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Obama decision on gay marriage shows government trying to abolish God

by Sam Guzman

In a controversial decision, President Obama this week abandoned the Defense of Marriage Act – the 1996 law that defines marriage as the union of one man and one woman, and forbids the federal government from recognizing same-sex marriages.

SAM, AS A REPORTER, DON'T YOU HAVE ACCESS TO GOVERNMENT DOCUMENTS? IF NOT, DON'T YOU AT LEAST HAVE ACCESS TO WIKIPEDIA?

WELL I DO. ACCORDING TO WIKIPEDIA, DOMA DOES NOT FORBID THE FEDERAL GOVERNMENT FROM RECOGNIZING SAME-SEX MARRIAGES AS YOU JUST CLAIMED - IT SAYS:

"no state (or other political subdivision within the United States) may be required to recognize as a marriage a same-sex relationship considered a marriage in another state."

MR. GUZMAN, IF YOU NEED A REFRESHER COURSE IN ESL, NOW MIGHT BE A GOOD TIME TO TAKE IT, BEFORE YOU EMBARRASS YOURSELF ANY FURTHER. HOPEFULLY THEY'LL GIVE YOU A CHAPTER ON READING COMPREHENSION.

Mr. Obama ordered his administration to stop defending it in court because he has decided it’s unconstitutional and unfair.

SAM, WHY DO YOU HIDE FROM THE READERS THE FACT THAT OBAMA MADE THAT DECISION AFTER A FEDERAL JUDGE RULED DOMA UNCONSTITUTIONAL?

YOU DON'T GIVE ANY INDICATION OF BEING AN OBJECTIVE REPORTER.

But this decision is more than political. By implication, President Obama is saying that the idea of marriage as being solely between a man and a woman is indefensible.

SAM, WHENEVER I SEE THE WORD "IMPLICATION," I BRACE MYSELF FOR THE MISREPRESENTATION THAT ALWAYS FOLLOWS - AND YOU DID NOT DISAPPOINT.

OBAMA SAID IT WAS "UNCONSTITUTIONAL"; THAT IS WHY IT IS INDEFENSIBLE.

By calling DOMA unfair, he is saying that gay marriage is a fundamental right.

SAM, IF YOU WERE BEING HONEST YOU WOULD HAVE ASKED "WHY IS DOMA UNFAIR?" AND THEN DEALT WITH THE RESPONSE, RATHER THAN TRYING TO PUT WORDS IN HIS MOUTH.

BUT THE REASON YOU PREFERRED TO PUT WORDS IN THE PRESIDENT'S MOUTH WAS PRECISELY BECAUSE YOU COULD NOT DEAL WITH THE RESPONSE.

The hubris of this decision should astound us.

SO SAM, IF SOMEONE MAKES A DECISION THAT YOU DISAGREE WITH, YOU DEFINE THAT AS "HUBRIS?" AND IF HE HAD AGREED WITH YOUR POSITION, WOULD IT STILL BE HUBRIS?

NO, HUBRIS ONLY APPLIES TO THOSE WITH WHOM YOU DISAGREE. THE ONLY THING THAT ASTOUNDS ME IS YOUR LACK OF OBJECTIVITY.

We have entered a brave new world – a world where the government has not only the authority to raise taxes, but to raze marriage.

SAM, IF GAY MARRIAGE IS ALLOWED THEN THERE WILL BE MORE MARRIAGES - NOT LESS. MARRIAGE WOULDN'T BE "RAZED," IT WOULD BE EXPANDED. MARRIAGE WOULD BECOME AVAILABLE TO A LARGE MINORITY OF THE POPULATION TO WHOM IT WAS PREVIOUSLY DENIED.

FOR YOUR WORD "RAZE" TO BE RIGHT, HETEROSEXUALS WOULD HAVE TO LOSE THE RIGHT TO GET MARRIED OR HAVE THEIR RIGHTS RESTRICTED.

Where it has the authority not only to define speed limits, but to defy moral limits.

SAM, WHY DON'T YOU TELL US WHICH MORAL LIMITS ARE BEING DEFIED?

For that is exactly what Obama has done. Marriage is, and always has been, a moral institution.

