**1/18/09 THESKEPTICARENA.COM**

**THE “FACE” ON MARS**

**THE FACE ON MARS IS THE IMAGE OF SOME PHOTOGRAPHS OF THE CYDONIA REGION OF MARS TAKEN IN 1976 BY THE VIKING ORBITER. THE IMAGE IS MOST LIKELY OF A NATURAL FORMATION BUT SOME PEOPLE SEE A FACE OR A BUILDING AND ARE CONVINCED THAT IT WAS CONSTRUCTED BY INTELLIGENT BEINGS.**

**ACCORDING TO GARY POSNER, THE ONE MOST RESPONSIBLE FOR THE VIEW THAT THE FACE ON MARS IS AN ALIEN CONSTRUCTION IS RICHARD C. HOAGLAND, AUTHOR OF THE MONUMENTS OF MARS: A CITY ON THE EDGE OF FOREVER.**

**NASA CLAIMS THAT THE PHOTOS ARE JUST A PLAY OF LIGHT AND SHADOW. SOME TOOK THIS EXPLANATION AS A SURE SIGN OF A COVER-UP. SOME ENGINEERS AND COMPUTER SPECIALISTS DIGITALLY ENHANCED THE NASA IMAGES. THIS SOON GAVE BIRTH TO THE CLAIM THAT THE FACE WAS A SCULPTURE OF A HUMAN BEING LOCATED NEXT TO A CITY WHOSE TEMPLES AND FORTIFICATIONS COULD ALSO BE SEEN. SOME BEGAN TO WONDER: WERE THESE BUILT BY THE SAME BEINGS WHO BUILT THE ANCIENT AIRPORTS IN PERU AND WHO WERE NOW COMMUNICATING TO US THROUGH ELABORATE SYMBOLS CARVED IN WHEAT CROP CIRCLES? OTHERS TOOK THE WONDER TO THE LEVEL OF BELIEF, BASED ON THE FLIMSIEST OF EVIDENCE AND THE GRANDEST OF IMAGINATION. CARL SAGAN'S MORE DOWN-TO-EARTH EXPLANATION FOR THE FACE ON MARS IS THAT IT IS THE RESULT OF EROSION AND WINDS AND OTHER NATURAL FORCES. SUCH A VIEW SEEMS MOST REASONABLE UNDER THE CIRCUMSTANCES.**

**NASA'S MARS ODYSSEY ORBITER SENT BACK SOME MORE DETAILED PICTURES IN JULY, 2002 THAT SEEMS TO SLAP THE FACE INTO THE GROUND WITH A GROUP OF OTHER SLAPPED FACES. MUCH TO THE DISMAY OF MYSTERY MONGERS, NASA SAYS THAT THE CYDONIA REGION IS A "NORMAL GEOLOGIC FEATURE WITH SLOPES AND RIDGES CARVED BY EONS OF WIND AND DOWNSLOPE MOTION DUE TO GRAVITY."**

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**THE SCIENCE SEGMENT**

**11/12/08**

**EVOLUTION'S NEW WRINKLE: PROTEINS WITH CRUISE CONTROL PROVIDE NEW PERSPECTIVE**

**A TEAM OF PRINCETON UNIVERSITY SCIENTISTS HAS DISCOVERED THAT CHAINS OF PROTEINS FOUND IN MOST LIVING ORGANISMS ACT LIKE ADAPTIVE MACHINES, POSSESSING THE ABILITY TO CONTROL THEIR OWN EVOLUTION.**

**THE RESEARCH, WHICH APPEARS TO OFFER EVIDENCE OF A HIDDEN MECHANISM GUIDING THE WAY BIOLOGICAL ORGANISMS RESPOND TO THE FORCES OF NATURAL SELECTION, PROVIDES A NEW PERSPECTIVE ON EVOLUTION, THE SCIENTISTS SAID.**

