

REMARKS OF JOSEPH A. CALIFANO, JR.
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COMMENCEMENT EXERCISES
THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICHIGAN

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I AM GRATEFUL FOR YOUR HOSPITALITY -- AND DELIGHTED AND HONORED THAT I HAVE RECEIVED, IN ONLY A FEW MINUTES, WHAT HAS TAKEN YOU YEARS TO ACHIEVE: A DEGREE FROM THE UNIVERSITY OF MICHIGAN. IF THE RECORD OF PAST MICHIGAN ALUMNI IS ANY GUIDE, MY FUTURE IS NOW ASSURED.

IT MAY NOT HAVE BEEN YOUR FIRST PURPOSE, DR. FLEMING. BUT BY AWARDING THIS HONORARY DEGREE, YOU HAVE DONE MORE THAN HONOR THE RECIPIENT; YOU HAVE CREATED ONE MORE ENTHUSIASTIC ROOTER FOR MICHIGAN'S ROSE BOWL TEAM.

IT IS A SPECIAL TREAT TO SEE MY OLD FRIEND AND PREDECESSOR, DEAN WILBUR COHEN. I FIND IT ESPECIALLY ENCOURAGING TO SEE A FORMER SECRETARY OF HEALTH, EDUCATION AND WELFARE NOT ONLY ALIVE -- BUT HEALTHY, HAPPY, AND GAINFULLY EMPLOYED.

LAST WEEK, WILBUR COHEN SENT ME A RECENT EDITION OF THE MICHIGAN DAILY. IN IT, A STUDENT WRITER HAD THIS ADVICE ABOUT MY REMARKS TODAY: "CONSIDERING THE JOB MARKET ... PERHAPS A MESSAGE WITH SOME PRACTICAL VALUE WOULD BE IN ORDER, LIKE, SAY, 'WELFARE AND THE RECENT COLLEGE GRADUATE.'"

I HAVE DECIDED NOT TO FOLLOW THAT SUGGESTION. I HAVE ABUNDANT FAITH IN YOUR TALENT AND RESOURCEFULNESS.

NOR DO I COME WITH GIFTS OF WISDOM OR ADVICE, OR A SET OF MODERN-DAY COMMANDMENTS FOR OUR EXCITING AND PERPLEXING WORLD.

I COME INSTEAD WITH QUESTIONS -- SOME ULTIMATE QUESTIONS -- TO WHICH I HOPE YOU WILL TURN YOUR MINDS NO MATTER WHAT YOUR CAREER. THEY ARE QUESTIONS OF ETHICS AND MORALITY THAT HAVE BEEN INFINITELY COMPLICATED BY POLITICS AND FINANCES IN RECENT YEARS. THEY ARE QUESTIONS LITERALLY OF LIFE AND DEATH. THEY DESERVE -- AND WILL PROBABLY COMMAND -- YOUR ATTENTION FOR THE REST OF YOUR LIVES.

THE UNIVERSITY OF MICHIGAN IS AN ESPECIALLY APPROPRIATE FORUM AT WHICH TO RAISE THESE ISSUES. AT THIS GREAT CENTER OF RESEARCH AND LEARNING, FRONTIERS OF KNOWLEDGE ARE TOUCHED EVERY DAY -- AND OFTEN PUSHED BACK.

IN PAST YEARS, THE UNIVERSITY CONDUCTED NEARLY \$75 MILLION OF RESEARCH -- MUCH OF IT BASIC IN A VERY REAL SENSE. ALMOST THREE-QUARTERS OF THAT \$75 MILLION COMES FROM THE FEDERAL GOVERNMENT -- AND THE OVERWHELMING SHARE OF THAT IS FROM THE DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE.

WE BEGIN WITH AN ANCIENT QUESTION -- REVIVED WITH ELECTRIC URGENCY: HOW CAN WE COPE WITH THE ETHICAL AND MORAL PROBLEMS THAT EXPLODING KNOWLEDGE BRINGS?

