

THE EMBLEM OF THE GALACTIC EMPIRE



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1. The Sun and Cogwheel

In his story “A Slave is a Slave”, H. Beam Piper reveals the emblem of the First Galactic Empire. When representatives of the Empire, led by Prince Jurgen Trevannion, annex the planet Aditya, they sit “under a canopy of black and gold velvet, emblazoned with the gold sun and superimposed black cogwheel of the Empire.”¹ In a video recording to the Adityans, welcoming them into the Empire, the Galactic Emperor Rodrick III refers to the Imperial symbol as “the Sun and Cogwheel.”² These forms are repeated in “Ministry of Disturbance”, which is set about 900 years later. The Thoran bodyguard of Emperor Paul XXII “wore helmets, emblazoned with the golden sun and superimposed black cogwheel of the Empire”, and Prince Yorn Travann “was at his desk, the Sun and Cogwheel of the Empire on the wall behind him”.³

Another example is “the three secretary-robots, their rectangular black cases blazoned with the Sun and Cogwheel of the Empire.”⁴ Flags are rectangular, too, suggesting that the gold sun and black cogwheel are displayed on a black field. The flag of the First Galactic Empire should therefore look something like this.

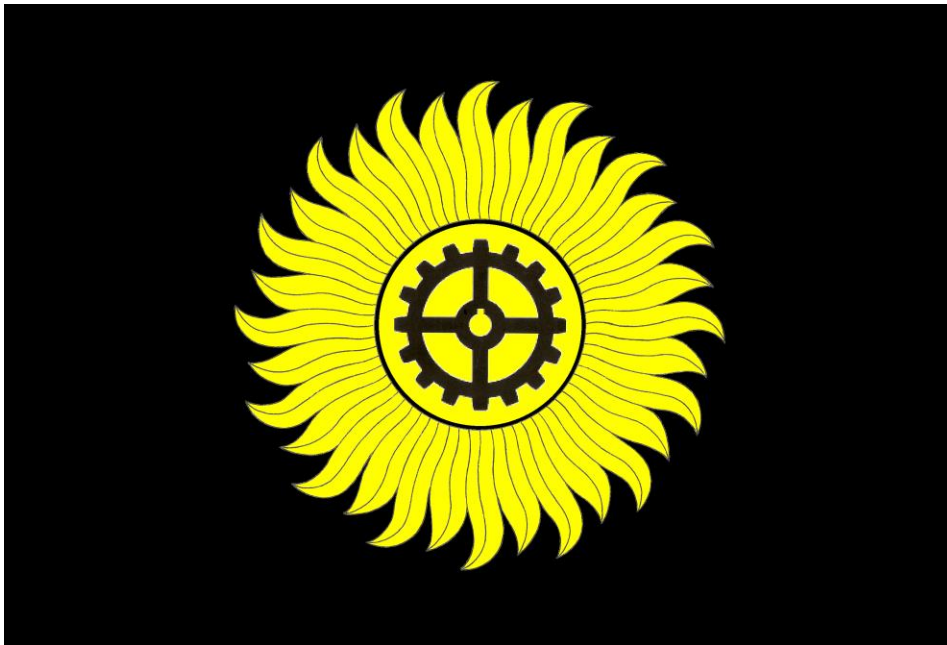


Figure 1. Postulated version of the Sun and Cogwheel, emblem of Piper's First Galactic Empire.

2. The Spaceship-and-Sun

Piper's use of a Sun suggests that the emblem of his First Galactic Empire was inspired by the emblem of Isaac Asimov's First Galactic Empire. Mentioned numerous times in the classic Foundation trilogy, Asimov's First Empire employs “the Spaceship-and-Sun”.⁵ Matching Beam's order, Isaac puts the sun first at least once, calling it “the Sun-and-Spaceship”.⁶ The most descriptive version is given by Hober Mallow. “The golden globe with its conventionalized rays, and the oblique cigar shape that was a space vessel. The Spaceship-and-Sun of the Empire!”⁷

The words “cigar shape” mean that Asimov's conception was the common one of the time; the “cylindrical/ogive shape [that] was the one, truly accurate, scientific shape of the Spaceship of the future.”⁸ This style of rocket ship originally appeared in the 1930s, and by the 1950s had become the classic “Golden Era” Spaceship.⁹ Several covers of *Astounding Science Fiction*, in which the Foundation stories first appeared, illustrate the concept. The April 1945 issue (“Dead Hand”; later “The General”), and the January 1948 issue (“Now You See It”; later “Search by the Mule”). (Figure 2.) The former cover presumably shows a large black ship of the Galactic Empire

surrounded by smaller red ships of the Foundation; possibly Independent Traders. The latter cover seems to depict a spaceship landing on the cold planet Rossem.



Figure 2. Classic rocket ships on the covers of *Astounding Science Fiction*; April 1945 and January 1948. ¹⁰

Confirmation is provided by Asimov's description of Kalgan Spaceport. "There is nothing, never has been anything, quite like a busy spaceport on the outskirts of a capital city of a populous planet. There are the huge machines resting mightily in their cradles. If you choose your time properly, there is the impressive sight of the sinking giant dropping to rest, or, more hair-raising still, the swiftening departure of a bubble of steel." ¹¹ I always pictured these cradles as being vertical rather than diagonal, but together, the following covers show the general idea.

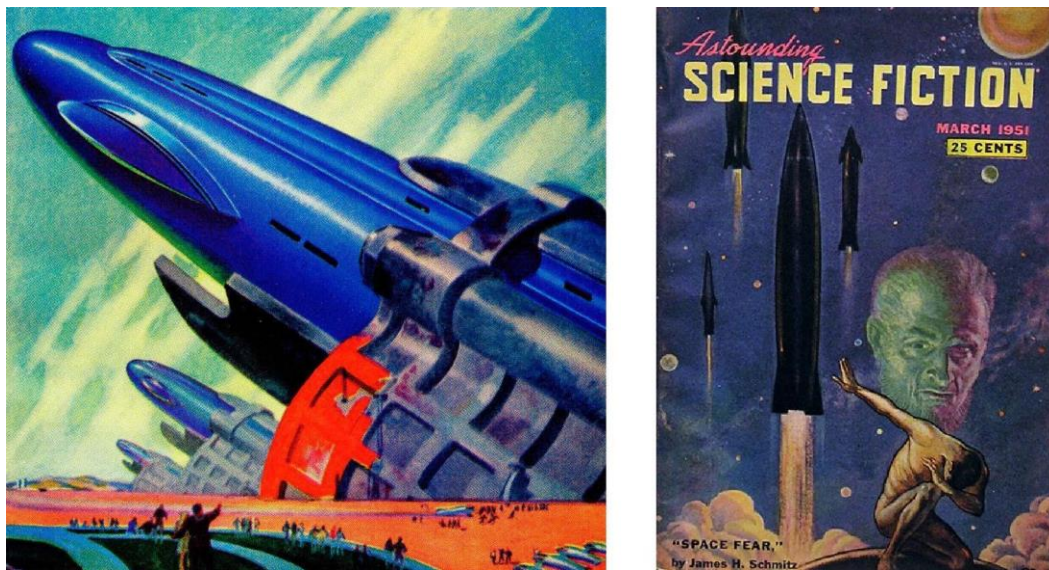


Figure 3. *Astounding Science Fiction* covers depicting spaceship cradles, and vertical launches. ¹²

Asimov apparently never specified, but on a flag the golden Spaceship-and-Sun is most likely displayed on a black field, representing outer space.¹³ Of the placement of the “oblique”, or diagonal, spaceship, my mental image has always had it emblazoned directly across the sun.

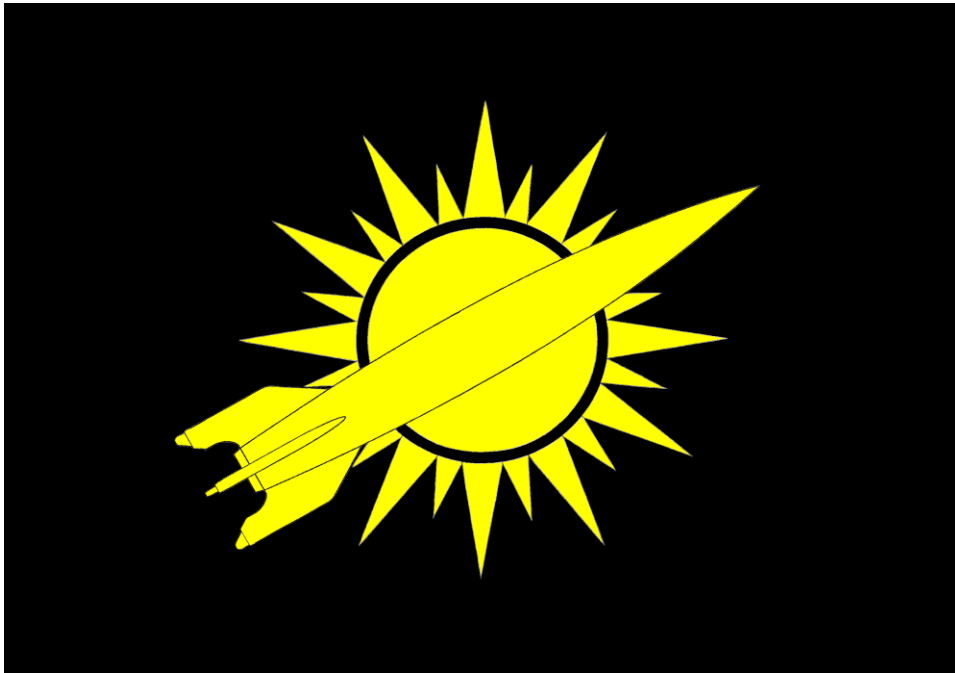


Figure 4. Postulated version of the Spaceship-and-Sun, emblem of Asimov's First Galactic Empire.¹⁴

I felt compelled to draw my own, because although research provided several pictorial examples of the Spaceship-and-Sun, none fitted Asimov's description. For example, the cover of the Ace Double edition of *Foundation* (called *The 1,000 Year Plan*) had a black winged rocket—actually, it looked more like a U2—across a red sun on a white disk. Or maybe it was a red disk on a white sun. At any rate, the paperback cover of *Prelude to Foundation* at least had a gold sun, but this rather resembled a hubcap, and instead of a rocket, there was a silver *Star Trek*-like chevron. Moreover, the chevron was only slightly oblique. Then I found one of Asimov's Galactic Empire novels; *The Stars, Like Dust*. The cover of the original 1951 edition shows this image.



Figure 5. Cover of *The Stars, Like Dust*, and reversed closeup of central image.

Simply an interesting coincidence? It is much more likely that others have gained the same impression of the Imperial emblem as I have. If one of them was H. Beam Piper, then the symbol could also have been the inspiration behind his emblem for Aditya in "A Slave is a Slave". "There were more troops where the corridor ended in great double doors, emblazoned with a straight broadsword diagonally across an eight-pointed star."¹⁵ Like the Spaceship-and-Sun, my mental picture has always had the sword running from lower left to upper right; hilt below, point above.

That there is a relationship between these emblems is supported by the planetary colors of Aditya, which are the same as those of Piper's First Galactic Empire, and by probable extension, Asimov's First Galactic Empire. Prince Trevannion observes that the Lords-Master of Aditya "all wore black, trimmed with gold; he wondered if the coincidence that these were also the Imperial colors might be useful."¹⁶

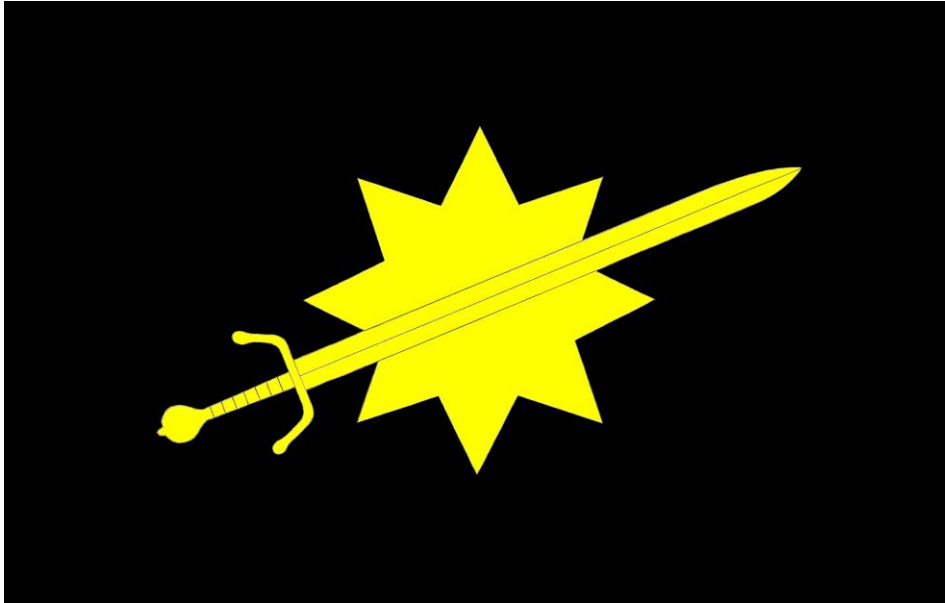


Figure 6. Postulated version of the gold sword and star, emblem of the Mastership of Aditya.¹⁷

Assuming that Beam was modeling Asimov, then for the emblem of Aditya, he replaced the Sun with a Star (essentially a sun without the central circle), and the diagonal Spaceship with a diagonal broadsword (roughly the same shape). Thus, what "might be useful" is to put these symbols together, because we find that there may be no "coincidence" involved. Piper probably knew exactly what he was doing, and the reference was an inside hint to that effect.