**THE RESEARCHERS -- RAJ CHAKRABARTI, HERSCHEL RABITZ, STACEY SPRINGS AND GEORGE MCLENDON -- MADE THE DISCOVERY WHILE CARRYING OUT EXPERIMENTS ON PROTEINS CONSTITUTING THE ELECTRON TRANSPORT CHAIN (ETC), A BIOCHEMICAL NETWORK ESSENTIAL FOR METABOLISM. A MATHEMATICAL ANALYSIS OF THE EXPERIMENTS SHOWED THAT THE PROTEINS THEMSELVES ACTED TO CORRECT ANY IMBALANCE IMPOSED ON THEM THROUGH ARTIFICIAL MUTATIONS AND RESTORED THE CHAIN TO WORKING ORDER.**

**"THE DISCOVERY ANSWERS AN AGE-OLD QUESTION THAT HAS PUZZLED BIOLOGISTS SINCE THE TIME OF DARWIN: HOW CAN ORGANISMS BE SO EXQUISITELY COMPLEX, IF EVOLUTION IS COMPLETELY RANDOM, OPERATING LIKE A 'BLIND WATCHMAKER'?" SAID CHAKRABARTI, AN ASSOCIATE RESEARCH SCHOLAR IN THE DEPARTMENT OF CHEMISTRY AT PRINCETON. "OUR NEW THEORY EXTENDS DARWIN'S MODEL, DEMONSTRATING HOW ORGANISMS CAN SUBTLY DIRECT ASPECTS OF THEIR OWN EVOLUTION TO CREATE ORDER OUT OF RANDOMNESS."**

**THE WORK ALSO CONFIRMS AN IDEA FIRST FLOATED IN AN 1858 ESSAY BY ALFRED WALLACE, WHO ALONG WITH CHARLES DARWIN CO-DISCOVERED THE THEORY OF EVOLUTION. WALLACE HAD SUSPECTED THAT CERTAIN SYSTEMS UNDERGOING NATURAL SELECTION CAN ADJUST THEIR EVOLUTIONARY COURSE IN A MANNER "EXACTLY LIKE THAT OF THE CENTRIFUGAL GOVERNOR OF THE STEAM ENGINE, WHICH CHECKS AND CORRECTS ANY IRREGULARITIES ALMOST BEFORE THEY BECOME EVIDENT." IN WALLACE'S TIME, THE STEAM ENGINE OPERATING WITH A CENTRIFUGAL GOVERNOR WAS ONE OF THE ONLY EXAMPLES OF WHAT IS NOW REFERRED TO AS FEEDBACK CONTROL. EXAMPLES ABOUND, HOWEVER, IN MODERN TECHNOLOGY, INCLUDING CRUISE CONTROL IN AUTOS AND THERMOSTATS IN HOMES AND OFFICES.**

**THE RESEARCH, PUBLISHED IN A RECENT EDITION OF PHYSICAL REVIEW LETTERS, PROVIDES CORROBORATING DATA, RABITZ SAID, FOR WALLACE'S IDEA. "WHAT WE HAVE FOUND IS THAT CERTAIN KINDS OF BIOLOGICAL STRUCTURES EXIST THAT ARE ABLE TO STEER THE PROCESS OF EVOLUTION TOWARD IMPROVED FITNESS," SAID RABITZ, THE CHARLES PHELPS SMYTH '16 PROFESSOR OF CHEMISTRY. "THE DATA JUST JUMPS OFF THE PAGE AND IMPLIES WE ALL HAVE THIS WONDERFUL PIECE OF MACHINERY INSIDE THAT'S RESPONDING OPTIMALLY TO EVOLUTIONARY PRESSURE."**

