

Zdeněk Burian and the Golden Age of Palaeo-art Part 2.

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4. The Špinar-Mazák Era

Augusta's successor at Charles University was Dr. Zdeněk Špinar (1916-1995), and he became Burian's collaborator and scientific advisor after Augusta's death. Špinar was a highly-regarded taxonomist, an international authority in herpetology and an expert in fossil frogs (for which certain Czech deposits are famous). Špinar's fellow scientist Dr. Vratislav Mazák (1937-1987) would also collaborate with both Špinar and Burian. Mazák held posts both at Charles University and at Prague National Museum; he was an international authority on mammalogy in general and tigers in particular (he described *Panthera tigris corbetti*), and was a leading palaeoanthropologist (in 1975 he co-described *Homo ergaster* with Australian biologist Colin P. Groves). Mazák was also something of an artist who illustrated his own monographs. Both Špinar and Mazák influenced Burian's artistic style and the subjects of his paintings in both positive and negative ways.

The main difference between Špinar and Augusta was that Špinar was far less a populariser of science than his predecessor had been, although pedagogy was still paramount to his work. Špinar was simply unable to offer Burian the kinds of popular Augusta-type 'story-lines' to accompany and inspire his art. After Augusta's death, there was increased emphasis placed on Burian to produce anatomically correct (and stylised) faunal types set within land-

scapes of greater definition and clarity, as in textbook illustrations. Concurrently Burian adopted brighter hues for his colour palette, which in some regards appeared less natural than his earlier colour work. All these features tended to detract somewhat from the primary subjects of his canvases, due to the greater visual impact of peripheral elements. Perhaps nowhere is this change in artistic style more apparent than in Burian's underwater scenes. His marine invertebrate paintings of the 1940s and '50s are characterised by out of focus backdrops of murky shadows and silhouettes which evoke an aura of primeval mystery. By the 1970s, such scenes had become more encyclopaedic in style with each brightly-coloured genus clearly visible and neatly arranged as if the viewer was looking into a large, recently-cleaned aquarium.

Špinar's influence was evident in the first Špinar/Burian collaborative series of 10 oils completed in 1971 for the Czechoslovakian Academy of Sciences' *Universal Encyclopaedia*. The immediate impression is that the scenes are suddenly far more open and panoramic than Burian's older works. This trend was repeated in the second series of paintings (1974-1976) produced for Špinar's college text *Palaeontology of Vertebrates*. In addition to these changes, Špinar was very receptive to what Walica calls the 'dinosaur heterodoxy' of that era, with its increased emphasis on the interpretation of dinosaur ethology. Špinar and Mazák both directed Burian to

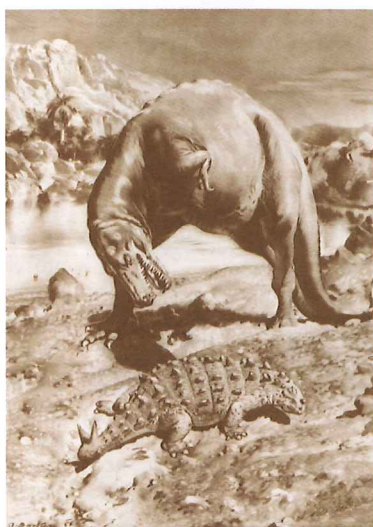
update a number of his Augustanian era paintings including well-known classics, but with mixed results.

On the positive side, Špinar supervised Burian to depict a series of convincing reconstructions of lower vertebrates that had not been considered by Augusta, principally Palaeozoic fishes (including armoured and jawless types) and archaic amphibians. Burian also added seven more canvases to his series of landscapes and oceanic scenes dating back to the Cambrian, and for the first time he ventured into another realm that had not fallen within Augusta's sphere of interest: that of depicting the early earth long before the genesis of life had begun (there was also a

canvas depicting the first marine blue-green algae). In spite of the barrenness of the planet's largely featureless surface at that time, Burian's five Precambrian canvases are amongst his most striking and dramatic landscapes. The total of his geological series eventually reached 36 (including the Vágner canvas completed in 1977, see next section). In 1972 came publication of Špinar's popular book *Life before Man* (the English translation of which was reprinted in '73, '74 & '77, and updated with a soft-cover version of rather poor print quality in 1995) which was in many respects a more comprehensive version of Augusta's *Prehistoric Animals*. It was translated into 13 languages and included some 40 Burian restorations that had been completed since the early Augusta book titles (four of which were key proboscidean paintings from 1964, namely: *Anancus*, *Gomphotherium*, *Platybelodon* and



Burian's 1942 depiction of the Silurian Seas shows various nautiloid cephalopods with a bed of sea lilies (right) behind flat corals and rugose corals. Much of the atmosphere of mystery and pathos inherent in such underwater scenes from this Augustanian era was sacrificed in the '70s when there was a greater demand for technical detail and clarity placed on Burian's reconstructions by subsequent collaborators.



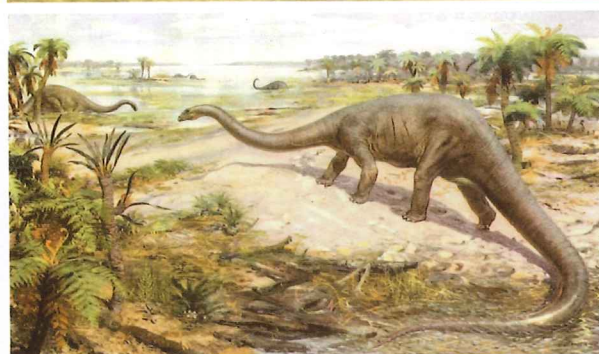
Three well-known Burian monochrome images dating from 1955. Clockwise from top left: *Gorgosaurus* and the ankylosaur *Scolosaurus* (this image was originally captioned as the genus *Deinodon* with a differently-shaped skull), a very unorthodox (for its time and even now) pterodactyl's-eye view of two Jurassic plesiosaurs of the genus *Cryptoclidus*, and a flock of *Pterodactylus* from the German Jurassic (this genus is notable as being the first pterosaur fossil to be identified, in 1784).



Tetralophodon).

Due to the changing philosophy of palaeoreconstruction during the 1970s, Burian completed more 'composite' imagery under his new supervisors than he had done under Augusta. I use the term composite in this context to denote any image containing three or more non-interacting vertebrate types (so as to exclude predator & prey depictions). Unlike some other palaeo-artists such as Rudolph Zallinger (1919-1995) and more latterly Jay Matterness and John Sibbick, Burian was not always comfortable painting composites, especially when asked to place different species in artificially close proximity to each other. Three Augustanian composites include the following: a 1941 depiction of four types of Carboniferous amphibians in a pool (re-painted in 1965; see figure); a 1954 European Miocene landscape featuring the elephant *Gomphotherium*, two types of deer (*Palaeomeryx* and *Dicrocerus*) and the flamingo *Palaelodus*; and a monochrome canvas published in *The Blowed over Life* (1941) showing a herd of *Deinotherium* alongside a herd of *Trilophodon* (*Gomphotherium*) at a waterhole, with boar in the distance. Examples from the Špinar-Mazák era include both dinosaur and Tertiary mammal subjects. The Miocene was depicted again in 1976 with a lake scene featuring a rhino and early forms of deer and boar, while a 1976 Eocene swamp scene harboured five faunal types (crocodile, serpent, primate and ungulates) and was a re-painting of a 1967 landscape that lacked fauna. A Cretaceous Gobi dinosaur composite from 1971 featuring *Psittacosaurus*, *Saurolophus*, *Gallimimus* and a crocodile-like *Pinacosaurus* (which was based on an obsolete restoration of *Syrmosaurus*) worked quite well, but another hastily-executed Gobi composite from 1976 (*Saichania*, *Gallimimus*, *Bagaceratops*) did not. Three primate composites from 1977 included Macaca and bison (the most convincing of the three), *Pliopithecus* and mega-fauna, and *Mesopithecus* and mega-fauna (all three images showed a primate troop in the foreground with mid-sized megafauna in the immediate background, and in two cases, elephants in the distance). Under Špinar's supervision in the 1970s, Burian painted a series of restorations of Tertiary ungulates and carnivorous mammals known from Asia, Europe and the Americas, some of which later appeared in the book *Prehistoric Animals and Plants* by Josef Beneš (1979). He also depicted a number of small but taxonomically important Mesozoic mammals (most of which were completed in 1976) including *Asioryctes* & *Barunlestes*, *Deltatheridium*, *Djadochtatherium* & *Kryptobaatar*, *Erythrotherium*, *Henkelotherium*, *Megazostrodon*, *Triconodon*, and *Zalambdalestes*.

