



THE HENRY FORD

COLLECTING INNOVATION TODAY

TRANSCRIPT OF A VIDEO ORAL HISTORY

INTERVIEW WITH CURATOR

SUZANNE FISCHER

ON

GEORGE WASHINGTON CARVER

CONDUCTED AT

HENRY FORD MUSEUM

DEARBORN, MI

FEBRUARY 7, 2011

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INTERVIEWER: BARRY HURD

PRODUCER: JUDITH ENDELMAN

BARRY HURD:

04:00:31;16

Let's start here. Tell me, who was George Washington Carver?

SUZANNE FISCHER:

04:00:35;14

George Washington Carver was a famous African American scientist. He was really concerned with the soil and environmental science.

BARRY HURD:

04:00:47;22

I heard he started out as like an artist, he was a painter, wasn't he? He painted plants and...

SUZANNE FISCHER:

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Yeah. Well, he had a very interesting sort of early life. He was born into slavery in the 1860s in Missouri. He was born the year before slavery was abolished in the state of Missouri. And he had a very sort of up-and-down childhood. But, he was always interested in plants and sort of walking out into the fields, and identifying plants and seeing what was around.

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And he was able to, after sort of a long youth and

adolescence sort of knocking around the Great Plains, and working, and trying to make it. He was able to get into college. And he was the first African American to go to Simpson College in Iowa. And while he was there, he was able to do art, which was always another thing that he loved and enjoyed.

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But, some of his mentors encouraged him to keep going with art and with music. He was always a very artistic person, he had lots of different interests. But, he really decided that he wanted to focus on his scientific work, and his scientific skills. He had this talent for biology, for botany. And he wanted to use that to help fellow African Americans. So, that was really his social mission. And, so, the art, he always did his whole life. But, really, he dedicated his life to sort of science and social justice work.

BARRY HURD:

04:02:50;14

Give me a little bit about his career. He started out, went to college. He was a botanist? Trained to be a botanist

and then he moved to...; and Booker brought him over to...

SUZANNE FISCHER:

04:03:00;03

Yeah. So, he was trained in biology and he ended up going to Iowa State University. He was the first African American to get a masters degree there, and he taught there for a while, doing agricultural science. Sort of applied botany, applied biology. And he was asked by Booker T. Washington to come to his new institution called the Tuskegee Institute, which was a place that sort of provided economic empowerment to African Americans through education.

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So, it was a place where you could learn to teach. It was a place where you could learn to make works. It was a place where you could learn to farm. So, he brought, he asked George Washington Carver to come down and run this new agricultural program. And Carver went and he spent the rest of his career there.

BARRY HURD:

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And, so, run the program. What was he trying to do? He was trying to teach people what?

SUZANNE FISCHER:

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Carver was really interested in teaching farmers how to farm better, how to be successful. So, he was really interested in building up crops that built up farmers and built up the soil. So, it was this holistic idea of agriculture. And Carver was very worried about sort of the conditions in the South, the agricultural conditions in the South during this reconstruction period.

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Cotton was a scourge, really. It depleted the land of nutrients. You couldn't grow cotton on a piece of land indefinitely. And, you know, if the cotton market was bad that year, if the weather was bad that year, you were out 'a luck. You couldn't eat your cotton. So, Carver really wanted to help farmers diversify and grow products that they could make money from, and grow products that would help the soil out and that would help them out, to

eat better.

BARRY HURD:

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And, so, there were certain products that he liked or crops: peanuts, soybeans. Take us through that and why those were good.

SUZANNE FISCHER:

04:04:56;07

Yeah. So, Carver is really known for the peanut. Everyone associates him with peanuts. But, Carver was really more than peanuts. So, we want people to understand that Carver was beyond peanuts. But, peanuts, sweet potatoes, soybeans, cowpeas, these sort of beans and legumes, they fix nitrogen in the soil instead of taking it away. So, those were the kinds of crops that Carver was really interested in getting people to grow. And really helped popularize peanuts as a major crop in this area of the South.

BARRY HURD:

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Wasn't he also trying to show that if you grow these new crops, there's things that you can do with them other than eat them? And wasn't that a big part of his push?

SUZANNE FISCHER:

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Exactly. Carver was really interested in this idea that you could create industrial products, commercial products out of the soil. So, he came up with all kinds of uses for peanuts, for sweet potatoes and so on. He came up with hundreds of different products that you could make peanuts into. And those were not just foods. But, things like paints, glues, cements. So, actual industrial products that could be used on a wide level, and could be useful to farmers.