IT IS A UNIVERSAL ASSUMPTION AMONG SCIENTISTS, AND A POPULAR ASSUMPTION AMONG AMERICANS GENERALLY, THAT ALL KNOWLEDGE IS GOOD. BUT AT LEAST SINCE THE DAWN OF THE NUCLEAR AGE, WE HAVE BEEN CONFRONTED WITH THE UNCOMFORTABLE REALITY THAT KNOWLEDGE CAN BE PUT TO USE IN WAYS THAT ARE NOT NECESSARILY BENIGN -- INDEED, IN WAYS THAT MAY THREATEN THE SURVIVAL OF MANKIND.

IN THE PAST FEW YEARS, BREAKTHROUGHS IN BIOLOGICAL RESEARCH HAVE STIRRED FEARS THAT WERE AROUSED BY THE REVOLUTION IN PHYSICS A GENERATION AGO: THE FEARS THAT OUR SCIENTISTS IN THEIR LABORATORIES MIGHT BE RE-ENACTING THE MYTH OF PANDORA'S BOX -- THAT BY THEIR RELENTLESS EXPLORATION OF THE UNEXPLORED, THEY MIGHT, HOWEVER UNINTENTIONALLY, UNLEASH UPON HUMANITY FORCES OF FRIGHTENING POTENTIAL.

AT THE FAR FRONTIERS OF BIOLOGICAL RESEARCH, SCIENTISTS LONG AGO FOUND WAYS TO CREATE NEW MOLECULES; NOW THEY HAVE FOUND WAYS TO ALTER GENES. THEIR EFFORTS HOLD OUT HOPE THAT WE MAY CURE CERTAIN DISEASES -- BUT THEIR EFFORTS ALSO RAISE THE DANGER THAT WE COULD INADVERTENTLY CREATE NEW FORMS OF LIFE THAT THREATEN THE ENVIRONMENT, OR EVEN OUR LIVES. DARE WE SEEK THE GAINS FROM THIS RESEARCH, WHILE IGNORING ITS POTENTIAL RISKS? AND IF THE ANSWER IS, AS I THINK IT MUST BE, TO CONDUCT SUCH RESEARCH, BUT TO REGULATE IT -- HOW DO WE STRIKE A PROPER BALANCE BETWEEN REASONABLE AND NECESSARY RESTRAINT AND UNWARRANTED FETTERING OF FREE INQUIRY?

THE TECHNOLOGY OF MEDICINE HAS MOVED INTO THE AWE-INSPIRING ERA OF VITAL-ORGAN TRANSPLANTS. SOME ORGANS FOR THOSE TRANSPLANTS, AS YOU KNOW, MUST BE TAKEN FROM DEAD OR DYING PATIENTS. THIS RAISES SEVERAL QUESTIONS THAT ARE INTELLECTUALLY INTRIGUING AND MORALLY CONFOUNDING: WHEN DOES DEATH ACTUALLY OCCUR? WHOSE BUSINESS IS IT TO DEFINE DEATH? SHOULD EACH INDIVIDUAL, OR SHOULD SOCIETY, HAVE THE RIGHT TO SPECIFY WHEN LIFE SHALL NO LONGER BE SUSTAINED BY EXTRAORDINARY TECHNOLOGY.

THESE QUESTIONS OF KNOWLEDGE AND ITS CONSEQUENCES ARE COMPLEX ENOUGH. BUT THEY ARE MADE EVEN MORE DIFFICULT BY A RELATIVELY RECENT HISTORIC DEVELOPMENT: THE ENTRANCE OF BIG GOVERNMENT, WITH ITS MASSIVE POWER AND GIANT BUDGETS, INTO FIELDS OF SCIENCE AND MEDICINE WHICH ONCE WERE LOCAL AND PRIVATE.

IN OTHER GENERATIONS, FOR EXAMPLE, HEALTH WAS A MATTER BETWEEN A PATIENT AND A DOCTOR WITH A LITTLE BLACK BAG. HEALTH RESEARCH WAS CONDUCTED IN SMALL LABORATORIES AND FINANCED BY INDIVIDUALS OR MEDICAL SCHOOLS.