SAM, WHAT THE HELL DOES THAT MEAN?

MARRIAGE IS SIMPLY THE LEGAL UNION JOINING TWO PEOPLE. WHETHER IT IS MORAL OR NOT DEPENDS ON THE MORALS OF THOSE INVOLVED. HOW DO YOU FIGURE THAT THE INSTITUTION OF MARRIAGE IS, ITSELF MORAL?

It has long been surrounded by a halo of sacredness, from the very roots of humanity.

SAM, YOU COULD SAY THE SAME THING ABOUT HUMAN SACRIFICE. THE FACT THAT SOMETHING HAS BEEN AROUND FOR A LONG TIME AND CONSIDERED "SACRED" DOES NOT MAKE IT RIGHT.

ANOTHER VIEW

Obama's DOMA shift: Why public embrace of gay marriage – and gays – is now certain

But why is this? It is not simply that marriage is a human tradition. And while marriage has implications for society, and civil authority can recognize it, it is not merely a civil institution. No, it is considered sacred because essentially all the religions of the world consider it a divine establishment.

SAM, I KNEW IT. THIS IS ALL ABOUT YOUR INVISIBLE GHOST ISN'T IT?

QUESTION SAM,

IF IT IS A DIVINE ESTABLISHMENT, WHY DO HALF OF THEM DIVORCE?

WHY DO HALF OF THEM CHEAT? WHY DO SO MANY OF THEM BEAT AND KILL THEIR WIVES?

YOU KNOW SAM, COME TO THINK OF IT - YOU MAY BE RIGHT. AFTER READING YOUR BIBLE AND SEEING THE STRIKING SIMILARITIES BETWEEN IT AND MANY MARRIAGES, I AGREE THAT MAYBE IT JUST MIGHT BE A DIVINE ESTABLISHMENT.

Importance of divine rights, many will sneer at the idea of divine establishment of anything as antiquated and even ridiculous – as a relic from a more ignorant day.

BUT NOT YOU SAM. YOU WOULDN'T DARE RISK ANTAGONIZING THAT GHOST WHO IS STANDING RIGHT BEHIND YOU AND LISTENING TO EVERY WORD YOU SAY AND THINK; AND GIVEN HIS HISTORY OF TEMPER TANTRUMS, THAT WOULDN'T BE VERY SMART.

But what these critics fail to realize is that this “ignorant” idea forms the basis of our nation.

SAM, HOW SO?

The founders didn’t all adhere to the same religious doctrines, but they did agree on one important principle: Our rights are divinely bestowed.

SAM, IN THOSE DAYS ALMOST EVERYONE BELIEVED IN A CREATOR BECAUSE SCIENCE WAS STILL IN ITS INFANCY, AND SO QUESTIONS ABOUT REALITY WERE ANSWERED BY REFERING TO INVISIBLE GHOSTS.

THEY CAN BE FORGIVEN FOR THEIR IGNORANCE. BUT FOR MODERN 21st CENTURY AMERICANS TO HOLD THOSE SAME BELIEFS, IN THE LIGHT OF ALL THAT OUR SCIENCE HAS DISCOVERED, IT IS JUST IGNORANT.

That’s why they stated unequivocally in our Declaration of Independence that all human beings are “endowed by their Creator with certain unalienable rights.”

SAM, YET MILLIONS WERE DENIED THOSE RIGHTS AND HELD IN SLAVERY. DID THE SLAVES NOT HAVE A CREATOR? WHERE WERE THEIR INALIENABLE RIGHTS?

APPARENTLY "ALL HUMAN BEINGS," WHEN PROPERLY TRANSLATED, MEANS "BURLY WHITE GUYS."

Their whole case against the King of England was founded on this principle. In effect, they were saying: “Who are you to take away something that the Supreme Authority gave us?

SO SAM, IF A SLAVE WERE TO ASK YOU THAT QUESTION - WHAT WOULD YOU REPLY?

These rights of humanity cannot be taken away by your or any other authority. You, King George, should be the guardian of these liberties, not their enemy.”

Their argument still stands. Like it or not (and most don’t), America was founded on this thoroughly philosophical and yet practical idea – the idea of the divine origin of the rights of man.

