Zoological Museums and Collections in Jerusalem During the Late Ottoman Period

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Edited by Michael A. Mares

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Foreword: Natural History Museum Builders

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According to Albert Bickmore, the young museum builder who had fought for a place for a new museum in New York City, the proposed museum site was actually "most desolate and forbidding. There was a high hill at the north east corner...and in the north west corner another hill of solid rock rose much higher than the elevated railroad station...In the southern and central part of the square, just where the first section of our building was to be erected, was a third hill, whose crest rose as high as the ceiling of our present Hall of Birds. As I sat on top of this rock, the surrounding view was dreary and my only companions were scores of goats." (The City Review)

Albert Bickmore’s comments in 1864 referred to the future building site in Central Park that he had struggled to obtain in order to realize his dream of a great natural history museum for the City of New York. I am certain that such gloomy comments echo strongly with most museum builders who have undertaken the difficult task of planning, developing, and building a natural history museum. New museums are never easy to build, and more than a few museum projects have long histories of directors who failed in the attempt to dream, plan, raise interest in, identify funding for, and finally build the museum. Each phase can take a long time to complete. And whereas art museums seem to pop up almost like banks, natural history museums—with their massive collections, research, and exhibit needs—are large, difficult institutions to plan, build, and staff (e.g., there are more art museums in New York State than there are natural history museums in the entire United States). So natural history museum builders are often unusually tenacious personalities willing to risk it all to get the job done.
Fig. 1. Bust of Albert Bickmore in American Museum of Natural History

Other examples of museum builders who struggled to realize their dreams abound. In the Kansas Legislature of 1899 (nearly a half century after Bickmore’s travails) in regards to a bill to fund a new natural history museum for the University of Kansas (Sharp and Sullivan, 1990:131),

“A Jefferson County representative stated that he did not wish to go home and tell his constituents that the state could not provide a suitable place for its destitute insane, but could spend $65,000 ‘for a building to cover [Lewis Lindsay] Dyche’s dead animals.’ Buck Dawes, Republican floor leader, also attacked the proposed amendment, declaring, ‘It’s a shame that the professors come up here from that school and neglect their work to lobby for these buildings. We have given enough to that institution already.’”

Fig. 2 Lewis Dyche, builder of the University of Kansas natural history museum.

The next year, as Dyche [the first director and museum builder of the University of Kansas Museum of Natural History] had to go to Topeka to meet with the legislature and seek funds for a new building, Sharp and Sullivan (1990:142-143) noted:
“Lobbying for a museum building in 1890, Dyche articulated his dream to Regent Charles F. Scott. ‘I want to say that while I am not as old as some people yet I am much older than I used to be. I have done my best for years to build up a good collection of large mammals, and while doing so have gone up against some pretty heard propositions. I want to do one thing more. I want to put the collections I have made in the best possible shape to insure their future preservation. This done I am ready to quit and ‘go a fishing’ all the rest of the days of my life.’”

The two quotations relating to the development of the University of Kansas Museum at the turn of the 19th Century point out a similar theme. Dyche was tired of the fighting required to get support to build a museum, whether from city, state, or local governments, or private donors. The search for the great amount of money required to found a museum can be staggeringly exhausting. No wonder he wanted to “go a fishing”? I am also a museum builder, having been primarily responsible for a large new facility for the Oklahoma Museum of Natural History (today the Sam Noble Museum) on the University of Oklahoma campus in Norman, Oklahoma. In reviewing the story of the challenge of actually building the new facility (as opposed to raising interest, funds, or developing a design), I wrote: “…there were enormous challenges in getting the project completed more or less on time and within budget …The eternal struggle between the builder and architect took place, with me…having final say on almost anything to do with the massive and complex structure. I knew that if I relented in the quality of the final project, the impact would extend across the generations” (M. A. Mares, 2002:48).

As this quotation illustrates, even after a new museum project has been sold to the powers that be, and after the site has been selected and funding has been obtained, one still has to build the building, and this is always an enormous challenge. My own chance to get away for a while was to do field research in South America and, since I study small mammals and am not a fisherman, I periodically “went a trapping!” I could definitely identify with Dyche.

The men and women who have built natural history museums have almost without exception had to meet and overcome enormous challenges. Even some of the greatest museums in the world, such as the Natural History Museum in London, had to struggle in their earliest days.

“There were also the political ramifications of London science in the 1860s [to be considered], an immensely complex subject…. In the many scientific debates, the shifting of groups and alliances, one important matter recurred again and again, the extension of the British Museum. Should there be new buildings to house the natural history collections or
should these be removed to another site, and if so, which site? [Richard] Owen, of course, was Director of the natural history collections. After the failure of his first attempt to get the existing building extended, Owen decided as early as 1859 that the natural history collections would have to move from [the British Museum at] Bloomsbury. This meant that he was on the lookout for a new site, which would indeed be a territory dominated by Owen, and this resulted in a sort of spatial dialectic with [Thomas Henry] Huxley [Owen’s bitter rival and one of England’s greatest zoologists]. From 1858 onwards Huxley led a campaign against Owen’s plans. However, in 1863 the parliamentary bill to buy the site was eventually carried and the principle of removing the natural history collections to South Kensington decided. Through the 1860s plans moved slowly forward, with Cole’s favourite lieutenant, Captain Fowke, winning the competition for the new building in 1864. When Huxley did decide that he too had to move to South Kensington, there were already very handsome plans afoot to build Owen his temple of natural history” (Forgan and Gooday, 1996:444-445).