Mazák's influence on Burian's work was similar to that of Špinar but was in some respects even more marked. His positive influence was most noticeable in a diverse series of palaeoanthropological works completed during their collaboration (to add to the similarly-themed collection painted during the Augustanian years). On the other hand, Mazák appears to have suppressed any romantic aspects of Burian's art in favour of heavily-stylised accuracy and the concept of the 'ideal restoration' (ironically, Walica notes



Burian painted a number of sauropods including the famous *Brachiosaurus* trio in a Tendaguru lake (upper, 1941) which became one of the most-reproduced palaeo images of all time, and *Diplodocus* (lower, 1952), one of several depictions he did of this genus. The *Brachiosaurus* image was at one time criticised for showing animals in water said to be too deep to enable inhalation. However, physiological evidence for such claims were entirely based on human studies. In contrast, sauropods not only possessed laterally-flattened chest cavities, but it is now known that large extant animals such as elephants (and surprisingly, camels) are capable of swimming while breathing with their lungs submerged at greater depths than is possible for any human.



This lucid and enchanting rock pool scene of Carboniferous amphibians was painted by Burian in 1941. Clockwise from top: *Urocorylus*, *Branchiosaurus*, *Microbrachis*, *Dolichosoma*. For some reason he re-painted the same scene in 1965 by re-arranging the subjects.

that Mazák continued to demonstrate clear romantic elements in his own textbook illustrations). But Mazák played other key roles in Burian's career, namely that of acting as an intermediary between Burian and the state authorities and between Burian and the art critics. Part of the reason for this was that since the 1950s Burian lived a self-imposed reclusive lifestyle, and was prone to locking himself away in his studio for long periods so as to concentrate fully on his work without interruption. Apart from Prague, Burian spent much time at his summer studio near the Central Bohemian town of ěrnošice. For the last few years of his life, he moved to the Moravian town of Štramberk (where he also had a studio). On May 28th 1992 a museum dedicated to his life work was opened in Štramberk.

The first collaboration between Mazák and Burian was a series of palaeoanthropological articles published in the journal *Živa* (= Life). The content focused on fossil hominoids and hominids, and the resulting artwork met with high approval from the anthropological community. Their next project had greater international implications, as Burian was invited to produce restorations for the *Animal Life Encyclopedia* (*Tierleben*) compiled by the celebrated German zoologist/conservationist Bernhard Grzimek

(1909-1987) and published between 1967-1972 (translated into English in 1975). Just as Burian and Augusta had worked under strained conditions during the war-time occupation of their country, the *Tierleben* also had close links to WW II. Grzimek had a doctorate in veterinary medicine when he fled the Gestapo in 1945 from Berlin to Frankfurt. There he was appointed director of what was left of the Frankfurt Zoo (only 20 animals had survived the war) and he organised the zoo's relocation to the suburbs where it eventually became one of the world's most famous. Together with his son Michael, Grzimek spent years in East Africa studying Serengeti wildlife (Michael was killed in a plane crash there in 1959) and his film *Serengeti shall not die* (1959) and the book based on it were instrumental in the establishment of Serengeti National Park.

The initial offer to Burian came in the mid '60s when he was asked to create a number of zoological watercolours. Later, the German edition added three supplementary volumes including one on the history of life (these were not included in the English edition) and it was this that Burian was offered a contract to illustrate. But the Swiss publisher's brief proved a disappointment as it was simply a request to fill the canvases with as many animal types as possible, being nothing more than a series of systematic images (including composites) crammed between the text.

Burian was very reluctant to accept the contract because it went against every artistic

principle he had followed. Burian wrote to the publisher "From the samples you have sent me, I can tell it will be a perfect work, but this dry-as-dust way of depicting the animals is really foreign to me." Nonetheless, Burian was well aware of Grzimek's international standing and the possible impact of the *Tierleben* (even today it is difficult to find a more highly-acclaimed series), and after two years of protracted negotiations, he reluctantly accepted. Burian's 13 images for the *Tierleben* show animals trapped in mud or sediment or in various stages of decomposition prior to fossilisation, includ-

ing mosasaurs and giant turtles (*Archelon*). Compiling such imagery must have seemed a total anathema to him. A less atypical (albeit composite) section was his panoramic gallery of the Jurassic fauna of southern England which included *Pterodactylus*, *Archaeopteryx*, *Megalosaurus* with prey, the ankylosaur *Polacanthus*, and a graceful rendition of the sauropod *Cetiosaurus*. Perhaps unsurprisingly, Walica described the *Tierleben* images as Burian's weakest series of paintings.

5. The Final Project

As was the case with Burian's involvement with Grzimek's *Tierleben*, Africa and a famous zoo were two common threads that once again featured in the genesis of his last major project. This was instigated by none other than the celebrated Czech zoologist Josef Vágner (1928-2000). Although not well-known in the West, Vágner was in many ways the embodiment of Bernhard Grzimek and Britain's David Attenborough combined into one. He was a forester, naturalist, hunter, animal collector, photographer, explorer, author, and zoo director. Although Vágner began his career as a teacher, in 1965 he was appointed Director of the Dvůr Králové Zoological Gardens (a post held until 1983) which was later expanded so as to include the famous East Bohemian Safari Park. Between 1967 and 1976, he organised nine expeditions to collect almost 2000 African animals for zoos and wildlife parks, and his books on his African adventures were translated into seven languages. Unlike many other such expeditions of that era, Vágner's collecting techniques and acclimatization practices ensured maximum stock survival. He was also involved in repatriating zoo-bred animals into the wild and supplying exotic wildlife to other zoos in Czechoslovakia and neighbouring countries. Today the zoo is also one of Europe's major gene banks for African ungulates, and it has been home to the world's most endangered large mammal, the northern white rhino *Ceratotherium simum cottoni* which has only ever been captive-bred by Vágner's zoo (in 2009 the zoo released some specimens into the wild). Sadly, at the time I was writing this article, one of the last five remaining animals died at Dvůr Králové Zoo (on 27/7/2015).

In 1977, Vágner tried to persuade Burian to create a giant mural for his zoo to show the parade of prehistoric life through the ages, something akin to Rudolf Zallinger's *Age of Reptiles* and *Age of Mammals* murals at the Yale Peabody Museum. Due to the state of his health, Burian was reluctant to undertake such a demanding project, but he and Vágner agreed on an alternative concept, a series of 34 large canvases of size 1.2m X 1 or 1.55m. Although Mazák was Burian's main supervisor for this project, Špinar also assisted with some reconstructions. Uncharacteristically Burian worked very slowly on each image; apart from his health, the scale of the canvases required great detail in some cases (such as the *Megatherium* where the leaves on the tree were laboriously painted individually). Another likely factor was the health of his wife Františka who passed away during the project (on Oct 18th 1979).