BARRY HURD:

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Now, what about his method? I mean, how did he make paint out of peanuts? Did he [use the] scientific method? Did he tinker? I mean, how did that work?

SUZANNE FISCHER:

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He really had a very intuitive, scientific process. He definitely sort of followed the scientific method. He's a trained scientist, right? He has his own lab here at Tuskegee. And he has his own lab there at Tuskegee,

right? But, he really has an intuitive process, and is able to sort of, think through the things that he's making in a holistic way.

BARRY HURD:

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And was part of his success that these ideas came along just when the boll weevil decided to visit the cotton plantation?

SUZANNE FISCHER:

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That's right. Yeah, the boll weevil was another sort of call to action about the problems with cotton. So, when you're planting all cotton everywhere, it's this mono culture and it's very vulnerable to these kinds of diseases. So, if you diversify the kinds of crops you're growing, that's really going to help too.

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And it's interesting. There was a town in Alabama that put up a monument to the boll weevil saying, "The boll weevil's the best thing that happened to us because we stopped growing cotton and started growing peanuts, and we were able to make money that way. And to be a successful and

healthy community."

BARRY HURD:

04:07:37;25

Well, it is an interesting idea to help people by teachin' them to grow other things. Roll out, I mean, did it work? I mean, what happened across the farms of America?

SUZANNE FISCHER:

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It really did work. And Carver not only taught and did this sort of agriculture outreach. He also did lobbying and advocacy on a sort of wider scale. One of the first times Carver comes to prominence nationally is in the early '20s, he testified in front of Congress about peanuts. And he said, "We need to put a tariff on imported peanuts so we can nurture a new peanut industry here in the U.S."

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And he proved his point, and this was shocking, right? This is a black man testifying in front of Congress in the '20s. This is really unheard of. People didn't wanna hear him. But they did give him a chance. And he started this talk about peanuts, the things you could do with them. And he had this sort of box full of products. Samples of

products that he had made out of peanuts. The, you know, these oils, and paints and so on. And he convinced this congressional committee to put this tariff on imported peanuts and to support the new peanut industry. So we really can say that Carver really grew the domestic peanut industry.

BARRY HURD:

04:09:01;09

Now, when we look at him in sort of the focus being innovation, I mean, you got scientific products. He's got these social things. How does he wrap in that whole idea of being an innovator?

SUZANNE FISCHER:

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Well, for Carver, being a scientist was a social mission and he did this and he was concerned about a lot of different things that some other scientists weren't concerned about. So, this idea that a farm should just not benefit the farmer, but it should benefit the soil, it should benefit the community the farmer's part of. That's a really powerful idea, and that's an idea that seems very contemporary still.

BARRY HURD:

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Yeah. Speaking of contemporary, what lessons are there that Carver still echoes that we might pick and use today in different walks of life or businesses.

SUZANNE FISCHER:

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Well, this focus on the soil as the basis of all agriculture, as the basis of all kinds of products. So, Carver really thought that all industrial products could come from the soil. That we had everything that we needed in abundance. And that's a very powerful idea. And the ideas of, you know, biofuels, of using industrial products, of using agricultural products, they're renewable, right? So, there's a lot of interest nowadays in those kind of ideas.

BARRY HURD:

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I heard he had some unusual working methods like they say he never really wrote down, he left no lab notebooks. He didn't write down any formulas. So, has a lot of his work been lost because of that?

SUZANNE FISCHER:

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Not really. I mean, that's not a, I mean, he certainly wrote and we do have some writings of his. And we have a lot of letters and scientific papers that he wrote. But, he did have this intuitive process. So, we like to think of scientists as these very straight ahead kind of thinkers that are very precise. And Carver was maybe less so. He was very open to a sort of inspiration.

BARRY HURD:

04:11:21;17

Did he have a team that he was working with in the lab at the school? And they would all work together? Did he manage them or what do we know about that?

SUZANNE FISCHER:

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He was a teacher first of all. Remember, he was a teacher. He was teaching his students at Tuskegee how to be agricultural scientists and how to do outreach to farmers. So, he was a teacher of scientists and he was a teacher of farmers. And, so, he always had people working with him in the lab. But, he was a pretty private

person. So, a lot of the major developments that he did were done sort of [on] his own.

BARRY HURD:

04:12:04;04

He made his own lab equipment too? What's that all about?

SUZANNE FISCHER:

04:12:07;00

Well, you know, Carver really had to struggle. He was a scientist in a segregated age and it was really tough to be an African American scientist. And he never had the resource that other scientists did. And he always had to struggle to even make lab equipment. So, when he came to the Tuskegee Institute, he didn't really have a lab. He had a room, right?

