sense of trust which leads them to hand over their family members to TCU, and allows its medical students to practice. Consequently, the number of donors is on the rise.⁷

A memorial service, led by nuns from the Jing Si Abode (the Headquarters of Tzu Chi and home to the Master Cheng Yen), is held before the bodies are cremated. The family members assemble with the medical students in front of the Buddha statue while Buddhist music is played. During this ceremony the students frequently burst into tears. They have developed feelings towards those whom they have dissected, and will now always regard them as their teachers. That is why Dharma Master Cheng Yen refers to them as "silent mentors".

To the relatives of the donors, the deceased would normally have been just a memory within the family, a name that would be forgotten after two or three generations. But now that memory is shared with a group of medical students and doctors who will always remember the silent mentors. The family members feel like part of a larger family, and know that it is rare in life to be so dignified and respected by so many.

TCU graduate Yang Ya-Wen said:

That has become a very special and very beautiful memory in our lives. She was an important teacher in my life. She also said that she was so glad she had left behind a group of children like us who

⁷ 20th February, 2005; interview with Yueh-Jan Wang in Tzu Chi University.

accompanied her on her last journey and fulfilled a very important wish of hers.⁸

Life is busy and tough when a medical graduate becomes a resident doctor at the hospital. When Yang first started as a first year resident at TC Hospital, she was on a 24-hour shift every two days. But she still attended every practical session that involved silent mentors in order to hone her skills, so that when she met patients in the future, she could alleviate their pains. To her, such sessions are precious. There was a day she went home and wept because she felt that due to stress she had show a lack of respect to the silent mentors.

One year seven students of the medicine faculty composed a cello concerto for their teachers, in memory of the teachings they had received. Often in the middle of the night, when they came across learning difficulties, they would play that to express their frustration. There was also a student who sang to a guitar for the silent mentors as if they were still alive. Thus intangible existence becomes tangible. Master Cheng Yen once said, “Utilise impermanence to cultivate the everlasting. Use the tangible body to cultivate a life of wisdom; use a body of limited duration to promote everlasting lives.”

Dr Chang Ch’un-Ming has spoken of the influence of those teachers on his chosen lifelong medical career:

I feel my whole view is probably not just affected by one single session with the silent mentor. Often, it is from practice with patients..... After seeing so many of them, I reflect, just as the Master said, whether there will be a tomorrow, whether death will come unexpectedly. You should follow what she says while you live. You should always try your best, as you don’t know how much longer you may live. ... Previously, I was a pessimist, thinking that it might be tomorrow or today that I would not wake up from my sleep. Therefore I have to do everything properly today. I still think like that now. I still do things properly every day, as I might not wake up tomorrow. That is my view on life as well as death. I have never thought about my view on death. But I know that the silent mentors live in our hearts and will do so for the rest of our lives. So I always remember who helped me and allowed me to gain my medical knowledge.⁹

⁸See fn.4.

⁹See fn.3.

Are Emotional Involvement and Medical Professionalism Compatible?

Master Cheng Yen expects that donating one's body will stimulate students to treat patients as relatives, and instill in them the spirit of the benefactors. Nevertheless, certain aspects of this practice are still under debate among medical professionals. If doctors really treat patients as their own relatives, would the emotional involvement hinder their judgment?

How do medical students, residents, chief residents and senior doctors handle such problems? Would a senior doctor, through performing similar operations frequently, treat them mechanically and operate without emotion? Would that indeed be the pinnacle of skill? No: the pinnacle of skill is love.

Dr Li Ming-Che, head of the TC surgical department, who is in charge of organ donation and transplant, has this insightful view on what constitutes surgical skill:

...from your understanding of past lessons on anatomy, you must have already visualised what a normal person's organs look like. Today, his illness causes you to operate from a certain area, so what sort of problems will you be encountering? What you saw before were normal organs. But now you must operate on an abnormal patient. You must remove the root of the problems. You cannot act as you did while still learning, when mistakes did not matter. When you are doing it for real, the first incision has to be the correct one. Just one cut. There is no repetition. You can't go back. I always tell my students that from the moment the surgeon picks up the scalpel, he has already decided on the patient's life or death and determined his fate. The placing of the scalpel, whether it is a clean cut or askew, will also determine whether you will be blamed by your patient when he wakes up.¹⁰