As the above makes clear, even giant personalities of history, such as Sir Richard Owen and Sir Julian Huxley, did battle over the site selection and plans to build one of the greatest museums in the world. In part, their feud was based on personality differences, as well as differences in their views of evolution. But the great museum Owen built ended up being not only a cathedral to nature, but also a cathedral to evolution. It remains today as one of the most impressive natural history museum buildings in the world.
Even the great Spencer Baird, who was responsible for the development of the United States National Museum, wrote in 1853:

“I expect the accumulation of a mass of matter thus collected (which the Institution cannot or will not ‘curate’ efficiently) to have the effect of forcing our government into establishing a National Museum.... The coming session of Congress is going to be a stirring one. I would not be much surprised to hear of attacks being made on the Smithsonian by persons dissatisfied with the administration of its funds. The great question of a National Museum will probably be brought forward...numerous... plans are talked of. I don’t much care how they manage it, so that I can have charge of the Nat. Hist. collections.” (Rivinus and Youssef, 1992:154).

Museum builders often began as scientific collectors. They were field biologists, archeologists, paleontologists, or geologists. Life in the field collecting specimens under all conditions and in locations around the world can be extremely challenging (e.g., Mares 2002). Conducting this kind of research leads a person to expect challenges, threats, difficulties, and other roadblocks to successful completion of the field research, challenges that must be overcome. Perhaps it is not surprising that so many museum builders came from the ranks of the field collectors. Not only did their research result in extensive collections, they, more than anyone else, realized the true value and irreplaceable nature of the collections and the extraordinary cost in blood, sweat, tears, and lives, that was required to build the collections in the first place. They recognized the need to find a
suitable home to protect these materials across time and to permit their full utilization by future generations.

In my own case, my dream of a museum was a very large one for one of the poorest states in the nation (M. A. Mares, 2002:48):

“I was under great pressure to build an inexpensive prefabricated building. Why did I need so much money? Surely the $35 million that I was talking about was way too much museum for the university and for Oklahoma. Why couldn’t I do it for $10 million? I replied with such questions as, ‘What is Oklahoma’s heritage worth?’ I knew that the people of Oklahoma thought it was worth a lot. I myself thought that it was priceless. ‘How can you put Oklahoma’s heritage in a cheap building?’ I asked. Plans came forth from various administrators to make the project less expensive. Why not build an exhibits building and leave the collections where they are—in the barns and stables? Why not build a cheap storage facility and forget about exhibits? Why not get rid of the most of the collections and just build an inexpensive building for displays?”

The struggle to build Oklahoma’s natural history museum consumed 17 years of my life. Not many directors are willing to dedicate 25-30% of their life, and perhaps half of their working life, to building a museum, much less dealing with a project that can be highly contentious over much of that span of time.

On a personal note, I believe that museum builders have exceedingly strong personalities built from the adversity they have experienced in their lives and work. They are dreamers. They are articulate enough to be able to convince people to believe in the dream. They may be risk takers. Consider the fact that there may be no museum at all when they begin their quest, or the existing museum may be housed in extraordinarily poor facilities that have remained unchanged across the decades. Change is hard, and change that is expensive is even more difficult for people to accept. Reading about the history of many natural history museums, it does not seem to matter much whether museums were built a century and half ago, 10 years ago, or even today. For example, Milwaukee’s Journal Sentinel on January 21, 2011, reported the following (Journal Sentinel, online): Milwaukee County should … make way for a new, world-class Milwaukee Public Museum and additional development, according to Milwaukee businessman/philanthropist Michael Cudahy….You’ve got to create a fever, a movement in Milwaukee that says we are going to have the best public museum in the United States….Supervisor Gerry Broderick, chairman of the County Board’s parks committee said…It seems to me the community has a number of
other priorities that trump the idea of a new museum, like feeding the hungry and taking care of the mentally ill."

Remarkably, 111 years after Dyche’s efforts to obtain funding for the new Kansas museum were pitted against the needs of the insane, the exact same argument was made in Milwaukee in opposition to a new museum for the city. The battles to develop a museum seem to be as timeless as the museums themselves. I would not be surprised to find that the earliest museum builders faced similar challenges.

My comments about museum builders relate directly to the CLS Journal of Museum Studies’ first article on international museology and history by Dr. Oded Shay. Dr. Shay presents a fascinating review of the development of natural history museums in Palestine (and Israel) and shows that there were several larger than life personalities who were responsible for Israel’s collections of birds, mammals, and other organisms that are in Israel’s natural history museums today. These collectors included a member of royalty, a diplomat, and a pioneering clergyman/naturalist. Notably, none of these early museum naturalists had a job that required them to collect specimens or explore for new flora and fauna. They did this with a willing passion for discovery, a love of nature, and a strong drive to make people aware of their environment. Israel Aharoni, one of the great naturalists of the Middle East, was the preeminent museum builder of the region. I have no doubt that were he alive today he could identify with those museum builders from all countries who labored (and labor) against great odds to develop museums that bring an awareness of nature and natural history to generations of people that are yet to be born.