**THE AUTHORS SOUGHT TO IDENTIFY THE UNDERLYING CAUSE FOR THIS SELF-CORRECTING BEHAVIOR IN THE OBSERVED PROTEIN CHAINS. STANDARD EVOLUTIONARY THEORY OFFERED NO CLUES. APPLYING THE CONCEPTS OF CONTROL THEORY, A BODY OF KNOWLEDGE THAT DEALS WITH THE BEHAVIOR OF DYNAMICAL SYSTEMS, THE RESEARCHERS CONCLUDED THAT THIS SELF-CORRECTING BEHAVIOR COULD ONLY BE POSSIBLE IF, DURING THE EARLY STAGES OF EVOLUTION, THE PROTEINS HAD DEVELOPED A SELF-REGULATING MECHANISM, ANALOGOUS TO A CAR'S CRUISE CONTROL OR A HOME'S THERMOSTAT, ALLOWING THEM TO FINE-TUNE AND CONTROL THEIR SUBSEQUENT EVOLUTION. THE SCIENTISTS ARE WORKING ON FORMULATING A NEW GENERAL THEORY BASED ON THIS FINDING THEY ARE CALLING "EVOLUTIONARY CONTROL."**

**THE WORK IS LIKELY TO PROVOKE A CONSIDERABLE AMOUNT OF THINKING, ACCORDING TO CHARLES SMITH, A HISTORIAN OF SCIENCE AT WESTERN KENTUCKY UNIVERSITY. "SYSTEMS THINKING IN EVOLUTIONARY STUDIES PERHAPS BEGAN WITH ALFRED WALLACE'S LIKENING OF THE ACTION OF NATURAL SELECTION TO THE GOVERNOR ON A STEAM ENGINE -- THAT IS, AS A MECHANISM FOR REMOVING THE UNFIT AND THEREBY KEEPING POPULATIONS 'UP TO SNUFF' AS ENVIRONMENTAL ACTORS," SMITH SAID. "WALLACE NEVER REALLY CAME TO GRIPS WITH THE POSITIVE FEEDBACK PART OF THE CYCLE, HOWEVER, AND IT IS INSTRUCTIVE THAT THROUGH OPTIMAL CONTROL THEORY CHAKRABARTI ET AL. CAN NOW SUGGEST A COUPLING OF CAUSALITIES AT THE MOLECULAR LEVEL THAT EXTENDS WALLACE'S SYSTEMS-ORIENTED APPROACH TO THIS ARENA."**

**EVOLUTION, THE CENTRAL THEORY OF MODERN BIOLOGY, IS REGARDED AS A GRADUAL CHANGE IN THE GENETIC MAKEUP OF A POPULATION OVER TIME. IT IS A CONTINUING PROCESS OF CHANGE, FORCED BY WHAT WALLACE AND DARWIN, HIS MORE FAMOUS COLLEAGUE, CALLED "NATURAL SELECTION." IN THIS PROCESS, SPECIES EVOLVE BECAUSE OF RANDOM MUTATIONS AND SELECTION BY ENVIRONMENTAL STRESSES. UNLIKE DARWIN, WALLACE CONJECTURED THAT SPECIES THEMSELVES MAY DEVELOP THE CAPACITY TO RESPOND OPTIMALLY TO EVOLUTIONARY STRESSES. UNTIL THIS WORK, EVIDENCE FOR THE CONJECTURE WAS LACKING.**

**THE EXPERIMENTS, CONDUCTED IN PRINCETON'S FRICK LABORATORY, FOCUSED ON A COMPLEX OF PROTEINS LOCATED IN THE MITOCHONDRIA, THE POWERHOUSES OF THE CELL. A CHAIN OF PROTEINS, FORMING A TYPE OF BUCKET BRIGADE, FERRIES HIGH-ENERGY ELECTRONS ACROSS THE MITROCHONDRIAL MEMBRANE. THIS METABOLIC PROCESS CREATES ATP, THE ENERGY CURRENCY OF LIFE.**

**VARIOUS RESEARCHERS WORKING OVER THE PAST DECADE, INCLUDING SOME AT PRINCETON LIKE GEORGE MCCLENDON, NOW AT DUKE UNIVERSITY, AND STACEY SPRINGS, NOW AT THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY, FLESHED OUT THE WORKINGS OF THESE PROTEINS, FINDING THAT THEY WERE OFTEN TURNED ON TO THE "MAXIMUM" POSITION, OPERATING AT FULL TILT, OR AT THE LOWEST POSSIBLE ENERGY LEVEL.**