The training in anatomy received by a medical student critically affects his surgical skill. It also affects a patient's rights. Doctors are under extreme pressure, which often affects their attitude towards their patients. Dr Li Ming-Che again:

A surgeon's life is actually very busy. That is why I feel as if it has been 15 years since I was a resident. I have always been enthusiastic

¹⁰2nd June, 2006; interview with Ming-Che Li in Hualien Tzu Chi General Hospital.

about working as a surgeon. Why do we need enthusiasm? Because it is really a demanding job: you have to brave long working hours, a heavy workload, and the consequent high pressure. More importantly, the result of the treatment could affect your relationship with the patient and his family. All these factors demand total dedication, or you may not last long in such an environment. Personally, I feel that I like surgery because it is very challenging. From the moment you pick up the scalpel and make the first incision on the patient, you have his fate in your hands. Each and every cut and every stitch may be a factor in deciding his fate – which in this context means to live or die, to live happily or live in pain. All could be set in the blink of an eye. It is this challenge which makes life as a surgeon so engrossing. You feel happy when your patient gets better every day. You start to worry if he doesn't do well. But if he finally gets well, the joy you feel is beyond words. But if his condition suddenly deteriorates, you feel immense sadness, like falling to the bottom of a valley. Maybe I also enjoy these ups and downs, highs and lows. But most of the time I enjoy the happiness I share with my patients. So this is the job I really long for.¹¹

The medical profession has recently been facing a worsening relationship with patients. Surgeons often have to risk being sued. Besides, surgery requires more physical strength than other medical fields. So students often lose interest in it. But from the lectures with the silent mentors, they start to realise the importance of surgery and acquire the courage to face problems. They become more active in seeking to improve the doctor-patient relationship, and help their patients more often.

Dr Chang Ch'un-Ming told of a doctor who was feeling extremely tired during an operation and was considering a break, when the image of a silent mentor flashed into his brain and gave him new energy and the courage to continue.

Let's say you are tired while operating. You might ask, should you continue? Sometimes an operation is not that smooth. Sometimes we have to assess how much we have to do to help. Sometimes, not every time, when you are tired, the image of a silent mentor would

¹¹Ibid.

flash into your mind, an image of how willingly they helped. You felt refreshed at that moment and continued. Sometimes I summon up a bit of self-encouragement and try to see how much I can do for the patient, and this revitalises me to continue. In other cases...it may be a smooth operation and you may remember that you have come across this condition before. Then you feel glad that you have learnt from the silent mentors. Maybe I shouldn't have said this. What I really mean is that without my thinking hard this just looked familiar to me; it was like the simulated surgery I did in year 3 and year 7, when I came across similar things. That is a pleasant feeling.¹²

Who says that the lives of body donors have ended? They live on in the hearts of every doctor. They live on in every cut made by the doctors. They come back to life in every critically ill patient. Just as Romain Rolland said: "I haven't died. I have only changed residence. I live in your heart, you who weep when you see me. The beloved has become the soul of the one who loves." (Rolland, 1938/1982: 291) The souls of the silent mentors live on in the hearts of their students.

Body Donation and the Displacement of Sorrow

At present, TCU has over 20,000 silent mentors. A big contrast when compared to the olden days, when the medical school found it so hard to get cadavers. Professor Wang Yue Ran of TCU's Anatomy Department recalled the shortage in his days as a student, when the supply was from unclaimed bodies:

Inadequate supply of bodies can be traced back to my student days. Our source came from nameless persons, for instance those found dead by the roadside. If it had been very cold for a few days, there would be deaths from cold. The government proclaimed that such bodies would be sent to medical schools if they remained unclaimed for 6 months. They would then be used by the students for learning purposes. Of course there were few unclaimed roadside deaths.¹³

In the past, many people were reluctant to donate their bodies. Partly that was because they were worried that their bodies might receive undignified treatment.

¹²See fn.3.

¹³See fn.5.

One can imagine the aversion to exposing one's body to a group of frivolously behaved people. But the respectful and grateful attitude of TCU's students and professors has encouraged the donors' desire to leave a legacy of love. The pleasant environment for dissection, coupled with simple but solemn ceremonies, enables the donor and his family to appreciate the sacred nature of the legacy rather than to dwell on death and the horror of dissection.

