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"Because it is not true federalism. It is a perversion of federalism. Under true federalism, there are things that the federal government does and there are things that the states do. Both are to be sovereign in their own realms. That is being lost, as states are being turned into mere administrative units of the national government. The federal government currently provides nearly $700 billion in subventions to state and local governments. Arizona state government will receive more than $15 billion in federal funds this year, roughly 40 percent of everything the state will spend from all sources.

This sending money to Washington to be returned with strings attached and a carrying fee deducted is wasteful and blurs political accountability. A truly federalist approach would return regulation of the individual health insurance market to the states. And let the federal government adopt a stand-alone safety net for the chronically and seriously sick."

– Robert Robb, "Attacks on the GOP health care bill are nonsense, but it's still a bad idea," The Arizona Republic Opinion, reprinted in USA Today, September 26, 2017 [1]

Relative or Zero Sum?: Sovereignty is generally defined as 'freedom from external control.' To the extent that anyone is dictating to you how or when to do things, under threat of force or other punishment for non-compliance, or a moral-social obligation to comply, you are not sovereign. It is the *a priori* of sovereignty. A post, privilege or place that is assigned or given to you can be revoked; hereditary nobility or title systems seek security against this. Thus, sovereignty is a relative matter, we each surrender parts of our personal sovereignty for the benefits of civilization. But it is also a zero-sum matter, the loss of sovereignty by one is an equal gain by another.

✓ See sovereignty discussion top of 2 Government Titles, p. 586 *et seq.*, *infra*.

"You should never hand someone a gun unless you are sure where they will point it. Your mistake."

– Commander Sinclair, Babylon 5, "By Any Means Necessary" (1994) [2]

Exercise in Vital Powers: *The primary quality of any government is its authority and ability to act.* Consider a government that has the authority to act, but not the ability. Or a government that has the ability to act but not the legitimate authority. Effective government requires both and there is no substitute.

✓ Rhetorical Questions: Which comes first, does authority create legitimacy (as in a territory held by a warlord) or does legitimacy create authority (as in eras when the Church granted legitimacy)? And which one creates the ability to act?

The various areas of authority which governments traditionally exercise over their societies are divided in this game into twelve Vital Powers or hereafter, "Powers," which collectively, can be considered the elements of sovereignty.   Each position may, each Regular Turn, activate *one Power for each currently undisrupted Government Title*. A position may have up to five Government Titles, meaning that each position could potentially activate five of the twelve Powers (40% of the possible Powers) each Regular Turn.

✓ Placing Acts and Scenes to activate Powers represents *potentials*, like mobilization.

✓ Most positions will have five Government Titles, all positions must have three Government Titles. Experienced players will discover that there are some advantages to having less than five Government Titles, but that is for a later time.

Activating a Power allows the position to issue Regular Turn Actions for and do the purposes that are specific to that Power as described in later rules sections. The actions which may be taken by activating a Power are called "purposes"; some Powers have only one purpose while others have many purposes to the Power Activation. When activating a Power that has multiple possible purposes, the position must specify for which purpose the Power is being activated.

✓ *Except for Census and Taxation*, the same Power may be activated multiple times in a Regular Turn, for the same or different purposes.

Following is a brief description of the Vital Powers:

➢ Taxation: The Taxation Power represents the ability and need of societies to pool their resources in one or more centralized authorities in order to achieve their (greater) purposes (like building pyramids, maybe). In the game, the Taxation Power is used to collect Resource Points (RPs) from the colonies into the Treasury for use in other Power Activations. Taxation is a Power that has only one purpose.

➢ Census: The Census Power is to insure the survival of the species by protecting and nurturing the next generations. In the game, the Census Power, when activated, 'causes' population growth on all Friendly and Naturalized Colonies. It is not that it actually 'causes' population growth, which is really happening all of the time, but rather, that in taking the Census (like a real world census), ongoing population growth is realized and added to the colony's population factors. The Census Power is a Power that has only one purpose.