**CHAKRABARTI AND RABITZ ANALYZED THESE OBSERVATIONS OF THE PROTEINS' BEHAVIOR FROM A MATHEMATICAL STANDPOINT, CONCLUDING THAT IT WOULD BE STATISTICALLY IMPOSSIBLE FOR THIS SELF-CORRECTING BEHAVIOR TO BE RANDOM, AND DEMONSTRATING THAT THE OBSERVED RESULT IS PRECISELY THAT PREDICTED BY THE EQUATIONS OF CONTROL THEORY. BY OPERATING ONLY AT EXTREMES, REFERRED TO IN CONTROL THEORY AS "BANG-BANG EXTREMIZATION," THE PROTEINS WERE EXHIBITING BEHAVIOR CONSISTENT WITH A SYSTEM MANAGING ITSELF OPTIMALLY UNDER EVOLUTION.**

**"IN THIS PAPER, WE PRESENT WHAT IS OSTENSIBLY THE FIRST QUANTITATIVE EXPERIMENTAL EVIDENCE, SINCE WALLACE'S ORIGINAL PROPOSAL, THAT NATURE EMPLOYS EVOLUTIONARY CONTROL STRATEGIES TO MAXIMIZE THE FITNESS OF BIOLOGICAL NETWORKS," CHAKRABARTI SAID. "CONTROL THEORY OFFERS A DIRECT EXPLANATION FOR AN OTHERWISE PERPLEXING OBSERVATION AND INDICATES THAT EVOLUTION IS OPERATING ACCORDING TO PRINCIPLES THAT EVERY ENGINEER KNOWS."**

**THE SCIENTISTS DO NOT KNOW HOW THE CELLULAR MACHINERY GUIDING THIS PROCESS MAY HAVE ORIGINATED, BUT THEY EMPHATICALLY SAID IT DOES NOT BUTTRESS THE CASE FOR INTELLIGENT DESIGN, A CONTROVERSIAL NOTION THAT POSITS THE EXISTENCE OF A CREATOR RESPONSIBLE FOR COMPLEXITY IN NATURE.**

**CHAKRABARTI SAID THAT ONE OF THE AIMS OF MODERN EVOLUTIONARY THEORY IS TO IDENTIFY PRINCIPLES OF SELF-ORGANIZATION THAT CAN ACCELERATE THE GENERATION OF COMPLEX BIOLOGICAL STRUCTURES. "SUCH PRINCIPLES ARE FULLY CONSISTENT WITH THE PRINCIPLES OF NATURAL SELECTION. BIOLOGICAL CHANGE IS ALWAYS DRIVEN BY RANDOM MUTATION AND SELECTION, BUT AT CERTAIN PIVOTAL JUNCTURES IN EVOLUTIONARY HISTORY, SUCH RANDOM PROCESSES CAN CREATE STRUCTURES CAPABLE OF STEERING SUBSEQUENT EVOLUTION TOWARD GREATER SOPHISTICATION AND COMPLEXITY."**

**THE RESEARCHERS ARE CONTINUING THEIR ANALYSIS, LOOKING FOR PARALLEL SITUATIONS IN OTHER BIOLOGICAL SYSTEMS.**

**THE RESEARCH WAS FUNDED BY THE NATIONAL SCIENCE FOUNDATION.**

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**THE ARENA GOES ABROAD**

**12/5/08**

**PATRIARCH ALEXIY II, HEAD OF RUSSIAN ORTHODOX CHURCH, DIES**

**BELLS RANG OUT AT 600 CHURCHES ACROSS MOSCOW TODAY AFTER THE DEATH OF PATRIARCH ALEXIY, HEAD OF THE RUSSIAN ORTHODOX CHURCH.**