That he had Asimov in mind when writing "A Slave is a Slave" is easily proven. One of Isaac's memorable phrases from *Foundation* is "violence is the last refuge of the incompetent", an oft-repeated epigram invented by Mayor Salvor Hardin.¹⁸ And in his story, Beam gives a wryly sardonic reply through Prince Trevannion. "Count Erskyll said nothing for a moment. He was opposed to the use of force. Force, he believed, was the last resort of incompetence; he had said so frequently enough since this operation began. Of course, he was absolutely right, though not in the way he meant. Only the incompetent wait until the last extremity to use force, and by then, it is usually too late to use anything, even prayer."¹⁹

In contrast to Asimov's characters, Piper's characters actually apply violence as a *first* resort, in order to save lives and avoid unnecessary destruction. When explaining the reason for the forceful annexation of Aditya, Commodore Shatrak elaborates the point. "You see, Count Erskyll, we really had to do it this way, for their own good...What we did, we just landed suddenly, knocked out their army, seized the center of government, before anybody could do anything. If we'd landed the way you'd wanted us to, somebody would have resisted, and the next thing, we'd

have had to kill five or six thousand of them and blow down a couple of towns, and we'd have lost a lot of our own people doing it. You might say, we had to do it to save them from themselves.”²⁰

So the emblem of Asimov's First Galactic Empire seems to have inspired Piper's emblem for *his* First Galactic Empire, plus that of the planet Aditya, annexed by the very same Empire. Putting the derivation another way, Beam simply separated the Sun from the Spaceship, giving the former to his own Empire, and the latter (in the form of a sword) plus some 'rays' to Aditya.

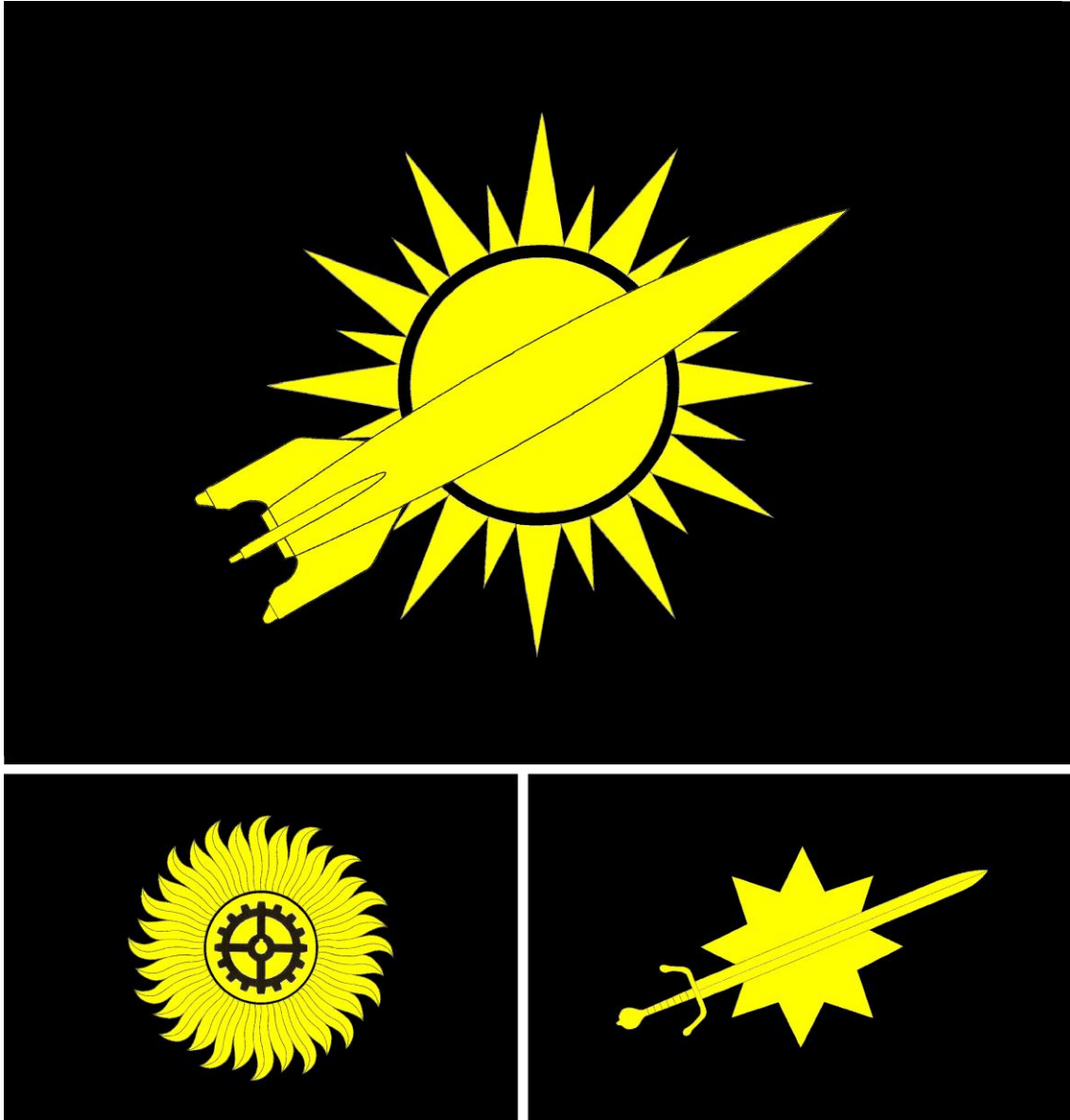


Figure 7. Possible derivation of Piper's emblems from Asimov's.

Now, in comparing the emblems of the two Galactic Empires, the Sun is obviously the common element, but why did Piper replace Asimov's Spaceship with a Cogwheel? Several possibilities come to mind. First, it is round, like Beam's interplanetary and interstellar spaceships, which are never cigar-shaped, but always spherical.²¹ In his universe, the Spaceship-and-Sun emblem would be a round spaceship on a round sun. Second, cogwheels are found in engines, and a spaceship—whatever its shape—is useless without an engine to

propel it. And third, the cogwheel is a symbol of industry, and spaceships are produced by aerospace industrialists.

Although the Spaceship represents the essential 'link' of an interstellar civilization—or as Asimov puts it, “the technological mesh that knits the spaceways”²²—cogwheels are a more all-encompassing symbol, being also essential for the planet-based activities of such cultures. The cogwheel might then be a reduction of the spaceship, and the civilization which produced it, to their basic element; a less-glamorous but more meaningful symbol, and hence an intended improvement by Piper on Asimov's emblem.

However, there seems to be another source, which may reveal Beam's true line of reasoning.

3. The 'Pen and Cogwheels'

On 9 November 2006, I saw some old science-fiction pulp magazines for sale on Ebay. One was the March 1929 issue of *Amazing Stories*, and the cover, which depicted one of the first appearances of Anthony “Buck” Rogers, bore an emblem in the corner.

This was a badge or shield in the shape of a rounded triangle, the top two sides of which form an arch of girders. As if looking out of a hanger, the scene within this triangle is a bit of ground beneath a starry sky. In the sky up near the top of the arch are Saturn and a crescent moon. But in the center of the badge is a large green cogwheel, with five lightning-shaped spokes, and twenty-four teeth. Actually, there are three cogwheels, for two smaller ones flank the main. These are *black* cogwheels, and in *gold* letters bear the names “Fact” and “Theory”. A rod connects the Fact cogwheel to a large stylus, which is in the foreground, and bisects—not quite straight but *obliquely* or *diagonally*—the main cogwheel. At the bottom of the badge, the stylus spells out “Scientifiction” in script form. (Figure 8, left image.)



Figure 8. 'Pen and cogwheels' logo from the cover of *Amazing Stories*, September 1920, and sun and planet gear.²³

The stylus and cogwheels in the *Amazing Stories* emblem may actually constitute what is called a “sun and planet” gear. (Figure 8, right image.) “[Sun and planet gearing](#) was a method of converting [reciprocating motion](#) into [rotary motion](#) in [steam engines](#). It was famously used by [James Watt](#) on his early steam engines in order to get around the patent on the [crank](#). In the illustration, the sun is yellow, the planet red, the reciprocating arm is blue, the [flywheel](#) is green

and the [driveshaft](#) is grey.”²⁴ Since the *Amazing* emblem has two subsidiary cogwheels rather than one, it could be referred to as a ‘sun and planets’—or solar system—gear. Perfectly appropriate, given the subject matter of the magazine.

The big cogwheel is not named, but it might be ‘Imagination’. The *Amazing Stories* badge would then show that the engine or ‘gear’ generating sun-and-planets based science fiction is an author’s pen powered partly by the small cogs of fact and theory, but mainly the large cog of imagination. And since the central symbol is this gear, the *Amazing* emblem could be called the ‘Pen and Cogwheels’. Not far from a Sun and Cogwheel.

Thus, the apparent answer is that Piper created the emblem of his ‘First’ Galactic Empire as a dual tribute to Asimov’s First Galactic Empire and *Amazing Stories*, which appears to have been the ‘first’ true science fiction pulp magazine. As John Carr says, “Science fiction only really came into its own in the late 1920s with the first of [Hugo] Gernsback’s pulps, *Amazing Stories*. Within a few years, science fiction magazines were multiplying like rabbits, and Piper got his introduction at the local newsstand and drugstore.”²⁵ *Amazing Stories*, or the pulps in general, were where both Asimov and Piper got their start; first by reading them, and later writing for them, in the genre Gernsback called “scientifiction”, but which was superceded by Campbell’s “science fiction”.

The pulps were also where both Isaac’s First Galactic Empire (the Spaceship-and-Sun), and Beam’s First Galactic Empire (the Sun and Cogwheel) made their first appearance. Although not in *Amazing Stories*, all of Asimov’s original Foundation tales appeared in *Astounding Science Fiction*; starting in May 1942 with “The Encyclopedists”, to “...And Now You Don’t” (“Search by the Foundation”) in November-December 1949.²⁶ Likewise, Piper’s “Ministry of Disturbance” was also published in *Astounding*, the December 1958 issue; while “A Slave is a Slave” appeared in its renamed successor, *Analog Science Fact—Science Fiction*, April 1962.²⁷

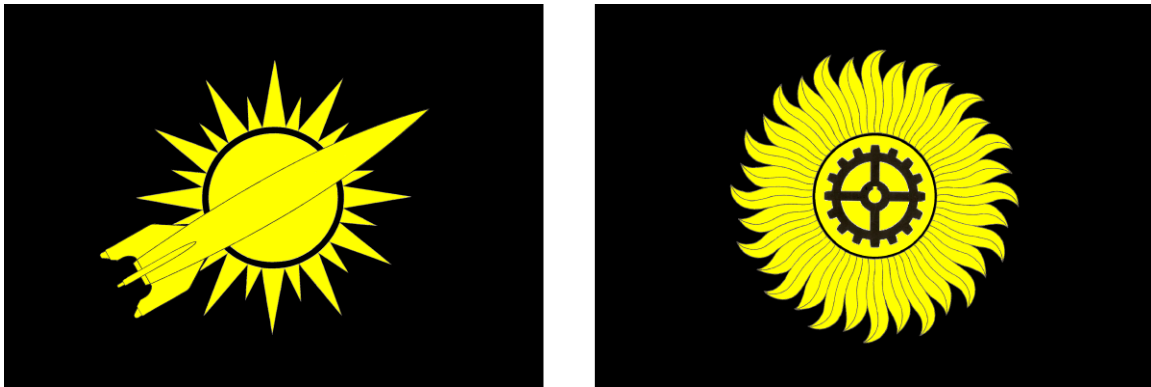


Figure 9. Flags of the “Astounding” First Galactic Empires; Spaceship-and-Sun and Sun and Cogwheel.

