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DIVIDED MINDS, SPECIOUS SOULS

BY DAVID WEISMAN

THE EXPERIENCE OF A UNIFIED MIND AND THE POSSIBILITY OF AN EVERLASTING SOUL ARE CONNECTED. AND THERE IS SCANT EVIDENCE TO SUPPORT THE EXISTENCE OF EITHER

THERE IS A COMMON IDEA: BECAUSE THE MIND SEEMS UNIFIED, IT REALLY IS. MANY GO ONLY A BIT FURTHER AND CALL THAT UNIFIED MIND A “SOUL.” THIS STEP, FROM SELF TO SOUL, IS AN ANCIENT ASSUMPTION WHICH NOW FORMS A BEDROCK IN MANY RELIGIONS: A BASIS FOR LIFE AFTER DEATH, FOR RELIGIOUS MORALITY, AND A LITTLE GOD WITHIN US, A SUPPORT FOR A BIGGER GOD OUTSIDE US.

FOR THE BELIEVERS IN THE SOUL, LET’S CALL THEM SOULISTS, THE SOUL ASSUMPTION APPEARS TO BE ONLY THE SMALLEST OF STEPS FROM THE EXISTENCE OF A UNIFIED MIND. YET THE SOUL IS A CLAIM FOR WHICH THERE ISN’T ANY EVIDENCE. TODAY, THERE ISN’T EVEN EVIDENCE FOR THAT PLACE SOULISTS STEP OFF FROM, THE UNIFIED MIND. NEUROLOGY AND NEUROSCIENCE, WORKING UNSEEN OVER THE PAST CENTURY, HAVE ERODED THESE IDEAS, THE SOUL AND THE UNIFIED MIND, DOWN TO NOTHING. EXPERIENCES CERTAINLY DO FEEL UNIFIED, BUT TO ACCEPT THESE FEELINGS AS REALITY IS A MISTAKE. OFTEN, THE WAY THINGS FEEL HAS NOTHING TO DO WITH HOW THEY ARE.

THERE ARE HISTORICAL PARALLELS. AN 18TH CENTURY SCIENTIST BELIEVED A SUBSTANCE CALLED “CALORIC” MADE HOT MATERIALS HOT AND FLOWED INTO COLDER MATERIALS TO MAKE THEM WARMER. IT SEEMED TO BE TRUE, BUT SUBSEQUENT INVESTIGATION SHOWED MECHANICAL VIBRATION EQUATES TO HEAT. SCIENCE IS LITTERED WITH SIMILARLY DISCREDITED THEORIES; THE SOUL IS ONE OF THEM.

THE EVIDENCE SUPPORTS ANOTHER VIEW: OUR BRAINS CREATE AN ILLUSION OF UNITY AND CONTROL WHERE THERE REALLY ISN’T ANY. WITHIN THE WIDE RANGE OF WORKS ARRANGED ALONG THE AXIS OF SOULISM, FROM LIFE AFTER DEATH: THE EVIDENCE, BY DINESH D’SOUZA, TO ABSENCE OF MIND, BY MARILYNNE ROBINSON, IT IS CLEAR THERE IS VERY LITTLE UNDERSTANDING OF THE BRAIN. IN FACT, TO ADVANCE THEIR IDEAS, THESE AUTHORS HAVE TO BE ALMOST COMPLETELY UNAWARE OF NEUROLOGY AND NEUROSCIENCE. FOR EXAMPLE, ROBINSON TELLS US, “OUR RELIGIOUS TRADITIONS GIVE US AS THE NAME OF GOD TWO DEEPLY MYSTERIOUS WORDS, ONE DEEPLY MYSTERIOUS UTTERANCE: I AM.” THE TRANSLATION MIGHT BE, “INDOCTRINATION TELLS US WE HAVE A SOUL, IT FEELS LIKE WE ARE A UNIFIED LITTLE GOD IN CONTROL OF OUR BODIES, SO WE ARE.”

IN EXPLAINING WHY SCIENCE SUGGESTS THAT THE UNIFIED MIND IS ILLUSORY, THERE ARE THOUSANDS OF SUPPORTING CASES AND EXPERIMENTS TO CHOOSE FROM, BUT LET’S TAKE ONE CASE FROM THE EMERGENCY ROOM.

AFTER EATING DINNER WITH HER HUSBAND, MRS. BLANFORD COLLAPSED. SHE COULD NOT MOVE THE LEFT SIDE OF HER BODY. I MET MRS. BLANFORD SOON AFTERWARDS: HER SPEECH WAS NORMAL, BUT SHE COULDN’T SEE OBJECTS TO HER LEFT, AND SHE COULDN’T MOVE OR FEEL THE LEFT SIDE OF HER FACE, OR HER LEFT ARM OR LEG. MRS. BLANFORD WAS SUFFERING A STROKE.