✓ Were our pets to become fully sapient – as in fantasy stories and in some science-fiction-imagined futures (e.g., the dog in Geneshaft who typed teletext messages on the PC) – don't expect them to volunteer to be spayed/neutered, even if they can understand the overpopulation problem.

➢ Culture: The Culture Power of governments is to preserve, guide, and encourage cultural development and identities. This is an interactive process since the culture determines what kind of government it finds acceptable and the government, by its actions, affects the culture that created it. The Culture Power is activated for the purposes of Exposing Aspects, Perfecting Proficiencies, Cohering, Introducing Writs, Founding and Endowing Colleges, Amending Charters, and establishing Doctrinal Templates, all of which will be explained in detail later.

➢ Order: The Order Power is the responsibility of governments to prepare for and recover from disruptions, hold back entropy, and to maintain the internal order (boundaries), a combination of civil defense, social welfare, police, and security forces. The Order Power must be activated for the purposes of Declare/Move Capital Colony, Conversion/Naturalization of a conquered **alien colony**, Maintenance (against Entropy) and Government Formation.

➢ Construction: The Construction Power, as the name suggests, is the Power of a government to construct vessels (in this case, starships), build defenses, and encourage the development of industry. It is the authority and responsibility to create infrastructure; starships, as the primary means of maintaining contact between colony planets and imposing order, are part of

the infrastructure of interstellar civilization (like roads, horses, wagons, automobiles, aircraft on Earth). The Construction Power must be activated for the purposes of Colony Enhancement, Colony Defenses Upgrade, Laying Keel, Shipbuilding, Ship Supply, and Scrapping.

➢ Technology: The Technology Power is the prerogative to encourage or carry out technological research and insure that new generations of scientist, technicians, and inventors continue the endeavor. The active Technology Power is the mark of a modern technological society (modernity) more so than the traditional society, and since it is technology that makes the entire game setting possible, it becomes the essential power. The Technology Power is activated for the purposes of Research, Development of Applications, and Patent Prosecution.

  ✓ The recognition of technology as a 'thing' (or phenomenon) onto itself in our civilization, is very recent. The word 'technology' wasn't coined until 1859, arguably it relates to the beginning of the Industrial Revolution, the Age of Invention, and the modern scientific era (similar to the development of Geology). While we might use terms like "medieval technology," it is not certain that the people of the Middle Ages (anywhere in the world) would have thought of themselves as possessing "technology" (they also didn't think of themselves as 'medieval,' that they were living in the 'Middle Ages,' their system as 'feudal,' or their castles or love as 'romantic,' more on that later). It is an example of how civilization reorganizes concepts, prior to 1859, for example, Thomas Jefferson referred to them as "ingenious improvements" (see Thomas Jefferson feature quote, top of 1 Patents, p. 726, *infra*).

➢ Movement: The Movement Power is the authority to control movement within the Galactic Space controlled by the government. Since ships create and rule the interstellar civilization, the power of Movement is the power to send ships from star to star to keep interstellar civilization connected and controlled. The Movement Power has only one purpose, to begin the movement of starships between two starsystems colonized by the owner of the starships.

➢ Expansion: The Expansion Power is to explore, find resources and living spaces, and establish new colonies on suitable planets found there. The Expansion Power is activated for the purposes of 'Looking' for new stars (you will understand this later), Scouting (aka exploration), Loading Population, Transporting Population, Unloading Population (to existing colonies), and Landing Population (to establish new colonies).

➢ Combat: The Combat Power is the prerogative to use military force externally to attack and defend territories, and to prepare for military action. The defender in a combat is not required to activate the Combat Power to defend, local defense is automatic. The Combat Power is activated for the purposes of Combat Movement, Combat Alert, Initiate Combat, and Seize the Initiative. "It was uh, attitude adjustment..." – Hank Williams, Jr., 1984.