BUT TODAY, HEALTH CARE IS THE THIRD BIGGEST BUSINESS IN AMERICA. TWELVE CENTS OF EVERY FEDERAL DOLLAR IS PAID TO THE HEALTH INDUSTRY. ABOUT NINETY PERCENT OF THE BIOMEDICAL RESEARCH IN THIS NATION IS FINANCED BY THE NATIONAL GOVERNMENT AND WITH THE ARRIVAL OF HEART TRANSPLANTS, HEART PUMPS, KIDNEY DIALYSIS, ARTIFICIAL HIP JOINTS, MICROSCOPIC SURGERY AND JOLTING ELECTRIC SHOCK TO REVIVE A STILLED HEART, GOVERNMENT'S DIRECT INVOLVEMENT IN SOME OF OUR MOST DIFFICULT -- AND CONTROVERSIAL -- SCIENTIFIC PROBLEMS HAS MARKEDLY INCREASED.

THIS MASSIVE INVOLVEMENT OF GOVERNMENT, INEVITABLY, THRUSTS INTO THE ARENA OF POLITICS AND PUBLIC POLICY A TANGLED MASS OF ETHICAL AND MORAL QUESTIONS -- WITH DISCOMFORTING CONSEQUENCES FOR THOSE OF US WHO GOVERN.

IF IT IS GOVERNMENT THAT SUPPORTS HEART-TRANSPLANT RESEARCH, CAN GOVERNMENT ESCAPE THE QUESTION OF WHEN DEATH ACTUALLY OCCURS?

IF GOVERNMENT FINANCES HEALTH CARE, THEN GOVERNMENT BECOMES THE CENTER OF BITTER CONTROVERSIES ABOUT WHAT IT SHALL FINANCE: ABORTION AND STERILIZATION, FOR EXAMPLE.

WHEN DOES LIFE BEGIN? WHEN DOES DEATH OCCUR?

IN ANOTHER AGE, THESE TWO MOST PROFOUND OF QUESTIONS WOULD HAVE BEEN FODDER FOR TALMUDIC SCHOLARS, JESUIT PRIESTS AND FAMILY DOCTORS LISTENING FOR A HEARTBEAT.

BUT THE PECULIAR AND INESCAPABLE FACT OF OUR AGE IS THAT THESE QUESTIONS ARE INTENSELY POLITICAL AND HIGHLY SCIENTIFIC AS WELL.

IT IS A DISQUIETING FACT OF OUR AGE THAT GOVERNMENT CANNOT ESCAPE SUCH SENSITIVE AND CONTROVERSIAL QUESTIONS. THERE IS NO NEUTRAL GROUND ON WHICH GOVERNMENT CAN COMFORTABLY STAND -- FOR JUST AS NO DECISION IS A DECISION, SO TOO IS NEUTRALITY. ANY DECISION BY GOVERNMENT ON THE FINANCING OF ABORTIONS, FOR EXAMPLE, WILL DISTRESS LARGE NUMBERS OF EARNEST, SINCERE AND HUMANE PEOPLE.

THE ENTRANCE OF GOVERNMENT INTO THE ARENA OF MORAL AND ETHICAL DECISION-MAKING IS COMPLICATED BY THE BLUNT REALITY OF LIMITED RESOURCES.

IN AN ERA OF FINITE BUDGETS, HOW DO WE CHOOSE WHAT TO DISTRIBUTE TO WHOM -- WHEN WHAT WE CHOOSE MAY RESULT IN LIFE FOR SOME AND DEATH FOR OTHERS?

THE GENIUSES OF MODERN MEDICINE AND BIOENGINEERING, FOR EXAMPLE, MAY SOME DAY PERFECT FOR US A WORKABLE ARTIFICIAL HEART. BUT DO WE HAVE THE GENIUS TO DECIDE WHO SHOULD BE ELIGIBLE TO HAVE THIS MARVELOUS, LIFE-SUSTAINING AND EXPENSIVE DEVICE?