For my version of Piper’s Sun and Cogwheel emblem, I decided on a complementary approach. In Figure 8, the ‘sun’ cog in has six spokes, the *Amazing Stories* main cogwheel has five, so the one I used has four. The four black metal spokes parallel a German-style iron cross, symbolizing the ‘Germanic’ element of the Mardukan Empire (see **Imperial Black and Gold**, below), which becomes the Galactic Empire. The four spokes also echo the emblem of the League of Civilized Worlds, which I have postulated is based on the ‘Sword and Morning Star’ of Tanith. Tanith’s morning star has four main rays, representing the initial four worlds of the League; “Tanith, Marduk, Beowulf, [and] Amaterasu”.²⁸

In addition, a notched hole in the center made the Cogwheel resemble a gun sight, an image I believe the firearms-loving Piper would appreciate. The gun sight is also symbolic of the fact that the Empire brooks no opposition. As Prince Trevannion puts it, “The Galaxy is not big enough for any competition of sovereignty. There must be one and only one completely sovereign power...We will not fail. We will create a unified and peaceful Galaxy.”²⁹

The sixteen teeth in the Cogwheel are similar to the 18 in the ‘sun’ cog; but the number also

falls between the 12 teeth in the Fact and Theory cogs, and the 24 teeth in the main cogwheel of the *Amazing* emblem. More importantly, the decision to depict 16 teeth again relates the Cogwheel to the League of Civilized Worlds. Though Beam's Galactic Empire begins with the Mardukan Empire, the Mardukan Empire grows out of the League, which at its inception contains somewhere between four and twenty planets.³⁰ The Cogwheel at the center of the emblem would then symbolize the Empire's origin, or 'center', in the League; the League of Civilized Worlds being the 'gear' that sets the Galactic Empire in motion.

The Sun represents the Empire itself. As stated in "Knights of Gram and Tanith", the Order of the Star of India could be the historical model Piper used for the Knight's Star of the Order of the [Galactic] Empire and the Grand Star of the Order of Odin, mentioned in "A Slave is a Slave".³¹ The Imperial Galactic Sun was therefore modeled on the sunburst of the British Imperial Star of India. The thirty-two flames of the latter were retained, because each is divided in two by a central line. This results in a total of sixty-four, bringing in more of Prince Trevannion's words. "There was an ancient word, originating in one of the lost languages of Pre-Atomic Terra—*sixtifor*. It meant, the basic, fundamental, question."³² In "Ministry of Disturbance", Emperor Paul XXII knows that "There were only two alternatives: the Empire, or Galactic anarchy."³³ Thus, the Empire is the civilized answer to the Galactic *sixtifor*.

That each flame of the Sun is divided in two also represents my belief that the Galactic Empire officially begins with a dynastic union between Marduk and Odin. (See below.) In sum, this design therefore symbolizes the necessity for the Galactic Empire as well as its growth; from the first four worlds (the Cogwheel's four spokes) to the League of Civilized Worlds (the Cogwheel's teeth, approximately 16 worlds in the beginning) to the Empire itself (a Sun with a great many rays, for the Empire's great many worlds, far outnumbering even those of the Old Federation).

4. Imperial Black and Gold

So far, we have seen that Piper's models for the emblem of the First Galactic Empire were literary ones; Isaac Asimov and *Amazing Stories*. But we know that he mainly used *historical* models. And looking at his historical models for the First Galactic Empire, we find that the black and gold colors are again entirely appropriate.

In the summer of 2000, I deduced that Piper's near-future universal state, the Terran Federation, was not just modeled on the British Empire, but also the Roman Empire. This explained why the Federation lasts over a thousand years—because Rome did—while the British Empire only lasted about 350 years. It also explained why the Federation's fall is followed by an interstellar age of Neobarbarians and Space Vikings; because the Fall of Rome was caused by Germanic barbarians, followed several centuries later by the Viking Age.

The Terran-Roman connection even explained the references in *Uller Uprising* to the alien Rakkeed as "that geek messiah", "soap and towels, for General Pontius von Pilate", and "A nice thirty-piece silver set!"³⁴ The Uller Uprising occurs in AE 526, and if we employ the formula 500 BC to 500 AD (the approximate lifespan of the Roman Empire) equals AE 1 to AE 1000 (the approximate lifespan of the Terran Federation), then AE 526 roughly parallels 26 AD, the time of Jesus the Messiah in Roman Judea. The Uller Uprising is therefore not just modeled on the Sepoy Mutiny, but also the Jewish Revolt, or Revolt of the Zealots (66-73 AD).

The First Century of the Christian Era is also alluded to by Carlos von Schlichten, who says that "Miss Quinton's company won't be any particularly heavy cross for me to bear".³⁵ Another example is his late-novel thought that "Uller was not ready for membership in the Terran Federation; then its people must bow to the Terran Pax."³⁶ Piper apparently modeled this on the *Pax Romana*, which was established not long before the Jewish Revolt was crushed.³⁷ The *Pax Romana* was the golden age of Rome, and lasted for several centuries, while the golden age of the Terran Federation is the Terran Pax, established sometime before the Uprising in AE 526, and lasting, presumably, until the System States secede in 839.

Now, if Beam modeled the Terran Federation on the Roman Republic, then it follows that his First Galactic Empire is a combination of the successor states of Rome; the Holy Roman (German) Empire in the West and the Eastern Roman ("Byzantine") Empire in the East.

Of these two, the Holy Roman Empire of the German Nation, the “First Reich”, is the model for the Mardukan Empire. In *Space Viking*, the neo-Nazi subversion of Marduk is a German element, the Mardukan city of “Drepplin” appears to be a combination of Dresden and Zeppelin,³⁸ and Marduk is a founding member of the League of Civilized Worlds, whose historical model is the Hanseatic League of northern Germany. In addition, the First Galactic Empire begun by Marduk allows member planets to govern themselves any way they choose. This is expressed by Prince Trevannion as “We will not attempt to force every planetary government into a common pattern”, and codified in Section Two of the Imperial Constitution as “Every planetary government to be sovereign in its own internal affairs”.³⁹ The source of this element is the Holy Roman Empire, which was “a mosaic of principalities, bishoprics and free cities kept in balance by a constitution which reduced the (elected) emperor to the role of a president-mediator without royal power.”⁴⁰ At its most diverse, the Holy Roman Empire contained “about 300 independent principalities and 1,500 or more semi-sovereign bodies or individuals.”⁴¹ While at its height, the First Galactic Empire contains one “thousand, three hundred and sixty-five inhabited worlds”.⁴²

This leaves the Eastern Roman Empire, which is the model for the ‘Empire’ of Odin. Piper provides no details of Odin’s rise to become the center of the Galactic Empire; it is merely stated that “Stevan IV...proclaimed Odin the Imperial planet and Asgard the capital city.”⁴³ However, the historical models lead me to believe that Odin, like Marduk, is a monarchy that grows into an empire. The Odin-Byzantium connection is supported by the fact that the “Household Guard” of the Galactic Emperors on Odin are Thorans.⁴⁴ The historical model for the Thoran Guards is therefore the Varangian Guard, the “personal bodyguards of the Byzantine Emperors”.⁴⁵ The Varangians were Vikings, whose main gods were Odin and Thor, and whose heaven was Asgard.

Piper himself liked to invoke the names of these Norse deities. For example, the unexpected launch of *Sputnik* in October 1957 caused him to exclaim, “DAMN!...If only Odin had given me a clue. And Thor himself must have surely known!”⁴⁶

Having established the historical models of the First Galactic Empire, we can now examine the Imperial colors of black and gold. As successor states of Rome, both the Byzantine and Holy Roman Empires employed the Roman eagle, black on a gold field, as their emblem. (Figure 10.)

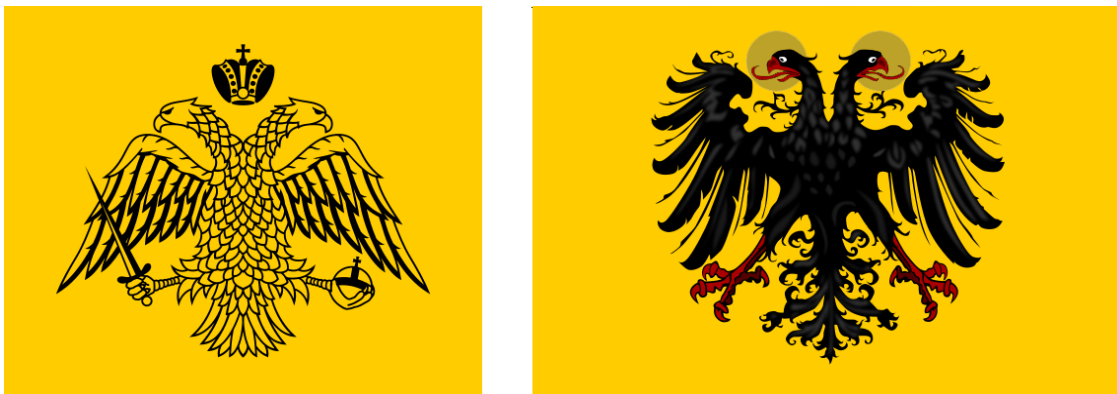


Figure 10. Black and gold flags of the Eastern Roman (Byzantine) and Holy Roman (German) Empires.⁴⁷

However, black and gold were not its original colors, as over time the Roman emblem changed. “The Etruscans were the first who adopted the eagle as the symbol of royal power, and bore its image as a standard at the head of their armies. From the time of Marius it was the principal emblem of the Roman Republic, and the only standard of the legions. It was represented with outspread wings, and was usually of silver, till the time of Hadrian, who made it of gold.”⁴⁸ Carried on a pole before the legions, the eagle with outspread wings was often perched within a wreath. But when Rome began turning into an Empire, the man who became known as its first emperor used an alternate symbol. “The standard of Augustus was a globe, to indicate his

conquest of the globe.”⁴⁹ (Figure 11, right image.)

Thus, the silver ‘wreathed eagle’ of the Roman Republic, perhaps in concert with the globe of Augustus, appears to be the historical model for the white wreathed globe on blue of Piper’s Terran Federation.⁵⁰

In flag form, the silver, later gold, Roman eagle came to be displayed on a red field, in origin a military banner. “When a general, after having consulted the auspices, determined to lead forth his troops against the enemy, a *red* flag was displayed on a spear from the top of the praetorian, as a signal to prepare for battle.”⁵¹ Since then, the gold eagle on a red field became generally viewed as the emblem of the Roman Empire. (Figure 11, left image.)



Figure 11. The Roman eagle, and globe of Augustus.⁵²

It was after the fall of Rome that the gold eagle on red changed to black and gold. Ironically, the gold eagle became black and the field became gold. “From the Roman standard is derived the numerous brood of white, black, and red eagles, with single or double heads, which are borne on so many of the standards of modern Europe. The countries they represent claim to be fragments or descendants of the great Roman Empire.”⁵³

The double-headed eagle appears to have originated with the Byzantine Emperor Isaac Comnenus, who reigned from 1057 to 1059. “The two-headed eagle comes from his homeland Paphlagonia and existed in his family arms.”⁵⁴ Since the “Byzantine” Empire was in reality the surviving eastern half of the Roman Empire, the two heads were heraldically interpreted “to indicate their claim to the empire both of the east and west.”⁵⁵

The Byzantine modification of the Roman eagle “certainly predated the development of the same in western heraldry.”⁵⁶ In fact, it probably inspired the Holy Roman emperors, and other European rulers with a claim on the Roman inheritance, to adopt similar flags. “The imperial banner was a golden yellow cloth, usually square, bearing a black eagle...The double-headed eagle was finally established by Sigismund as regent of the [Holy Roman] empire in 1401, but this pattern was always more favored in the similar flags of Austria and Russia.”⁵⁷ For these two states, the imperial eagle of Austria was undoubtedly derived from the Holy Roman Empire, over which Austrian Hapsburgs were often emperor.⁵⁸ And “In Russia it was Ivan III...who first assumed the two-headed eagle, when, in 1472, he married Sophia, daughter of Thomas Paleologus, and niece of Constantine XI, the last Emperor of Byzantium.”⁵⁹

The black and gold emblem of Piper’s First Galactic Empire is therefore modeled on the black eagle on gold of the Holy Roman (First Reich) and Byzantine Empires. (Figure 12.)