  ✓ It is very important to pay attention to the number of Acts and Scenes required in advance of each Power Activation (as detailed in each section and on Appendix PAT1), poor planning and half-measures leaves a position flatfooted; e.g., after delaying, Norway finally sent out the national mobilization order by post on April 9, 1940 – equivalent to putting one Act on the Combat Power! The invasion started that day.

➢ Diplomacy: The Diplomacy Power represents the outward face of the civilization. The Diplomacy Power is activated for the purposes of making or breaking a Treaty, issuing Articles

of Incorporation to form a MegaCorporation with other positions, and to form and share Meanings (an Interpretation).

➤ Commerce: The Commerce Power represents the controls over the economic wellbeing of the civilization, and more specifically, domestic and foreign trade and the movement of resources. The Commerce Power is activated for the purposes of Marketing, Loading Resources and Unloading Resources from Cargo Ships, Trade Missions (departure of Cargo Ships to another starsystem), local Trucking and Carting (in-system) transactions, and issuing Articles of Incorporation to domestic Corporations.

➤ Special Operations: Well, this shouldn't need much explanation ... you know ... but just in case it does, Special Operations is the Power of governments to recruit and train secret forces to carry out double-double-super-secret missions (like the silly password you had to say to get into the boys-only treehouse club when you were in 3rd grade or like the silly passwords you use today to log into your computer and every place on the internet – the two are really the same game) for which governments maintain 'plausible deniability' should anything go wrong on the mission. The Special Operations Power will be activated for the purposes of Reconnaissance, Recruiting Missions, Lodging Missions, Black-ops, Treason, Training Counter-Operations, and Counter-Operations.

➤ Slice of the Pie: As mentioned many times in GGDM, it depends on how you choose to slice the pie. I chose to have twelve Vital Powers to represent sovereignty in the game, and the results were agreeable (to an English speaker) in that twelve was the number sufficient to cover all areas important to the game. A designer from a non-English speaking country may have chosen ten Vital Powers, as ten is a number natural to all humanity due primarily to the fact that nearly everyone is born with five digits (i.e. fingers and toes) at the end of each limb (it is the reason for our base-10 counting system).

"The Bible teaches us how to go to heaven, not how the heavens go."

– Galileo Galilei

Cardinal Baronius: This was probably first said by Cardinal Caesar Baronius to Galileo Galilei in a conversation and the latter wrote it down later in a letter. It is thus that Galileo is popularly credited with the statement – it happens to all of us – but it is important that both of these eminent men shared a love for truth and facts, both within the Church (for the former) and ultimately, in contradiction to Church dogma (the latter). Caesar Baronius is credited with one of the best, early, and very honest attempts to write a history of the Church, *sans theology*.

So, I wondered recently, what do Christian Fundamentalist (or creationist at least) think of the discovery of exoplanets in the last few years? Does it trouble them, does it suggest evolution of life on other planets? I can see the pie being sliced either way; if creationist are narcissistic, old line dogmatic and such, they may believe that man is God's special creation and the purpose of the universe and as such, the existence of exoplanets is a threat to their beliefs. There were Jehovah's Witnesses who came to my grandmother's house telling her that we never landed on the moon and it was all a myth, a conspiracy.

✓ Exoplanets are the sidereal stages, they are where Scenes are placed!

It seems however, from a sampling of websites, that even Christian Fundamentalist have been pulled along with the times (with Christian literalist kicking, whining and screaming loudly):

✓ "For Christians, finding our future in the stars can appear misguided, but it is not – as long as Christians can separate eschatological fervor from practical science and understand God's plan for creation. ...

When God created the world and saw that it was good, it wasn't just the Middle East or the Old World, but all of creation – the entire universe. Exoplanets such as those in the TRAPPIST-1 system are really no different than Antarctica or the depths of our ocean – parts of creation that are still to be explored. Indeed, they are simply further into the horizon than humanity has yet traveled.