ALL OF US SUPPORT ENTHUSIASTICALLY THE BATTLE AGAINST CANCER. BUT HOW SHALL WE DEPLOY OUR LIMITED TROOPS IN THAT BATTLE? WHAT PROPORTION OF OUR BUDGETS SHOULD WE SPEND ON BASIC RESEARCH, TO HELP FUTURE GENERATIONS ESCAPE THE DISEASE? AND WHAT PROPORTION SHALL WE DEVOTE TO EXPENSIVE THERAPIES FOR THOSE WHO HAVE THE DISEASE? WHO DETERMINES THIS DELICATE BALANCE -- AND HOW?

THE ARTIFICIAL HEART THAT I MENTIONED EARLIER IS FOR TOMORROW, IF AT ALL. BUT KIDNEY DIALYSIS MACHINES ARE HERE TODAY: A NATIONWIDE HEMODIALYSIS PROGRAM HELPS MAINTAIN 50,000 PATIENTS AT A COST OF ALMOST ONE BILLION DOLLARS A YEAR, PAID FOR ALMOST ENTIRELY BY THE FEDERAL GOVERNMENT.

THUS THE NATION HAS TAKEN RESPONSIBILITY FOR THE COMPLETE CARE OF VICTIMS OF JUST ONE CATASTROPHIC ILLNESS. BUT WHAT ABOUT OTHER VICTIMS OF OTHER ILLNESSES? TO WHAT EXTENT DO THEY HAVE A CLAIM ON LIMITED PUBLIC FUNDS? THEIR LIVES ARE ALSO AT STAKE. BY WHAT CALCULUS OF JUSTICE OR MERCY SHALL GOVERNMENTS DECIDE WHOSE LIFE SHALL BE SAVED AND WHOSE LOST.

IF YOU WONDER WHAT A SECRETARY OF HEALTH, EDUCATION, AND WELFARE THINKS ABOUT, NOW YOU HAVE SOME IDEA: HE THINKS ABOUT QUESTIONS LIKE THESE. AND IF HE CHANCES TO LOOK OUT HIS OFFICE WINDOW, HE MAY SEE A CROWD OF DEMONSTRATORS EXPRESSING THEIR STRONG FEELINGS ON ONE OF THESE QUESTIONS -- OR SEVERAL OF THEM. HEW IS THE ONLY DEPARTMENT OF GOVERNMENT IN WHICH BOTH MOTHERHOOD AND APPLE PIE ARE CONTROVERSIAL.

QUESTIONS PEOPLE ONCE SOUGHT TO HAVE ANSWERED BY PRAYER, ISSUES ONCE LEFT FOR SCIENTISTS TO RESOLVE ARE NOW DEBATED ON THE FLOOR OF CONGRESS AND DECIDED BY MAJORITY VOTE, OR THROWN INTO THE REGULATORY PROCESS.

CONSIDER A RANDOM SAMPLING OF ISSUES WE FACE -- OR HAVE RECENTLY FACED:

WHAT ARE THE PROPER LIMITS ON FETAL RESEARCH? UNDER WHAT CIRCUMSTANCES SHOULD THE NATIONAL GOVERNMENT FINANCE ABORTION? UNDER WHAT CIRCUMSTANCES SHOULD WE RELEASE POTENTIALLY LIFE-SAVING BUT POTENTIALLY FATAL DRUGS? TO WHAT EXTENT SHOULD WE FUND PSYCHOSURGERY? SHOULD WE SPEND NEW FEDERAL MONEY ON EXPENSIVE MEDICAL TECHNOLOGY OR ON PROVIDING BASIC HEALTH CARE TO THE POOR? TO WHAT EXTENT SHOULD WE HOLD PEOPLE RESPONSIBLE FOR TAKING CARE OF THEIR OWN HEALTH BEFORE THE GOVERNMENT BEGINS PAYING THEIR MEDICAL BILLS?