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So, he had to build some of his own lab equipment out of whatever was around. So, he was a very thrifty guy in general. And I'm not sure how much of that is from necessity and how much of that is from sort of ideology. But, he really was committed to building a lot of his own things in that way. And when he was doing his agricultural

teaching, he ended up needing to build agricultural equipment as well.

BARRY HURD:

04:13:04;28

Now, we talk about the crop rotation. Would he really be credited with sort of starting that whole movement of rotating crops? Taking care of the soil? Putting things back? Or were there other people? Or?

SUZANNE FISCHER:

04:13:14;28

No. I mean, these are ideas that have been around for a long time. And there, and having a movement of scientific agriculture in many ways was opposed to these sort of earlier ideas about how often you should rotate your crops and so on. So, a lot of what Carver did was bring sort of older ideas about how the soil, how wild plants could all work together. And to bring those back into prominence and to do research and say, "Okay, these are real things. And these are worth doing."

BARRY HURD:

04:13:56;01

Now, in part of his adventures, he was a friend of Henry Ford. Tell us a little bit about their relationship.

SUZANNE FISCHER:

04:14:00;29

Well, Carver and Henry Ford were both interested in a lot of the same things. This idea that from the soil you can make products that can be used in industry. And so, Henry Ford was really interested in soybeans. And he developed plastics, fabrics, all kinds of things from soybeans. And so Carver, of course, was interested in making all these kinds of products from other kinds of legumes, right? And other kinds of agricultural crops.

SUZANNE FISCHER:

04:14:32;06

Carver and Henry Ford were both interested in this emerging science called chemurgy. Which is about making industrial products from the soil. And this was really just starting up in the '30s. So, Carver and Ford were both older guys at this point. And they were both folk heroes. They were both famous people for being innovative. They were both famous innovators that everybody, that people knew about.

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And so, it's very interesting to think of them both together. And they met several times. Henry Ford came down to

Tuskegee at one point. Carver came up here. In 1942 Henry Ford built a cabin in Greenfield Village and it's still here. And it's a replica of the slave cabin that Carver was born in Missouri in 1864.

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And Carver came here for the dedication and he actually spent a night in the cabin. And Carver and Ford spent some time together and talked to each other. And Ford named a school after Carver. And when Carver had become increasingly frail, Henry Ford paid for an elevator to be put into the building that Carver lived in Tuskegee so that he could get up to his lab.

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So there was definitely some real affection between the two men, and they corresponded and really had these scientific principles in common.

BARRY HURD:

04:16:10;22

So, if we had a bunch of school kids here today (and you've probably done this before), and we're trying to tell them what the lasting legacy of somebody like Carver is,

what do we say to them?

SUZANNE FISCHER:

04:16:20;01

Well, I think Carver's lasting legacy is this idea that science can serve people, and science can help people. And that it can be a tool for oppressed people to be able to make a better life.

BARRY HURD:

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So, there really is. I mean, such [a thing as] social innovations. I mean, what's your take on that?

SUZANNE FISCHER:

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Yeah. There's definitely such a thing as social innovation. And I think one really interesting thing about Carver is how he combines scientific and social innovation. Though, the way that science became this social mission to help African Americans in Carver's life and work I think is really special.

BARRY HURD:

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And was he an inspiration? Were there offshoots of his theories that echo today that we see around?

SUZANNE FISCHER:

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Well, I think that this emphasis on the soil and on thinking

of agricultural science in a more holistic way is definitely something that's come back cyclically over the 20th and 21st centuries that really owes a lot to Carver.

BARRY HURD:

04:17:34;04

You've obviously done a lot of thinking and research on it. Is there anything that surprised you that you learned about him? Something that I wouldn't have expected that?

SUZANNE FISCHER:

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Well, I think that art. The art that Carver did is really unexpected to people. And there's some pieces of art that Carver made that still exist that are in museums and other institutions. And embroidery as well. And I think it's a really interesting testament to the way that Carver used sort of both sides of his brain to do science, and to do his work. That he was open to sort of artistic inspiration in his scientific work as well.

BARRY HURD:

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It's a little out of focus back there. But, tell us about the microscope back there.