AN INTERESTING THING HAPPENED WHEN I BROUGHT HER LEFT ARM UP ACROSS HER FACE SO SHE COULD SEE IT. I ASKED, AS I ALWAYS ASK SUCH PATIENTS, “WHOSE ARM IS THIS?”

“THAT IS YOUR ARM.”

“THEN WHY AM I WEARING YOUR RING?” I POINTED TO HER WEDDING BAND.

“THAT WEDDING BAND BELONGS ON THE ARM OF MRS. BLANFORD.”

“SO WHOSE ARM IS THIS?”

“THAT IS YOUR ARM.”

PATIENTS LIKE MRS. BLANFORD SOMETIMES ACCUSE ME OF STEALING THEIR RINGS OR WATCHES. EVEN IF WE DEMONSTRATE THAT THEIR ARM IS ATTACHED TO THEIR BODY, THEY ARE NEVER CONVINCED THE ARM ACTUALLY BELONGS TO THEM. AT MOST, ONE IS ABLE TO RENDER THEM BRIEFLY CONFUSED, AND THEN THE CONDITION REESTABLISHES ITSELF. THE CONDITION IS CALLED “NEGLECT.” THERE IS NOTHING EXTRAORDINARY HERE. MRS. BLANFORD’S CASE IS NOT RARE. THERE ARE COUNTLESS CASES OF LEFT-SIDE NEGLECT DUE TO RIGHT-BRAIN STROKES.

HOW CAN WE EXPLAIN THIS? GIVEN THAT WE FIND NEGLECT SOON AFTER RIGHT-BRAIN DAMAGE, WE ARE BEST SERVED BY ADOPTING A NEUROLOGICAL POINT OF VIEW. TO DO SO, WE NEED TO UNDERSTAND A BIT ABOUT HOW THE BRAIN WORKS. IN GENERAL, AND IN THE BROADEST STROKES, THE BRAIN IS DIVIDED INTO TWO HEMISPHERES. THE LEFT HEMISPHERE PROCESSES SPEECH AND THE MOTOR AND SENSORY INFORMATION FOR THE RIGHT SIDE OF THE WORLD. THE RIGHT HEMISPHERE PROCESSES NONVERBAL INFORMATION AND REPRESENTATIONS FROM THE LEFT SIDE. THIS PARTICULAR STROKE RENDERED MRS. BLANFORD’S RIGHT HEMISPHERE DYSFUNCTIONAL, UNABLE TO PROCESS ANYTHING FROM THE LEFT SIDE OF HER WORLD. IT IS NOT THE LEFT HEMISPHERE’S JOB TO RECOGNIZE THE LEFT ARM, AND THE LEFT HEMISPHERE CAN’T IMMEDIATELY STEP IN TO DO THAT TASK. TO THE LEFT BRAIN, THE LEFT SIDE OF THE BODY ESSENTIALLY DOES NOT EXIST. THE RIGHT BRAIN HAS FAILED, NOT ONLY TO PROCESS ARM INFORMATION, BUT FAILED TO LET THE LEFT HEMISPHERE KNOW IT FAILED.

FOR MRS. BLANFORD, IT ISN’T ONLY THAT HER LEFT BRAIN CAN’T DO THE RIGHT BRAIN’S TASK. THE LEFT HEMISPHERE ALSO CAN’T RECOGNIZE THAT THERE IS MISSING DATA, OR THAT THERE IS SOMETHING WRONG WITH THE DATA IT RECEIVES. IT HAS TO USE THE DATA IT HAS, SO THE LEFT HEMISPHERE COMES UP WITH CONFABULATIONS, CREATING VERBAL FABRICATIONS TO EXPLAIN AWAY MISSING INFORMATION. IN THIS CASE THE CONFABULATION BECOMES, “THAT IS YOUR ARM, NOT MINE.” ALTHOUGH EASY TO FALSIFY, THE IDEA IS INTERNALLY CONSISTENT, MAKES SOME SENSE OF THE SCRAMBLED INTERNAL DATA, AND FEELS CORRECT. THE INJURED BRAIN CREATES A CONFABULATION TO MAINTAIN A UNITY OF SELF AND A FEELING OF CONTROL. WE FIND A BRAIN CONVINCING ITSELF OF SOMETHING THAT FEELS RIGHT, BUT ISN’T.