References


Zoological Museums and Collections in Jerusalem During the Late Ottoman Period

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The establishment of zoological museums and collections worldwide and the manner in which these collections were developed as part of the general development of art, history, and archeology museums and collections. During the Renaissance and the 16th and 17th centuries, a “new spirit” came about that reflected intellectual curiosity. New continents and cultures were being discovered, revealing new horizons and hitherto unknown species of animals and plants. With time, artifacts and exhibits began to accumulate in private collections, in the salons and houses of the rich, including kings and princes. The collections contained articles and exhibits derived from the natural world. Other collections were the fruit of labors of doctors, pharmacists, and chemists employed in the service of royal households and
the church. These collections contained minerals, medicinal herbs, and animal hides.

This period witnessed progress in the preservation of animals and the development of new taxidermy methods. Development of these new techniques preceded the process of collection and preservation of bird and animal specimens. At the same time, a gallery in the Medici palace in Florence opened to the public for the first time with an exhibition of artistic creations side by side with animal specimens, shells, fossils, minerals, and other artifacts from the natural world (Scherer, 1913, 6-42). With the opening of private collections to the public in Europe in the 18th century, a process began whereby “general” exhibitions were replaced by single-discipline exhibitions. Exhibitions covering nature not only displayed animal specimens and rare artifacts but also represented the living flora and fauna in the widest sense.

Abstract. The first zoological collections were concentrated at monasteries and churches in Jerusalem and included the Dalman bird exhibit at the Lutheran church school in Moristan, the Schmitz specimens exhibited at the St. Paulus Hostel, and the natural history collection exhibited at the Franciscan Museum in the Monastery of the Flagellation. At the same time, the Bezalel Museum was established in Jerusalem, initially containing a natural history collection set up by Aharoni. The museum later featured art, Judaica, and archeology. Selah Merrill was an important private collector. Activities of the natural history explorers Aharoni, Merrill, and Schmitz, were motivated by a combination of national and religious fervor that accompanied their zoological studies and exploration of Palestine. The common denominator to all three was the intimate and uncompromising link to the Bible. The aim of the collections was firstly to revive the living world of the Bible and origins of ancient times. They also recognized a need to collect zoological specimens to preserve the zoological history of the country in light of the accelerated development of settlements and agriculture and consequent impact on the natural environment. The collection of animal hides was varied. Most collectors stuffed the hides, while others bought them from hunters and employed taxidermists. Zoological collections were established following the accelerated development of Palestine at the beginning of the 20th century and had economic significance: animal hides were sold to various overseas museums, providing substantial incomes for Aharoni, Merrill, and Schmitz. Moreover, butterfly collections provided samples for carpets produced in the workshops of Bezalel.

Establishing zoological museums and collections

Initially, the collections were almost completely lacking in scientific interpretation. This all changed when Carl von Linné laid the foundations for the method of classification of plants and animals. These scientific
collections, based on private collections, were the basis for the establishment of natural history museums in Europe. Natural history museums in Paris and London were established at the close of the 18th century. Thereafter, natural history museums were established throughout Europe and in the USA based upon private collections of wealthy collectors and pioneering researchers. In the 19th century, museums provided research opportunities for geologists, paleontologists, botanists, zoologists, anthropologists, and other scientists. Museums were popular with the public, which found great pleasure in observing the universal wonders of the natural world (Alexander, 1989, 10, 41; Meyer, 1911, 29-31). An additional stage in the development of natural history museums began in the USA in 1890 with the advent of the diorama.

At the end of the 19th century, the notion of “extinction” became prevalent among the scientific community following the revelation of numerous life forms that no longer existed on the planet. Observations of extinction relied on the tales of travelers and seafarers about creatures that existed in this or that location but were no longer present. It became clear to zoologists that natural history collections in museums were the last remaining places to observe the remains of extinct creatures. The need to preserve organisms for future generations became the overriding mission of the museum, and this new approach heralded the institutionalization of the museum in its modern sense.

In contrast to Europe and the USA, the development of museums and zoological collections in Palestine was different. Indeed, scientific discoveries and research in Palestine in the 19th century were similar to research in many other unexplored territories around the world. In the early 19th century, living forms were more or less unknown and unresearched. Western Europeans had not explored most areas in Palestine (Goren, 2003; Ben-Arieh, 1983). The majority of explorers of the east in general, and Palestine in particular, were American, English, German, and French. Most were in the service of exploration societies. One explorer of the Jewish lands at the beginning of the 19th century, even before the research societies appeared, was Rabbi Joseph Schwarz (1804-1865), who resided in Jerusalem. Within the framework of his studies of the history of the land, he examined the fields of nature and biology. His interest was driven by an attempt to understand different aspects of Jewish origins. Animal research stemmed from his desire to identify animals referred to in the bible.
Schwarz was in continuous communication with the Munich Biological Museum and its research staff and was a visitor on a number of occasions. He carried out measurements and tests on specific animals. For example, he identified the barn owl and wrote: “and already I have sent this vermin as exemplary proof to the West to the King’s museum in München in Bayern State, so that proof of the genuine article can be seen and acknowledged” (Schwarz, 1900).