In many cases of body donation, we have discovered how the solemn dignity of donation could assuage the sorrow of death. In May 2002, Sister Ts'ai Ts'ui-Chin of Changhua got up one morning to prepare breakfast for her daughter. While she was washing her face in the bathroom, the basin unexpectedly cracked and cut the main artery in her neck. She bled to death peacefully and painlessly. As she had signed up as a body donor, her husband (Brother Hsieh Ching-Yun) and three children quickly contacted TCU, even before the sadness sank in. Coincidentally, TCU was having a simulated anatomy session the next day for year 7 students and some specialists. Sister Ts'ai was just in time to be the teachers' teacher.

When the hearse was passing through Hohuan Mountain, Brother Hsieh recalled the scenes of their touring together along the Central-Cross Island Highway. He spoke to her body and recalled merry moments from the past.¹⁴ The journey had delayed the sorrow of the loved one's departure, as if she were still by his side, going to a worthwhile and dignified activity. Sorrow was now displaced by the urgent arrangements required for the donation procedures and the ceremony.

Early the next day, Sister Ts'ai smoothly became the fifth body-teacher of that anatomy session. TC volunteers accompanied brother Hsieh and his three children, caring and comforting the whole way, and offering positive views and strength to deal with death. There was no time for the family members to feel sad for the deceased, as they had to commence the donation procedures with minimum delay.

The sorrow was diverted into expectations of new lives from medical education. A poem by Kung Tzu-Chen of the Ching dynasty would be an appropriate reflection of the spirit of the body-teachers: "Fallen petals are not without use. They mulch in spring and protect the flowers."

In the morning assembly of volunteers three days after the death, brother Hsieh and his son, a high school student, walked on stage and shared their ex-

¹⁴ 24th May, 2006; interview with Ching-Yun Hsieh at Ms. Hsieh's residence in Hsiuhsui village, Chang Hwa.

perience. They contained their sorrow without breaking down. He said his wife was blessed to become a Bodhisattva. The end of a tangible life is the beginning of an intangible, endless life. Death is not the end of life, but its conversion and continuation. We often observe in the relatives of silent mentors this power which transcends death and grief. Her son shared his experience with calm sadness in his voice. He said, “Mum has become a Bodhisattva. I know her body can help many patients. I will look after myself and will not let her worry. Just as the Master said, when the front foot moves, the rear foot has to let go too. I will remember her. I also pray for her to come back soon.”

The relatives of silent mentors cannot follow the social customs of a prompt burial. They also do not conduct the customary ceremonies on the seventh day or the hundredth day, nor do they issue obituary notices for remembrance. Instead, they have learned the lesson that death does not mean extinction. Though the bodies have returned to the void, instead of grieving and weeping, it is better to pray that the deceased will be able to help after their bodily functions have stopped, so that a useless body serves lasting values.

The Experience of Sacrifice and Dignity

Though traditional burials appear to be full of grandeur, in reality the bodies buried in the coffins are attacked by insects and rotted by bacteria. According to custom, after a certain number of years of burial, relatives of the deceased have to relocate their bones. What they usually find then are a spectacle of decay and an unbearable stench. Dharma Master Cheng Yen once mentioned an incident regarding her father. Years after his death, a geomancy master was engaged to relocate his bones. But instead of a skeleton, he found a semi-decomposed body. Consequently, he had to spray it with rice wine and resume the job a week later. At that time, Master Cheng Yen wondered what values were left after death. (Shih 2007: 91)

The rotten stench of decay is partly responsible for people’s negative feelings about death. Donating one’s body has changed that. It has turned the uncertainty and apprehension of death into seeking and realizing everlasting value. This transformation of value is the best way to help people face death and overcome their fear and uncertainty.