**RUSSIA'S FIRST POST-SOVIET ORTHODOX LEADER DIED AT HIS RESIDENCE OUTSIDE MOSCOW, A CHURCH SPOKESMAN SAID. THE CAUSE OF DEATH WAS NOT GIVEN, ALTHOUGH THE 79-YEAR-OLD HAD BEEN IN POOR HEALTH FOR SOME TIME AND DIPLOMATS IN MOSCOW HAVE SAID THAT HE WAS SUFFERING FROM CANCER.**

**ALEXIY II WAS ELECTED HEAD OF THE ORTHODOX CHURCH IN 1990 AND OVERSAW ITS RESTORATION TO A DOMINANT ROLE IN RUSSIAN SOCIETY THANKS TO OPEN SUPPORT FROM THE KREMLIN UNDER BORIS YELTSIN AND IN PARTICULAR VLADIMIR PUTIN, THE FORMER KGB OFFICER.**

**PATRIARCH ALEXIY'S LINKS WITH THE KREMLIN WERE CLOUDED BY ALLEGATIONS THAT HE HIMSELF HAD BEEN A LONG-SERVING KGB AGENT CODENAMED "DROZDOV" (THE THRUSH), WHO HAD BEEN AWARDED A "CERTIFICATE OF HONOUR" FOR HIS SERVICE BY THE SOVIET AUTHORITIES IN 1988. HE WAS ACCUSED OF PROVIDING INFORMATION ON DISSIDENT PRIESTS, AND THE KGB EVEN SENT HIM TO ENGLAND IN 1969 ON A MISSION WITH A CHURCH DELEGATION.**

**MR PUTIN CALLED THE PATRIARCH'S DEATH "A VERY TRAGIC AND SORROWFUL EVENT", ADDING: "NOT ONLY WAS HE A PROMINENT FIGURE IN THE HISTORY OF THE RUSSIAN ORTHODOX CHURCH, BUT ALSO A GREAT STATESMAN."**

**PRESIDENT MEDVEDEV, WHO IS IN INDIA, CANCELLED A PLANNED VISIT TO ITALY TO RETURN TO RUSSIA FOR THE FUNERAL.**

**IN A STATEMENT ISSUED BY THE KREMLIN, HE SAID: "A VERY GRIEVOUS EVENT HAS HAPPENED IN THE LIFE OF THIS COUNTRY, OUR SOCIETY - PATRIARCH OF MOSCOW AND ALL RUSSIA ALEXIY II HAS DIED. NOT ONLY WAS HE AN OUTSTANDING RELIGIOUS FIGURE AND TRUE SPIRITUAL LEADER, HE WAS ALSO A GREAT CITIZEN OF RUSSIA."**

**AS PATRIARCH, ALEXIY II OVERSAW THE RESTORATION OF THE CHURCH'S AUTHORITY IN RUSSIA AFTER THE FALL OF COMMUNISM AS CHURCHES WERE REBUILT AND REOPENED ACROSS THE COUNTRY. HE WAS SEEN AS A UNIFYING NATIONAL FIGURE,HIS MORAL STRICTURES AND BENEVOLENT APPEARANCE OFFERING CERTAINTY AT A TIME OF EXTREME ECONOMIC HARDSHIP AND POLITICAL UPHEAVAL.**

**ALEXIY II ALSO PRESIDED OVER A REUNIFICATION CEREMONY AT CHRIST THE SAVIOUR CATHEDRAL IN MOSCOW LAST YEAR THAT ENDED AN 80-YEAR SCHISM WITH THE ORTHODOX FAITHFUL WHOSE FAMILIES HAD FLED RUSSIA AFTER THE BOLSHEVIK REVOLUTION IN 1917.**

**HIS DEATH AFTER AN 18-YEAR REIGN IS LIKELY TO PROMPT AN OUTPOURING OF GRIEF IN RUSSIA, WHICH HAS EXPERIENCED A PROFOUND RELIGIOUS REVIVAL SINCE THE COLLAPSE OF THE SOVIET UNION. STATE TELEVISION SCREENED IMAGES FROM ALEXIY'S LIFE, ACCOMPANIED BY THE SOUND OF TOLLING CHURCH BELLS, IMMEDIATELY AFTER THE ANNOUNCEMENT OF HIS DEATH.**