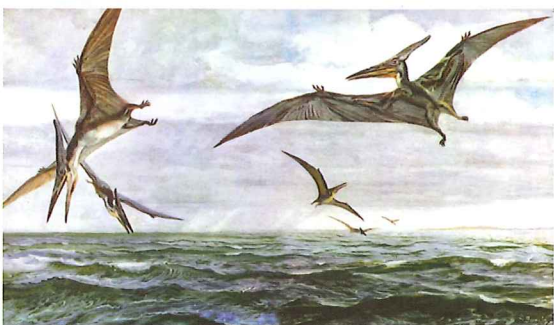
Burian began working in sequential geolog-



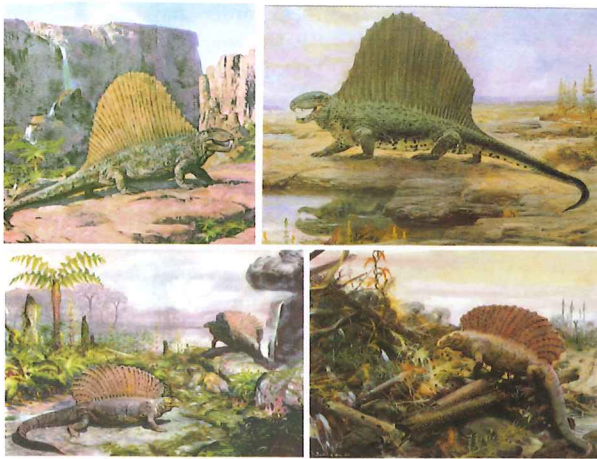
Amongst the many instances of Burian having painted more than one version of a subject is the giant placoderm *Dunkleosteus* from the late Devonian, shown here amongst a school of small *Cladocelache* sharks. The upper dates from 1955, and the lower from 1967, being one of 44 so-called 'school paintings' of which sadly only 34 exist today. These two paintings are an interesting example of Burian managing to infuse as much pathos and mystery into the colour version as he did in the more-easily engendered monochrome one.

(1979); *Archaeopteryx* (1979); *Iguanodon* (1979); *Kronosaurus* (1981, see figure); *Diplodocus* (1978); *Tyrannosaurus* & *Triceratops* (1979); *Torosaurus* (1978); *Indricotherium* (1980); *Carcharodon* (1979); *Thylacosmilus* (1980, see figure); *Deinotherium* (1978); *Smilodon* (1978); *Megatherium* (1979); *Bos primigenius* (*aurochs*, 1980); *Mammuthus* (1978); and Neanderthals & cave bear (1979). On June 17th 1983 the exhibition of his works opened at the Dvůr Králové Zoo and was housed in a magnificent villa formerly used as a regional and textile museum. At the time it contained 59 of his oil paintings (37 in addition to the Vágner canvases), but Vágner subsequently arranged to purchase 88 of Burian's older paintings including many famous examples from the 1950s and '60s to boost the zoo's holdings to 147. In 1998, the collection was officially declared a Czech cultural monument.

Walica states that some Vágner canvases reflect the fact that Burian was ill and that, with a few exceptions, they leave a weak impression on the viewer. He comments that Burian was "anticipating his own death....he overfills these landscapes with dead, rotten trees." This was true for a minority of canvases (*Edaphosaurus*, *Diplodocus*, *Torosaurus*, and *Iguanodon*), and although dead vegetation and fallen trees were characteristic of many earlier Burian images, new plants were generally shown growing amidst the debris in the earlier paintings whereas they were not in the Vágner canvases. While it is true that in general the Vágner series was more stylised and less iconic than many of Burian's previous works (and here I am largely speaking of the 1940s and '50s), this was partly due to the fact that the theme of the series was rather conservative as it was intended for large numbers of people expecting to see traditional reconstructions of prehistoric life. During the socialist era, the zoo was popular not only within



Two of Burian's numerous pterosaur reconstructions from the Augustinian era showing (upper) a flock of *Pteranodon* circling over the inland Kansas Sea (1960), and (lower) a flock of *Pterodactylus* (1967).



Four of Burian's synapsid reconstructions (clockwise from top left): *Dimetrodon* (1970) and (1965), *Edaphosaurus* (1961) and (1942).



Burian's proboscidean reconstructions were mainly painted in the early 1960s. Clockwise from top left: *Palaeoloxodon* (1961), *Gomphotherium* (1964), Columbian mammoth *Mammuthus columbi* (1961), and the steppe mammoth *Mammuthus trogontheri* (1961).

Czechoslovakia but received large numbers of sponsored tour groups from other socialist countries, particularly following the opening of the safari park for which it provided tours in open-roofed double-decker buses.

In fact some of Burian's best large-format colour canvases emerged during the Vágner project including a number of potential classics. In this category I would place at least the following images: the Precambrian; *Deinotherium*; *Carcharodon*; Neanderthals & cave bear (this image being a more defined version of a 1951 monochrome scene); *Archaeopteryx* (when I first viewed this painting I thought it was a lost canvas from the 1950s, so close was its style to that era); *Thylacosmilus*; and *Kronosaurus*. The *Mastodonsaurus*, *Ichthyostega* (a re-painting of the original 1967 version; see figure), and the *Bos primigenius* canvases would also be contenders.

The Vágner *Thylacosmilus* (see figure) is one of the most convincing of Burian's feline-like paintings with respect to both subject and setting (ironically, his last *Smilodon* from the Vágner series, is one of his weakest). The *Carcharodon* is interesting from a dimensional perspective; in earlier paintings of giant marine vertebrates (e.g. *Dunkleosteus*, plesiosaurs and mosasaurs) Burian often gave the impression of size by including smaller fish in the image, but he accomplished the same effect simply by the shading and perspective of the *Carcharodon* (the background is so indistinct as to provide negligible viewer guidance). The *Kronosaurus* is undoubtedly a classic, and contains details which suggest a sequence of events (see figure caption). With regard to the Vágner *Deinotherium*, Burian's original 1940 family trio (two adults and calf) was so idealistically composed that to surpass it would have been an impossible task (see figure). This proboscidean was a favourite subject for Burian; for some reason he re-painted his original family group within a more panoramic setting in 1951 (but minus the constrictor snake) and did other depictions in 1941, 1968 (twice) and 1973. I have not sighted the 1968 images but would rate the Vágner *Deinotherium* as above the 1951 and '73 images in composition and detail.

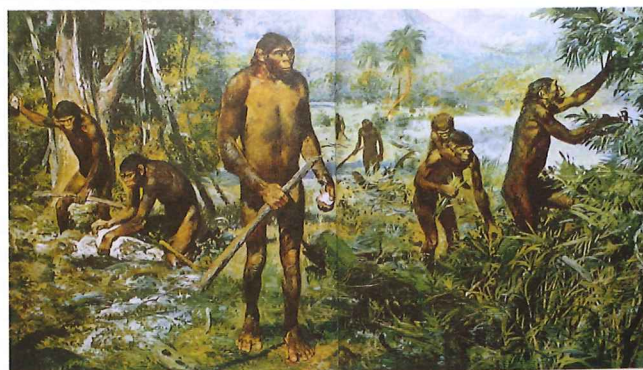
The Vágner *Indricotherium* and *Megatherium* (a re-painting of his original 1941 monochrome) are technically accomplished but seem to lack the pathos of earlier depictions of those genera. Burian first painted the gigantic *Indricotherium* in 1955 (see figure) closely-based on reconstructions by Flerov. He was correct to use these as templates given that some Western museums (including,

surprisingly, the AMNH in New York) continue to use very outdated restorations of this animal by representing it as a giant rhino minus the horn. The animal was in fact, very giraffe-like in appearance, and Burian captured this as competently as Flerov had done. His later *Indricotherium* painting (1964) was in frontal aspect, and, as in the 1955 version, was viewed from ground level which accentuated the animals' dimensions (this image

was used for the dust-jacket of *The Age of Monsters*). In the Vágner version however, the main animal was depicted lying/kneeling as viewed side on, making it appear neither as large nor as impressive (the confusing horizon angles in this image did not help in this regard). His Vágner *Diplodocus* is technically correct in most details (although the tail is rather thick), but the image lacks the iconic status of his Augustanian versions (1952 and the 1966 School painting). It shows the nostrils on top of the cranium unlike his earlier versions where they are on the snout (Walica claims this as an oversight with the early reconstructions on Augusta's behalf, but I am unaware that this issue has been settled even today).