Silent mentor Liu Shun-Cheng stayed in the hospice ward of Tzu Chi Dailin Hospital before she passed away. She gave vivid expression to the fear of a person facing imminent death alone:

In these few days, I have learned about life and death. There is nothing wrong in my saying that. Close your eyes and then you are gone, just like falling asleep. But I feel the most terrible part is probably when no one beside you at the last moment. I have seen this in the last few days, this being neglected. When a family member or relative passed away, those who should have been present were absent. The regrets, pains, and loneliness felt by a person on the verge of dying are really frightening. Even in the hospice ward, patients still have moments of emptiness. That is the time when I worry most – worry that I have been discarded....At this time of facing death, you feel like saying who has been kind to you. It is a time when you are most sensitive.¹⁵

In the hospice ward, Liu was accompanied by her family members, especially her sister, and received continuous care from TC volunteers. Her fear of facing the uncertainty of death alone was relieved by this experience of love, and transformed by her wish to donate her body. Fear was replaced by the sensation of following the right course. Loneliness was blown away by the love between her and those around her. She said:

I feel that there is so much love in the hospice ward. My little bit of love can't really compare with all the love flowing from everyone. Really, mine is so tiny that I feel it is hardly noticeable. I am grateful. Grateful for coming to Tzu Chi, which has given me all this appreciation. Really. One day my sister mentioned body donation, and I asked, "After I have donated my body and my cornea have been used, what would I do if I come back but cannot see and cannot find my family?" At that moment I was quite scared. My sister laughed at me for still having such thoughts when I am about to help others.¹⁶

After Liu was notified that her body was suitable for donation, she happily said that she was glad that she finally had permission for her body to help others: "I had been hesitating during that period. But once I had decided, the feeling was different. I felt very proud when I received my donor card, really proud."¹⁷

¹⁵ 27th March, 2006; interview with Shun-Cheng Liu in Dalin Tzu Chi General Hospital.

¹⁶ Ibid.

¹⁷ 25th May, 2006; interview with Shun-Cheng Liu in Dalin Tzu Chi General Hospital.

Liu was not without fear, not without struggle. But every time, the fear was transformed by the holy sensation of worthiness, of being able to offer positive help to medical students. Due to her resolution and the perceived value of body donation, she felt relieved whenever she had to confront the despair of death. With her struggle transformed into benefaction, when fear turned into love, Liu's mind was filled with dignity. She still had to fight against pain. But those dignified images which appeared even in her sleep relieved the pain of her body and mind.

As soon as I close my eyes, I can now see the god of mercy sitting in front of me, inside a cave with a beam of light shining down. And then the god went up and a light shone back, forming a circle. I then repented in front of him and prayed. I prayed without stopping. As soon as I close my eyes, I have this urge to pray. I then feel soothed, as if I am very close to the land of eternal happiness.

Sometimes when the pains came, I went to the chapel, just sat there and forgot my pain. I have already reached the stage of wanting to live in the chapel and stay there. Strange, often the nurse would have to come looking for me to inject painkiller. She would find me either there or in my room. After all those needles and extractions of samples every day, I am now beyond pains. They don't matter any more. I take it as doing ascetic practices, and don't feel bothered by them. I close my eyes and feel at ease. I go to the chapel and feel peaceful. See my swollen feet. Normally such feet would feel numb, but mine don't. I go to the chapel every morning at 5.30, sit there and don't want to leave. Feel so close to the Buddha. I feel as happy as I believe that you can feel only when you are close to the Buddha. I am very happy that the Buddha has converted me so quickly and allowed me to be so close. It is my fortune that that has happened.¹⁸

Desire to repent comes to everyone who feels he has done wrong. Repent what? Being preoccupied with success? Offering someone insufficient love? Having done so little that was worthwhile? After deciding to donate her body, Liu, who was not a Buddhist, could still feel the presence of the Buddha. After repentance and after making the decision to donate her body, her dignity and sanctity gradually developed, her pain from cancer was eased, and she gained the courage to face her end.

¹⁸Ibid. Shun-Cheng Liu passed away 20 July 2006.

Making Life's Last Episode a Beautiful Experience

After cremation, the ashes of donors are placed in TCU's Hall of Great Sacrifice. They are put inside individual glass boxes. Transparent and carefully designed, they are reverently called Jing Si Abode. This dignified, pure and bright environment has also attracted donors. Imagine burial in a dark and empty cemetery, the grave exposed to the weather, soon forgotten by the world and visited by relatives who come only once a year to remove weeds and dirt. With the passage of time and generations, even the most glamorous graves are covered and forgotten. Compared to that, the placement in crystal-clear, elegant and graceful glass Jing Si Abode has complemented death with a sense of honour, dignity and warmth. Whenever Chang Ch'iu-Lin goes to work at Hualien TC General Hospital as a volunteer, he makes time to go to the Hall at TCU, makes himself a cup of coffee, and speaks to his deceased wife as if she were alive. To him, she has lived on but in a different residence. This has saved the donors from the sordidness usually associated with death.