AND WHAT ABOUT FEDERAL FINANCING OF STERILIZATION? WE MAY AGREE THAT WHERE SUCH A MEDICAL PROCEDURE IS INVOLVED, IT IS REASONABLE AND NECESSARY TO GET A SECOND OPINION OR TO REQUIRE REVIEW BY OTHER PROFESSIONALS. WE MAY ALSO AGREE THAT INFORMED CONSENT BY THE PATIENT IS A NECESSARY INGREDIENT IN A DECISION TO BE STERILIZED. BUT HOW DO WE DEFINE INFORMED CONSENT? IS IT POSSIBLE, FOR EXAMPLE, FOR A MINOR TO GIVE INFORMED CONSENT? WHAT ABOUT A RETARDED OR MENTALLY INCOMPETENT

CHILD? CAN ANYONE -- EVEN THE PARENTS -- PROVIDE INFORMED CONSENT? IS THERE ANY SUCH THING AS INFORMED CONSENT BY A YOUNG MAN OR WOMAN TO AN IRREVERSIBLE PROCEDURE LIKE STERILIZATION?

ALL THESE ARE QUESTIONS THAT CONCERN NOT JUST PHYSICIANS, SCHOLARS, RESEARCHERS AND GOVERNMENT OFFICIALS. THEY CONCERN ALL OF US. FOR IN A DEMOCRACY, WE WISELY HOLD THAT SUCH QUESTIONS ARE TOO IMPORTANT TO BE LEFT TO MERE EXPERTS.

CERTAINLY THESE ARE NOT QUESTIONS FOR ONE DEPARTMENT OF GOVERNMENT -- OR EVEN FOR THE COURTS OR CONGRESS ALONE. THEY ARE QUESTIONS FOR SOCIETY -- WHICH IS TO SAY, FOR YOU AND ME. THE EXPERTS CAN GIVE US A WEALTH OF TECHNICAL INFORMATION UPON WHICH TO BASE OUR JUDGMENTS -- BUT IN MATTERS OF MORALS AND OTHER SOCIAL VALUES, MERE INFORMATION IS NOT ENOUGH.

SCIENCE HAS BECOME TOO IMPORTANT TO BE LEFT TO SCIENTISTS -- AND GOVERNMENT HAS ALWAYS BEEN TOO IMPORTANT TO BE LEFT TO THE GOVERNORS.

ALL GREAT POWER -- WHETHER THE POWER OF KNOWLEDGE, THE POWER OF GOVERNMENT OR THE POWER OF WEALTH -- CAN BE DANGEROUS UNLESS IT IS ACCOMPANIED BY GREAT WISDOM. THERE IS NO MAN OR WOMAN WISE ENOUGH TO ANSWER THE QUESTIONS I HAVE RAISED. WHAT WE MUST DO IS ESTABLISH INSTITUTIONS AND PROCESSES THAT WILL DRAW TOGETHER OUR BEST WISDOM, FROM ALL POSSIBLE SOURCES, TO TEMPER KNOWLEDGE AND TO GUIDE GOVERNMENT.

A PLURALISTIC SOCIETY FACING SUCH INTRINSICALLY COMPLEX QUESTIONS WILL NEVER FIND A SINGLE RIGHT ANSWER THAT WILL SATISFY ALL ITS CITIZENS. BUT THERE ARE SOME BASIC TENETS OF DECISION-MAKING WE SHOULD FOLLOW:

-- FIRST, WE CAN ASSURE DUE PROCESS. IF WE CANNOT GUARANTEE RIGHT DECISIONS, WE CAN GUARANTEE THAT WE DECIDE IN THE RIGHT WAY. THIS MEANS DECISIONS MADE DEMOCRATICALLY THROUGH WIDE CONSULTATION, NOT BY SPECIAL ELITES. INDEED, IN A DIVERSE, CONTENTIOUS NATION WHOSE PEOPLE SELDOM ACHIEVE UNANIMOUS AGREEMENT, THE PROCESS BY WHICH WE REACH DECISIONS BECOMES AS IMPORTANT AS THE DECISIONS WE MAKE. WE CANNOT ASSURE THAT EVERYONE WILL AGREE ON A CONTROVERSIAL ISSUE LIKE RECOMBINANT DNA RESEARCH. BUT WE CAN AT LEAST ASSURE THAT EVERYONE HAS BEEN HEARD. THIS IS THE SLOWEST WAY; THE MOST INCONVENIENT WAY -- AND IN A DEMOCRACY, THE ONLY WAY -- TO MAKE SUCH DECISIONS.