SAM, THE FACT THAT YOU CAN FIND ONE REFERENCE TO A CREATOR IN THE DECLARATION OF INDEPENDENCE DOES NOT MEAN THAT OUR COUNTRY WAS FOUNDED ON THAT IDEA.

IF OUR COUNTRY WAS FOUNDED ON THE IDEA OF DIVINE RIGHTS, WHY DID THE FATHERS HAVE TO ADD A BILL OF RIGHTS TO THE CONSTITUTION THAT DID NOT MAKE A SINGLE REFERENCE TO YOUR GOD?

WHY IS THERE NO MENTION OF GOD ANYWHERE IN THE CONSTITUTION? WHY IS THERE NOT ONE REFERENCE TO THE TEN COMMANDMENTS?

IT SOUNDS LIKE OUR COUNTRY WAS FOUNDED ON EVERYTHING EXCEPT THE RULES OF YOUR INVISIBLE GHOST. OKAY, WELL THEY DID INCLUDE ONE OF HIS RULES - I ALMOST FORGOT ABOUT SLAVERY.

This is not a notion we can outgrow. It’s an eternal truth.

SAM, YET IN 2,000 YEARS OF INTENSE EFFORT NOT ONE OF YOU HAVE BEEN ABLE TO PROVIDE EVEN THE SLIGHTEST BIT OF EVIDENCE TO SUPPORT WHAT YOU CALL "THE TRUTH."

Law makes man, not the other way around.

SAM, BETTER REREAD THE CONSTITUTION - YOU'LL DISCOVER THAT IT WAS MAN THAT MADE THE LAW - NOT THE OTHER WAY AROUND.

Ancient wisdom holds that law makes man.

SAM, MODERN WISDOM HAS OVERTURNED THAT ARCHAIC IDEA. IF YOU CAN'T SEE WHICH WORKS BETTER - IT'S BECAUSE YOU DON'T WANT TO.

Today, we mistakenly think that man makes law,

SAM, HUNDREDS OF CONSTITUTIONS AND THOUSANDS OF CRIMINAL CODES THROUGHOUT THE WORLD PROVE THAT YOU ARE THE ONE WHO IS MISTAKEN.

which is why our government now suggests that God’s creation of two sexes – male and female – is an irrelevant principle in forming a family.

SAM, WHILE YOU'RE REREADING THE CONSTITUTION, YOU MIGHT ALSO CONSIDER REREADING YOUR BIBLE. IN ONE CASE YOUR GOD TOOK NO ISSUE AT ALL WITH ONE OF HIS FAVORITE KINGS HAVING 700 WIVES; AND HE IS NOT THE ONLY POLYGAMIST THAT YOUR GOD HONORED.

But what right does government have to interfere in what has historically been a religious institution?

SAM, YOU DIDN'T HAVE A PROBLEM WITH GOVERNMENT INTERFERING WITH THE MORMONS RIGHT TO EXERCISE POLYGAMY. SO YOU ONLY HAVE A PROBLEM WITH GOVERNMENT INTERFERENCE WHEN IT INTERFERES WITH YOUR RIGHT TO DEPRIVE A MINORITY OF AMERICANS OF RIGHTS THAT YOU RESERVE FOR YOURSELVES.

AND HOW DO YOU FIGURE MARRIAGE IS A HISTORICALLY RELIGIOUS INSTITUTION? NON-RELIGIOUS PEOPLE BEEN GETTING MARRIED FOR CENTURIES; AND BEFORE MARRIAGES WERE INSTITUTIONALIZED, EVERYONE GOT MARRIED WITHOUT ANY RELIGIOUS ASSISTANCE. IT IS ONLY IN RECENT HISTORY THAT RELIGION HAS IMPOSED ITSELF UPON THE INSTITUTION OF MARRIAGE BY REQUIRING CEREMONIES, AND OF COURSE ... MONEY.

YOU NEED TO GET TO AN ENCYCLOPEDIA AND LOOK UP THE HISTORY OF MARRIAGE BEFORE YOU EMBARRASS YOURSELF FURTHER BY WRITING ARTICLES ABOUT WHICH YOU ARE IGNORANT.