SUZANNE FISCHER:

04:18:27;00

Okay. Well, we have a number of artifacts that belong to George Washington Carver. His long-time associate, Austin Curtis who worked with him in Tuskegee, Dr. Curtis, so, Carver died in 1943. And Dr. Curtis ended up moving up to Detroit and opening a business selling cosmetics. Selling natural cosmetics. So, using some of these ideas from Carver, right? And Dr. Curtis eventually donated to The Henry Ford a microscope and a typewriter that Carver used at Tuskegee. So, this is that microscope.

BARRY HURD:

04:19:16;02

So, tell us about Carver and his Jessup wagon.

SUZANNE FISCHER:

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So, Carver was really interested in doing this educational outreach and teaching farmers how to apply sort of the lessons of scientific agriculture to the work they were doing on their farms, in their fields, in their small farms. So, one way he did this was, a philanthropist named Jessup funded a sort of traveling, agricultural school called the Jessup Wagon. And Carver and his colleagues would

go around the countryside and tell people about new scientific methods of agriculture.

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And they would bring with them all kinds of things to help them learn. Seeds and tools, and examples of products they could make. So, all kinds of things that could be useful in teaching about this new kind of agriculture.

BARRY HURD:

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Okay. Here's the \$64,000 question. Is he named after the first President of the United States? George Washington? I'll bet not.

SUZANNE FISCHER:

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No, he's not, actually. His given name was just George. Carver was actually the last name of the family that owned his mother that adopted him after his mother died. And Carver took this middle name Washington just because he wanted a middle name. He was not named after George Washington.

BARRY HURD:

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Tell us a little bit about what he was like as a person.

SUZANNE FISCHER:

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He was an interesting person. He was as I said, he was very sort of thrifty. He was very DIY. We would say. You see a lot of pictures of him like the picture that's behind me sort of in this suit with this little boutonnière. He always wore a little flower. But, also, the suit that he wore in this picture, he wore in many, many pictures for most of his life.

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He didn't like to buy new clothes. He didn't like to buy new things. There's a little bit of a mythology about him losing his paychecks sort of in the disarray of his office. That he wouldn't cash his paychecks just because he was so interested in his science. So, he was a little bit of an absentminded professor if you'd say that. But, of course, he was a very driven scientist as well. But, personally, he had some quirks.

BARRY HURD:

04:22:07;01

Well, [are] there any other famous scientists at the time that he collaborated with or innovators? We know about Ford.

SUZANNE FISCHER:

04:22:12;15

Well, a lot of the work he did was sort of getting the word out. So, he did this, he also went around the country giving lectures, all kinds of places. And, often, the places he would give the lectures, he would give lectures to a big group of people who were eating dinner, and he couldn't eat dinner with them because these hotels were whites only in their dining rooms. And just traveling around the country, the trains, the hotels. He really had a lot of problems. There was a lot of prejudice. So, even doing this work, this scientific work that he was really passionate about he really had to overcome a lot of obstacles just to give a talk.

BARRY HURD:

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Did he ever write why he was so passionate about it? Or do we know anything about that? What drove him?

SUZANNE FISCHER:

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Well, just sort of growing up and seeing the plight of farmers was really a spur to him.

BARRY HURD:

04:23:41;10

Speaking of, there's a myth that he invented peanut butter. Not true, right?

SUZANNE FISCHER:

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No. Carver didn't invent peanut butter. Peanut butter was around as, you know, it's not rocket science, right, to grind up nuts. But, he did invent a lot of different products from the peanut. And he certainly popularized peanuts as a food source and as a commercial product.

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He made some interesting things out of peanuts too. One of the things that he made out of peanuts was a patent medicine that was made out of peanut oil that he marketed. He didn't patent most of the products that he developed from the peanut. He didn't wanna make money out of it. He just wanted to show that farmers could make it.

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He wanted to show that these were viable products. But, he didn't really wanna make money out of them. But, this medicine was one thing he did patent. And during the polio epidemic, he thought that some of his peanut products could help cure polio. And it's pretty unlikely that they did. But he did do peanut oil massages and that may have helped.

BARRY HURD:

04:25:06;15

Is there anything other than, I mean, not peanut butter, but a product he did invent out of peanuts that we still use today? Or have there been, other materials [that] are used now?

SUZANNE FISCHER:

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I mean, all these products that he made out of peanuts were not necessarily to market or to sell. But, really, to show that you could do it. So, I'm not sure that you can really find bricks and so on that are made out of peanuts nowadays. Sometimes you can...

BARRY HURD:

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You sell some of it, and the rest you use to make things for yourself?

SUZANNE FISCHER:

04:25:43;17

Right. Or that you can sell them to larger factories that'll process them. That that there are actual uses for peanuts beyond agriculture.