-- SECOND, WE CAN WRESTLE WITH THESE QUESTIONS IN THE OPEN. THE WHOLE SOCIETY CANNOT, PERHAPS, PARTICIPATE IN HIGHLY TECHNICAL DECISIONS ABOUT MASS IMMUNIZATION FOR INFLUENZA. BUT IT CAN WITNESS SUCH DECISIONS -- AND IT MUST. WHEN THE STAKES ARE SO HIGH, WHEN VALUES IN CONFLICT AND EMOTIONS LAID BARE, THE TEMPTATION IS GREAT FOR LEADERS, WHETHER THEY BE DOCTORS OR RESEARCHERS OR GOVERNMENT DECISION-MAKERS, TO SEEK SECURITY AND CALM BEHIND CLOSED DOORS. BUT IN TODAY'S WORLD, CLOSED ROOMS OFFER NO SAFETY -- ONLY THE ILLUSION OF SAFETY.

DECISION-MAKERS IN SCIENCE AND MEDICINE MUST LEARN THE HARD LESSON THAT POLITICIANS HAVE ABSORBED IN RECENT YEARS: CLOSED DOORS BREED DISTRUST -- EVEN IF WHAT HAPPENS BEHIND THOSE DOORS IS PERFECTLY LEGITIMATE. PERHAPS OUR PEOPLE CANNOT SHARE IN THE MAKING OF EVERY BIG DECISION; BUT THEY SHOULD AT LEAST SEE THEM MADE.

DECISIONS MADE IN THE SUNSHINE ARE PARTICULARLY IMPORTANT WHEN SO MANY DIFFICULT QUESTIONS ARE BEING DECIDED IN THE EXECUTIVE BRANCH OF NATIONAL GOVERNMENT, OUTSIDE THE NORMAL PROCESSES OF CONGRESSIONAL DEBATE, WITHOUT SUFFICIENT POLITICAL DEBATE IN COUNTY SEATS, CITY COUNCILS AND STATE LEGISLATURES.

-- THIRD, WE SHOULD RESIST THE TEMPTATION TO GIVE GLIB ANSWERS TO UNANSWERABLE QUESTIONS.

IT IS TEMPTING TO POLITICIANS AND SCIENTISTS, WHOSE BUSINESS IS SOLVING PROBLEMS, TO LEAVE NO QUESTION UNANSWERED.

YET WE MUST RECOGNIZE THAT THERE ARE SOME QUESTIONS WHICH HAVE NO SINGLE READY ANSWER. ON SUCH QUESTIONS, IT IS IMPORTANT, I THINK, TO GO SLOW. WE SHOULD HOPE FOR MODERATE PROGRESS TOWARD CONSENSUS, RATHER THAN PRESSING IMPATIENTLY FOR NATIONAL SOLUTIONS. THIS MAY MEAN LEAVING SOME DIFFICULT QUESTIONS TO BE ANSWERED IN DIFFERENT WAYS BY DIFFERENT COMMUNITIES. BUT QUICK NATIONAL ANSWERS TO SUCH DEEP QUESTIONS ARE USUALLY IMPOSED FROM ABOVE -- AND SO THEY SOLVE LITTLE AND GENERATE GREAT STRIFE.

WE SHOULD TRUST OUR PLURALISTIC SYSTEM TO DO ITS WORK. HOWEVER FRUSTRATED AND IMPATIENT WE MAY BECOME WITH IT, IT IS THE SYSTEM BY WHICH CONSENSUS IS BUILT ON DIFFICULT ISSUES. WINSTON CHURCHILL WAS RIGHT WHEN HE SAID THAT DEMOCRACY IS THE WORST FORM OF GOVERNMENT -- EXCEPT FOR ALL OTHERS.