Even if our world is on the cusp of a technological singularity, travel to other planets is still a far off possibility for the immediate future. Exoplanets are on our horizon but are merely a tiny shadow in front of something much greater. If humanity gets to the TRAPPIST-1 system one day, as a natural extension of exploring the world that God created, it will be good. In the meantime, there is no shortage of creation to explore within our reach." – Douglas Estes, "The Exoplanets Declare the Glory of God – TRAPPIST-1 is not our new home. The Creator declared it good anyway," Christianity Today, March 14, 2017.

Of the three samples offered here, from 2014, 2017, and 2018, Mr. Estes' 2017 comments (*ut supra*) are the most pragmatic and even optimistic assessment by a Christian writer. It is interesting that he mentioned the technological singularity, and he impliedly chastises certain Fundamentalist and Literalist elements ("as long as Christians can separate eschatological fervor from practical science") for having their heads in the sand.

✓ "In my last three blogs I described the inevitable climate instabilities that occur on Earth as a result of subtle variations in Earth's rotation axis tilt and shape of its orbit about the Sun. For the first time, astronomers are paying serious attention to how similar variations affect the possible habitability of planets beyond our solar system. These studies are revealing extraordinarily fine-tuned design features in the solar system – and Earth in particular – that make Earth habitable not only for life, but also for animals, human beings, and global human civilization. ...

[Russell] Deitrick [University of Washington] and his team do not discuss what their research implies about Earth's habitability. Their excellent work shows that the fine-tuning designs that have made Earth continuously habitable for 3.8 billion years of abundant, diverse life, and has made possible the existence of a large population of human beings enjoying global, high-technology civilization, has been grossly underestimated by most scientists. Their research adds to the already overwhelming scientific evidence that a supernatural, superintendent Creator personally designed Earth for the specific benefit of life and of human beings in particular." – Hugh Ross, "Exoplanets' Climate Instabilities Reveal Earth's Fine-Tuning," Reasons to Believe (reasons.org), July 30, 2018.

Mr. Ross has fallen into the anthropic puddle. Douglas Adams told a story of a puddle at Digital Biota 2 that specifically refuted, and pointed out the danger of this smug sort of thinking. See the In Our Puddle discussion, 1 Entropy, p. 231, *infra*. In the words of Carl Sagan, Mr. Ross has

confused cause with effect. See also additional related Douglas Adams quote and Children & Puddles discussion, 3 Technology, p. 720, *infra*. It is probable that Mr. Ross is repeating an argument that was making the rounds at least in the 1960s, since both Sagan and Adams refuted it.

- ✓ "Other astronomers are reluctant to abandon the old nebular hypothesis, even though it has numerous problems of its own. For instance, particles in a dust disk less than a kilometre in diameter do not accrete; they disrupt. Any 'planetesimals' (small bodies thought to be growing into planets) must grow fast enough to clear out a path in their orbits before inward migration sets in. Both theories, therefore, require rapid formation of planets.

  The 'bottom-up' theories of evolutionists have effectively been falsified. For this reason, creationists should defend a 'top-down' model of planet formation. Believers in God should not be surprised that God created stars with orbiting bodies from the beginning. The top-down model is supported by the principles underlying the Second Law of Thermodynamics, which reveal a relentless tendency for things to become more disordered over time. That is exactly what we see: stars and planets winding down and wearing out. Some stellar dust disks that were thought to be forming planets are now believed to be the ruins of destructive collisions. If it were not for God's unique design and care for our earth, it would not long survive.

  Because evolutionists desperately want to prove that the origin and evolution of life is common in the universe, the search for habitable planets has intensified. Once again, though, the observations point to earth-like planets being extremely rare. At this time, the Planetary Habitability Laboratory website lists only one earth-size planet candidate from Kepler data out of thousands. Another 48 are labelled 'potentially habitable exoplanets,' but these are all in the 'super-earth' category: much larger than earth, which creates additional habitability issues. ...