Another Jewish non-resident of Palestine, Walter Lionel Rothschild (1868-1937), a renowned ornithologist, owned collections of preserved specimens of birds of Palestine. He established a private museum at his estate in Tring, near London, that contained mainly preserved specimens of birds and butterflies (Aharoni, 68, 87, 193).
A pioneer of natural sciences of Palestine was the clergyman and British ornithologist Henry Baker Tristram, who visited Palestine on numerous occasions in the second half of the 19th century. He was one of the founders of the "Fund for Research in Palestine” and earned the title of “father of zoology of Palestine.” He published many books and papers, the best known being his book on the flora and fauna of Palestine (1889). He took a special interest in birds, building a collection numbering 20,000 specimens from all parts of the world, which he sold to the Liverpool Museum at the end of the 19th century. Animal specimens collected during his sojourn in Palestine were transferred to the Natural History Museum in South Kensington in London, and dried plants were given to the Botany Museum in Cambridge (Tristram, 1866; ibid., 1894).

During the 19th century, a number of German researchers arrived in Palestine and engaged in the collection and transfer of specimens to Germany. One of these researchers was Gotthilf Heinrich von Schubert (1780-1860), the curator of zoological collections in München. He visited Palestine in 1836-1837, during which time hides of many rare animals were collected and transferred to Germany. Likewise, Dr. Rudolph Roth (Wagner, 1859), curator of zoology at the Munich museum, visited Palestine during the first half of the 19th century and collected animal hides and plants. Ernst Gustav Schulz (1811-1851) was appointed as Prussian consul in Jerusalem in 1842. He hunted wild animals and collected flora from the Jerusalem area for transfer to Germany (Wolff, 1857, 208). Another tourist, the heir to the Austrian throne, Prince Rudolph (1858-1889), was an ornithology enthusiast and keen hunter of wildfowl during his visit to Palestine (Prince Rudolph, 1884). In the 19th century, the collection of animal hides was considered a zoologist’s highest priority. Today, hide and study specimen collections gathered and defined over the years and supplemented with DNA sequence data provide the basis for all zoological work, including animal classification, identification, and phylogeny.

**Palestine’s first Hebrew zoological museum**

Israel Aharoni (Aharonovitz) was born in 1880 in the town of Viczi, near Vilna in Lithuania. His father, Abraham-Joseph was a rabbi, principal of the local yeshiva and author of “The Scattered Sons of Israel.” Aharoni was orphaned at an early age and reared in his grandparents’ household. His grandmother influenced his life and nurtured his love for animals. She told him stories of animals and even brought him birds that had been caught in the synagogue (Aharoni, 1943, 19, 7). When Aharoni was aged seven, he contracted diphtheria and was bedridden for a lengthy period. Friends of the family brought him a sparrow, which was a source of great wonderment. Later on, he studied in the Telshe Yeshiva and, in addition to torah studies, read many other books. He took particular pleasure in Shalom Yaakov Abramovitch’s book, known by its nickname “Mendele
moocher sefarim,” “The History of Nature,” which in effect is a translation, in three volumes, of “The History of Nature” in German by Lenz from 1863. Abramovitch wrote his book in the language of the bible and gave the animals Hebrew names. His preoccupation with philology, particularly with respect to animals, greatly influenced Aharoni. After completing high school, Aharoni studied zoology and Semitic philology at the University of Prague. In 1899, he made his first visit to the zoological museum of Prague, showing a special interest in the wading bird and fish sections (Israel Aharoni, 1946, 7).