-- FOURTH, THE INSTITUTIONS WE CREATE TO HELP MAKE THE DIFFICULT TECHNICAL, POLITICAL AND MORAL CHOICES POSED BY EXPANDING SCIENTIFIC KNOWLEDGE MUST BE BROADLY-BASED. WHETHER THEY BE HOSPITAL ETHICS COMMITTEES, PEER REVIEW BOARDS, OR BIOHAZARD COUNCILS -- THE INSTITUTIONS WE CHOOSE TO WRESTLE WITH THESE QUESTIONS SHOULD REPRESENT US ALL, ALL THE VARIED BELIEFS AND VALUES THAT COMPETE IN AMERICA. THESE INSTITUTIONS MUST REACH OUT FOR ALL VIEWS -- TO BE INCLUSIVE NOT, AND I USE THIS WORD IN BOTH ITS SENSES, EXCLUSIVE.

OTHERWISE, OUR DECISIONS ARE LIKELY TO REFLECT NOT CONSENSUS, BUT BIAS.

IT WAS THE CRIME OF PROMETHEUS -- OR HIS ACHIEVEMENT -- TO STEAL FIRE FROM THE GODS. WE TWENTIETH CENTURY HUMANS HAVE OUTDISTANCED PROMETHEUS: WE HAVE STOLEN FROM THE GODS NOT ONLY FIRE, BUT THE ATOM AND THE SECRETS OF THE LIVING CELL.

IT WAS THE FATE OF PROMETHEUS TO BE CHAINED TO A ROCK FOR HIS IMPERTINENCE. IT IS OUR FATE, IN OUR AGE, TO BE CHAINED TO THE NEW PROBLEMS WE CREATE BY OUR CLEVERNESS: PROBLEMS THAT WOULD CONFOUND A SOLOMON, AN AQUINAS, OR AN HIPPOCRATES.

I HAVE RAISED MANY QUESTIONS TO WHICH I OFFER NO CERTAIN ANSWERS. I SUBMIT TO YOU THAT EVEN A SOLOMON, AQUINAS OR HIPPOCRATES WOULD MEET HIS MATCH IF FACED WITH THESE QUESTIONS IN THE LAST QUARTER OF THE TWENTIETH CENTURY.

MOREOVER, WE HAVE CHOSEN IN THIS NATION TO BE SUSPICIOUS OF INDIVIDUAL WISDOM AS APPLIED TO THE BODY POLITIC. INDEED THE ESSENTIAL INGREDIENT OF PLURALISTIC DEMOCRACY IS TO TEST SUCH WISDOM SKEPTICALLY AND OPENLY.

TODAY, MORE THAN EVER, DEMOCRACY DEPENDS ON AN INFORMED AND ENGAGED CITIZENRY. I URGE YOU TO BE BOTH -- INFORMED AND ENGAGED. INFORMATION WITHOUT ENGAGEMENT IS THE STUFF OF POLITICAL STERILITY IN MODERN DAY AMERICA; ENGAGEMENT WITHOUT INFORMATION IS THE STUFF OF DEMAGOGUERY.

YOU CAN IGNORE THE QUESTIONS I HAVE RAISED -- AND SCORES OF OTHERS LIKE THEM -- ONLY AT YOUR PERIL AND YOUR NATION'S. THE RELENTLESS PURSUIT OF KNOWLEDGE AND TRUTH WILL CONTINUE -- AS IT SHOULD. THE INVOLVEMENT OF GOVERNMENT IN THAT PURSUIT WILL DEEPEN. THE LIMITATION OF OUR RESOURCES WILL BECOME MORE PRONOUNCED.

THE ISSUES THESE THREE INEVITABLE FACTS RAISE ARE TOO IMPORTANT FOR SOMEONE ELSE. THEY DESERVE YOUR PERSONAL ATTENTION.

WHATEVER CAREER YOU PURSUE, I HOPE YOU WILL GIVE IT THAT ATTENTION. AND, IF YOU DO, I CANNOT PROMISE YOU WILL FIND CLEAR AND HARD ANSWERS. I CAN PROMISE THAT YOU WILL ENRICH YOURSELVES AND YOUR GENERATION, THAT YOU WILL BE EXHILARATED BY THE EXCITEMENT OF INFORMED ENGAGEMENT, AND THAT YOU WILL SHARE THE SATISFACTION OF HAVING, EACH IN YOUR OWN INDIVIDUAL WAY, MADE THIS SOCIETY A LITTLE BETTER PLACE FOR YOURSELF AND THE REST OF US.

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