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Right to Life, After Death?

ARIZONA CONTROVERSY RAISES DIFFICULT QUESTIONS

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he University of Arizona and its prestigious Department of Cognitive Science is once again finding itself in legal hot water. Only this time, the hot water happens to be held in a vat that also contains the remains of a nine-year-old boy, or more specifically, his brain.

For 14 months, it was research as usual at the university's Center for Consciousness Studies. Professors David Blumley and Peter Shickle, well known for their collaborative work and investigations into the biological basis of consciousness, were awarded grant money from the National Science Foundation, the McMaster Foundation and the University of Arizona to investigate the behavior of large-scale neural systems *in vitro*. The experiments were designed to give cognitive scientists the opportunity to study a live human brain in its



John Feldsman/Associated Press David Blumley (right) and Peter Shickle speak to the media.

entirety, without the limitations and precautions necessary with a live human subject.

Traditionally, neural research involves either small-scale in vitro experiments with limited networks of cells, or minimally invasive research on living subjects. Though research has progressed very rapidly, with the 1990's being declared the Decade of the Brain, large-scale invasive experimentation has largely been impossible.

The fields of medicine and medical technology have been the most immediate benefactors of the research to-date. Those scientists and cognitive philosophers whose work focuses on consciousness as an emergent phenomenon of the brain as a whole have been constrained in the depth of their studies.

Thus the grant proposal in the spring of 2002 by Blumley and Shickle, who proposed to use the federal and state organ donor laws to acquire and maintain a living human brain, absent owner.

The federal donor laws allow individual states themselves the decision of what constitutes legal death. Some states require the brain itself to cease functioning, a state known as biological death wherein there is an absolute absence of any brainwave activity,

before a doctor can declare death. Other states, including Arizona, require only that a patient's heart stop beating and for the patient to be incapable of sustaining themselves as unassisted by life support technologies.

The flexible laws in Arizona made it possible for the university to acquire a living, fully functioning human brain immediately upon a donor patient's legal death. The heart stops, legal death is declared and the brain is removed as quickly and cleanly as possible. The procedure then calls for the organ to be placed into what the researchers call a "nutrient bath" to maintain its integrity while circulation to the organ is restored.

Blumley and Shickle were awarded the grant money and allowed to create a two-year program to conduct initial research and feasibility studies. Divided into three phases, the program would first explore the technological possibilities beginning with small samples and moving towards larger organ preservation. Phase 2 would be a one year organ viability test involving a full-scale human brain, a feat never successfully accomplished. Phase three would open the project up to researchers around the world, enabling broad medical and philosophical work to be conducted by groups with separately defined and funded projects.

Working with the university's medical and biotechnology programs, Blumley, Shickle and their team were able to develop the required laboratory environment and successfully test their equipment on small specimens. With the first year and phase one a success, the researchers began phase two 14 months ago in August of 2003. All that was left was to wait for an organ donor patient to appear under circumstances that left their brain in a viable state.

The call came on the evening of August 15th, 2003. A nine-year-old boy, Brian Schultz, had been admitted to the Phoenix Heart and Lung Center suffering from complications of a heart deformation that doctors had been monitoring since the boy's birth. The condition, a congenital valve disorder affecting 3 of the heart's 4 valves, was exacerbated by a degenerative muscle disorder that left the boy, despite valve surgery, with a slowly decaying heart and at extremely high risk of fatal arrhythmia. Due to the degenerative condition, doctors deemed more extreme surgery unfeasible and futile in extending the boys life. Even with an entirely new heart, the boys surrounding tissue would be incapable of supporting it. His body was simply falling to pieces and there was nothing that the doctors could do.

The young Brian Schultz was admitted as a result of an increasingly leaky valve, and the doctors did not feel optimistic about his longevity.

Dr. Philip Moresh, the surgeon who had performed Brian's early surgeries and a friend of David Blumley's, spoke with the Schultz family and received their overwhelming approval to use Brian's organs for research after his death, which seemed close at hand. As a result, the call to the university was made and a team, including Blumley and Shickle, were dispatched to the hospital to await the boy's legal death.

Because the Schultz family was intent on not resuscitating their son, believing that the boy had "suffered enough in his nine short years", the death certificate was quickly signed and the procedure to remove his brain and other organs went remarkably smoothly. His liver, kidneys and other viable organs went to patients in need via the United Organ Network, whereas his brain went directly to the University of Arizona.

Remarkably, none of this prompted any protest or legal action from anyone. The case appeared so mundane, in fact, that it escaped even the conservative media attention. The procedure was approved by the family, supervised by professional medical personnel and was well within the limits of Arizona law.

What has prompted the lawsuits, protests and threats just over one year after the procedure is not the facts of the initial donation, but the university's decision to terminate the experiments, and therefore the care, of the brain.

Unorthodox Procedure or Unorthodox Views?

One year after the university received its gift of a living and viable human brain, the primary investigators on the research team, Blumley and Shickle, declared phase two a success, and called for the termination of the experiment and the beginning of phase three, as outlined in their grant proposals. They were beginning to raise more funds in support of the third phase and had several other universities and one biotechnology company interested in participating.