It’s one thing for states to codify standards – like minimum-age requirements – and establish spousal legal benefits. But it’s quite another for government to radically redefine marriage itself. If the government has this kind of authority, couldn’t it just as easily begin to regulate things like religious worship or proselytizing?

SAM, SERIOUSLY, GET OVER TO WIKIPEDIA AND LOOK UP THE LOGICAL FALLACIES. YOU JUST GAVE A PERFECT EXAMPLE OF THE SLIPPERY SLOPE FALLACY.

AND FOR CHRIST'S SAKE SAM, READ THE DAMN CONSTITUTION. RELIGIOUS FREEDOM IS GUARANTEED BY THE FIRST AMENDMENT.

It is a smaller step than we may think from tampering with marriage to targeting people of faith with so-called hate crimes because they publicly uphold moral principles.

SAM, YOU ARE NOT UPHOLDING MORAL PRINCIPLES - YOU ARE ATTEMPTING TO IMPOSE MORAL PRINCIPLES UPON THOSE WHO DISAGREE WITH YOU OR HAVE A LIFESTYLE WITH WHICH YOU DISAGREE.

It is ironic that those who most strongly advocate the separation of church and state will just as strongly advocate the government’s intrusion into an issue that has historically been an issue reserved for religious institutions to bless and define.

SAM, SEPARATION OF CHURCH AND STATE REFERS TO RELIGION KEEPING ITS GRIMY LITTLE HANDS OUT OF GOVERNMENT. IT HAS NOTHING TO DO WITH ALLOWING GHOST WORSHIPPERS TO DEPRIVE OTHER CITIZENS OF THEIR CIVIL RIGHTS.

AND GO BACK TO THE ENCYCLOPEDIA: RELIGIOUS INSTITUTIONS HAVE TRIED TO TAKE OVER CONTROL OF THE INSTITUTION OF MARRIAGE AS THEY HAVE TRIED TO TAKE OVER EVERYTHING ELSE IN OUR LIVES; FROM GOVERNMENT, TO WHAT WE CAN EAT, WHO WE CAN LOVE, WHEN WE CAN WORK, CEREMONIES FOR BIRTH, DEATH, AND BAPTISM, HOW MUCH MONEY WE GIVE, AND EVEN ... WHAT WE MUST THINK.

It is ironic, but not surprising. For we have essentially abolished God and any trace of divine authority from the public sphere.

SAM, WHAT COUNTRY DO YOU LIVE IN? CERTAINLY NOT THIS ONE. YOUR GOD IS EVERYWHERE: AT WEDDINGS, FUNERALS, GRADUATIONS, FOOTBALL GAMES, BEFORE PUBLIC MEETINGS, ETC.

YOU CAN STILL FIND THE TEN COMMANDMENTS DISPLAYED (ILLEGALLY) IN MANY PLACES, AS WELL AS CHRISTIAN CROSSES DISPLAYED ACROSS THE COUNTRY.

IF YOU WISH TO SUBMIT TO THE AUTHORITY OF AN INVISIBLE GHOST, THAT IS YOUR CONSTITUTIONAL RIGHT. BUT YOUR ATTEMPTS TO RAM YOUR BELIEFS DOWN THE THROATS OF NON-CHRISTIANS (WHO MAKE UP ABOUT 25% OF AMERICA) WILL CONTINUE TO BE MET WITH RESISTANCE AS LONG AS WE KEEP THE CONSTITUTION INTACT.

THAT IS WHY CHRISTIAN FUNDAMENTALISTS NEVER STOP ATTACKING IT.

And what has filled the void (for something always fills the void)? Government. It has taken on the role of God, and only too gladly.

SAM, FINALLY YOUR TRUE FEELINGS EMERGE. THAT STATEMENT PROVES YOU WANT TO REPLACE OUR DEMOCRACY WITH YOUR CHRISTIAN THEOCRACY. IF OUR FOUNDING FATHERS WERE ALIVE TODAY, YOU WOULD LEARN PERSONALLY WHAT IS MEANT BY THE TERM "DRAWN AND QUARTERED."