The 'weak' Vágner images include *Torosaurus* and *Edaphosaurus* from 1978 and three images from 1979 (the year of Františka's death): *Iguanodon*; *Tyrannosaurus* & *Triceratops*; and *Brachiosaurus*. Again the

Torosaurus is quite correct technically but far more stylised and 'wooden' than his earlier ceratopsians. His *Edaphosaurus* is depicted in an almost retro style and does not match his earlier versions in terms of credibility (see figure). Burian had previously painted iconic images of the 1979 subjects (*Tyrannosaurus* in 1938, *Triceratops* in 1955, and *Iguanodon* and *Brachiosaurus* from 1941). The Vágner *Tyrannosaurus* & *Triceratops* recalls Burian's (1940) image for the front cover of *The Wonders of the Prehistoric World*. Although the animals depicted there were rather clumsy (the *T. rex* is far too rotund and has three-fingered hands which was thought to be correct at that time), they made for suitably primeval imagery. His original 1938 *Tyrannosaurus* had been 'updated' earlier (under Špinar) so as to straighten the tail and alter the skull. Burian's *Triceratops* on the *Wonders* cover is somewhat Victorian, with rows of high serrated dorsal scutes. His 1955 image had a more likely morphology (used again in a very similar re-painted 1962 canvas) so it is surprising that he resorted to the 'serrated' version for the



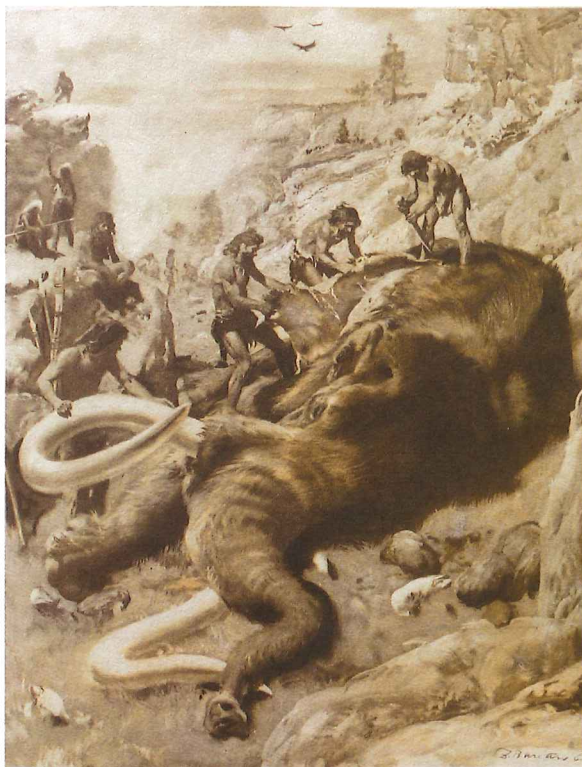
Amongst numerous anthropology subjects painted by Burian is this upper image (1951) of *Pithecanthropus* (= *Homo erectus*) from the Javanese Pleistocene (photographed from *Life before Man*), and a dramatic encounter between *Pithecanthropus* and a sabre-toothed cat (lower, 1952).

Vágner canvas (in which the forelimbs are relatively too small). The two *Tyrannosaurus* fare little better, the female has a low slung bloated body while the male (foreground) appears wooden, as if it happened upon its dead prey by chance. The landscape (or should one say moonscape) has only a few trees in the distance to hint at any foliage. The Vágner *Brachiosaurus* (supervised by Mazák) is a complete oddity and pales next to the 1941 original; the neck is unnaturally contorted and far too short. The iconic original was later dropped from the 1995 edition of *Life before Man* and replaced with the bizarre Vágner image (no doubt as the result of the deep water physiological debate that may have been spurious given what is now known of large animal physiology; see figure caption).

Why did Burian paint such blatantly atypical images in these several instances? I doubt that failing eyesight was to blame (as has been claimed) because subsequent canvases returned to a high standard. Naturally there were his own health issues and the passing of his wife. I also suspect that he was simply painting as directed for some canvases after having lost the will (not to mention the fortitude) to infuse any of his own themes into them. Even his beloved *Iguanodon* suffered - this was not only his favourite saurian (see next section) but one he had depicted competently numerous times including a 1962 work (see figure) that was an elaborate colour version of the original 1941 monochrome. The Vágner *Iguanodon* is admittedly not too different in anatomical detail from earlier images but appears strangely statuesque against the backdrop of a setting sun (which is not well-depicted). The skull is relatively small and the tail drags on the ground, compared with his earlier depictions where it only just touched when the animal was fully upright, but was otherwise well off the ground. All of this strongly indicates that Burian's mind was pre-occupied during part of 1979. Following Františka's death, his art for the Vágner series improved markedly, as if the burden of Burian's concern for her health had been lifted.

6. The Master's Legacy

It is difficult to objectively summarise Burian's extensive palaeo-art legacy (without even considering all of his other work) and to some extent I feel unqualified to do so. However, I will touch on several points that I consider salient to any discussion on the topic. When reviewing his palaeo-art it



Burian's images of early man's co-existence with the mammoth as a source of food, insulation and even shelter (in Central Europe mammoth tusks and bones were used as hut frameworks) included this cleverly-composed 1961 reconstruction published in *A Book of Mammoths*.

becomes evident that there are certain landmark years and periods. The first (and in some respects the most important date) is 1940/41. In these two years Burian painted some of his most iconic depictions of well-known prehistoric types for several Czech language publications. Many of these were classic monochrome gouache images, although some famous colour classics also emerged at this time (notably *Deinotherium*, *Brachiosaurus*, *Styracosaurus*, *Tylosaurus* & *Pteranodon*). In general these works were characterised by strong primary subjects set within less detailed landscape elements. The next big year was 1955 after the contract was signed for production of *Prehistoric Animals*. Again both monochrome and colour canvases featured in that year, some of which were re-worked images that first appeared in Czech publications of the 1940s. The year 1961 saw the series of colour proboscidean paintings for *A Book of Mammoths* while in 1962 came the collection of marine reptile images for *Prehistoric Sea Monsters*, plus the palaeoanthropological/Ice Age fauna canvases for the *Anthropos* Pavilion. In 1967 there was the series of prehistoric landscapes, and after Augusta's death (1968) the comprehensive

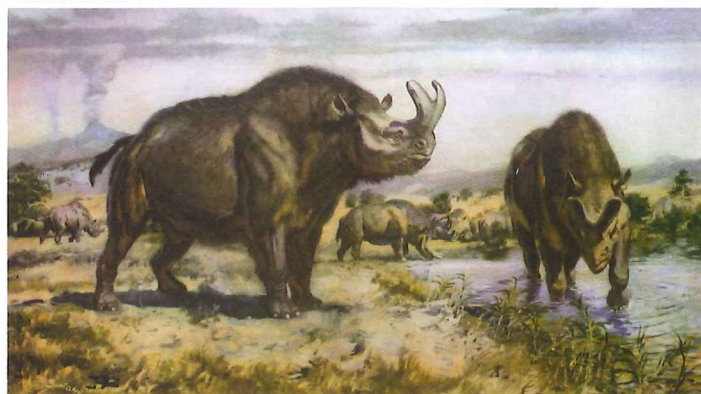
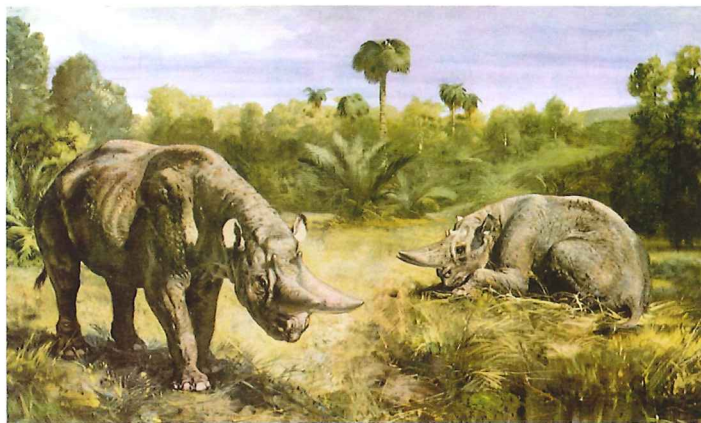
series of palaeoanthropological reconstructions under Mazák's supervision (lasting to 1981). Finally in 1979-81 came the best of the Vágner canvases.