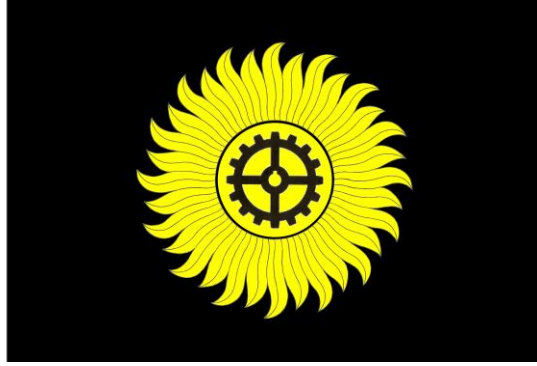


Figure 12. Black and gold flags of the First Reich and First Galactic Empire.

Incidentally, this may reveal another improvement by Piper over Asimov. As we have seen, he modeled the Terran Federation on the Roman Republic, and the silver wreathed eagle of Rome (possibly combined with the globe of Augustus) is the model for the ‘wreathed globe’ of the Federation. Asimov’s First Galactic Empire is also modeled on Rome, but assuming its emblem is black and gold, then one of the colors is wrong. In chart form, the parallels look like this.

Piper

State and Emblem	Historical Model	State and Emblem	Historical Model
Terran Federation; wreathed globe, white on blue field	Roman Empire; wreathed eagle/globe, silver/gold on blue/red field	1 st Galactic Empire; black cogwheel on gold sun	HRE/Byzantine Empire; black double-headed eagle on gold field

Asimov

State and Emblem	Historical Model	State and Emblem	Historical Model
1 st Galactic Empire; golden Spaceship-and-Sun on black field (?)	Roman Empire; wreathed eagle/globe, silver/gold on blue/red field	2 nd Galactic Empire; unknown	HRE/Byzantine Empire; black double-headed eagle on gold field

Figure 13. Emblems of science fiction universal states compared with their historical models.

Thus, the golden Spaceship-and-Sun should actually appear on a field of blue or red, paralleling that of the Roman Republic or Empire. A black field is more appropriate for Asimov’s *Second* Galactic Empire, which should be a combination of the Holy Roman and Byzantine Empires. Piper’s system therefore seems to be more true to the historical models.

On the other hand, Isaac does include an interesting detail, which could very well be relevant. In “The Psychohistorians”, Hari Seldon is put on trial for predicting the fall of the First Galactic Empire. He is being judged by five men. “Five of the Commission of Public Safety sat behind the raised desk. They wore scarlet and gold uniforms and the shining, close-fitting caps of their judicial function.”⁶⁰ When the Commission’s Advocate, who acts as prosecutor, “backed Seldon into a corner” with his arguments, “There was a rising buzz of conversation at that which swept the ranks of the peers in the audience and invaded even the row of Commissioners. They swayed toward one another in their scarlet and gold, only the Chief remaining uncorrupted.”⁶¹

Because of the words “judicial function”, my impression until now was that scarlet and gold were the colors of the Commission of Public Safety. But this may not be so. Chief Commissioner

Linge Chen says, “Dr. Seldon, you disturb the peace of the Emperor’s realm”, and refers to the relocation of the Seldon Project to Terminus as “meanwhile, doctor, you will not trouble Trantor and there will be no disturbance of the Emperor’s peace.”⁶² Since the Commission is ostensibly acting on behalf of the Emperor, scarlet and gold could in fact be the colors of the Galactic Empire. In that case, the golden Spaceship-and-Sun would be displayed on a red field, correctly modeling the gold eagle on red of the Roman Empire. (Figure 14, left image.)

The Imperial emblem may also appear on the field of yet another color. Because like naval officers of our time, officers on spaceships during the First Galactic Empire wear white dress uniforms. When Gaal Dornick first travels to Trantor, “An officer came through and said, “View-room will be closed for the remainder of the trip. Prepare for landing.” Gaal had followed after, clutching at the sleeve of the white uniform with the Spaceship-and-Sun of the Empire on it.”⁶³ This practice apparently originated with the white uniforms and White Ensign of the British Royal Navy, which were undoubtedly familiar to Asimov. It is therefore possible that the white uniform in *Foundation* indicates the Imperial Galactic Navy flies a white ensign. (Figure 14, right image.)

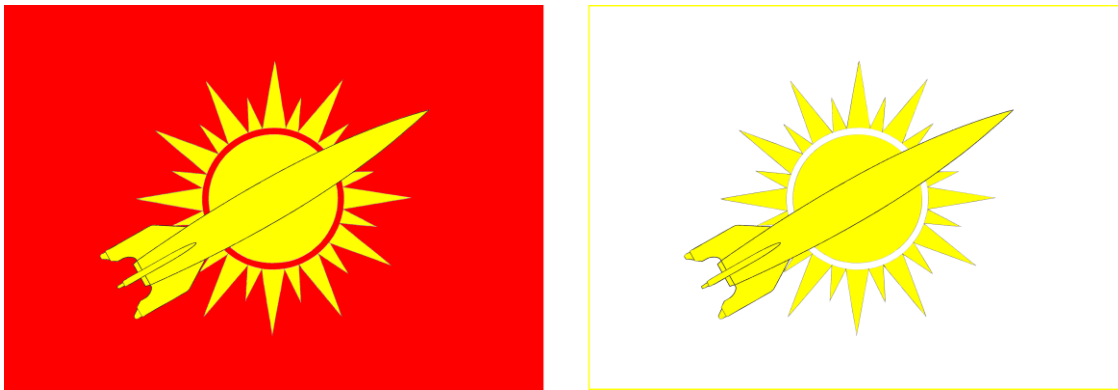


Figure 14. Scarlet and gold Spaceship-and-Sun, and possible White Ensign of the Imperial Galactic Navy

5. Later Galactic Empires

a) *Unrevealed Emblems*

Isaac Asimov never finished his *Foundation* epic, which was originally planned as “a series of stories, in which the full history of the thousand years of turmoil between the fall of the First Galactic Empire and the rise of the Second Galactic Empire was to be outlined”.⁶⁴ Indeed, in his novels *Foundation’s Edge* and *Foundation and Earth*, written four decades later, he barely reached the halfway, or “hemimillennial”, point.⁶⁵ What the Second Empire’s emblem would be was still 500 years in the future, and therefore not revealed.

By that time, it is predicted that “a Second Galactic Empire will have been established in which Mankind will be ready for the leadership of Mental Science. In that same interval, the Second Foundation in *its* development, will have brought forth a group of Psychologists ready to assume leadership.” The Second Foundation will then become “Lords of the Galaxy”, which they already consider themselves during the Interregnum.⁶⁶

But since the Second Foundation is located on Trantor, the implication is that Trantor will again be the Galactic capital. And if the capital is the same, it is possible that the Galactic flag will be, too. The golden Spaceship-and-Sun may once again be the Imperial emblem, although we’ve seen that putting it on a black field makes more sense this time around.⁶⁷

In a similar fashion to Asimov, H. Beam Piper wrote no stories in the eras of his Second, Third and Fourth Galactic Empires, leaving their emblems a parallel mystery. And while “The Keeper” takes place in the days of the Fifth Galactic Empire, Beam did not include any details on the

symbols of that far future era.⁶⁸

If his historical models for the later galactic empires can be determined, however, it will be possible to make some educated guesses. It's been shown that Piper's First Galactic Empire (the successor state of the Terran Federation) is modeled on the Holy Roman and Byzantine Empires (the successor states of the Roman Republic). His Second Galactic Empire should be modeled similarly, which begs the question: what were the successor states of the Holy Roman and Byzantine Empires?⁶⁹

b) A Sun for a Galaxy?

But that takes us beyond the scope of this paper. Nevertheless, there is a final point to be made. It never seemed very logical to me that the 'galactic' empires of Asimov and Piper had only one sun in their emblem. Especially Asimov's First Galactic Empire, which until its dissolution encompasses the entire galaxy of uncounted billions of suns, among which are "nearly twenty-five million inhabited planets".⁷⁰ Think about it: a single sun, representing an entire galaxy? In Piper's universe, that would be as if the First Terran Federation, which encompasses the entire Earth after the Third World War, and then "Completely unified"⁷¹ it after the Fourth, did not include a globe in its emblem, but rather the outline of a single tiny nation, like Monaco.

Beam's First Galactic Empire fares a little better, because although it does not appear on the Empire's emblem, the entire Galaxy is at least depicted on the ceiling of the Emperor's study. In "Ministry of Disturbance", this is Paul XXII.

He entered the big oval room, lighted from overhead by the great star-map in the ceiling...

He lit a cigarette and leaned back, looking up at the glowing swirl of billions of billions of tiny lights in the ceiling. At least, there were supposed to be billions of billions of them; he'd never counted them, and neither had any of the seventeen Rodricks and sixteen Pauls before him who had sat under them. His hand moved to a control button on his chair arm, and a red patch, roughly the shape of a pork chop, appeared on the western side.

That was the Empire. Every one of the thousand three hundred and sixty-five inhabited worlds, a trillion and a half intelligent beings, fourteen races—fifteen if you counted the Zarathustran Fuzzies, who were almost able to qualify under the talk-and-build-a-fire rule.⁷²

Piper's First Galactic Empire may therefore not employ the galaxy as its symbol because it only controls a small part of the entire System.⁷³ Hence, I would extrapolate that one of his later empires does indeed use a galaxy as its emblem. Probably the Fifth Empire, which appears to encompass the entire Milky Way, and is likely the first universal state to do so.

In Beam's story "The Keeper", set "about 30,000 years in the future",⁷⁴ the Lords Salsavadran and Dranigrastan come from "the Far Stars" to Terra, which by this time is an "old, forgotten world".⁷⁵ When informed that they are from the planet Dremna, Raud the Keeper thinks, "Why, Dremna was the Great World, at the middle of everything! Dremna was the Empire. People from Dremna came to the cities of Awster and fabulous Antark as Southron traders from the Warm Seas came to the villages of the Northfolk."⁷⁶

I have always taken the earlier part of this quote to mean that Dremna is at the center of the Galaxy, and in fact, Piper's version of Trantor.⁷⁷ The later galaxy-to-globe metaphor implies that Terra is part of a unified Galaxy, but out on the fringe of Imperial civilization which is literally 'centered' at Dremna in the Core; just as the Northfolk are part of a unified Globe, but out on the fringe of Terran civilization, now centered on Awster and Antark at the other side of the world, around the South Pole. A 'center versus periphery' comparison, à la Asimov.

At the time of Beam's story, the Fifth Empire is "less than a thousand years" old.⁷⁸ One then wonders if he envisioned Dremna as eventually becoming a planet like Trantor, which over 12,000 years of Imperial history becomes the ultimate City; a global metropolis.

At the beginning of the thirteenth millenium, this tendency had reached its climax. As the center of Imperial government for unbroken hundreds of generations and located, as it was, in the central regions of the Galaxy among the most densely populated and industrially advanced worlds of the system, it

could scarcely help being the densest and richest clot of humanity the Race had ever seen.

Its urbanization, progressing steadily, had finally reached the ultimate. All the land surface of Trantor, 75,000,000 square miles in extent, was a single city. The population, at its height, was well in excess of forty billions. This enormous population was devoted almost entirely to the administrative necessities of Empire, and found themselves all too few for the task...Daily, fleets of ships in the tens of thousands brought the produce of twenty agricultural worlds to the dinner tables of Trantor...⁷⁹

Although we've seen that the emblem of Piper's First Galactic Empire is modeled on the emblem of Asimov's,⁸⁰ his Fifth Galactic Empire is the actual *physical* parallel of Isaac's First Empire. Both encompass the entire Galaxy, and both are ruled from a planet in the Core. The emblem of the Fifth Galactic Empire could therefore be a 'Galaxy and Hypership', an improvement on the Spaceship-and-Sun.

The spherical hypership would naturally be centered on the spherical Core, which has become the center of Terro-Human—or perhaps by this time, one should call it 'Galacto-Human'—civilization. Indeed, the spaceship may *become* the Core, representing humanity's long-sought dominance of the entire System. And since the ancient colonization of Terra from Mars occurred around 100,000 BC,⁸¹ it has therefore taken Terro-Humanity about 130,000 years to progress from Stone Age savages to masters of the Milky Way.



Figure 15. Cover art for *Empire*, by Michael Whelan.⁸²

The next question would be the colors of such an emblem. Given its parallel with both First Galactic Empires, perhaps a black hypership on a golden galaxy, on a black field. In that case, the black hypership emblazoned on the Core would resemble a really big black hole, which,

although unknown in Piper's time, may actually exist at the center of our Galaxy.