Aharoni joined the Zionist movement and emigrated to Israel in 1902, settling in Rehovot. During this period, he began his research on living organisms. In 1904, he relocated to Jerusalem and dedicated himself completely to this subject. Aharoni was the first Jew to carry out research on living animals in Palestine in modern times. He wrote in his diaries: “When I arrived in Palestine, there was not a single Jew engaged in research of living forms and their species. No research was being carried out of animals of Palestine or neighboring countries. Investigation of living forms mentioned in the bible was completely neglected. There were not many scholars in Palestine, and those that were there were engaged in refining the language... scholars were generally agronomists who came from Paris (the Baron’s officials in the settlements) and were coping with pests of plant cultures” (ibid, 191). Aharoni traveled widely in Palestine, studying animals for the purpose of his research. He was supported and financed by Gustaf Dalman (1855-1941) [Männchen, 1993, 3-130]. Dalman reimbursed Aharoni for animal hides given to the collection of the German institute headed by him, and helped in finding buyers for specimens of birds, butterflies, and beetles found by Aharoni in his searches. Both Aharoni and Dalman were especially interested in those animals mentioned in the bible. The collection of bird specimens in the school of the Lutheran church in Morristown was, according to the ornithologist Yossi Leshem, a cornerstone in the zoological history of Palestine. Among other items, the collection contains specimens of rare birds discovered by Aharoni for the first time in Palestine that have since disappeared from the landscape (Shay, 2006, 207).
Aharoni wrote in his diaries that Dalman asked him to put together a collection of “all the winged animals mentioned in the bible... and not only all the species mentioned in the holy works... but all the indigenous birds and all the migratory birds that pass through Palestine in the spring and the fall” (Aharoni, 1943, 35). The collection contained 321 winged animals. Aharoni noted for each bird in addition to its scientific name, its Hebrew name, as referenced in the bible, and its Arabic name. He learned the art of taxidermy and draining of the eggs from a German expert named Bacher, a resident of the Templar settlement in Jerusalem (Israel Aharoni, 1946, 8).
Aharoni published many articles in scientific journals, establishing a reputation, which led to orders from overseas institutions for animals that he had discovered in the region. He toured neighboring countries, Syria and Iraq, and spent prolonged periods in the deserts and Bedouin encampments (Aharoni, 1943, 17-24). During his travels, he discovered new animal species, previously unknown to science, as well as species thought to be extinct. He succeeded in collecting a rich store of material relating to the life forms of Palestine and its neighboring lands. He hunted animals, mainly birds, and sent specimens to the British Museum, to the Zoological Museum of Berlin, and to other museums in Europe (ibid, 82, 84, 86). These specimens provided a scientific basis for the study of life forms in the Middle East.

From 1908-1912, he made a number of visits to Europe, handing over rare animals and birds to zoos in Berlin and Antwerp (Israel Aharoni,
1946, 10). His mission, if the necessary funds were available, was to establish a zoological museum and zoo in Palestine (Aharoni, 1943, 83). In 1907, he wrote:

“Yes I dream – realizing the dream more and more – of creating a great museum encompassing all aspects of nature in Palestine, besides plants and inanimate forms, as always, also when I was in Prague I was in love with nature. My dream is that our museum will house all the birds of Palestine with their nests and eggs, all the butterflies of Palestine from the egg stage, through the larva and pupa stages to the adult butterfly and even each butterfly’s predator. At the same time, I dream of a biological museum arranged in every respect according to the last word in science.

And to this museum will come my fellow settlers in Palestine to enjoy and marvel at what they see until they cry out in one voice: Countless are the things thou hast made, O Lord! But only knowledge of the nature of life, but only the proper and deep understanding of all that surrounds us can lead us to know the reason for all reasons... in order to show the way to future generations in Palestine to the greater knowledge of this... but my greatest hope, for example, is that teachers will come and observe the results of the nature of our country which they will then impart to their students, the generation in whom we place all our hopes and that this generation shall know what exists in Palestine” (a letter 1960, 146).

When the Bezalel Academy was established in 1906, Aharoni was teaching Hebrew. Boris Schatz, the founder and head of the academy, solicited Aharoni’s help to establish at Bezalel a center for the collection of flora and fauna of Palestine (Aharoni, 1913, Nr. 11). Consequently, Aharoni established a collection of bird and butterfly specimens at the Bezalel Academy. This collection went on exhibition in 1902 at the fifth Zionist Congress in Basel, after which the Jewish National Fund acquired the collection, which was transferred to the Hebrew University. Aharoni and Schatz were enthused by a collection of butterflies of a resident in the German Colony, a certain Paulus, who lived close by Bezalel. They obtained from him 30 colorful butterflies that were used as examples for models of carpets for embroiderers, weavers, and artists in Bezalel’s school and art workshops. Thus, the carpets reflected a unique Palestinian look, with the hope that this would enhance overseas sales. Samples of birds and butterflies indigenous to Palestine formed the basis for the new art of Palestine that Schatz imparted to the artists of Bezalel. This was the basis and justification for establishing the Jewish zoological museum at Bezalel (Shay, 2006, 208-209).

The beginnings of the natural history museum were cemented by a chance meeting of Aharoni and Schatz in 1906, at the home of Eliezer Ben-Yehuda. At the meeting, Aharoni expressed his disappointment at having no place to store his and his collectors’ specimens from their travels.
Schatz’s response was to place at Aharoni’s disposal a room in the Bezalel museum, which had an animal corner containing a large collection of mammals, birds, fish, reptiles, and insects, cared for by Aharoni and Schatz (Shay, 2007, 51).

The public lent a hand in gathering the samples. Jerusalem old-timers brought butterflies to the museum, as well as golems, beetles, and winged creatures. Collectors, including colleagues and many others from the Arab settlements, from Antioch in northern Syria to Beer Sheba in the south, brought him specimens from nature. The winery in Rishon Lezion donated alcohol for the preservation of snakes and fish. When Bezalel relocated in 1908 to new premises, Aharoni decided to set out on a research trek to the Sinai desert lasting many months. Before setting out, Aharoni published in the Jerusalem press an open letter to Schatz entrusting him to ensure appropriate storage of the zoological collection in glass cupboards. Aharoni continued to take responsibility and care for the collection on his return from Sinai, even though Schatz guided the museum program into ethnographic channels (Aharoni, 1908, 158). The collection grew and widened to include tens of thousands of items, and was subsequently transferred in 1920 to the agricultural museum in Jerusalem. Today, the collection is preserved in the natural history department of the Hebrew University in Jerusalem (Shay, 2006, 209).