As mentioned previously, Augusta permitted Burian a large degree of artistic licence throughout their 30-year collaboration, and although both scientist and artist followed a very orthodox philosophy, Burian often infused very dramatic themes into what may

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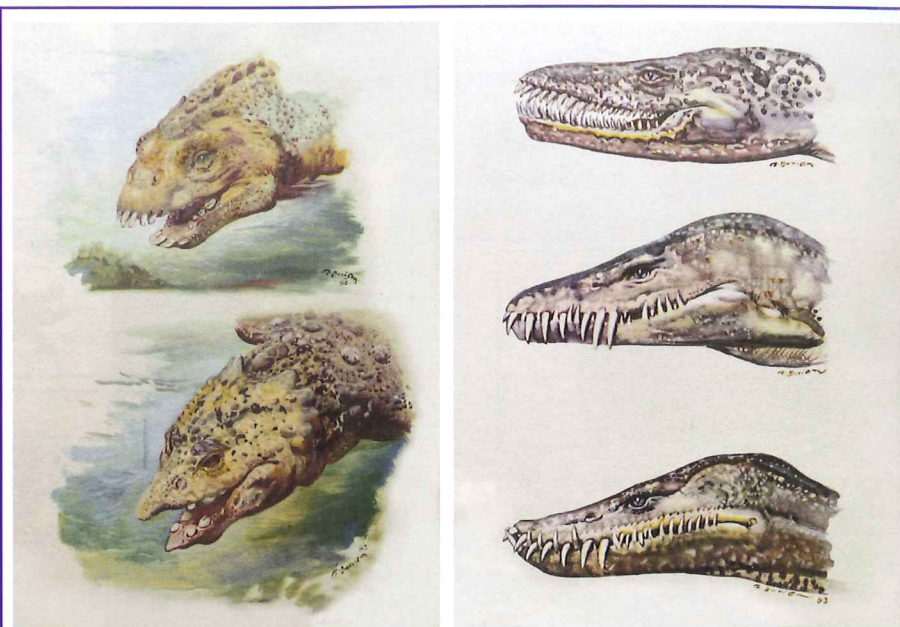
Two of many prehistoric landscapes painted by Burian under Augusta's supervision include (upper) a dramatic portrayal of a Carboniferous storm (1967) and (lower) a more orthodox reconstruction of a Triassic scene (1952).



Burian reconstructions of two types of horned Eocene mammals. The upper (1961) shows the unusual paenungulate *Arsinoitherium* from the Egyptian Fayum, and the lower (1960) depicts a herd of *Brontotherium* (= *Megacerops*), the so-called 'thunder horse' of the North American Sioux Indians, who believed that their exposed bones represented mythical beasts which caused thunderstorms as they galloped across the clouds.

have otherwise resulted in formal compositions.

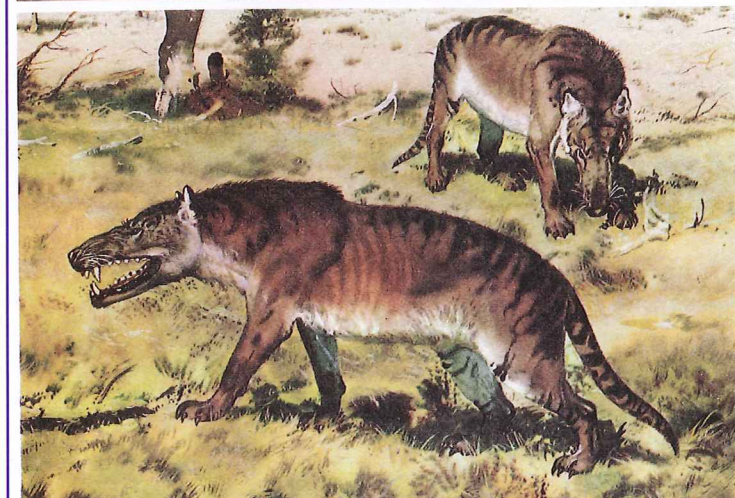
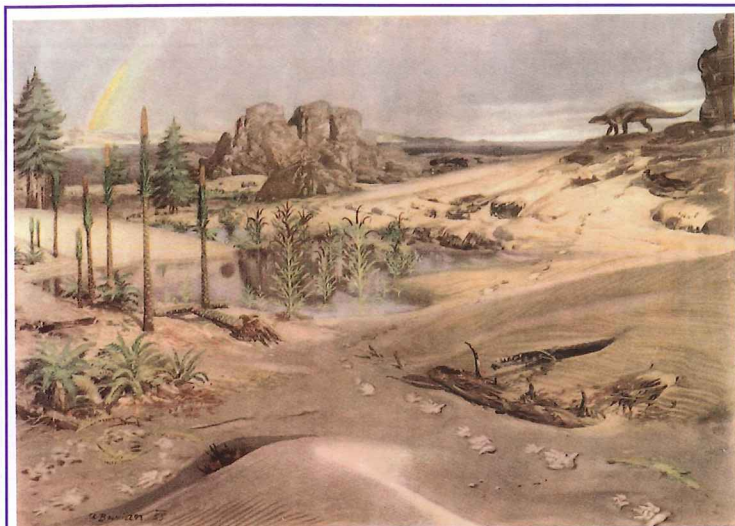
To a large extent, many elements of his Augustanian era reconstructions were entirely of his own imagination and stemmed from his experience in depicting natural history subjects and illustrating adventure novels. By the same token, he strictly followed the anatomical dictates of formal restoration. As detailed in commentaries by his friend and cataloguer Petr Sadecky (1943-1991), Burian ensured that all key features of a subject were clearly visible on each canvas while consciously omitting any morphological details that could in any way be construed as ambiguous. Such rules may seem an unusual approach to today's palaeo-artists, but Burian and Augusta were working in an era when the science of palaeontology (and by extension the art of palaeoreconstruction) was an almost entirely descriptive discipline that rarely touched on the contextual sub-disciplines (palaeoecology and palaeoethology) that now characterise it. Walica claimed that one of Burian's restoration rules was that his flying pterosaurs were always depicted with wings held horizontally, but he may not have fully defined his context because I know of at least five instances (e.g. see figure) where the wings were depicted in a V shape (and there are possibly other examples). In spite of being subject to a number of restoration 'rules', Burian did paint a number of purely hypothetical reconstructions, including assumed transitional (pre-*Archaeopteryx*) proto-avian types, as well as animals known only from very fragmentary remains (two



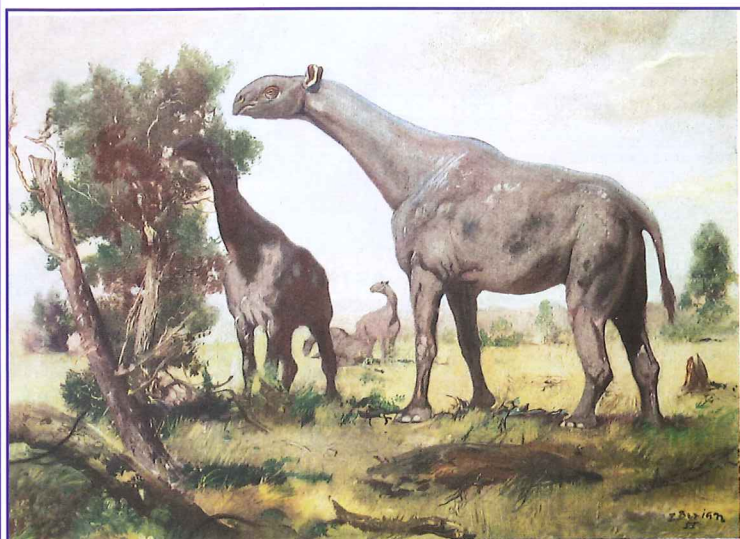
Comparative heads of marine reptiles showing (left): the placodonts *Placodus* (top) and *Placochelys* (1962) and (right, from top to bottom): the plesiosaurs *Muraenosaurus*, *Hydrotherosaurus* and *Styxosaurus* (1963).

examples, *Chirotherium* and *Andrewsarchus*, are included as accompanying figures. The latter image was subsequently widely adopted as a template by other artists).