**THE CHURCH CALLED AN EMERGENCY SESSION OF THE HOLY SYNOD FOR SATURDAY TO ORGANISE THE PATRIARCH'S FUNERAL SERVICE. A TEMPORARY PATRIARCH WILL ALSO BE ELECTED AT THAT MEETING, BISHOP MARK OF YEGORIYEVSK, A CHURCH SPOKESMAN, TOLD INTERFAX NEWS.**

**A NEW PATRIARCH MUST BE ELECTED BY A CHURCH COUNCIL NO LATER THAN SIX MONTHS AFTER THE POSITION BECOMES VACANT. FORMER SOVIET LEADER MIKHAIL GORBACHEV TOLD INTERFAX NEWS THAT THE ALEXIY II'S DEATH HAD LEFT HIM "SO SHOCKED THAT IT IS VERY HARD FOR ME TO FIND WORDS ON THE SPOT." HE ADDED: "I RESPECTED HIM DEEPLY."**

**THE 15TH PRIMATE OF THE RUSSIAN ORTHODOX CHURCH WAS BORN ALEXEI RIDIGER IN INDEPENDENT ESTONIA IN FEBRUARY 1929, THE SON OF A RUSSIAN EMIGRÉ PRIEST. HE TRAINED AT THE LENINGRAD THEOLOGICAL SEMINARY DURING STALIN'S RULE, GRADUATED IN 1949 AND WAS ORDAINED AS A PRIEST A YEAR LATER.**

**HE SERVED IN HIS NATIVE ESTONIA, NOW ABSORBED INTO THE SOVIET UNION, RISING TO BECOME BISHOP OF TALLINN AND ESTONIA IN 1961. HE BECAME DEPUTY CHAIRMAN OF THE DEPARTMENT FOR EXTERNAL CHURCH RELATIONS IN THE MOSCOW PATRIARCHATE SHORTLY AFTERWARDS.**

**BY 1964, UNDER BREZHNEV, THEN ARCHBISHOP ALEXIY WAS APPOINTED CHANCELLOR OF THE MOSCOW PATRIARCHATE, A POSITION HE HELD UNTIL 1986. SOVIET AUTHORITIES AT THIS TIME WERE JAILING DISSIDENT PRIESTS AND MAINTAINING A TIGHT GRIP ON THE ORTHODOX CHURCH, BUT ALEXIY ROSE TO THE RANK OF METROPOLITAN.**

**IN 1986, SOON AFTER MR GORBACHEV CAME TO POWER, ALEXIY WAS APPOINTED METROPOLITAN OF LENINGRAD AND NOVGOROD. HE WAS ELECTED PATRIARCH IN JUNE 1990, PARTLY BECAUSE HE WAS SEEN AS MORE IN TUNE WITH MR GORBACHEV'S MODERNISING REFORMS THAN HIS MAIN RIVAL, WHO ALSO HAD STRONG TIES TO THE COMMUNIST REGIME.**

**THE ORIGINAL CHRIST THE SAVIOUR CATHEDRAL HAD BEEN DESTROYED BY STALIN AND REPLACED WITH A SWIMMING POOL. BUT PATRIARCH ALEXIY II OVERSAW THE BUILDING OF AN EXACT REPLICA WITH HELP FROM PRESIDENT YELTSIN AND THE INFLUENTIAL MAYOR OF MOSCOW, YURI LUZHKOV.**

**CHURCH FINANCES WERE BOOSTED BY INCOME FROM CUSTOMS CONCESSIONS GRANTED BY THE RUSSIAN GOVERNMENT IN THE 1990S. BUT PATRIARCH ALEXIY'S CLOSE ALLIANCE WITH PRESIDENT PUTIN, WHO OPENLY PROFESSED HIS ORTHODOX FAITH, GREATLY INCREASED THE CHURCH'S INFLUENCE IN RUSSIA'S POLITICAL AND SOCIAL LIFE.**