A NEGLECT CASE ONLY MAKES SENSE IF YOU CONSIDER EACH HEMISPHERE AS ITS OWN SEPARATE ENTITY. WE SEE THAT WHEN A STROKE DAMAGES THE RIGHT BRAIN JUST SO, THE MIND FOLLOWS AS A RESULT. IT IS EXPECTED, TO BE COMPARED WITH THE UNPLUGGING OF A MOUSE RESULTING IN A FROZEN CURSOR.

NOW CONSIDER YOURSELF. CONSIDER YOUR OWN LEFT ARM. IT FEELS PERFECT, UNDER YOUR CONTROL, A PART OF YOU, EXACTLY WHERE IT SHOULD BE. BUT THIS UNIFIED PERCEPTION RELIES ON NEURONAL MACHINERY HUMMING IN THE BACKGROUND, FAR BENEATH CONSCIOUS AWARENESS. YOUR SENSE OF UNITY, ONLY PERCEPTIBLE TO YOU, IS A SHEEN ON THE SURFACE, NOT A DEEPER LAYER OF REALITY.

WHERE DOES THIS LEAVE THE SOUL? DOES THE SOUL MAKE ANY SENSE IN THE FACE OF A BRAIN AND MIND SO EASILY FRACTURED BY ISCHEMIA? A SOUL IS IMMATERIAL, ETERNAL, A LITTLE GOD, IMPERVIOUS TO INJURY, ABLE TO SURVIVE OUR DEATHS. YET HERE WE SEE ONE INJURED, TETHERED SO CLOSE TO THE INJURED BRAIN THAT THERE IS NO STRING. WE SEE A HOLE, AND THROUGH IT WE GET A GLIMPSE INTO THE BRAIN’S INNER WORKINGS. ONE PART IS DAMAGED; ANOTHER PART FALSELY THINKS IT IS WHOLE. HOW DOES THE IDEA OF A UNIFIED SOUL MAKE ANY SENSE IN THE FACE OF THIS DATA?

I WISH THERE WERE A TERM IN THE ENGLISH LANGUAGE THAT HONESTLY CAPTURES THE IDEA THAT ALL WE EXPERIENCE IS DUE TO BRAIN FUNCTION. ”MATERIALISM” COMES CLOSE, BUT IS LADEN WITH EXCESS METAPHYSICAL BAGGAGE. THE PHILOSOPHER JOHN SEARLE COINED “BIOLOGICAL NATURALISM” AS A MIND-BODY THEORY WITHIN PHILOSOPHY, AND THAT COMES VERY CLOSE. “ASOULISM” IS MORE MODEST: A SIMPLE DISBELIEF IN THE EXISTENCE OF SOULS BASED ON EVIDENCE.

THE SOUL IS AN ANCIENT HYPOTHESIS, OLDER THAN CALORIC AND JUST AS SPECIOUS, LEFT UNSUPPORTED BY THE COLLECTED WORKS OF NEUROLOGY AND NEUROSCIENCE. THIS LEAVES A DISTINCT ABSENCE OF SOUL, BY WHATEVER NAME. IMPORTANTLY, THIS ABSENCE DOES NOT ARISE BECAUSE OF CULTURAL BIASES AND INERTIAS, OR BECAUSE OF OVERARCHING DOGMAS AND HIDDEN AGENDAS AND WISHFUL THINKING. IT LEAVES AN ABSENCE BECAUSE THE AVAILABLE DATA SUPPORTS IT AND TENDS TO FALSIFY EVERYTHING ELSE.

ALMOST ONE HOUR AFTER SYMPTOM ONSET AND LESS THAN 50 MINUTES FROM THE TIME SHE CAME TO THE ER, WE TREATED MRS. BLANFORD’S STROKE WITH TISSUE PLASMINOGEN ACTIVATOR. WE ALSO ENROLLED HER INTO AN ACUTE STROKE TREATMENT TRIAL, THUS ENSURING THAT MEDICAL SCIENCE TOOK ANOTHER TINY STEP FORWARD. PERHAPS BECAUSE OF OUR TREATMENTS, OR HER PERSONAL BIOLOGY, MRS. BLANFORD DEFIED THE TYPICAL COURSE FOR A LARGE RIGHT BRAIN STROKE. SHE RECOVERED NEARLY ALL HER FUNCTION AND WALKED OUT OF OUR HOSPITAL ABOUT A WEEK LATER, SEEMING NEARLY WHOLE. SHE FELT UNIFIED WITH HER BODY AND HER MIND, EVEN THOUGH SOME OF US BELIEVE OTHERWISE, THAT RECONNECTION ISN’T UNIFICATION, AND THAT THE WAY THINGS SEEM ISN’T ALWAYS HOW THEY ARE.