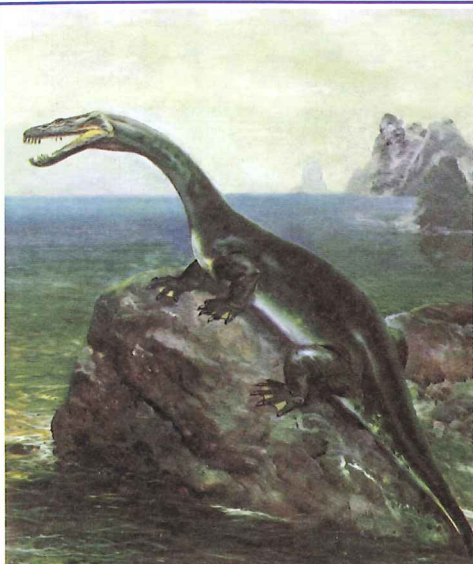
It is notable that Burian painted a large number of palaeo-subjects more than once (apart from publication requirements, as with the Siberian mammoth, for example). In some cases he experimented with different versions of an image seemingly for his own interest, and in this category comes to mind the series of (four?) paintings of a *Deinodon* confronted by two *Styracosaurus* (1948) at different stages of conflict (the *Styracosaurus* were later overpainted by Burian into *Monoclonius*). He also had favourite subjects, evidence for which comes from his interview with Ondrej Neff when Burian stated that he divided saurians into 'sympathetic' and 'unsympathetic' types. When asked which ones he considered most sympathetic, Burian replied... "I like *Iguanodon* the best. On the other hand I do not like *Tyrannosaurus* at all. Look at its dwarfed little hands. Some animals are in fact beautiful and some are not beautiful. One can do nothing about it." Burian painted *Iguanodon* at least four times: 1941, '50, '62 and '79 (the first and third being the best examples) not to mention numerous ink and pencil drawings. As far as I am aware, apart from the 1938 image, the only other *Tyrannosaurus* paintings were the 1940 image used for the cover of *The Wonders of the Prehistoric World*, and the Vágner canvas. He also painted its Gobi equivalent, *Tarbosaurus*, in a 1970 depiction that became an



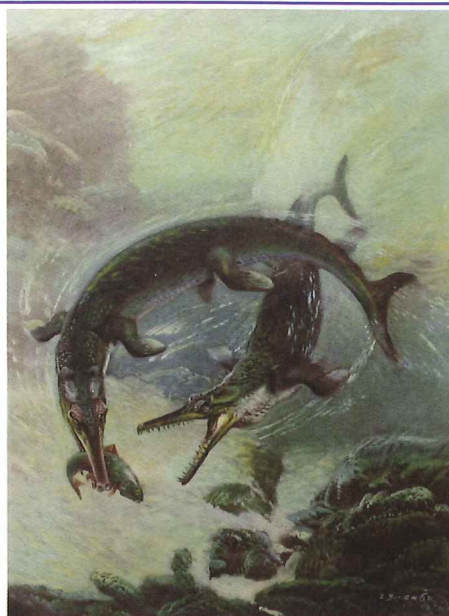
Not all of Burian's reconstructions were based on good fossil evidence. In 1955, under Augusta's direction, he painted this German Triassic scene (upper) with a speculative distant profile of the mysterious *Chirotherium* (which was most likely a pseudosuchian archosaur, known only from its fossilised footprints). Another example was his hypothetical restoration of the giant Eocene carnivore *Andrewsarchus* (lower, 1970) which although very convincing, is known only from an incomplete skull found in the Gobi Desert by the American Museum of Natural History.



The largest known land mammal *Indricotherium* was painted by Burian at least three times; 1955 (above), 1964, and in 1980 for the Vágner project. All three were closely based on the original reconstructions by Russian scientist/artist Konstantin Flerov.



Two marine reptile reconstructions that Burian completed in 1962. Above is the Triassic seal-like *Nothosaurus* and (right) a pair of the crocodile-like (and similar-sized) *Metriorhynchus* from the Jurassic.

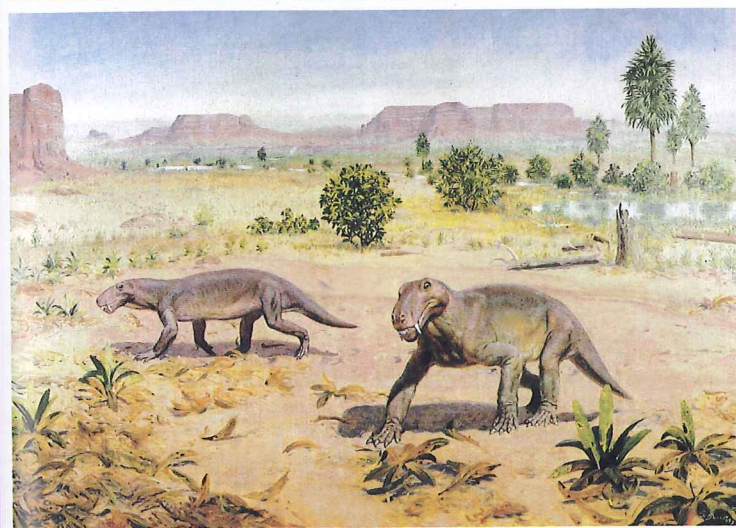
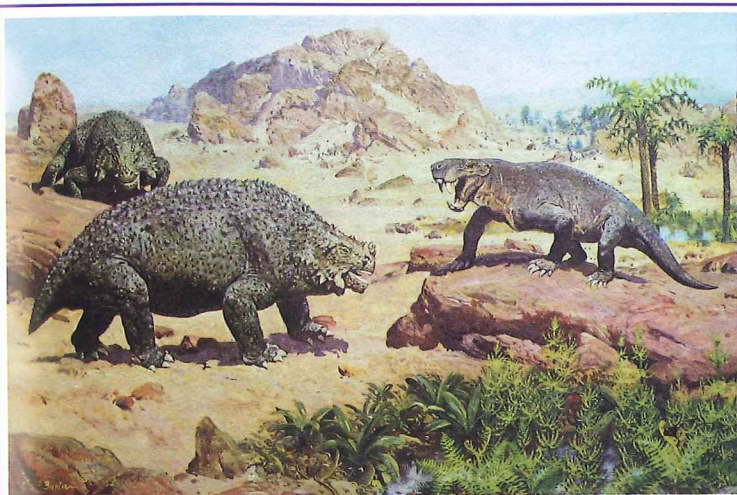


unlikely icon despite being hastily composed.

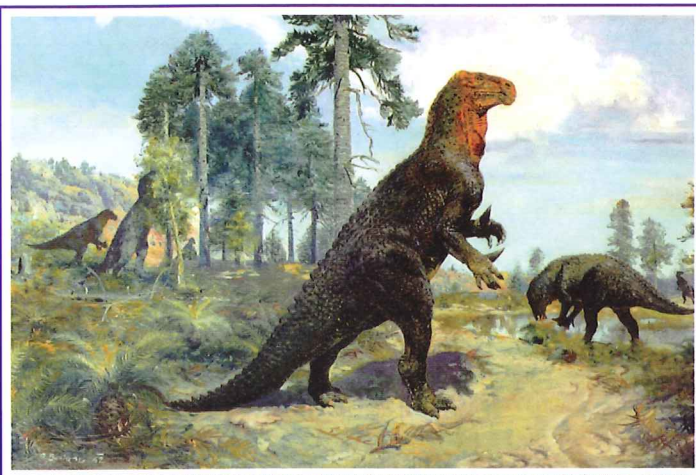
Other than the 'trade secrets' that Burian took to the grave (such as his photorealistic gouache technique), there are some identifiable insights into his artistic style. Regarding the technical components of his art, some palae-themed images required very detailed preliminary 'plans' showing relative osteological measurements, muscle attachment areas, skull details, and limb

positioning. In other cases he produced test water-colours of intended canvases, some of which were close in composition to their final image (such as the detailed version of his 1951 'Neolithic Village') while others were noticeably different (e.g. 1941 *Brachiosaurus*). Completed oil paintings were sometimes later altered, most often for scientific reasons (as mentioned previously) but also for purely aesthetic ones (as with *Brachiosaurus* in which the first published version was later given a different background). As regards the philosophical basis of his art, this appears to have been the same whether he was painting a natural history subject or a palaeo one. In an interview with Pavla Horakova published posthumously, Burian described how he began each canvas.... "When I paint an animal, I always start with the eye. I make a sketch with pencil or charcoal and then I paint the eye in oil, and then I proceed. The eye looks at me and I understand the animal better." (Cesky Rozhlas, 8/6/2005). Walica discussed Burian's artistic philosophy in some depth, including the fact that he did not follow any particular artistic movement (although his style largely followed those of the 19th