We don’t need God, says the thoroughly agnostic modern man, we have the government – the supreme maker, giver, and sustainer of all things. Praise government, from whom all blessings flow.

SAM, AT LEAST WE CAN SEE THE GOVERNMENT.

IT WAS OUR GOVERNMENT THAT TOOK AWAY YOUR BIBLICALLY SUPPORTED SLAVERY.

IT WAS OUR GOVERNMENT THAT STOPPED YOU PEOPLE FROM STONING OTHERS TO DEATH FOR MINOR RULE INFRACTIONS AND FROM BURNING INNOCENT WOMEN TO DEATH AS WITCHES.

IT WAS OUR GOVERNMENT THAT ALLOWED ALL AMERICANS TO PRACTICE THEIR RELIGIONS FREELY WITHOUT FEAR OF GOVERNMENT INTERFERENCE.

AND IT WILL INTERFERE AGAIN WHEN YOU ATTACK YOUR FELLOW AMERICANS BASED ON NOTHING MORE THAN THE RANTINGS OF ANCIENT, DESERT GOAT HERDERS.

It is this toxic idea that is leading the government to cross the line into modifying and defacing moral law.

SAM, IT IS GOVERNMENT THAT MAKES MORAL LAW; AND OUR LAWS HAVE REPLACED NEARLY ALL OF YOUR BIBLICAL LAWS: THAT'S CALLED - PROGRESS.

And while we are now reveling in our supposed freedom from divine authority,

SAM, ONLY AN ATHEIST CAN UNDERSTAND THE ECSTASY BROUGHT BY FREEDOM FROM DIVINE AUTHORITY. AS LONG AS YOU FEAR THE THREATS OF YOUR INVISIBLE GHOST, THAT IS A FEELING YOU WILL NEVER KNOW.

we may very quickly have to reckon with the more terrible and far less compassionate authority that we have chosen.

SAM, YOUR AUTHORITY, GOD, THREATENS ETERNAL TORTURE FOR FAILURE TO SUBMIT. HOW DO YOU FIGURE THAT THAT IS LESS TERRIBLE AND MORE COMPASSIONATE THAN GOVERNMENT?

After all, the same government that dares to redefine family can redefine faith.

SAM, IT IS NOT NECESSARY TO REDEFINE FAITH. THE CURRENT DEFINITION IS QUITE SUFFICIENT. FAITH IS BELIEF - IN THE ABSENCE OF EVIDENCE.

The same government that can declare a moral wrong to be a legal right can declare a moral right to be a legal wrong.

SAM, YOU BELIEVE HOMOSEXUALITY IS A MORAL WRONG BECAUSE YOU ACCEPT THE MORALS DICTATED BY ANCIENT GROUP OF DESERT NOMADS WHOSE IDEA OF MORALITY INCLUDED STONING, RAPE, AND MURDER.

SOUNDS LIKE YOU'RE THE ONE WHO NEEDS A MORAL ADJUSTMENT.

AND SINCE YOU MENTION IT, OUR GOVERNMENT DID DECLARE A BIBLICAL MORAL RIGHT TO BE A LEGAL WRONG ... SLAVERY.

DIDN'T THINK THAT ONE OUT TOO WELL, DIDJA?

This isn't hypothetical. The history of the 20th century shows that as governments try to supplant God as the source and center of law, they make religion unlawful.

SAM, IN ADDITION TO THAT REFRESHER COURSE IN ESL, I ALSO RECOMMEND A COURSE IN U.S. HISTORY. FOR YOU, AN INTRODUCTORY COURSE SHOULD BE ALL YOU CAN HANDLE.

I THINK YOU WILL DISCOVER THAT DESPITE MAKING THE CONSTITUTION, STATE AND LOCAL LAWS, CRIMINAL LAWS, AND LAWS COVERING ALL ASPECTS OF SOCIAL INTERACTION, THERE HAS BEEN NO ATTEMPT TO MAKE RELIGION UNLAWFUL.

YOUR VAST BREADTH OF KNOWLEDGE IS ... EMBARRASSING FOR A JOURNALIST.