Both professors thought that they could simply follow standard medical procedure and dispose of the organ through the university's medical waste system. What they did not know was that the LifeRights League of America, an Arizona-based pro-life activist group, had been alerted to the case and felt that the university, and specifically Blumley and Shickle, were grossly violating basic human rights.

The brain, they claim, has been sustained and kept alive for one year. It has been well cared for and is, by all accounts, functioning as a normal brain would. The experiments during phase one of the project were designed, after all, to assure just that, that a human brain could be kept alive and well outside of the confines of the skull and without the natural support of the body, and moreover, that it could be made to behave on the cellular, chemical and structural level as any normal, healthy human brain would.

This means, according to Timothy and Lisa Dobranis of the LifeRights organization, that this brain is not simply a donated organ, but that it is in fact "the nine year old boy Brian Schultz".

What the Dobranis's and their supporters claim is that Brian Schultz, the nine-year-old organ donor who legally passed away one year ago, is actually alive and well at the University of Arizona.

Timothy Dobranis, in a statement to the media during a LifeRights rally near the U of AZ

campus on Tuesday, was quoted as saying "The university has kept this boy alive by keeping his brain alive. It is healthy and functioning. To destroy it now would be to kill an innocent child."

Asked how this case differs from the group's usual pro-life campaigns, Lisa Dobranis stated, "If partial birth abortion is murder, then destroying this boy's brain is like murder in the first." The LifeRights group believes that the university's actions would be outright murder of a fully conscious human being.

Since the protests began in earnest with last Tuesday's demonstration, the case has garnered national attention and has become a weapon for the right wing conservatives to wield against their more liberal counterparts. Surprisingly however, the Bush administration has come under intense scrutiny after it was revealed in a Washington Times report that the administration was aware of the project and endorsed it. "This new knowledge runs counter to the public position of the Bush administration and is likely to negatively impact Bush's popularity with his strongest supporter base" says William Panopolis, a Washington Times political columnist.

More surprising for the liberals, according to Gary Kofie of The New York Times, is that "Bush was even funding a scientific project, let alone one as progressive as this".

Whether outraged by the administration's secretive support or surprised by its newly emerging progressive position, Bush's stance on this topic may well prove to make or break his career. Regardless of the official statements, the political positioning has already given rise to a wide array of conspiracy theories which claim that the government support for the project and its hush-hush attitude is a result of their interest in everything from "mind-control technologies" to "sophisticated privacy invasions".

In a public statement to the media, David Blumley claimed that there was "no violation of human rights" because "there is no human involved". Meanwhile, the official position of the university is one of "absolute support" of the project.

"We endorse, encourage and fund research of this nature. The Cognitive Sciences department is working well within the law and within the scope of their approved grant. The protests and accompanying lawsuit are the result of fanatical extremists who misunderstand the nature of our faculty's work, and perhaps even the nature of life itself."

With a large lawsuit brought by the LifeRights group, continuous and disruptive protests and now national media attention, this case surely has many people on both sides enraged. Yet despite the local and national political ramifications of this situation or the ultimate destination of the brain of nine-year-old Brian Schultz, this situation will undoubtedly have our philosophical and moral thinkers debating for years to come.

In the meantime, the Alcor Life Extension Foundation, a Scottsdale, AZ-based non-profit cryonics research organization, has offered to cryonically suspend the brain, adding it to its collection of 62 human bodies and heads for which it cares, while the university and

the rest of the world await the outcome of the lawsuit and the ensuing ethical debates. There are those that argue, however, that cryonically preserving the brain would itself be a bold and controversial statement.

"We're not going to freeze the brain" stated Shickle. "That would only be confusing the issue even more. By preserving it [cryonically], we would be sending the message to the LifeRights group that we agree with them that there is a young boy in that brain that needs to be saved."

During a one-on-one interview with NBC's Lawrence Girshman, Blumley admitted that there is a "possibility that a human consciousness could be maintained in an environment similar to the one that we have created in our laboratory" but that the technology for doing so would "exceed what we currently have available." He added, "And even if we had the technical capabilities, I am absolutely certain that the burden of proof [of consciousness] would be enormous. These people are simply unprepared to answer such broad metaphysical questions."

Prepared or not, the LifeRights League is forcing the country to reconsider some very important questions regarding the nature of consciousness, the answers to which could have impact on our own personal life and death.

It just goes to show that, though you may need education to answer the questions, asking them is simply human nature. And with 2500 years of recorded debate on the topic, how close are we to an answer in the 21st century?

Let this be clear, this story is fiction. Any resemblance of the events, names, personalities, places, or organizations in this story to actual names or events is coincidence.

Alexander Rudzinski is the pen-name du jour of Roderick Russell, a magician, illusionist, and sword swallower with a professional and personal interest in understanding consciousness and cognition. "I wrote it as a personal exercise [...] to potentially spark some thought and interesting discussion."

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