Century masters), and he compared it with those of Burian's contemporaries and his successors of the modern age. His discussions concentrated on Burian's well-known dinosaur images of the Augustanian era and he concluded that these displayed a feature that Walica referred to as 'warm-bloodedness.' He didn't use the term in relation to any physiological or metabolic state, but rather as defining an aspect of Burian's personality that was natu-



Two Permian scenes by Burian showing (upper) the armoured-pareiasaur *Scutosaurus* (left) confronting the gorgonopsid *Sauroctonus* from the Volga Basin in Russia (1966), and (lower) a pair of the mammal-like therapsid reptile *Lycaenops* from South Africa (1971).



Iguanodon was Burian's favourite saurian subject and one that he painted and drew many times. The main animal in this 1962 painting was based on his famous 1941 original which, in spite of the very upright stance, was described by commentator Juraj Gullar as "...monumentally so completely solved that it is impossible to change anything on it."

rally infused into his work (one gets the impression that Walica was implying that Burian's dinosaurs had as much individualistic character as did his mammals). He noted that this defining quality is not to be found amidst the palaeo-art of the modern era, and he also comments on the fact that several latter-day palaeo-artists intentionally exaggerated or distorted aspects of dinosaur morphology so as to stress contemporary ethological or physiological theories. Ironically, such reconstructions often appear as 'cold-blooded' (in character) Frankenstein-like monsters in constant conflict with each other, an impression readily perpetuated by Hollywood. Another unfortunate result of this is that many laypeople now view dinosaurs as increasingly fanciful creations totally removed from reality.

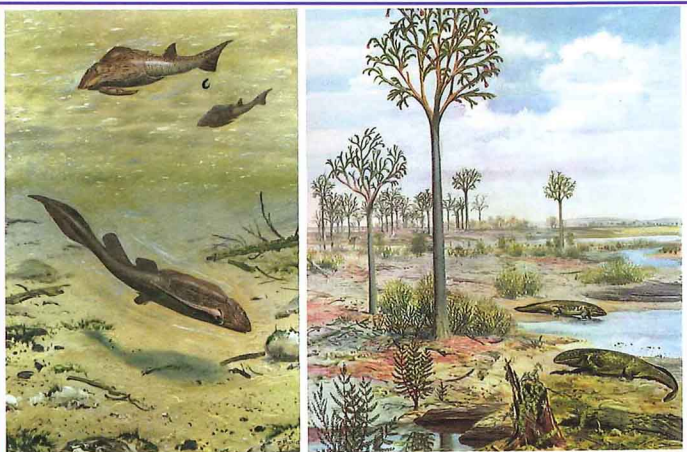
In my analysis, I have concentrated far less on Burian's dinosaur paintings, given that they constituted such a small part of his total output. I would describe the distinctive feature of Burian's philosophy towards reconstructing faunal or human palaeo-subjects as being one of complete empathy (far more evident in his work from the Augustanian era than subsequently). Because of this, he was able to successfully engender a sense of distinct individuality into his subjects, be they mammalian, reptilian or avian. When doing so, he wasn't simply painting a representative of the

genus or species concerned, he was depicting a very real individual that once lived, perhaps reproduced, and died. One can view any Burian painting from the Augustanian era and find little difference in composition and subject identity as compared to a natural history subject painted from life. This is not the case with the work of other notable palaeo-artists either of



Two of Burian's primeval landscapes depicting (left) primitive vascular plants growing at the edge of the shallow Ordovician seas (1970), and (right) mist-shrouded swamps and marshlands of the late Silurian/early Devonian (1967).

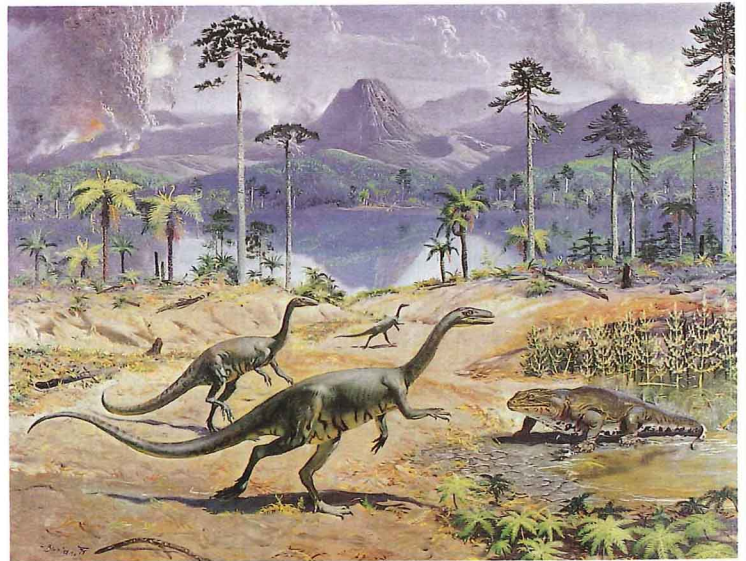
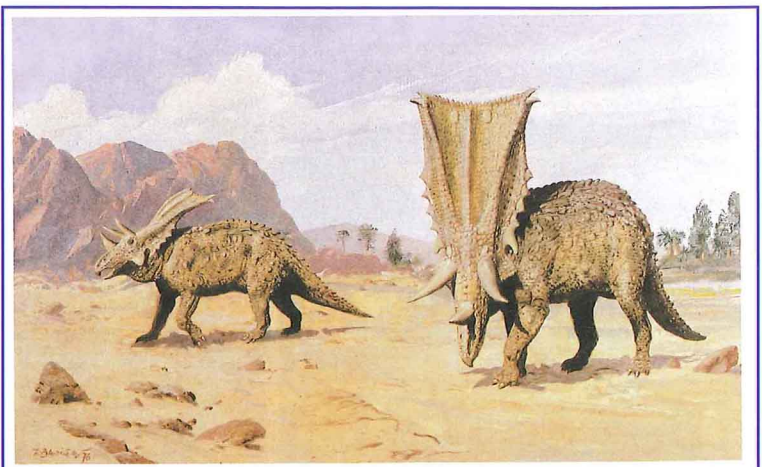
his era or since, even though some of them certainly had the ability to infuse such character into natural history subjects. A further result of Burian's skill was that his prehistoric landscapes never have any other-worldly feel to them, as do those of some palaeo-artists (e.g. Konstantin Flerov). Although many of Burian's landscapes have a suitably primeval atmosphere that speak of bygone ages, they remain very much identifiable images of our world and, indeed, were they to be scaled up to life-size, viewers might feel as if it were entirely possible to step inside them.



Two Devonian reconstructions by Burian. At left are the armoured placoderm fishes *Pterichthyodes* (top) and *Bothriolepis* (1970). At right is a scene from Greenland depicting the early tetrapod *Ichthyostega* (1967).