When the government ceases to be the defender of inalienable rights, and begins to dispense and withdraw inalienable rights, it leads to tyranny and slavery – as inevitably as sunrise leads to noon.

SAM, TYRANNY AND SLAVERY. HOW MUCH CLOSER TO CHRISTIANITY CAN YOU GET?

Yet, this is the path we have chosen in our godless age.

SAM, ONCE AGAIN YOU DISPLAY A LACK OF KNOWLEDGE THAT IS JUST BREATHTAKING. ACCORDING TO THE ALMANAC, 75% OF AMERICANS ARE CHRISTIANS, AND 85% BELIEVE IN A GOD. HOW DO YOU DEDUCE FROM THAT, THAT WE ARE LIVING IN A GODLESS AGE?

God only knows where it will end.

SAM, I WILL AGAIN REFER YOU TO YOUR BIBLE WHICH YOU DON'T SEEM TO HAVE OPENED SINCE THE 3rd GRADE.

GOD ALREADY TOLD US WHERE IT WILL END. THE EARTH WILL BE COMPLETELY DESTROYED BY FIRE. BUT YOU DON'T HAVE TO WORRY BECAUSE YOU WILL GET TO GO TO FAIRYLAND AND FLOAT AMONG THE CLOUDS FOREVER WITH YOUR IMAGINARY FRIEND.

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THE SCIENCE SEGMENT

GAS RICH GALAXIES CONFIRM PREDICTION OF MODIFIED GRAVITY THEORY

RECENT DATA FOR GAS RICH GALAXIES PRECISELY MATCH PREDICTIONS OF A MODIFIED THEORY OF GRAVITY KNOWN AS MOND. THIS -- THE LATEST OF SEVERAL SUCCESSFUL MOND PREDICTIONS -- RAISES NEW QUESTIONS ABOUT THE ACCURACY OF THE REIGNING COSMOLOGICAL MODEL OF THE UNIVERSE.

MODERN COSMOLOGY SAYS THAT FOR THE UNIVERSE TO BEHAVE AS IT DOES, THE MASS-ENERGY OF THE UNIVERSE MUST BE DOMINATED BY DARK MATTER AND DARK ENERGY. HOWEVER, DIRECT EVIDENCE FOR THE EXISTENCE OF THESE INVISIBLE COMPONENTS REMAINS LACKING. AN ALTERNATE, THOUGH UNPOPULAR, POSSIBILITY IS THAT THE CURRENT THEORY OF GRAVITY DOES NOT SUFFICE TO DESCRIBE THE DYNAMICS OF COSMIC SYSTEMS.

A FEW THEORIES THAT WOULD MODIFY OUR UNDERSTANDING OF GRAVITY HAVE BEEN PROPOSED. ONE OF THESE IS MOND - MODIFIED NEWTONIAN DYNAMICS, WHICH WAS HYPOTHESIZED IN 1983 BY MOTI MILGROM A PHYSICIST AT THE WEIZMANN INSTITUTE OF SCIENCE IN REHOVOT, ISRAEL. ONE OF MOND'S PREDICTIONS SPECIFIES THE RELATIVE RELATIONSHIP BETWEEN THE MASS OF ANY GALAXY AND ITS FLAT ROTATION VELOCITY. HOWEVER, UNCERTAINTIES IN THE ESTIMATES OF MASSES OF STARS IN STAR-DOMINATED SPIRAL GALAXIES (SUCH AS OUR OWN MILKY WAY) HAD PRECLUDED A DEFINITIVE TEST.

TO AVOID THIS PROBLEM, GAS RICH GALAXIES WERE EXAMINED, WHICH HAVE RELATIVELY FEWER STARS AND A PREPONDERANCE OF MASS IN THE FORM OF INTERSTELLAR GAS. WE UNDERSTAND THE PHYSICS OF THE ABSORPTION AND RELEASE OF ENERGY BY ATOMS IN THE INTERSTELLAR GAS, SUCH THAT COUNTING PHOTONS IS LIKE COUNTING ATOMS. THIS GIVES US AN ACCURATE ESTIMATE OF THE MASS OF SUCH GALAXIES.