However, if I am right about the historical models for the Fifth Empire, these suggest that the emblem would be a white galaxy on a dark blue field. Not too dissimilar from Michael Whelan's excellent cover for the story collection in *Empire*. (Figure 15.)

6. Conclusion

In the present paper, we have shown that the flag of H. Beam Piper's First Galactic Empire, the gold Sun and superimposed black Cogwheel on a black field, had several sources. The Sun was certainly inspired by Isaac Asimov's classic Foundation series—the golden Spaceship-and-Sun emblem of the First Galactic Empire, which internal evidence suggests is (at least in wartime) displayed on a black field. The Cogwheel seems to come from the badge of *Amazing Stories*, which was the 'first' true science fiction pulp magazine. That badge included two small black cogwheels embossed with gold letters, flanking a large green cogwheel bisected by a slightly oblique or diagonal stylus—an emblem which can be described as the 'Pen and Cogwheels'.

The oblique stylus then connected the *Amazing* Pen and Cogwheels with Asimov's Spaceship-and-Sun, in which the spaceship is described as an "oblique cigar-shape", blazoned *diagonally* across the Sun. In sum, Beam's Sun and Cogwheel was therefore one of his 'creative combinations', and a very interesting one at that.

In addition, we found that the emblem of the planet Aditya, a straight broadsword emblazoned diagonally across an eight-pointed star, gold on a black field, also seems to have been inspired by Asimov's Spaceship-and-Sun. The eight-pointed star is essentially a Sun without the central circle, and the diagonal broadsword is roughly the same shape as the oblique Spaceship. The Asimov influence on Aditya was confirmed when Count Erskyll said that "force was the last resort of incompetence". This is Piper's version of Mayor Salvor Hardin's famous epigram from *Foundation*, "violence is the last refuge of the incompetent." Hardin employed his epigram to great political effect; first by overthrowing the Encyclopedists in a bloodless coup, then stopping a war with Anacreon almost before it starts. Beam, however, apparently objected to such a pacifist-sounding policy, because he had his main character, Prince Trevannion, refute it. "Only the incompetent wait until the last extremity to use force, and by then, it is usually too late to use anything, even prayer."

Isaac Asimov and *Amazing Stories* are literary influences, but we know that Piper mainly used historical models. And his models for the First Galactic Empire and Aditya confirm the black and gold colors of their respective flags. As a successor state to the Terran Federation, which is partly modeled on the Roman Empire, the First Galactic Empire is a combination of the successor states of Rome; the Holy Roman and Byzantine Empires. Both of these empires flew a black double-headed eagle on a gold field; a modified form of the old Roman flag, which was a gold eagle on a red field.

And a companion-piece, "Emblems of Aditya", will show that Beam's historical model for that planet is Russia. In "A Slave is a Slave", Aditya is annexed to the First Galactic Empire, similar to how Russia was converted to Orthodox Christianity by the Byzantine Empire. Due to cultural and marital ties, Russia later adopted the black and gold Byzantine flag as its own, paralleled by how the black and gold emblem of Aditya matched the colors of the Galactic flag.

Finally, we noted with disappointment that Asimov never revealed what the emblem of the Second Galactic Empire would be, paralleled by Piper, who never disclosed those of his Second, Third, Fourth and Fifth Galactic Empires. However, we also discussed the incongruity of both men's First 'Galactic' Empires having a single sun in their emblem. A galaxy would be more appropriate, suggesting that one could appear in the emblem of Asimov's Second Empire, as well as Piper's Fifth Empire, presumably the first universal state in the Terro-Human Future History to encompass the entire Milky Way, and thus the physical parallel of Asimov's First Empire. We then speculated that the emblem of the Fifth Galactic Empire could be a 'Galaxy and Hypership', an improvement on Asimov's Spaceship-and-Sun.

Appendix 1. Parallel Galactic Hierarchies

If one questions whether Piper's Sun and Cogwheel was modeled on or inspired by Asimov's Spaceship-and-Sun, there is certainly plenty of evidence connecting the two authors' galactic empires. What can be called 'Exhibit A' in the case was the common element of a Sun in their emblems, while Exhibit 'B' was Beam's rebuttal of Asimov's epigram, "violence is the last refuge of the incompetent", as mentioned in **The Spaceship-and-Sun**. We now present Exhibit 'C'; the Imperial hierarchy of Piper's First Galactic Empire, which is very similar to that of Asimov's First Galactic Empire.

In "A Slave is a Slave", Count Erskyll is crowned as the "Imperial Proconsul" of Aditya.⁸³ However, since Prince Trevannion makes "the limits of [Adityan] sovereignty the orbit of the outer planet of this system",⁸⁴ we can assume that the Proconsul's mandate is not merely to oversee Aditya, but all Adityan activities within their system. This will soon include the abandoned "mines on the fourth planet and the colony [which] was limited to a couple of dome cities."⁸⁵

That every member planet in the Empire has an Imperial Proconsul is confirmed in "Ministry of Disturbance", where Emperor Paul XXII is looking over a chart of economic data. "It had been transmitted from Planetary Proconsulate to Prefecture, and from Prefecture to Viceroyalty, and from Viceroyalty to Odin, all by ship."⁸⁶ Since a Proconsulate administers one planet (or perhaps planetary system), we can assume that a Prefecture is interstellar in area. The next level up, a Viceroyalty, is undoubtedly also interstellar, but on a larger scale.

The definition of viceroy is "a governor who represents a sovereign in a province, colony or country". Thus, the Viceroyalties are probably 'provinces' of the Galactic Empire. Piper states that there are ten of these Viceroyalties in the Empire, which as a whole contains 1,365 inhabited planets.⁸⁷ Applying a little arithmetic, each Viceroyalty therefore contains about 136 planets or stellar systems (1,365 divided by 10).⁸⁸ Beam did not supply the number of Prefectures per Viceroyalty, but if we assume that there are a similar ten, that means each Prefecture will contain 13 or 14 stellar systems (136.5 divided by 10). Thus, the setup of his First Galactic Empire should look something like this:

Planetary Proconsulate	(Interstellar) Prefecture	(Provincial) Viceroyalty	Galactic Empire
1 planet or system	13 or 14 inhabited planets	about 136 planets	1365 planets

Now, let's look at Asimov's First Galactic Empire.

In *Pebble in the Sky*, which takes place on Earth during the first millenium of the Empire, the Imperial overlord of a single planet is titled Procurator. At the time of the story, this is "Lord Ennius, Procurator of Earth".⁸⁹ The Galactic political system is further elaborated upon in *Foundation*, which takes place in the last millenium of the Empire. "How the mighty had fallen! *Kingdoms!* They were prefects in the old days, all part of the same province, which in turn had been part of a sector, which in turn had been part of a quadrant, which in turn had been part of the all-embracing Galactic Empire."⁹⁰

A Procurator oversees a single planet (or possibly stellar system), while Prefectures are interstellar in area. "Following closely the boundaries of the old Prefect of Anacreon, [the Kingdom of Anacreon] embraced twenty-five stellar systems, six of which included more than one habitable world."⁹¹ Thus, above a Planetary (or single-system) Procurator is an 'Interstellar' Prefect.

And above an Interstellar Prefect is a Provincial Viceroy. Onum Barr tells Hober Mallow that "When Siwenna was the provincial capital, I was a patrician and a member of the provincial senate...Under [Emperor] Stannel VI, it had almost achieved its ancient prosperity. But weak emperors followed, and weak emperors mean strong viceroys, and our last Viceroy...Wiskard... aimed at the Imperial Purple."⁹²

This implies that directly above a Provincial Viceroy is the Galactic Emperor; however, we still have the sector and quadrant levels of hierarchy to fill. But sectors are also ruled by viceroys, for Barr also states that "Siwenna is no longer capital of the Normannic Sector".⁹³ And the

description of Lord Ennius of Earth includes the following. "As the direct representative of the remote Emperor, his social standing was, legalistically, upon a par with viceroys of huge Galactic sectors that sprawled their gleaming volumes across hundreds of cubic parsecs of space..."⁹⁴

Asimov's Galactic Empire is therefore governed by Planetary Procurators, Interstellar Prefects, Provincial Viceroys, and Sector Viceroys, all under a Galactic Emperor. Isaac only neglects to mention who rules a quadrant.

Since he modeled his Galactic Empire on the Roman Empire, the later Galactic Empire of the Foundation series parallels the later Roman Empire. This means that the quadrant level (four parts) could be based on the 'tetrarch' system (four rulers) initiated by Emperor Diocletian in 293 AD. "One of Diocletian's first acts was to name a colleague, Maximian, as emperor with responsibility for the western provinces. That was in 285. Eight years later the division of power was taken a stage further when Diocletian and Maximian each appointed a junior colleague... Thus was established the tetrarchy, the system of government which divided overall responsibility between a college of four regional emperors, headed by Diocletian."⁹⁵

We can now deduce that the missing level of Asimov's Galactic hierarchy involves 'Quadrant Tetrarchs'. No quadrant tetrarch is ever mentioned by name, nor does Isaac's Galactic Empire ever seem to be run by 'co-emperors' paralleling Diocletian and Maximian. However, that is not conclusive, since most of the Empire's 12,000-year history was never fleshed out by Asimov. The quadrant level may therefore be a holdover of an earlier time, perhaps a millenium or two before *Foundation*, when the Empire went through a temporary breakdown that necessitated establishing such a system.

But now, let's directly compare the ruling hierarchies of both authors' First Galactic Empires.

Piper: Planetary Proconsul, (Interstellar) Prefect, (Provincial) Viceroy, Galactic Emperor.

Asimov: (Planetary) Procurator, (Interstellar) Prefect, Provincial Viceroy, Sector Viceroy, (deduced) Quadrant Tetrarch, Galactic Emperor.

Aside from the slight difference of Proconsul versus Procurator, Piper's named levels are identical with Asimov's. The estimated figure of 13 or 14 stellar systems in Beam's Prefectures is not too different from the known 25 in Asimov's Prefecture of Anacreon.⁹⁶ Moreover, the lack of sector and quadrant levels in Beam's First Empire is easily explained, for it does not control the entire Galaxy, but merely a "patch, roughly the shape of a porkchop...on the western side."⁹⁷ Being a much smaller political unit, Piper's First Galactic Empire therefore has no need for these additional layers of bureaucracy. But if the comparison is any indication, his Fifth Galactic Empire, which presumably does span the Milky Way, may well have Sector Viceroys and Quadrant Tetrarchs.

Nor is that all. The only Proconsul named by Piper is very similar to the Procurator named by Asimov. After the Adityan ex-slaves betray Count Erskyll's trust and massacre their former masters, he indignantly demands that they pay him the proper respect due a representative of His Imperial Majesty. Instead of "Citizen-Proconsul", their previous form of addressing him, they thereafter refer to him as "Lord-Master Proconsul!"⁹⁸ The comparison then looks like this.

Piper: Lord-Master Erskyll, Proconsul of Aditya

Asimov: Lord Ennius, Procurator of Earth

Lord-Master, Lord; Erskyll, Ennius; Proconsul, Procurator.

And if even that is not enough evidence, there are many more Asimovian parallels in Piper's stories. These will be revealed in the pertinent papers, another time.

