

Janet Monge Talks Skeletal Remains, the Museum Business and Her Career as a Physical Anthropologist

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Janet Monge says she was a born anthropologist. Even so, it took her a lot of years of soul searching before she decided to make the stuff of skeletons her actual career. Now, as acting curator in charge of physical anthropology at the Pennsylvania Museum of Archaeology and Anthropology, she travels as close as Malvern, Pa., to research skeletal remains at a mass railroad worker gravesite and as far away as Croatia to study the biggest collection of Neanderthal fossils. Knowledge@Wharton High School talked to Monge about her fascinating work and her thoughts about how museums are challenged to move into the future. An edited transcript of the conversation is below.

Knowledge@Wharton High School: Hi. We are here today with Janet Monge, keeper of skeletal collections and acting curator in charge of physical anthropology at the Pennsylvania Museum of Archaeology and Anthropology. For the past several years, what have been some of the main focuses of your research? And what places has your work brought you?

Janet Monge: Difficult question because I do a lot of different things and go to a lot of different places. But the main focus of my work is really skeletal materials of various sorts. I work with the skeletal materials that are in the Penn Museum. We have huge, vast, wonderful collections. We have many researchers who come from all around the world to see the collections. That is part of it, but it is probably just a small part of it. The other section of it is traveling to various places and looking at the skeletal materials and studying them.

The most local one of these is at Duffy's Cut, which is in Malvern, Pa. It has yielded some skeletons. Thus far it is a really interesting site. It probably represents the remains of railway workers who were maybe killed — died certainly but maybe killed — as part of building a [section] of the Pennsylvania railroad. So that is a cool site there. Close by.

I also work overseas at a variety of sites. A lot of my research has been in human evolution. I go to look at fossils from around the world. Now I am planning a trip in December to go to Zagreb and Croatia that has the biggest collection of Neanderthal fossils. I think in January I probably will be going to Kenya, which is sort of the homeland of human history. So it is an exciting place for me to go and for anybody who has ever visited there.

KWHS: The University of Pennsylvania Museum of Archaeology and Anthropology received a three-year, \$1.7 million contributing grant from the National Science Foundation — the largest grant the museum has ever received. Part of the money went to fund the museum’s traveling show “Surviving the Body of Evidence.” What did the exhibition present to viewers and how was the information displayed?

Monge: In fact, it is an exhibit about evolution and the evolutionary process. We decided to take a completely different tactic. I’m sure that most of your listeners have been in museums and looked at some evolutionary history of some form of life. They might have been dinosaurs. It could have been really any of a number of things. And they could have seen an exhibit on, for example, human evolution. But we decided that there are many good museums that do exhibits on human evolution. So we wanted to move away from that a bit and really contextualize humans and human history and human evolution.

So the focus of the exhibit — and I think we were pretty successful on this — was to show the consequences of evolutionary processes in our every day life — and to also give an indication of the functionality of evolution in that it is not predictable. So we give them a teaser about thinking of the future of humans on the planet, but of course we can’t predict that fully into the future. We have had a very good time with it. In a sense we ask people to witness themselves — and all of their issues, all of their problems, all of their good points, too — from an evolutionary perspective. And then by doing that allow them to embody the evolutionary process in ways that evolution exhibits have not challenged people to do in the past.

KWHS: The [museum’s] traveling show will soon begin its national tour. Has working on the tour spurred further research?

Monge: It is moving around the country right now..... The museums really try to take in traveling shows because, even though they pay a rental fee, it is much cheaper than constructing a show [from scratch]. So the show will move around to all of these different places for three-month or four-month stays.

What has it spurred? It certainly spurred a lot of interest in the sense that it has spurred a lot of controversy — even in ways that I don’t think we ever anticipated, which is kind of cool. You think you know what is going to happen and then you do it and it has some other outcome. Right now, it is at the Cleveland Natural History Museum in Cleveland, Oh. One of the consequences of evolutionary process on human biology that we highlight is childbirth. As it turns out, a very active childbirth group in Ohio objected to some of the statements we made medically about the functionality of caesarian sections. The group thought [c-sections] were over-produced in the United States because birth has become highly biomedicalized and it shouldn’t be. They are kind of a back-to-natural-childbirth group and they began a very hot group of emails to me over the course of the last couple of months. Interesting. I would never have thought we made controversial statements because we know in human history humans have indeed been plagued by difficulties associated with childbirth.