Aharoni participated in the establishment of natural history museums throughout the Ottoman Empire. In 1908, the Ottoman Sultan,
Abdul Hamid II, appointed Aharoni to be a member of a scientific expedition for research of the Dead Sea and Transjordan, which were part of the Sultan’s private estate. The research expedition set out under the leadership of the German geologist Max Ludwig Paul Blanckenhorn, with the participation of Aaron Aaronsohn and Engineer Joseph Treidel (Aharoni, 1943, 218). The expedition’s objective was to collect specimens for a natural history museum to be established in Istanbul (Aharoni, 1943, 219-221). When the expedition was concluded, its members were received by the Sultan who conferred on them medals of honor. They brought the Sultan a collection of butterflies in the form of a crescent, the Turkish emblem, which was exhibited in the palace and later transferred to the zoological museum of Istanbul. The expedition’s report was published in book form in 1912 (Naturwissenschaftliche Studien, 1912; Blanckenhorn M., 1912, 88-95).

During World War I, Aharoni served as the zoologist to the Turkish army, and Cemal Pasha appointed him to direct the war against locusts. His research on the locust had attracted the attention of Jamil Bey, the principal of the Tazail agricultural school in Lebanon, who made Aharoni responsible for the establishment of a natural history museum of the Middle East. Aharoni collected specimens on a wide scale, together with 20 hunters under his command. The specimens that they collected were lost during the war because of a fire (Israel Aharoni, 1946, 11).

From 1918-1921, Aharoni served as zoologist in the mandatory government and in 1925, established the zoological museum of the Zionist Federation, which subsequently came under the aegis of the Hebrew University. From 1930 onward, he lectured in zoology at the university and founded a zoological museum. He made numerous visits to Europe, lecturing at universities and scientific institutions and was elected to membership of the British Zoological Society. He reared animals at his home, including different species of wading birds, and domesticated the Syrian hamster. He wrote textbooks and manuals on the subject of zoology. Two of his better-known works are: “Reminiscences of a Hebrew Zoologist,” in which he describes with much humor his pioneering work in the field of zoology, and “The Laws of the Living,” for schoolchildren. He was active in the “Hebrew Language Committee,” and introduced many names for animals, although not all his suggestions have become common parlance. Israel Aharoni passed away in 1946 (ibid, 10, 13).

Yehudith Harari has written that Yehudith and Israel Aharoni’s home, replete with furniture, served as a comprehensive zoological laboratory. Their home contained cages with different animals alongside stuffed skins and eggs of fowl. From her description, it seems that throughout their lives these animals surrounded Aharoni and his wife. In fact, there was no dividing line between Aharoni’s private life and his
research objectives. The main driving force for his biological research was curiosity and a desire to expand the knowledge of God's creations (Shay, 2006, 210-211).

Selah Merrill — Collector of Hides and Bird Specimens

The history of the life of Selah Merrill (1837-1909) and his consular activities in Palestine were the subject of detailed research, presented here in brief, with particular reference to his private collection of bird specimens (Bates, 1909, 347; Kark, 1994, 323-326). Merrill was a researcher of Palestine, consul, tourist agent, collector, museologist, and photographer. He was born in 1837 in Connecticut, USA, and completed his studies at the School of Religious Studies at Yale University in 1863. He was ordained one year later. On completion of his studies, he was appointed chaplain of the Forty-ninth United States colored infantry. In 1869, he journeyed to Greece, Egypt, Palestine, and Syria in the company of students of Edwards Amasa Park, a teacher at the Andover Theological Seminary. This trip aroused his interest in research into the Holy Land.

In 1874, Merrill returned to the region as an archeologist with the American Palestine Exploration Society. From 1876-1877, he led three exploratory trips to Transjordan where he collected archeological, topographic, and ethnographic data, which he published in 1881 in his book: "East of the Jordan." In 1882, after two years teaching Hebrew at the Andover Theological Seminary, he returned to Jerusalem as US consul. He served in this capacity for a period of three years. In 1891, he was again appointed as consul and served in that position until 1893 and again from 1898 until 1907 (ibid, 296). Merrill served as consul for a longer period than any other consuls in Jerusalem. His lengthy stay in Jerusalem allowed him to study the history and archeology of Palestine and to participate in research and travels relating to these subjects. Merrill published papers in the journals Palestine Exploration Fund, Quarterly Statement and Biblical World. Most of his papers and books dealt with the archeology of the Bible and historical geography of the Holy Land (Torrey, 1906, 47).