ENDNOTES

1. The Sun and Cogwheel

1. H. Beam Piper, *Empire* (New York, NY: Ace Books, 1981), p. 85
2. *Ibid.*, p. 86
3. *Ibid.*, pp. 132, 140 Also in that story, students marching on the Imperial Palace on Odin wave “a few Imperial and planetary and school flags”. (*ibid.*, p. 158) Alas, Piper gave no further details, which would have revealed the flags of Odin and “the Imperial University here in Asgard.” (*ibid.*, p. 140)
4. *Ibid.*, p. 73

2. The Spaceship-and-Sun

5. Isaac Asimov, *Foundation* (New York, NY: Avon Books, 1966), pg. 9, for example
6. Isaac Asimov, *Foundation and Empire* (New York, NY: Avon Books, 1966), p. 27
7. Asimov, *Foundation*, p. 164
8. Jack Hagerty and Jon C. Rogers, *Spaceship Handbook* (Livermore, CA: ARA Press, 2001), p. 151
9. *Ibid.*, p. 146
10. <http://www.isfdb.org/cgi-bin/pl.cgi?ASTAPR1945> and <http://www.isfdb.org/cgi-bin/pl.cgi?ASTJAN1948>
The difference in ship sizes on the April 1945 cover is actually alluded to in an earlier story. In “The Merchant Princes”, war breaks out when the Foundation ship *Dark Nebula* first comes into contact with an Imperial vessel in the service of the Korellian Republic. “It was a ship, but a whale to the *Dark Nebula*’s minnow; and on its side was the Spaceship-and-Sun of the Empire.” (Asimov, *Foundation*, p. 192)
Comparing outer space to an ocean is an old science fiction device; military forces in space are usually called ‘navies’, and groups of spaceships ‘fleets’. For Asimov to compare cylindrical rocket ships with cylindrical marine life forms would therefore seem a natural extension, if indeed he was the first to do so.
On the January 1948 cover, the descending rocket ship is apparently about to land on “the chilly wastes of Rossem”, where “the long winter imposed a lonely hibernation upon the peasant.” (Isaac Asimov, *Second Foundation* (New York, NY: Avon Books, 1964), p. 35)
11. Asimov, *Second Foundation*, p. 134 Isaac continues with, “Only five percent of the port is given over to the floods of humanity to whom it is the way station to all the stars of the galaxy. It is certain that very few of the anonymous many-headed stop to consider the technological mesh that knits the spaceways. Perhaps some of them might itch occasionally at the thought of the thousands of tons represented by the sinking steel that looks so small off in the distance. One of those cyclopean cylinders could, conceivably, miss the guiding beam and crash half a mile from its expected landing point—through the glassite roof of the immense waiting room perhaps—so that only a thin organic vapor and some powdered phosphates would be left behind to mark the passing of a thousand men.” (*ibid.*, pp. 134-135)
12. <http://www.isfdb.org/cgi-bin/pl.cgi?ASTAUG1941> and <http://www.isfdb.org/cgi-bin/pl.cgi?ASTMAR1951>
Not being very familiar with the science fiction of that era, I surmise that these spaceships may have been conceived as loading passengers and cargo horizontally, and were then raised to launch vertically, or at least obliquely. That some launch vertically is supported by Lathan Devers, who in his escape from Imperial agents on Trantor, dove “into the huge barn of the hangar, where the ship lifted hastily through a giant cavity burnt fiercely into the roof.” (Asimov, *Foundation and Empire*, p. 77)
13. That the Galactic Empire’s flag has a black field is first suggested by the 3D star map of General Bel Riose’s campaign against the Foundation. “Can you read a map in radial projection? You can? Well, here, see for yourself. The stars in gold represent the Imperial territories. The red stars are those in subjection to the Foundation and the pink are those which are within the economic sphere of influence.” (Asimov, *Foundation and Empire*, p. 38) Like the other stars, the gold Imperial stars are undoubtedly projected on a

background of space-black. And later, General Riose's field uniform is described as "doleful in its monotonous gray-black." (ibid., p. 48) The general's uniform is probably the same as those of his troops; "men in Imperial uniform with the Spaceship-and-Sun insignia on their shoulders." (ibid., p. 37) Thus, a gold insignia on a gray-black uniform. (See endnotes 63 and 67.)

14. I finally put my mental vision of the Spaceship-and-Sun onto paper in April 2013. My version of the Spaceship is a combination of the *Polaris*, rocketship of *Tom Corbett*, *Space Cadet*, and the *Luna*, from *Destination Moon*. (Hagerty and Rogers, *Spaceship Handbook*, pp. 175, 214) Basically, I made the *Polaris* wingless like the *Luna*—although the *Luna*'s large fins can actually serve as clipped delta wings (ibid., p. 213)—and gave it the *Luna*'s pointed nose. At first, I also gave it the *Luna*'s fins, much reduced in size; but the final product didn't look right across the sun, so I restored the *Polaris*' fins.

These vessels were not chosen for any nostalgic reasons—I've never seen any episodes of *Tom Corbett*, although *Destination Moon* is another matter—but because, of all the rockets in the *Handbook*, they seemed to best represent the 'classic spaceship' concept. As an unintentional consequence of this pairing, it occurs to me that the amalgamated Spaceship could be christened the *Polunaris*. If the *Polunaris* had an emblem on the hull, like Piper's spherical hyperships in *Space Viking*, then this would include a Moon and North Star.

I gave the Galactic Sun twelve large rays—two of which are obscured by the Spaceship—for two reasons. Firstly because at the beginning of *Foundation*, the First Galactic Empire "has stood for twelve thousand years" (Asimov, *Foundation*, p. 28). Second, the Empire at that time is really ruled by the Commission of Public Safety. "*The aristocratic coterie rose to power after the assassination of Cleon I, last of the Entuns. In the main, they formed an element of order during the centuries of instability and uncertainty in the Imperium.*" (ibid., p. 20) And the Commission of Public Safety is ruled by the Chief Commissioner, Linge Chen, who is therefore "the actual Emperor of all the Galaxy". (ibid., pp. 24, 31) Both Linge (Ling) and Chen are Chinese names, and when the *Foundation* stories were written, the flag of China was a sun of twelve rays; the 'white sun in blue sky over red land' of the Kuomintang. From 1928 to 1949 it flew over the mainland, and since then has been the flag of 'Taiwan'; still officially the Republic of China. The twelve-rayed sun of China is therefore the historical model I chose for the Galactic Sun.

The twelve smaller rays were added to make a total of twenty-four. Multiplied by a million, this is close to the total number of planets in the First Galactic Empire. "There were nearly twenty-five million inhabited planets in the Galaxy then, and not one but owed allegiance to the Empire whose seat was on Trantor." (ibid., p. 8) 'Nearly' suggests that the actual number is around 24,999,990 member worlds. My version of Asimov's Galactic Sun therefore symbolizes both the extent and duration of the First Empire.

Originally, I had the 'gap' between the sun's disc and rays also in gold, because that's how I always mentally pictured Asimov's emblem. But a gold spaceship on a totally gold sun was a lot of gold. I thought it might be advisable to differentiate the two elements of the emblem in some way, and this could best be done by simply filling in the gap with the color of the flag's field, staying true to its Chinese model. This reasoning caused me to go back and add a (smaller) gap to the emblem of Piper's Galactic Empire.

Restoring the gap can also be justified for scientific reasons; the three elements of the Sun would represent a star's three visible layers. The central gold circle would stand for the photosphere; "the layer from which practically all the Sun's visible light is emitted, and as such represents what is normally called the "surface" of the sun." (Patrick Moore and Garry Hunt, *Atlas of the Solar System* (New York, NY: Rand McNally & Company, 1983), p. 26) The black gap would represent the chromosphere—"the tenuous layer of gas, a few thousand kilometers thick, which lies above the photosphere"—while the golden rays would stand for the corona, "the outer atmosphere of the sun". (ibid., pp. 28, 46)

And a black or 'unseen' chromosphere would represent the fact that chromospheres are rarely visible. "Far too faint to be seen against the brilliance of the photosphere, the chromosphere may be observed visually only during a total eclipse". (ibid., p. 28)

15. Piper, *Empire*, pp. 84-85

16. Ibid., p. 85

17. Since the Space Vikings who conquered Aditya came from the planet Morglay, I assume the sword on Aditya's emblem is Morglay itself. The hilt guard was given that odd backsweep because it was depicted as such in the first picture of Morglay I saw on the internet. (<http://planetbizzle.blogspot.com/2008/02>) The fact that the backsweep makes the sword look more like a spaceship adds to the parallel with the Spaceship-and-Sun, but given the futuristic setting of the *Sword-Worlds*, it is an aesthetic plus even without the Asimov influence. For example, Piper's characters could describe the sword in my version of Aditya's emblem as 'resembling an early Atomic Era rocket.'

Morglay was the sword of Sir Bevis of Hampton, and is purported to still exist. It can be seen in the

armory (or library) of castle Arundel, in West Sussex, England. This Morglay has a straight hilt guard, and its blade is quite a bit longer than in the first illustration. (www.sussexarch.org.uk/saaf/giants.html)

For my version, I simply combined the illustrated and real swords, adjusting the angles of the hilt guard to match the points of the star, and taking the average length of the blades.

As to why Piper gave the Adityan star eight points, see my paper “Emblems of Aditya”.

18. Asimov, *Foundation*, pp. 61, 76, 100, 105, 116 The phrase also underlies Hober Mallow’s refusal to wage an overt military campaign against Korell, relying on economic forces to win what “*was certainly the most unfought war on record*” (ibid., p. 200).

19. Piper, *Empire*, p. 66 Comparing “violence is the last refuge of the incompetent” with “force was the last resort of incompetence”, I would say that Piper’s version is better phrased; an improvement on Asimov. But Beam’s reversal of the meaning of Asimov’s epigram may be a deliberate reflection on the relative eras.

In Salvor Hardin’s time, the First Galactic Empire has just begun to break up. It is a time of retreat, and slowly progressing collapse. As applied to the Empire, Asimov’s “violence is the last refuge of the incompetent” can therefore be seen as a defeatist slogan; an unwillingness to fight, a surrendering to the rising barbarians. But in the time of Prince Trevannion, Piper’s First Galactic Empire is still expanding, annexing minor planets like Aditya at will. As applied by his Empire, “force was the last resort of incompetence” can therefore be restated as ‘the first resort of competence’; a slogan of victory, or confident advance. A willingness to use violence against the (Neo-) barbarians, and to use it wisely and well.

20. Ibid., p. 68

21. H. Beam Piper, *The Cosmic Computer* (New York, NY: Ace Books, 1983), p. 124

22. Asimov, *Second Foundation*, p. 135

3. The ‘Pen and Cogwheels’

23. http://en.wikipedia.org/wiki/Amazing_Stories, and <http://en.wikipedia.org/wiki/Cogwheel>

24. <http://en.wikipedia.org/wiki/Cogwheel>

25. John F. Carr, *H. Beam Piper: A Biography* (Jefferson, NC: McFarland & Company, Inc., 2008), p. 71 Piper may have read pulps long before that. He implies that Edgar Rice Burroughs was an early influence (ibid., p. 79), and Burroughs’ first three Martian tales were serialized in *The All-Story* magazine in 1912, 1913 and 1914. Beam would have been ten years old in 1914, so this may be a little early; but he could certainly have been reading them a few years later, when in his teens. Mike Knerr wrote that “It is obvious the ‘pulp’ nourished [Beam] mentally and taught him much of how writing was accomplished. The so-called pulps, for those too young to remember, were the pulp paper magazines that were largely the training ground for aspiring writers.” (ibid., p. 71)

Beam’s use of the *Amazing* logo is therefore additionally interesting because several Martian tales by Burroughs first appeared in *Amazing Stories*. “The Master Mind of Mars” was published in the *Amazing Stories Annual* of 1927, *Llana of Gathol* was serialized in 1941, and *John Carter of Mars* in 1941 and 1943. (John Flint Roy, *A Guide to Barsoom* (New York, NY: Ballantine Books, 1976), pp. 2,3) The Burroughs influence on Piper appears to have been fairly substantial; see my papers “Beam’s Mars Revealed”, “When in the Course—Piper’s *Gods of Mars?*”, and “*Uller Uprising—Piper’s Chessmen of Mars?*”

Moreover, *Amazing Stories* was probably among the first pulp magazines read by Isaac Asimov. “Asimov’s discovery of science fiction and his attempts to write it were more important to his final career than his studies. He had come upon *Amazing Stories* in 1928, its second year of publication, when he was eight years old. His father’s candy store carried magazines, but the young Asimov was not allowed to read them because his father considered them a waste of time and a corrupting influence...Finally, when Hugo Gernsback lost control of *Amazing* and brought out a competitor, *Science Wonder Stories*, the then nine-year-old boy brought the magazine to his father, pointed out the word “Science” in the title, and won his battle.” (James Gunn, *Isaac Asimov: The Foundations of Science Fiction* (New York, NY: Oxford University Press, 1982), p. 11)

26. Gunn, *Isaac Asimov*, pp. 220-221

27. Carr, *Piper Biography*, pp. 228-229 One of Piper’s characters is actually a pulp-magazine science-

fiction author, like himself. "Pierre [Jarret] was a Marine captain, invalidated home after being wounded on Peleliu; he writes science-fiction for the pulps." (H. Beam Piper, *Murder in the Gunroom* (New York, NY: Alfred A. Knopf, Inc.), p. 35. Pierre's description of his profession is probably a mirror of Piper's own. "I do a lot of stories for the pulps... *Space-Trails*, and *Other Worlds*, and *Wonder Stories*; mags like that. Most of it's standardized formula-stuff; what's known in the trade as space-operas. My best stuff goes to *Astonishing*. Parenthetically, you mustn't judge any of these magazines by their names. It seems to be a convention to use hyperbolic names for science-fiction magazines; a heritage from what might be called an earlier and ruder day. What I do for *Astonishing* is really hard work, and I enjoy it." (ibid., p. 152)

As John Carr notes, *Astonishing* is "a barely-disguised *Astounding*." (Carr, *Piper Biography*, p. 79) However, there was in fact such a magazine; *Astonishing Stories* was a short-lived pulp first edited by Fred Pohl, in the early 1940s. (http://en.wikipedia.org/wiki/Astonishing_Stories) And the others mentioned by Pierre Jarret; *Other Worlds*, (*Science*) *Wonder Stories* and *Space-Trails*, were actual pulps, as well. Piper only disguised the name of the one he sent his best stuff to, *Astounding*, by combining it with another magazine bearing a very similar name, *Astonishing*.