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THE SCIENCE SEGMENT

PARASITIC 'WARRIOR WORMS' DISCOVERED IN SNAILS; SCIENTISTS SEE POSSIBLE BIOMEDICAL APPLICATIONS

SCIENTISTS AT UC SANTA BARBARA HAVE DISCOVERED A CASTE OF GENETICALLY IDENTICAL "WARRIOR WORMS" - MEMBERS OF A PARASITIC FLUKE SPECIES THAT INVADES THE CALIFORNIA HORN SNAIL.

THE FINDINGS ARE REPORTED IN THE ONLINE VERSION OF THE PROCEEDINGS OF THE ROYAL SOCIETY B.

ARMAND M. KURIS, PROFESSOR OF ZOOLOGY IN THE DEPARTMENT OF ECOLOGY, EVOLUTION AND MARINE BIOLOGY SAID, "WE HAVE DISCOVERED FLATWORMS IN COLONIES WITH VICIOUS, KILLER MORPHS DEFENDING THE COLONY. THESE FLUKES HAVE A STRONGLY DEVELOPED SOCIAL ORGANIZATION, MUCH LIKE SOME INSECTS, MAMMALS AND BIRDS."

THE TINY WARRIOR WORMS ARE ONLY A COUPLE OF MILLIMETERS IN LENGTH, YET THEY ARE POWERFUL THANKS TO RELATIVELY LARGE MOUTHS. THEY FORM COLONIES IN SNAILS. REPRODUCTIVE WORMS AND SOLDIER WORMS COOPERATE TO GROW AND DEFEND THEIR COLONY WITHIN THE SNAIL. THESE TWO TYPES OF INDIVIDUALS LOOK AND BEHAVE DIFFERENTLY. THE WARRIOR WORMS ATTACK OTHER INVASIVE PARASITES TRYING TO INVADE THE SNAIL.

KURIS CALLS THE WORMS PARASITIC "BODY SNATCHERS" BECAUSE THEY CASTRATE THE SNAIL, MAKING IT UNABLE TO REPRODUCE. THE SNAIL, WHICH IS ONLY AN INCH AND A HALF LONG, HOUSES THOUSANDS OF WORMS. A MATURE COLONY OF THIS TYPE OF WORM WEIGHS 25 PERCENT OF THE WEIGHT OF THE HOST SNAIL.

THE WORMS ARE PRODUCED THROUGH ASEXUAL REPRODUCTION AND THEIR RELATIONSHIPS ARE EVEN MORE DRAMATIC THAN THOSE AMONG HONEYBEES. FOR EXAMPLE, WORKER BEES AND QUEEN BEES ARE RELATED AS SISTERS THROUGH SEXUAL REPRODUCTION. THE FLUKE CASTES ARE GENETICALLY IDENTICAL.

KURIS SAID MANY OTHER SPECIES OF FLUKES PROBABLY HAVE COLONIES OF CLONES WITH CASTES. HE EXPECTS INTERNATIONAL RESEARCH TO EXPAND IN THIS DIRECTION NOW THAT THIS EXAMPLE HAS BEEN DISCOVERED.

THESE COLONIES ALSO ACT LIKE AN IMMUNE SYSTEM, DEFENDING THE BODY OF THE SNAIL FROM OTHER FLUKE INFECTIONS. THE SOLDIERS BEHAVE LIKE WHITE BLOOD CELLS; THEY ATTACK OTHER UNRELATED FLUKES, BITING AND KILLING THEM.

THESE FLUKES WITH SOLDIER CASTES MAY ALSO HAVE A BIOMEDICAL APPLICATION. THEY MIGHT BE USED IN THE BIOLOGICAL CONTROL OF MAJOR HUMAN PARASITIC DISEASES SUCH AS BLOOD FLUKES. THERE ARE 200 MILLION CASES OF BLOOD FLUKE DISEASES WORLDWIDE. LIVER FLUKES MIGHT ALSO BE CONTROLLED.

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ABROAD

BRITS WARNED OF 'NEW WAVE OF TERROR'

MILITANTS FROM DIFFERENT NATIONS APPEAR TO BE JOINING FORCES

BRITAIN SHOULD BRACE FOR A NEW WAVE OF TERROR AS THE THREAT FROM BOTH DISSIDENT IRISH REPUBLICANS AND ISLAMIC RADICALS RISES. MILITANT IRISH GROUPS—ONE OF WHICH HAS THREATENED TO BLOW UP BANKS IN BRITAIN AND IRELAND—ARE SHOWING WORRYING SIGNS OF CO-ORDINATION AND CO-OPERATION, AND ACQUIRING MORE SOPHISTICATED WEAPONS.