USING RECENTLY PUBLISHED WORK TO DETERMINE BOTH THE MASS AND FLAT ROTATION VELOCITY OF MANY GAS RICH GALAXIES, A SAMPLE OF 47 OF THESE WERE COMPARED TO EACH GALAXY'S MASS AND ROTATION VELOCITY WITH THE RELATIONSHIP EXPECTED BY MOND. ALL 47 GALAXIES FELL ON OR VERY CLOSE TO THE MOND PREDICTION. NO DARK MATTER MODEL PERFORMED AS WELL.

MOND VS. DARK MATTER & DARK ENERGY

ALMOST EVERYONE AGREES THAT ON SCALES OF LARGE GALAXY CLUSTERS AND UP, THE UNIVERSE IS WELL DESCRIBED BY DARK MATTER / DARK ENERGY THEORY. HOWEVER, THIS COSMOLOGY DOES NOT ACCOUNT WELL FOR WHAT HAPPENS AT THE SCALES OF GALAXIES AND SMALLER.

MOND IS JUST THE OPPOSITE. IT ACCOUNTS WELL FOR THE SMALL SCALE OF INDIVIDUAL GALAXIES, BUT MOND DOESN'T TELL YOU MUCH ABOUT THE LARGER UNIVERSE.

OF COURSE, ONE CAN START FROM THE ASSUMPTION OF DARK MATTER AND ADJUST ITS MODELS FOR SMALLER SCALES UNTIL IT FITS THE CURRENT FINDING. BUT THIS IS NOT AS IMPRESSIVE AS MAKING A PREDICTION AHEAD OF NEW FINDINGS, ESPECIALLY SINCE WE CAN'T SEE DARK MATTER.

WE CAN MAKE ANY ADJUSTMENT WE NEED. BUT THIS IS RATHER LIKE FITTING PLANETARY ORBITS WITH EPICYCLES. EPICYCLES WERE ERRONEOUSLY USED BY THE ANCIENT GREEK SCIENTIST PTOLEMY TO EXPLAIN OBSERVED PLANETARY MOTIONS WITHIN THE CONTEXT OF A THEORY FOR THE UNIVERSE THAT PLACED EARTH IN ITS CENTER.

IF WE'RE RIGHT ABOUT DARK MATTER, WHY DOES MOND WORK AT ALL? ULTIMATELY, THE CORRECT THEORY -- BE IT DARK MATTER OR A MODIFICATION OF GRAVITY -- NEEDS TO EXPLAIN THIS.

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FAMOUS QUOTES

WERNER HEISENBERG (1901 – 1976) 74 YEARS.

HE WAS A GERMAN THEORETICAL PHYSICIST WHO MADE FOUNDATIONAL CONTRIBUTIONS TO QUANTUM MECHANICS AND IS BEST KNOWN FOR ASSERTING THE UNCERTAINTY PRINCIPLE OF QUANTUM THEORY. IN ADDITION, HE MADE IMPORTANT CONTRIBUTIONS TO NUCLEAR PHYSICS, QUANTUM FIELD THEORY, AND PARTICLE PHYSICS.

HEISENBERG, ALONG WITH MAX BORN AND PASCUAL JORDAN, SET FORTH THE MATRIX FORMULATION OF QUANTUM MECHANICS IN 1925. HEISENBERG WAS AWARDED THE 1932 NOBEL PRIZE IN PHYSICS FOR THE CREATION OF QUANTUM MECHANICS, AND ITS APPLICATION ESPECIALLY TO THE DISCOVERY OF THE ALLOTROPIC FORMS OF HYDROGEN.

FOLLOWING WORLD WAR II, HEISENBERG WAS APPOINTED DIRECTOR OF THE KAISER WILHELM INSTITUTE FOR PHYSICS, WHICH WAS SOON THEREAFTER RENAMED THE MAX PLANCK INSTITUTE FOR PHYSICS. HE WAS DIRECTOR OF THE INSTITUTE UNTIL IT WAS MOVED TO MUNICH IN 1958.

"WHAT WE OBSERVE IS NOT NATURE ITSELF,

BUT NATURE EXPOSED TO OUR METHOD OF QUESTIONING."