  After 50 years of failure, some SETI people still scan the skies for alien radio messages. It's highly doubtful, however, that any such indicator of intelligence will be received in the foreseeable future.

  Let's suppose that, against all odds, they do find life. What would it mean for biblical interpretation? It depends on the type of life discovered. Intelligent life is ruled out, because we know from Heb. 9:24–26 that Christ died for sins once, and only once – for the sins of humanity. He did not have to 'suffer repeatedly since the foundation of the world' (i.e., the universe). Nowhere in Scripture is there any hint that Christ became incarnate for the sins of any other beings. For this reason, it is highly unlikely that alien intelligence (as opposed to fallen angels impersonating aliens) will ever be found. But what about non-sentient, e.g. microbial, life? Though one cannot rule it out, it is highly unlikely that this exists, either. All of creation seems focused around mankind on earth, and the plants and animals are part of our life support system.

  All life is intelligently designed. Only humans are made in the image of God, have fallen into sin, and are in need of salvation. Christ Jesus provided grace uniquely to humans by His death on the cross and His glorious Resurrection. Unverifiable speculation about life on other planets may be fun, but in the end, it is futile. We can know for sure what we need to know: that God has provided for our physical and spiritual

needs on our superbly designed planet." – David F. Coppedge, "Extrasolar planets: a challenge to biblical cosmology?" Creation 36(3):42–44, July 2014 (creation.com).

In this review, I was only looking to the expressed or apparent attitude of the author toward exoplanets, and to some extent, intelligent life elsewhere. The first two authors quoted above, included extensive science to which was attached at the end a discussion of Christian implications. Mr. Coppedge, quoted above, also included science, but in a derisive way that probably is deceptive or could be challenged as misrepresentative; there were also a few other eye-rolling statements, but the author's overall approach to possible exoplanets was not 'negative,' if guarded.

✓ Admittedly, I quoted more of Mr. Coppedge's article than I originally intended. Perhaps as a demonstration, perhaps out of a misplaced sense of inclusiveness and fair representation. 'N all dat.

"It is not improbable, I must point out, that there are inhabitants not only on the moon but on Jupiter too, or (as was delightfully remarked at a recent gathering of certain philosophers) that those areas are now being unveiled for the first time. But as soon as somebody demonstrates the art of flying, settlers from our species of man will not be lacking. Who would once have thought that the crossing of the wide ocean was calmer and safer than of the narrow Adriatic Sea, Baltic Sea, or English Channel?

Given ships or sails adapted to the breezes of heaven, there will be those who will not shrink from even that vast expanse. Therefore, for the sake of those who, as it were, will presently be on hand to attempt this voyage, let us establish the astronomy, Galileo, you of Jupiter, and me of the moon."

– Translated by Edward Rosen (1965), Kepler's Conversation with Galileo's Sidereal Messenger (1610), p. 39 [3]

Endnotes.

[1] Commentary: That is, state and local politicians can get the money they need from Big Brother without being held locally accountable for raising taxes to get the money. The big, distant Federal Government does the taxing, higher up politicians take the blame for raising taxes, and then the money is returned through subventions with strings attached. And local politicians can say, "Hey, it's the rules, we didn't make them, but we have to play by them." This is the blurring of political accountability referenced by Mr. Robb.

✓ Sovereignty is ultimate responsibility and about taking ultimate responsibility to go with the power (i.e. "the buck stops here" – Pres. Harry Truman's desk sign and U.S. Attorney General Janet Reno after Waco); the less responsibility you have, the more so your sovereignty is degraded.

[2] Commentary: Commander Sinclair was given authority by the Earth Senate to end the dock worker's strike "by any means necessary." It was expected that he would use force, but instead, he used the "by any means necessary" language to divert funds to improve safety and work hours for the workers. The Earth representative was ☹.

[3] Citation: "*(Galileo) Galileo, (Galileo) Galileo, Galileo figaro magnifico!*" (sing it in high falsetto!)