So in terms of research, of course, it allows us to always think and rethink every part of the ways we present the evolutionary process. [These presentations] are always going to be challenging you to reevaluate a lot of those sort of basic tenets that you assume to be true and allow you to move to a different plane by doing that. Every day it is a challenge for us.

KWHS: In 2002, you established the Penn Modern Primate and Human CT Database. What enabled you to start the

project? And how has the development of the Internet and technological advancement changed the way you share your research with others?

Monge: Museums are now challenged to move into the future. What does that mean? How do we distribute information to a broader audience? How do we do it more efficiently? This was the brainchild of a co-worker of mine, Tom Schoneman, who is now at Indiana University. [We thought] it would be a great idea to [make use of] some of the technology, which is readily available — especially at places like Penn where we have an amazing biomedical complex and they contain many types of instrumentation we could never possibly support in a place like a museum. So they were open to it. What we decided to do is to spend our time CT scanning the bulk of the collections in the Penn Museum — the skeletal collections — and then making all of that available to any scholar anywhere in the world for them to use in their own research.

It is great for us because of course it gets our specimens and our name on publications all over the globe in ways that we could never possibly produce if we were just a place in Philadelphia. And we do it more cheaply and more effectively. Also, we then have data that is never going to go away. In its digital format it is always going to be there and it will always be available. That is something that we can be super proud of.

KWHS: In addition to your work at Penn, you own a non-profit small business venture that has a worldwide sales distribution to museums and universities for research and teaching known as the Casting Program. What made you start this non-profit?

Monge: Also a really good question. And a real tough one to answer in the sense that it is one of these kinds of things that 25 years into it I think to myself, “Why did I ever get involved in this?” It is a big time consuming process but I think it is a key one. It is like anything you do in life. Basically you derive a lot of pleasure out of doing your job well. The bulk of my job of course is teaching students and working with museum collections. But I’m one of those people who had to have a little bit more — do something else. The “something else” for me was making these really accurate replicas available for distribution to all kinds of educational institutions including other museums. We make casts, for example. If you have been in any exhibit on human evolution you have seen our casts. We should sign them because most people don’t know where they come from.

In fact, the program and project were a part of the Penn Museum for a long time. They had produced reproductions of fossils going back into the 1940s. The history is a little dim. The museum record keeping wasn’t the way it is today. So of course it is hard for us to precisely place it in time. What had happened was the museum had become interested in the business of producing replicas. They started by reproducing a lot of the archaeological objects that you see at the museum, but they also were interested in reproducing fossils. So they wound up purchasing a group of molds. These are the positives, which are made on the fossils, from an organization in New York City and then began distributing these in this cast form. And, of course, what always happens in those situations, the interest [increased] — it is a labor-intensive process. It takes a very long time to train for this. It became not feasible for them to carry on with it. So they closed that program in the early 1960s.

My colleague and mentor at Penn at the time, Alan Mann, became very interested in revitalizing that process. So he instituted it again in 1975. I came to Penn in 1976 and he was looking for a lab manager. At the time, I was a graduate student. So over the course of the next 20 years or so I actually learned the process. That’s how long it takes to be able to take a really old bone and cover it over with silicon and hope for the best when you pull it out of this big shell of plaster. It takes a while to build up the confidence to do that.

At that point he and I became much more interested in expanding the program. So we started traveling all over the world making reproductions on fossils and bringing them back to Penn. At the moment we number about 3,200 molds made on original fossils, which is remarkable as a feat. Most of the time was spent in Europe but we have also molded in

Australia and Africa — all over the place. These molds are at the Penn Museum and, of course, because they are made on original fossils, there is a really high demand for them. They are real specialty items. They are custom-made. So individuals write to us and say, “Do you make this piece?” We have a website, too. But we also have a lot of specialties not on our website.

We talk about how we’re going to produce it and the timeline we are going to produce it in. If it is a rare object, it is very expensive to produce. So when I say it is time-intensive, it is time-intensive and labor-intensive. A single piece can take us months to produce. I spent the last six months reproducing a fossil that was just excavated in Romania. It was a very fragile piece — a very difficult one to do. It is for an exhibit at the Smithsonian, which is opening up in January. I like working with my hands. Basically I work in classrooms most of the time. In the museum I also work with my hands in general. But I like figuring out — give me a good problem and I’m a happy gal.