The English philosopher Francis Bacon said, "The ceremony of death is more frightening than death itself." (Bacon, 1972/2006: 8-13) Traditionally, death implies darkness, horror, filth, rotting, void and abandonment. Master Cheng Yen has turned the journey of death into beauty, dignity, sanctity and grace. Not only is the glass Jing Si Abode their final resting place, the warm Hall of Great Sacrifice will be their home forever. The memorial service is also designed to be warm and dignified. The Master has aimed to minimise all the uncertainties associated with death and turn them into something predictable, allowing everyone to share in the journey.

Master Cheng Yen has created a new dimension and given new meaning to death. The traditional longing for the "land of purity" has now been changed to a wish "pure as crystal glass" in the Hall of Great Sacrifice. The fear of one's bodily death has been replaced by the joy of giving tangible assistance to mankind. A tangible body can cultivate the invisible life of wisdom. According to Master Cheng Yen, this life of wisdom is achieved through the selfless sacrifice of benefaction.

The dignified cleanliness of TCU's Hall of Great Sacrifice does not separate it from the activities of daily life. To a certain degree, this overcomes the despair and sadness of loneliness after death. Loneliness and uncertainty breed fear. For teaching purposes, the Master has combined the anatomy room with a lecture room. The partition between them is glass, so that the students performing anatomy will not feel scared, and the silent mentors will not feel lonely.

Death is no longer treated as an occasion for grief. Before the start of each anatomy session, the students must respectfully greet the silent mentors, their palms pressed together. At the end of the term, when the anatomy course is completed, they must restore and neatly stitch the bodies back together. This is like the finale to a piece of sacred music. The stitching removes any guilt that the students may have felt about invading the bodies, and enables them further to appreciate the consecration of the teachers.

In addition, the donation process diverts the relatives' grief over the departure of their loved ones. Death and life intermingle, as the living give effect to the wishes of the dead to assist others through the honourable notion of student education. Thus the survivors can feel that death can mark the beginning of a new life. Resurrection is no longer a religious myth; it is now an experience with real practical value.

Furthermore, through their interaction, the students, relatives, and volunteer workers have become a big family of love, and this too helps to overcome the loneliness and grief connected with death.

Finally, the instruction given by the silent mentors will always stay with the students. Both the medical knowledge presented through their silent bodies and the spirit of self-sacrifice to help others will remain a fountain of strength to sustain the students at times of irritation and frustration.

Conclusion

Dharma Master Cheng Yen is full of creative wisdom. She turns abstract thoughts and intangible spiritual meanings into tangible and visible forms, features of the real journey through life.

Of this the institution of silent mentors is an example. Immortality is a remote, abstract, mythical concept. But the medical students will forever be influenced and guided by the spirit of sacrifice which informs body donation. It is as if the Bodhisattvas who have bequeathed their bodies to science and to humanity still exist in this universe. Who would say that they have passed away?

Death turns into rebirth, through the patients and students. It is no longer darkness and gloom but crystal-clear and bright. It is no longer loneliness and desolation among weeds but an existence inseparable from relatives. It is no longer the end of a temporary existence but the conversion of that existence into another form.

Rather than clinging to material things and achievements in this world, it is better to indulge in the joy of giving. Rather than looking forward to some remote, nebulous kingdom of heaven, it is better to envisage the continuity of life as helping the sick. Instead of craving to make this body last longer, it is better to use it to train doctors. The more we are preoccupied with ourselves, the more we will be affected by the destructive power of absolute. The less we are concerned with our own lives, the more we can experience the beauty of everlasting life.

Dharma Master Cheng Yen's conception avoids the crisis which turns bodies into mere objects and preserves respect and dignity for the individual. It dilutes the religious myth of the everlasting soul by converting the desire for immortality into tangible acts of generosity. On the one hand, she believes in science and supports research to process bodies with the best technology available, to maintain their cleanliness and dignity. On the other hand, in preaching her ideal of giving, she emphasises "transforming the useless into the useful". This practice allows the donors, their families, students and the public to appreciate that life's value is not extinguished by death. The spirit of wisdom can cut across time and space, transcend the body's physical form and continue to influence and help others.

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