EVANS SAYS HIS OFFICERS ARE UNCOVERING MORE AND MORE TERROR PLOTS ORIGINATING IN SOMALIA, WHERE SOME 100 BRITISH RESIDENTS OF ASSORTED ETHNIC BACKGROUNDS ARE BELIEVED TO BE TRAINING WITH THE AL-SHABAAB MILITIA. THE ISLAMIST GROUP IS CLOSELY ALIGNED WITH AL-QAEDA, AND SOMALIA SHOWS MANY OF THE CHARACTERISTICS THAT MADE AFGHANISTAN SO DANGEROUS A SEEDBED FOR TERRORISM IN THE PERIOD BEFORE THE FALL OF THE TALIBAN.

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RELIGION

FRANKLIN GRAHAM: ISLAM IS 'WICKED'

ABC’S THIS WEEK WADED INTO SOME CONTROVERSIAL WATERS TODAY WITH A TOWN HALL DISCUSSION ON ISLAM, AND NO ONE WAS MORE CONTROVERSIAL THAN REV. FRANKLIN GRAHAM (THE SON OF BILLY GRAHAM), WHO CALLED THE RELIGION “EVIL” AND “WICKED.”

(WELL REV, HOW DO YOU FIGURE YOUR RELIGION IS ANY DIFFERENT? PERHAPS YOU COULD GIVE US AN EXAMPLE?).

GRAHAM SAID, “THEY WANT TO BUILD AS MANY MOSQUES AND CULTURAL CENTERS AS THEY POSSIBLY CAN SO THEY CAN CONVERT AS MANY AMERICANS AS THEY CAN TO ISLAM."

(REV, SINCE YOU DON'T SEEM TO BE BIG ON BALANCE, LET ME HELP THE LISTENERS OUT WITH THIS LITTLE GEM ... FROM YOUR OWN HOLY BOOK:

MARK 16:15

"And he said unto them, Go ye into all the world, and preach the gospel to every creature."

YOUR OWN GOD TELLS YOU TO DO THE SAME THING THAT YOU ARE CRITICIZING MUSLIMS FOR DOING. IN THE DICTIONARY, YOUR PHOTO MUST APPEAR RIGHT NEXT TO THE WORD "HYPOCRITE."

WORLD DOMINATION IS AN OPEN AND STATED GOAL OF BOTH DESERT DOGMAS. NEITHER CHRISTIANS NOR MUSLIMS CAN HIDE A FACT THAT APPEARS IN BOTH THEIR HOLY BOOKS - NOR DO THEY ATTEMPT TO.

MODERN HUMANS HAVE SEMI-CIVILIZED CHRISTIANS BY TAKING AWAY THEIR SLAVES AND ENACTING LAWS THAT PREVENT THEM FROM CARRYING OUT MANY OF THEIR GRUESOME LAWS, CUSTOMS, AND PRACTICES.

ISLAM HAS PROVEN A TOUGHER NUT TO CRACK DUE TO THE STRANGLE HOLD THAT THEIR RELIGIOUS LEADERS STILL MAINTAIN OVER THEIR SOCIETIES, BUT PROGRESS IS BEING MADE IN MANY MUSLIM NATIONS.

YOU REV, ARE THE LAST PERSON WHO SHOULD BE THROWING STONES ... AT ANYBODY).

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FAMOUS QUOTES

STEVEN NOVELLA (BORN 1964) 46 YEARS OLD.

HE IS AN AMERICAN CLINICAL NEUROLOGIST, ASSISTANT PROFESSOR AND DIRECTOR OF GENERAL NEUROLOGY AT YALE UNIVERSITY SCHOOL OF MEDICINE. NOVELLA IS BEST KNOWN FOR HIS INVOLVEMENT IN THE SKEPTICAL MOVEMENT.

HE IS THE FOUNDER AND LEADER OF THE VIRALLY SUCCESSFUL SHOW "THE SKEPTIC'S GUIDE TO THE UNIVERSE" WHICH CAN BE FOUND AT:

"HTTP://THESKEPTICSGUIDE.ORG/"

"GOOD RESEARCH CREATES MORE QUESTIONS THAN IT ANSWERS."

"I WAS HOPING FOR ONE ELECTION IN MY LIFE

WHEN THE FLESH WOULD NOT MELT OFF MY BONES

WHILE PULLING THE LEVER

FOR THE LEAST OF TWO ASSHOLES."