While serving as consul, he gave sterling support to the establishment of the American School of Oriental Research in Jerusalem in 1900. Exchanges of letters between the Semitic Museum (located at Harvard University) and the Harvard Museum of Comparative Zoology make mention of Selah Merrill and his wife. These letters reveal that Merrill played an active non-professional museologist role. He profited financially by providing archeological, ethnographic, and botanical specimens, as well as natural materials and birds from Palestine to Andover and Harvard museums. The American archeologist William Foxwell
Albright noted on record that Merrill was an enthusiastic collector of relics, birds, and other animals. His private collection contained specimens of birds and animal hides, as well as ethnographic and archeological items, which were sold to Harvard University’s Museum of Comparative Zoology and Semitic Museum. While teaching at the Andover seminary, he established the Biblical Museum, where many items from Palestine were exhibited. The museum collection contained bird specimens and animal

hides, flora, and relics from Palestine, Egypt, and Mesopotamia. The objective of the collection was didactic-pedagogic, aimed at generating American curiosity in Palestine and the holy writings. Merrill was a keen observer of the world of nature and reported his sightings in papers submitted to a number of journals (Albright, 1933, 564-565). In 1890, he noted that from 1882-1886, he collected 2000 bird skins in Palestine (ibid, 40). He took great pride in the fact that he possessed the largest collection of animal specimens from Palestine. Merrill is recognized as an international expert on animals and as someone who handled his collection in accordance with the most modern methods of the time. The only zoological collection to compare with Merrill’s at the conclusion of the 19th century was that of Henry Baker Tristram in England (Tristram, 1866).

Merrill’s collections attracted the attention of both tourists and researchers in Jerusalem. His private museum is described in a children’s book on Jerusalem, with a preface by Merrill himself. The book notes that a visit to Merrill’s collection accompanied by Merrill’s explanations was in itself an extraordinary experience. The book tells of an anonymous tourist who, during her stay in Jerusalem, was invited to Dr. and Mrs. Merrill’s residence and was overjoyed by her visit. The collection she saw was described as consisting of curiosities, with birds, animals, pitchers, fossils, insects, flora, minerals, and coins, all related to the Holy Land. She opines that these specimens were enough to fill a biblical museum and art gallery and that they appear to be as real and complete as in the natural state (Knight, 1888, 262). On September 28, 1906, a director of Yale University visited Jerusalem. He complimented the libraries and museums in the city, noting that Merrill’s collection contained ancient pottery amassed over a period of many years, and that it would be difficult or impossible to find its equal (Prince & Bacon, 1906, 38-39).

**Schmitz Founds Zoological Museum in Paulus Hostel**

Father Ernst Schmitz (1845-1922) was born in Rhendt, in the vicinity of München Gladbach in Germany. In 1862, he joined the Paul von Vinzenz congregation of the Lazarist order in Cologne (Schmitz., 1913, 25; Dunkel, 1923, 7). He was ordained in 1869 and was engaged as a supervisor in the Knight’s Academy in the Rhine valley. In the 1870’s,
following the “war of cultures” during Bismarck’s rule, he left Germany accompanied by other Catholic holy men. In 1908, after completing various posts in Funchal, Madeira, and Belgium, he made his way to Palestine, where he lived for a number of years in Jerusalem and was active as principal of German Catholic institutions. He replaced his predecessor, Father Wilhelm Schmidt, the original head of the German Catholic school for girls and of the congregation (Schmitz., 1913, 20. 24; Cramer, 1956, 44).

During his first years in Jerusalem, he managed and developed various building projects and operations in Palestine. He investigated and took a particular interest in animals and wildfowl and was among the pioneering explorers. Schmitz was a world-renowned ornithologist. He employed Arab hunters who brought him different species of animals and fowl, which he preserved as specimens. In addition, he enjoyed the assistance of his students, and in 1911 he wrote: “My seminarists are taught to direct their attention to the environment when travelling near and far, to gather any and every item that can teach us about the Lord’s wondrous creation, and thereby contributing to the development of natural science research. The seminarists discovered forty species of ants in the Jerusalem area, which were exhibited in the museum in the St. Paul Hostel close by the Damascus Gate. More than twenty species were unknown scientifically and thus it was necessary to provide them with new names.” (A.D., Das heilige Land. 1923, 8). Schmitz published many papers on the life forms of Palestine, as well as hunting methods and the folklore of the living world among the Bedouin. He also discovered an unknown variety of fish in Lake Tiberias, which is named after him—Hagioxenus schmitzi forel.

Schmitz devoted his time to enlarging the scientific library, receiving donations and books from different authors and publishers (Cramer, 1956, 83). On his arrival in Palestine, he established a natural
history museum next to the library, in a building planned according to a concept he developed during his stay in Madeira, where he administered a natural history museum (Das heilige Land 1909, 115). He brought with him from the Madeira museum 47 bird specimens, 157 types of trees, and many additional flora and fauna specimens. In addition, he received a collection of different rock specimens from Prince Karl Löwenstein-Wertheim of Germany. These were supplemented by small-scale collections already in existence, such as Father Johannes Sönnen's collection of butterflies, insects, and snakes. The museum housed a large collection of stuffed Palestinian bird specimens prepared in Germany, as well as a collection of bird eggs.