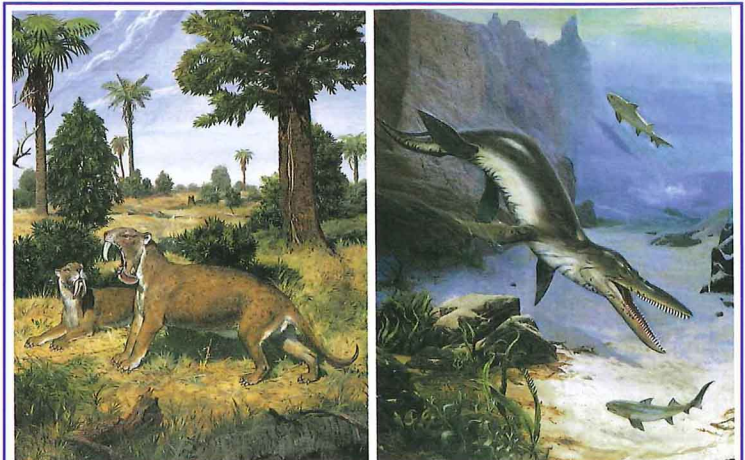
Burian's post-Augusta work in general shows more-stylised main subjects set within environments of greater definition. This is not to imply that his earlier landscapes were not greatly detailed when required – one need look no further than his Silurian and Devonian wetlands, Carboniferous and Jurassic forests, and Tertiary landscapes to see palaeobotanical detail rarely matched in palaeo art. But such detail was generally reserved for instances where the landscape itself was the primary subject of the painting, rather than the fauna. Many of Burian's early faunal images from the 1940s and '50s achieved iconic status because he focussed fully on them as main subjects without well-defined peripheral details to detract from their visual impact. Some became so archetypal that other artists often did not bother to credit Burian when copying his works. Such imagery can also be found representing numerous countries in the form of postage stamp designs, which is always a good measure of impact in the populist realm.

In 1992 I travelled to the Czech Republic with a colleague, intending to view Burian's original works and possibly even meet the artist himself (this pre-dated the internet age and we remained unaware that Burian had passed away). Since the so-called 'velvet revolution' of 1989 the former



Burian's collaboration with Augusta's successor Zdeněk Špinar resulted in a lessening of his artistic licence and a greater emphasis being placed on technical detail. His colours were somewhat less natural and the landscapes more stylised and panoramic. Examples from this era include (upper) the North American ceratopsian *Chasmosaurus* (1976) and (lower) a Triassic scene with a group of *Coelophysis* fleeing a forest fire next to the amphibian *Metoposaurus* (1971).

Czechoslovakia had decided to split itself into separate Czech and Slovak Republics. As a result of this, the new authorities enacted numerous name changes for many institutes and public buildings as well as street names in the capital, making it difficult to identify the locations of major repositories of Burian's art as mentioned in Augusta's books. Nonetheless, I knew that



Although Burian was in failing health towards the end of his life, he managed to produce some of the most technically-detailed works of his career in his final years, including a number of large panel canvases for Josef Vágner at Dvůr Králové Zoo. Two examples are these magnificent 120 X 100 cm. images. At left are a pair of South American sabre-toothed metatherians *Thylacosmilus* (1960) and at right, the giant Australian short-necked plesiosaur *Kronosaurus* (1981). Notice such Burian trademark details as the fresh sand upon the surface of the submerged rocks, suggesting recent turbulence, perhaps from a tropical storm, and the benthic swirl left by the fast-moving fish in the background.

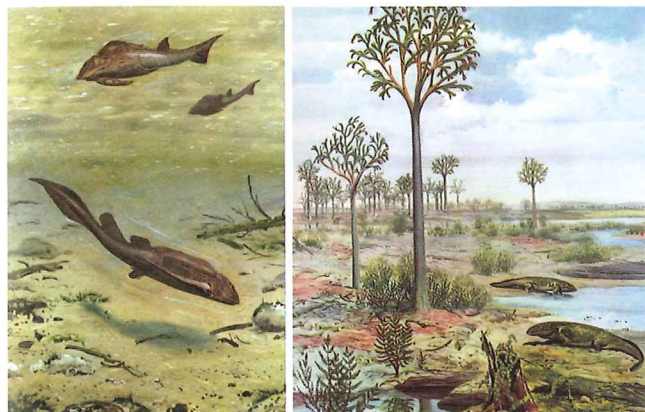
two such places were the National Museum in Prague and the *Anthropos* Pavilion in Brno (at that stage I did not know of his Vágner collections at Dvůr Králové Zoo otherwise would have made every effort to visit). It was at the National

Continues on pg. 55

Museum that we learned of Burian's fate. The gallery section that held his commemorative plaque was closed off, but an attendant allowed us to photograph it when we explained that we had come all the way from New Zealand. The first Burian painting I saw at the National Museum was the famous 1952 *Diplodocus*, a magnificent 1.1 X 2m oil painting displayed in a gallery foyer (see figure). My first impression was a revelation that no printed version I had seen of this image could do justice to the colours and intricate detail of such a huge canvas (and the same was true of many other Burian works I viewed). It was as if the artist had indeed travelled back in time and somehow recorded every feature of the animal and its environ-



One of Burian's last projects of the Augustinian era was a collection of panoramic landscapes of past geological periods. This image from 1967 (one of 13 completed that year) portrays the range of mid-Devonian plant life and the high level of botanical detail typical of his landscape series. After Augusta's death, 11 additional canvases were added during Sojar's era.



Two Devonian reconstructions by Burian. At left are the armoured placoderm fishes *Pterichthyodes* (top) and *Bothriolepis* (1970). At right is a scene from Greenland depicting the early tetrapod *Ichthyostega* (1967).

ment. Later at the *Anthropos* Pavilion, we were fortunate to not only observe many more Burian paintings but also had a chance encounter with the museum's curator Dr. Jaroslav Jelinek. He was a leading international expert on Ice Age fauna and had known Burian due to his previously-mentioned collaborative work with the museum. Jelinek was surprised that New Zealanders had travelled to Brno principally to view Burian's art. At the end of our all too brief meeting during which we exchanged contacts, he paused and with conviction expressed a sentiment that is perhaps the best conclusion anyone could ever draw regarding the legacy of Zdenek Burian...."*There will never again be another painter like Burian.*"

Select bibliography

- Augusta, J. and Z. Burian (1956). *Prehistoric Animals* (104 p). London: Spring Books.
- (1960). *Prehistoric Man* (153 p). London: Paul Hamlyn.
- (1961). *Prehistoric Reptiles and Birds* (104 p). London: Spring Books.

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- (1962). *A Book of Mammoths* (92 p). London: Paul Hamlyn.
- (1964). *Prehistoric Sea Monsters* (115 p). London: Spring Books.
- (1966). *The Age of Monsters* (128 p). London: Paul Hamlyn.
- Beneš, J. and Z. Burian (1979). *Prehistoric Animals and Plants* (65 p). London: Hamlyn.
- Hochmanova-Burianova, E. (1991). *Zdenek Burian - pravek a dobro-užství* (65 p). Prague: Magnet Press.
- McFarland, P. (2012). Zdenek Burian: an interview with his grandson Jiri Hochman. *Prehistoric Times*, 103 (10-13).
- Prokop, V. (1990). *Zdenek Burian: a paleontologie* (156 p). Vydal stredni Ustav Geologicky.
- (2005). *Zdenek Burian* (2005). (98 p). Gallery.
- Špinar, Z. and Z. Burian (1972). *Life before Man* (228 p). London: Thames & Hudson Ltd.
- (1995). *Life before Man* (revised edition; 256 p). London: Thames & Hudson Ltd.
- Walica, R. (2003). Dinosauria Buriannica: the Burianian phenomenon – arching for a context (four parts). *Prehistoric Times*, 58 (28-31); 59 (48-); 60 (56-59); 61 (48-51).
- Wolf, J. (1978). *The Dawn of Man* (231 p). London: Thames & Hudson Ltd.

Websites

- <http://www.zdenekburian.com/> Website by Burian's grandson Jiri Hochman, the legal copyright owner of Burian's art (Email: j.hochman@volny.cz).
- <http://www.stramberk.cz/> Zdenek Burian Museum in Štramberk.
- <http://farisles.com/forum/index.php?showtopic=1668> (in Russian with 152 paintings).
- <http://www.evolbiol.ru/burian.htm> (in Russian with 60 paintings).
- http://allday2.com/2007/11/25/kartiny_pervobytnojj_prirody__zdenek_burian.html (in Russian with 31 paintings).
- <http://www.daildeli.cz/burian.html> (Czech index to many Burian artworks).



A selection of Czech and English language books featuring Burian's art.