KWHS: You mentioned earlier about the business side of working in a museum. How do you grapple with the idea of a museum being both a business and an academic institution?

Monge: I think all museums are at that crossroad right now. I would say that I am not on that side of administration or that I know the ins and outs of that process. I think it is a huge challenge for all museums in the world at the present time. Eventually they are going to have to figure out a way to effectively not only just take care of their finances but really suit their long-term mission. What is their function into the future? That has been a very big question.

Who are our audiences? What do they react to? Why do we show things? Those kinds of questions that you might take for granted or think are intuitive but they are actually really not. In a world where lots of things go through media — if you can see the great objects of the world on a TV special, what makes the museum experience an enhancement of that or an addition to that or something more special than that? Those big issues are really tough for us.

Then, of course, people say we have to spend all this money to go there. Is it really justified to do that because they all are charging admissions, as you know you have to. And if you have a family — let’s say a mom, a dad and a couple of kids — that afternoon in the museum becomes a \$150 afternoon, not so much at the Penn Museum but at other museums. I have been at many that are like this. What kind of special experience are those families going to have when they walk into those doors?

It will be interesting to see what happens over the next 10 years. I think most of us have come to the conclusion that other media hasn’t replaced that one-on-one experience. It would be like saying that all of us would be really happy being in a little closet all day long doing our work. We certainly can since everything is digitized. Why do we have to have that one-on-one? But we are humans. We need that social experience, and a museum is an experience not only of the objects but it is the social context. That is something that can’t really be reproduced out of that milieu.

KWHS: We often have a vision of archaeologists and anthropologists at digs by Egyptian pyramids. While your work puts you in contact with mummies, you have also conducted research on so many other subjects. How is your work both similar and different from the work that we imagine those in your field doing?

Monge: Most people don’t imagine the tedious nature of most of what we do. I think that we see the kind of glamour points, which are shown in a variety of ways. But they don’t actually follow the day-to-day when you are sitting in the lab cleaning the 150th tooth. Or trying to make sure that you have everything appropriately arranged in a storage place so it is retrievable. It is all of those kinds of issues that are just the normal part of the process that a lot of people don’t really appreciate.

This is why Penn is so good because we want our students to do this — what it means to actually collect data. It is not this wonderful explosive mental moment every single second of the day. It takes a huge amount of drive and motivation to

get yourself up and going and to do that tedious work that is the necessary component of any research — not just at a museum, anywhere.

Then even more frustrating is that you can do all of that work and it may come to nothing. So the constant rethinking, the constant adjustments, the constant tossing things around that are just the normal process of being a scientist. I don't think it is easy — or glamorous — and sometimes not even very much fun.

KWHS: What made you decide then to become a physical anthropologist? And do you see the way anthropologists conduct research changing in the near future?

Monge: Good questions, too. I didn't have the "Gee, wow" moment as some people do. I actually have some students who come up to me and they will say the moment they remember having a thought that they wanted to be an anthropologist. I didn't have that. In a sense, I had the experience, which is probably as profound but it's not in the same sort of way you think about that moment. I started to take anthropology classes and realized that I was always an anthropologist. It was like I was a born anthropologist. It was very natural. Not that you don't have to work at things, but I had a kind of a natural flow into it. I knew it was something that I wanted to do. For a very long time I refused to accept that.

So I wandered around in a lot of different majors and was always looking for that place that I thought was going to be the place for me because I came from a background where people didn't do things like anthropology. I'm sure they couldn't even pronounce anthropology. They had no idea what an anthropologist did. So for me it was, now I have to explain this to the group of relatives and neighbors who are saying, "You are studying what? What do you do again?" — including some of my immediate family members who at the time were thinking, "Gosh, I thought you went to school and you became a doctor or a lawyer or a dentist or a this or a that. What do you come out and do when you are an anthropologist? Sit in a lab. Stare at things. Dig in the dirt. Is this what adults do?"

It was just one of those things that I couldn't help but do. It wasn't like I said, okay, everything is great. I'm just going to do it. I soul searched to see if that was the thing that I wanted to do. I have no regrets. I don't think it has been an especially easy time as a career. What happens with anthropology is that you go to school forever. You come out and you are in a kind of intern experience for a long time. It is a struggle to be able to keep up the energy that is necessary to achieve the educational base to let you do it. But if you persevere and you love something, it is no problem. It really isn't.

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