28. H. Beam Piper, *Space Viking* (New York, NY: Ace Books, 1963), p. 242 See "Knights of Gram and Tanith" for the postulated emblems of Tanith and the League. The latter emblem, a wheel-like circle of twenty planets not quite connected by the spoke-like rays of a morning star, would then be an extrapolated precursor of the Imperial Sun and Cogwheel. Once the League becomes politically unified under Mardukan leadership (see endnote 30), the wheel-like emblem of the League could be 'solidified' into a cogwheel.

29. Piper, *Empire*, pp. 86-87 The fortuitously-shaped cogwheel is from www.crflags.com, and represents the industrial quarter (Industriequartier) of Zurich canton, Switzerland.

30. In "A Slave is a Slave", it is said that "the Empire had risen on a few planets five thousand light-years away", and that "Marduk, [was] where the Empire had begun" (Piper, *Empire*, p. 87). The "few planets" seem to refer to the four mentioned at the end of *Space Viking*. "And there would be the treaty—*Tanith, Marduk, Beowulf, Amaterasu*; eventually, treaties with the other civilized planets. Nebulously, the idea of a League of Civilized Worlds began to take shape in his mind." (Piper, *Space Viking*, p. 242, emphasis added) To me, this means that what could be called the 'Four Worlds Treaty' is the origin of the League, but is not the League itself, which is formalized only after many more civilized planets have signed treaties with Tanith, Marduk, Beowulf and Amaterasu.

And in "The Future History", Beam states that "Lucas Trask organizes League of Civilized Worlds; work continued by the Bentricks, reigning house of Marduk. By the time of the Nineteenth Century [AE], the League has turned into the Galactic Empire." (Carr, *Piper Biography*, p. 213) This statement implies that although Tanith is the driving force in creating the League, Marduk comes to dominate it, probably through its sheer size as a fully-civilized planet of two billion people, plus the strong leadership of its reinvigorated monarchy. (Piper, *Space Viking*, pp. 155, 242) In their book *The Last Space Viking*, however, John Carr and Mike Robertson have Marduk pull out of the League, effectively causing its collapse. (John F. Carr and Mike Robertson, *The Last Space Viking* (Boalsburg, PA: Pequod Press, 2011), p. 100) This event therefore seems to be at variance with Beam's statements.

31. Piper, *Empire*, pp. 78, 85 See my paper "Knights of Gram and Tanith", section "Of Unfamiliar Design".

32. Ibid., p. 90 The Star of India image that I used as the model for the Imperial Sun can be found at http://commons.wikimedia.org/wiki/Order_of_the_Star_of_India?uselang=nl

33. Ibid., p. 144 It also occurs to me that the wavy flames of the Sun are slightly suggestive of the curving arms of a standard spiral galaxy. Perhaps the first symbolic hint that Terro-Humanity will eventually dominate the entire Milky Way.

4. Imperial Black and Gold

34. H. Beam Piper, *Uller Uprising* (New York, NY: Ace Books, 1983), pp. 50, 144

35. Ibid., p. 34

36. Ibid., p. 187

37. http://en.wikipedia.org/wiki/Pax_romana The *Pax Romana* was held to have begun with the

accession of Augustus in -27, or the last half of the First Century BC; the time of Christ was of course the first half of the First Century AD.

38. During WWII, Dresden was “a major commercial hub and industrial center” and the capital of Saxony. In February 1945, the city was destroyed by Allied bombing in which many thousands perished; an operation which became controversial due to its seeming ruthlessness and use of excessive force. Zeppelins were employed in WWI by Imperial Germany to bomb England; their use as airliners reached its heyday in the 1930s, until the destruction of Nazi Germany’s *Hindenburg* in 1937 signaled their decline. (<http://en.wikipedia.org/wiki/Dresden> and <http://en.wikipedia.org/wiki/Zeppelin>)

“Drepplin” as a combination of Dresden and Zeppelin is therefore another one of Piper’s interesting combinations, referring to the German enemy of both world wars. Andray Dunnan is Beam’s version of Adolf Hitler, who fought in WWI and started WWII; the protagonists in *Space Viking* decide to “go to Marduk and smash [Dunnan] now, while he’s still little enough to smash.” To which Prince Trask mentally adds, “There had been a few who had wanted to do that about Hitler, and a great many, later, who had regretted that it hadn’t been done.” (Piper, *Space Viking*, p. 216) In addition, Trask calls his liberating force “the allied fleet”, (ibid., p. 229) paralleling the anti-German Allies of both world wars.

Among the allies landing on the planetary capital Malverton are three independent Space Vikings; the *Harpy*, the *Curse of Cagn* and the *Damnthing*. (ibid., p. 231) When Captain Gompertz of the *Grendelsbane* requests permission to use nuclear weapons against Drepplin, which is fighting against the liberation of Marduk, Trask asks the three Vikings to go there and plunder the city instead. “We have a city for you; big industrial center. It should be fine looting. Drepplin.” (ibid., p. 238) Prince Bentricks adds “By all means, gentlemen. Take your men to Drepplin, and nobody will object to anything you do.” (ibid.) If we add the fact that Space Vikings are “professional robbers and murderers” (ibid., p. 8) to the city name “Drepplin”, it seems to equal a particularly savage sack of the city by the *Harpy*, *Curse of Cagn* and *Damnthing*, followed by an extensive bombardment. They ‘destroy’ and ‘burn’ Drepplin, just as Dresden was destroyed and the zeppelin *Hindenburg* burned. Many hundreds of thousands, if not millions, will perish in the ruthless Sack of Drepplin. Indeed, if the bombardment involves nuclear weapons, what happens to Drepplin may make Dresden look tame by comparison.

Beam even addresses the controversy over Dresden. “ ‘Controversial’, it appeared, was the dirtiest dirty-name anything could be called on Marduk.” (ibid., p. 180) This was also true in Great Britain and America during WWII. General Patton slapped a soldier who had lost his nerve, a ‘controversial’ act which caused Patton to be relieved from his command. But with the phrase “nobody will object to anything you do”, Piper actually takes the controversy out of the destruction of Drepplin. He does this by making Drepplin the headquarters of Zasparr Makann’s People’s Welfare Party; a parallel of Nuremberg, the headquarters of Hitler’s Nazi Party. If the Allies had destroyed Nuremberg like they did Dresden, it is doubtful that anyone would have called it controversial.

After the war, many German war criminals were brought to trial in Nuremberg. Thus, Piper’s Mardukan city is actually a combination of bombed Dresden with a burning Zeppelin and the war crimes trials of Nuremberg. This would seem to make the full meaning of Drepplin ‘an enormous “trial by fire”; one that is eminently deserved.’

And finally, as a parallel of the capital of Saxony, Drepplin may be the capital city of its region of Marduk.

39. Piper, *Empire*, pp. 87, 89

40. Pierre Vidal-Naquet, editor, *The Harper Atlas of World History* (New York, NY: HarperCollins Publishers, Inc., 1992), p. 148 Contrast the weak Holy Roman Emperor with “The absolute powers of the Emperor” in Section One of the Galactic Constitution. (Piper, *Empire*, p. 89) This may therefore be a Byzantine element, as the Byzantine Emperors were pretty much all-powerful throughout their history.

Of course, Byzantine laws came to be very complicated and convoluted, and the Imperial court was rife with intrigue, so that the word ‘byzantine’ came to mean “extremely complex or intricate” as well as “marked by deviousness or scheming”. So it may be that since Beam’s version of the Holy Roman and Byzantine Empires (Marduk and Odin) succeed in uniting—an improvement on real history—the resulting Emperors are an idealized fusion of Holy Roman and Byzantine practices.

41. <http://www.answers.com/mt/holy-roman-empire> The Galactic Empire may actually contain many more planets before it begins to collapse. In “Ministry of Disturbance”, the main characters mention solving the Empire’s nonworker problem by resettling them on new worlds, outside the present frontiers. (Piper, *Empire*, pp. 175, 176, 178) In my view, the story number of 1,365 member worlds is Piper’s way of alluding to 1365 AD. At that time, the Byzantine Empire had only about a century of life left. Thus, the First Galactic Empire may contain around 1,450 inhabited planets by its fall, an allusion to the Byzantine Empire’s end in 1453 AD.

By extension, since the Byzantine Empire ended just before the beginning of the Age of Discovery, Beam's Second Galactic Empire may witness great voyages of galactic discovery.

42. Piper, *Empire*, p. 136

43. Ibid.

44. Ibid., p. 132

45. http://en.wikipedia.org/wiki/Varangian_Guard The Varangians came to Constantinople through Russia, which they had founded. "The guard was first formed under Emperor Basil II in 988, following the Christianization of Kievan Rus' by Vladimir I of Kiev. Vladimir, who had recently usurped power in Kiev with an army of Varangian warriors, sent 6,000 men to Basil, as part of a military assistance agreement. Basil's mistrust of the native Byzantine guardsmen, whose loyalties often shifted with fatal consequences, as well as the proven loyalty of the Varangians, many of whom served in Byzantium even before, led the Emperor to employ them as his personal bodyguard." (ibid.)

The Russian connection is important, as it may help explain how the First Galactic Empire falls; see my companion pieces, "Emblems of Aditya" and "The Fall of the Galactic Empire".

The deduction that Odin is a monarchy is another element at variance with John Carr and Mike Robertson's book, *The Last Space Viking*. They portray Odin as the capital planet of a Confederacy; an apparently secular organization run by a bland, humorless bureaucracy. (Carr and Robertson, *Last Space Viking*, pp. 117, 122)

46. Carr, *Piper Biography*, p. 136; sourced from Don Coleman, "The Early Letters", pp. 251-253 Five years earlier, when *Murder in the Gunroom* was accepted for publication, Beam's reaction was similar. "Great claps of thunder!...I cannot determine whether Great Thor, son of Odin, is the true benefactor of my pleadings, but whosoever it be, 'Jeff Rand' is about to meet the masses!" (ibid., p. 74; also sourced from "The Early Letters", pp. 225-226)

47. http://flagspot.net/flags/gr_byz.html, and http://en.wikipedia.org/wiki/Holy_roman_empire

48. George Henry Preble, *The Symbols, Standards, Flags, and Banners of Ancient and Modern Nations* (Winchester, Massachusetts: The Flag Research Center, 1980), pp. 57-58

49. Ibid., p. 57 On page 61, it is said that "Another figure, used as a standard by the Romans, was a ball or globe, emblematic of their dominion over the world."

50. See my paper "The Emblem of the Terran Federation". The Roman globe helps explain why Piper retained the UN wreathed globe as the TF emblem, but is not a critical element. The early First Federation is actually a natural extrapolation of the United Nations into the future, as the Federation encompasses the whole world after WWII, and completely unifies it after WWIV.

51. Preble, *Symbols of Nations*, p. 57, original emphasis

52. The Roman eagle image is from www.erebus74.deviantart.com; the globe of Augustus as depicted on a Roman coin (17/16 BC) comes from www.stuff.mit.edu

53. Preble, *Symbols of Nations*, p. 58

54. Katerina Korre-Zografou, *Hellenic Flags* (Athens, Greece: G. Tsiveriotis, publisher, 1997), p. 32

55. Preble, *Symbols of Nations*, p. 58

56. [http://en.wikipedia.org/wiki/Eagle_\(heraldry\)](http://en.wikipedia.org/wiki/Eagle_(heraldry))

57. Whitney Smith, *Flags Through the Ages and Across the World* (New York, NY: McGraw-Hill Book Company, 1975), p. 116

58. Austria was an Archduchy prior to 1804. "The Holy Roman Emperor Francis II, assumed the title Francis I, Emperor of Austria in 1804, two years before the dissolution of the Holy Roman Empire." (Gene

Gurney, *Kingdoms of Europe* (New York, NY: Crown Publishers, Inc., 1982), p. 276) “The Holy Roman Empire was formally dissolved in 1806” (ibid., p. 252), making the Austrian Empire its Imperial successor.