**THE ORTHODOX FAITH HAS COME CLOSE TO BEING THE OFFICIAL RELIGION, WITH SCHOOLS ENCOURAGED TO TEACH ITS PRECEPTS. PRESIDENT MEDVEDEV AND HIS WIFE SVETLANA WERE SHOWN ON NATIONAL TELEVISION RECEIVING A BLESSING FROM THE PATRIARCH DURING THE PRESIDENT’S INAUGURATION AT THE KREMLIN IN MAY, EVEN THOUGH THE RUSSIAN STATE IS OFFICIALLY SECULAR.**

**RELATIONS WITH THE ROMAN CATHOLIC CHURCH REMAINED TOUCHY, HOWEVER, AND THE PATRIARCH CONSISTENTLY OPPOSED ANY VISIT TO RUSSIA BY POPE JOHN PAUL II AND HIS SUCCESSOR BENEDICT XVI. HE ACCUSED ROME OF "PROSELYTISM", A SUSPICION FUELLED BY THE CREATION OF FOUR CATHOLIC DIOCESES IN RUSSIA.**

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**FAMOUS QUOTES**

**GEORGE CARLIN (1937 – 2008) AGE 71.**

**WAS AN AMERICAN STAND-UP COMEDIAN. HE WAS ALSO AN ACTOR AND AUTHOR, AND WON FOUR GRAMMY AWARDS FOR HIS COMEDY ALBUMS.**

**CARLIN WAS NOTED FOR HIS BLACK HUMOR AS WELL AS INSIGHTS ON POLITICS, THE ENGLISH LANGUAGE, PSYCHOLOGY, RELIGION, AND VARIOUS TABOO SUBJECTS. CARLIN AND HIS "SEVEN DIRTY WORDS" COMEDY ROUTINE WERE CENTRAL TO THE 1978 U.S. SUPREME COURT CASE F.C.C. V. PACIFICA FOUNDATION, IN WHICH A NARROW 5–4 DECISION BY THE JUSTICES AFFIRMED THE GOVERNMENT'S POWER TO REGULATE INDECENT MATERIAL ON THE PUBLIC AIRWAVES.**

**IN THE 1990S AND 2000S, CARLIN'S STAND-UP ROUTINES FOCUSED ON THE FLAWS IN MODERN-DAY AMERICA. HE OFTEN TOOK ON CONTEMPORARY POLITICAL ISSUES IN THE UNITED STATES AND SATIRIZED THE EXCESSES OF AMERICAN CULTURE.**

**CARLIN WAS PLACED SECOND ON THE COMEDY CENTRAL CABLE TELEVISION NETWORK LIST OF THE 100 GREATEST STAND-UP COMEDIANS, AHEAD OF LENNY BRUCE AND BEHIND RICHARD PRYOR. HE WAS A FREQUENT PERFORMER AND GUEST HOST ON THE TONIGHT SHOW DURING THE THREE-DECADE JOHNNY CARSON ERA, AND WAS ALSO THE FIRST PERSON TO HOST SATURDAY NIGHT LIVE.**

**"RELIGION HAS ACTUALLY CONVINCED PEOPLE THAT THERE'S AN INVISIBLE MAN - LIVING IN THE SKY - WHO WATCHES EVERYTHING YOU DO, EVERY MINUTE OF EVERY DAY.**

**AND THE INVISIBLE MAN HAS A SPECIAL LIST OF TEN THINGS HE DOES NOT WANT YOU TO DO. AND IF YOU DO ANY OF THESE TEN THINGS, HE HAS A SPECIAL PLACE, FULL OF FIRE AND SMOKE AND BURNING AND TORTURE AND ANGUISH, WHERE HE WILL SEND YOU TO LIVE AND SUFFER AND BURN AND CHOKE AND SCREAM AND CRY FOREVER AND EVER 'TIL THE END OF TIME! ... BUT HE LOVES YOU."**