These collections provided the basis for the establishment of the zoological museum in 1908 for tourists and other visitors to Jerusalem, especially pilgrims from Germany. The museum was divided into two halls in the basement of St. Paulus Hostel, (Thomsen, Kompendium, 1913, 9) containing the two collections: one, a collection of specimens from overseas, containing 126 minerals and other rock types, and the other, a collection of Palestinian fauna. According to Schmitz, the zoological museum had no equal in the country in terms of the comprehensive variety of animal specimens (Schmitz, 1913, 26; Das heilige Land 1909, 115).

The zoological museum sent rare animal specimens to various museums in Europe, including the Royal Zoological Museum in Berlin, the Biblical Museum at the University of Lyons, and the Pope’s biblical institute in Rome. The collection featured extinct (Palestine) animal and fowl specimens, e.g., panther, roe deer, Oryx, caracal, black eagle, vulture and others. The museum also contained impressive collections of insects, butterflies, reptiles, bird eggs, animal embryos and skins, rock samples, and fossils. Most of the animal specimens brought to the museum were obtained for Schmitz by Bedouin huntsmen and peasants who were handsomely rewarded, especially for the rare fauna. The museum also exhibited a large number of exhibits from outside Palestine. Schmitz stuffed the animals himself, in order to ensure their long-term preservation.

The museum featured a modest collection of archeological finds, including pottery from the periods of the first temple and middle ages. According to the archeologist Gabriel Barkai, some of the items originated at the museum location during the laying of the foundations for the building. A few specimens came from Tel Anantot and Tel Achziv. The tools in the exhibit were acquired in order to establish a representative learning collection side by side with the fauna collection. Schmitz’s scientific library was adjacent to the collection. The library contained mainly ornithological journals. Next to the museum in the St. Paulus Hostel was a teachers’ seminary where Schmitz expounded his basic concept whereby he saw Mother Nature as an important educational tool.
for students. The seminarists went on trips and excursions, collecting specimens that were donated to the museum and contributed to its development. The museum appeared in the list of museums in Jerusalem in 1913 (Thomsen, 1913, 124).

In 1914, the museum closed because of the outbreak of WWI. It reopened at the beginning of the mandatory period. The collection of specimens was preserved for many years in the basement of the St. Paulus building within the grounds of the German Schmidt School in east Jerusalem until its transfer to the Tel Aviv University zoological institute in the latter part of the 20th century (Shay, 2006, 213).

Conclusion

The first zoological collections were concentrated at monasteries and churches in Jerusalem. Examples are the Delman bird collection on exhibition at the Lutheran church school in Morristown, the Schmitz collection of stuffed specimens exhibited at the St. Paulus Hostel, and the natural history collection exhibited at the Franciscan Museum in the Monastery of the Flagellation. At the same time, the Bezalel Museum was established in Jerusalem, initially containing a natural history collection set up by Aharoni. At a later stage, the museum also featured art, Judaica, and archeology.

The activities of the explorers of natural history—Aharoni, Merrill, and Schmitz—were motivated by a combination of national and religious fervor that accompanied their zoological researches and explorations of Palestine. The common denominator of all three is the intimate and uncompromising link to the Bible. The aim of the collections was firstly didactic pedagogic to revive the living world of the Bible and origins of ancient times. Moreover, they recognized a need to collect zoological specimens and to preserve the zoological history of the country in light of the accelerated development of settlements and agriculture and consequent impact on the natural environment.

The collection of animal hides was varied. Most of the collectors stuffed the hides themselves, while others bought the hides from hunters and employed experts in taxidermy. The zoological collections were established following the accelerated development of Palestine at the beginning of the 20th century. These collections had an economic significance: animal hides were sold to various overseas museums, providing substantial incomes for Aharoni, Merrill, and Schmitz. Moreover, butterfly collections provided samples for carpets produced in the workshops of Bezalel.
References

Aharoni, I. 1908. Die naturhistorische Abteilung am Bezalel, Palästina, Jg. 5, Nr. 8, 158-160.

Aharoni, I. 1943. Zichronot Zoolog Ivry. Tel Aviv [Hebrew].

Aharoni, I. 1946. In Memory of Israel Aharoni (18.11.1946), Jerusalem [Hebrew].

Aharoni (Aronowitsch), J. 1913. Ein Brief aus Jerusalem. Die Selbstwehr 7, Nr. 11.


Merrill, S. 1890. Birds and animals new to Palestine. Palestine Exploration Fund, Quarterly Statement, 22 (1890): 40-44.

Zoological Museums and Collections, Shay


Scherer, V. 1913. Deutsche Museen, Entstehung und Kulturgeschichtliche bedeutung unserer Öffentlichen Kunstsammlungen, Jena.

Schmitz, E. 1913. Das Kathol. Deutschtum in Palästina, Freiburg i Br.


Shay, O. 2006. The Beginning of Museums and Collections in Late Ottoman Palestine (1848-1917). Dissertation written at Bar Ilan University's Department of Jewish History, Ramat Gan.


Tristram, H. B. 1894. Eastern Customs in Bible Land, Butler & Tanner, London


The Schmidt German School, Jerusalem, where Israel’s natural history specimens were preserved in the mid-20th Century.

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