59. [http://en.wikipedia.org/wiki/Eagle_\(heraldry\)](http://en.wikipedia.org/wiki/Eagle_(heraldry))

60. Asimov, *Foundation*, p. 24

61. Ibid., p. 28

62. Ibid., pp. 31, 33

63. Ibid., p. 9 White dress uniforms may be standard during the last half century of the peaceful and undivided Galactic Empire, but battle uniforms during the disunited Interregnum are apparently black. When General Bel Riose attacks the Foundation, “his field uniform [was] open at the collar, and doleful in its monotonous gray-black.” (Asimov, *Foundation and Empire*, p. 48) See endnote 13.

5. Later Galactic Empires

64. Isaac Asimov, *Foundation and Earth* (Garden City, NY: Doubleday & Company, Inc., 1986), p. vii

65. *Foundation's Edge* begins in 498 F.E.; the “hemimillennial celebration” is two years away. (Isaac Asimov, *Foundation's Edge* (Garden City, NY: Doubleday & Company, Inc., 1982), pp. xi, 2

66. Asimov, *Second Foundation*, pp. 92, 105

67. In this regard, it is interesting that by the time of the Foundation's war with Kalgan, when the Galactic Empire no longer exists, the gold on battle-maps now represents the Foundation. “He half-led half-forced Darell toward the limpid ovoid cradled gracefully on its tiny force-field support. At a touch of the mayor's hand, it glowed within—an accurate three-dimensional model of the Galactic double-spiral. “In yellow,” said the mayor excitedly, “we have that region of Space under Foundation control; in red, that under Kalgan.” What Darell saw was a crimson sphere resting within a stretching yellow fist that surrounded it on all sides but that toward the center of the Galaxy.” (Asimov, *Second Foundation*, pp. 152-153)

Since the Second Galactic Empire is physically set up by the First Foundation, its emblem should be based on the Foundation's emblem, which could therefore be yellow on a black field. However, in a surprising lapse, Asimov never bothered to create an emblem for the First Foundation, the main protagonists of his whole series!

However, that lapse allows us to speculate on an appropriate design. Mine would be a ‘wreathed galaxy’. At the bottom, where the wreath's branches intertwine, I would place an open book embossed on a planet, symbolizing Terminus and the Encyclopedia Galactica as the foundation, or ‘base’, in creating the Second Empire. At the top, between the ends of the branches, would be a bright star. This symbolizes the First Foundation's opposite number; the unknown Second Foundation, said to be located at “the other end of the Galaxy...at Star's End.” (Asimov, *Foundation*, p. 36) The galaxy, of course, would represent the goal of both Foundations to reunite the entire System in a thousand years—the Seldon Plan.

When the Second Galactic Empire is established, and the Second Foundation reveals itself as the ruling elite, the First Foundation's emblem could be changed slightly to become that of the Empire. Since the Second Foundation is located on Trantor, capital of the First Empire, Trantor may become the capital of the Second Empire, as well. Thus, they could adapt the old Spaceship-and-Sun symbol to represent this fact. The illogical Sun of the Old Empire could be dispensed with, and the Spaceship enlarged, so that it is now emblazoned obliquely across the round galactic core. The emblem of the Second Empire could then be described as ‘the Spaceship-and-Galaxy’, paralleling my postulated Galaxy and Hypership of H. Beam Piper's Fifth Galactic Empire. (See section **A Sun for a Galaxy?**)

68. See “The Emblem of the Terran Federation” for the possible planetary coat-of-arms of Fifth Empire Terra.

69. See my paper “Piper's System” for the possible historical models of the later galactic empires.

70. Asimov, *Foundation*, p. 8 *Pebble in the Sky* contains a different figure. “Bel Arvardan...felt at supreme peace with all the hundred million star systems that composed the all-embracing Galactic Empire.” (Isaac Asimov, *The Far Ends of Time and Earth* (Garden City, NY: Doubleday & Co., 1979), p. 17) If that

means 100 million *inhabited* systems, then it is obviously at variance with the number given in *Foundation*. But if it means a hundred million *total* systems, then the Milky Way was once thought to contain far fewer stars. The correct number is of course unknown, but current estimates place it at 100-400 *billion* stars. (http://en.wikipedia.org/wiki/Milky_Way)

71. Piper, *Empire*, p. 21

72. *Ibid.*, pp. 135-136 Here, too, Piper may have been inspired by Asimov. The Milky Way is actually displayed on the ceiling of General Bel Riose. "Slowly, in the footsteps of the ushering aide, he stepped into the garish room whose ceiling was an ornamented stereoscopic model of the Galaxy, and in the center of which Bel Riose stood in field uniform." (Asimov, *Foundation and Empire*, p. 25) Riose is standing right under the ornamental Galaxy, even as Beam has the Galactic Emperor Paul XXII seated right under his own lighted one.

It is therefore interesting that Riose's ceiling is mentioned just six pages before Asimov introduces his own Galactic Emperor, Cleon II, who "slept in the pleasure palace of Ammenetik the Great, as heir of a line of Galactic rulers stretching backward into a tenuous past." (*ibid.*, p. 31) Assuming it was conscious modeling, Piper may have reasoned that it made more sense for the Galactic Emperor Cleon II to be lying under an ornamental ceiling depicting the entire Milky Way, which is (mostly) his domain, rather than General Riose, who is merely "the Military Governor of Siwenna" and commander of "the Twentieth Fleet of the Border." (*ibid.*, pp. 33, 51) A much narrower range of authority, requiring a more modest ceiling map.

73. The answer to the question, then why call it a 'galactic' empire at all? would be the Asimov influence. The proper names of Piper's First, Second, and Third Empires should be 'Interstellar' rather than 'Galactic'. The Fourth Empire may control more than half the Galaxy, lending it at least a plausible claim to the title, but it is my belief that Beam's Fifth Empire is his only true Galactic state.

Thus, though inspired by Asimov, Beam was seemingly also trying to improve on his ideas. In Isaac's future history, there are two universal states, the First and Second Galactic Empires, that control the exact same area—the Milky Way galaxy. A somewhat 'stagnant' concept, when you think about it. But in Piper's future history, there is a progression of six universal states, five of which are called Galactic Empires, and each of which is presumably larger than its predecessors, until the Fifth Empire finally unites the entire Galaxy. This seems to parallel the historical process by which Western civilization expanded until it united the entire Globe, but during which various European nations were dominant at different times.

74. Carr, *Piper Biography*, p. 214

75. Piper, *Empire*, pp. 221, 225 "The Far Stars" is perfectly logical within the framework of Piper's story; it seems to mean anything beyond the general stellar neighborhood of Terra (presumably called the Near Stars). However, 'Far Stars' may also be a hidden tribute to the *Far Star*, spaceship of Hober Mallow in *Foundation*. Mallow travels from the Foundation, located at the edge of the Galaxy, to Siwenna, located in the Galactic Empire. There he meets Lord Onum Barr, Patrician of the Empire, and together they travel via the *Far Star* to Trantor in the center of the Galaxy. Piper reverses this by having the Lords Salsavadran and Dranigrastan travel from Dremna in the center of the Galaxy to Terra, located quite a ways out toward the Periphery.

76. *Ibid.*, p. 222

77. This impression is supported by the historical models. "Dremna" appears to be a modified anagram of 'Denmark'; Beam merely left out the k. But if we put it back in, Dremna becomes 'Dremnak', and Dremnak has the same vowel-consonant ratio as 'Trantor'. That Piper used such a method of transliterating is known. In "Omnilingual", he mentions that the name of the Old Martian city discovered by the Terrans was "Kukan, or something with a similar vowel-consonant ratio." (H. Beam Piper, *Federation*, (New York, NY: Ace Books, 1981), p. 41) In my paper "Beam's Mars Revealed", I deduced that Kukan may simply be a transliteration of 'Piper'; a literary device by which he figuratively signed his name—or 'made his mark'—on the Red Planet. He also employed the practice in his Paratime series; the god "Dralm" on the Fourth Level Aryan-Transpacific Subsector appears to be a transliterated form of 'C(h)rist'. (See my paper "A Study of Kalvan Subsector".)

So why did Beam name the capital of his galaxy-spanning Fifth Empire after Denmark? Presumably because Denmark is a peninsula in northern Europe—the counterpart of Italy, a peninsula in southern Europe, whose capital is Rome, which happens to be Asimov's historical model for the galaxy-spanning First Empire. As a bit of Piper's wordplay, Dremna is therefore in perfect company, because Trantor itself

appears to be a modified anagram of 'Otranto', a city in southern Italy. Isaac simply changed one of the two o's into a second r (Otranto—Trantoo—Trantor), probably because he based his First Galactic Empire on 'Rome'; the Roman Empire.

Thus, like Asimov, Piper was also using Western History as the basis for his Future History, but unlike Isaac, didn't limit himself to southern European models. Dremna is therefore an example of what I call Beam's 'complementary' approach; filling in the gaps left by other future history authors, such as Asimov and Heinlein.

78. Piper, *Empire*, p. 223

79. Asimov, *Foundation*, pp. 12-13

80. Its political organization is also modeled on Asimov's; again, see **Appendix 1**.

81. H. Beam Piper, *Paratime* (New York, NY: Ace Books, 1981), p. 53

82. <http://www.dana-mad.ru/gal/display.php?img=3833> I cropped a bit off the top of the picture.

Appendix 1. Parallel Galactic Empires

83. Piper, *Empire*, p. 89

84. *Ibid.*, p. 88

85. *Ibid.*

86. *Ibid.*, pg. 137 If the colony on the fourth planet in the Adityan system ever becomes populous and powerful enough to seek independence, it will probably not be granted a Planetary Proconsul of its own. Aditya's sovereignty includes the entire system, so any attempt by the fourth planet to break away could be met with Imperial intervention.

However, in stellar systems that *already* contain more than one inhabited planet, as in almost half the old System States Alliance (Piper, *Federation*, p. 190), it is possible that each is governed by an Imperial Proconsul. Aditya's fourth planet would be a parallel of Mars, and both Mars and Venus are settled from Terra long before the Galactic Empire is born. Terra itself "*was bombed back to the Stone Age*" during the breakup of the Old Federation (John F. Carr, Introduction to "The Return"; *Empire*, p. 181), so there is presumably no proconsul there. But depending on how the rest of the Solar System fared during the Interstellar Wars and Space Viking Age, Mars and Venus may both be governed by Imperial Proconsuls during the First Empire. In that case, the Solar System could be divided between them. The Proconsul of Venus might be granted authority over the nearest planets, Mercury and Terra, while the Proconsul of Mars is responsible for the Asteroid Belt and the outer planets.

87. Piper, *Empire*, pp. 136, 137

88. Each of the ten Imperial Viceroys would then control more planets than the entire System States Alliance, which "had ninety systems, a hundred and thirty inhabited planets, [and] a hundred billion people". (Piper, *Federation*, p. 190) A hundred billion times ten equals 1 trillion people; a third less than the Galactic Empire, which at its height contains "a trillion and a half intelligent beings" (Piper, *Empire*, p. 136).

89. Asimov, *Far Ends*, p. 28

90. Asimov, *Foundation*, pg. 72 Notice that Piper describes the galactic hierarchy in a story set not long before his First Empire falls, while Asimov describes his galactic hierarchy in a story just after the First Empire begins breaking up. Both therefore occur in 'late Imperial' times.

91. *Ibid.*, p. 102

92. *Ibid.*, p. 168

93. *Ibid.*, p. 166

94. Asimov, *Far Ends*, pp. 28-29

95. Chris Scarre, *The Penguin Historical Atlas of Ancient Rome* (New York, NY: Penguin Books, 1995), p. 122

96. The original number of systems in the Prefect of Anacreon may have been 27. During his embassy to Terminus, Anselm haut Rodric says that "We've just finished a war with [Smyrno] and she still holds two stellar systems that are ours." (Asimov, *Foundation*, p. 44) Applying Asimov's number would mean that Piper's Viceroys would only rule over five or six Prefects (136 divided by 25 or 27), rather than ten.

In any case, the size of Piper's Prefectures is just an estimated average; the actual number of systems probably varies, and there may well be larger Prefectures with 25 or more systems, while smaller ones contain fewer than 10. For example, the Prefect of Marduk could be larger, given the importance of Marduk in establishing the Empire; presumably similar to the size and role of Prussia in creating the German Empire. But the Prefect of Tanith could be smaller, roughly consisting of Tanith and its trade planets at the time of *Space Viking*.

97. Piper, *Empire*, p. 136 That he specifies the "western" side is another hint that Beam was using Western History as the model for his Future History. See endnote 77, and my paper "Piper's System".

98. *Ibid.*, p. 122