

HISTORY BENEATH THE SKIN

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Lister Sinclair

Good evening. I'm Lister Sinclair and this is *Ideas* about history beneath the skin.

The past is another country, so they say. There the people do things differently. But though the ways of other times are not ours, we still tend to assume that we have things in common with those who lived before us, and one of those things is our bodies. However differently they may have dressed, or acted or thought, we tend to say, surely beneath the skin they were just as we are. Fashions, even worldviews, may belong to the shifting terrain of history, but the substance of the body belongs to nature and therefore to natural science.

This is the view that historian Barbara Duden challenges in a book just published in English called *The Woman Beneath the Skin*. First published in Germany in 1987, the book examines the records of an early eighteenth-century German physician called Johannes Storch, who kept extensive case notes on his encounters with ailing women in the provincial court city of Eisenach, the city where two hundred years earlier Martin Luther completed his German translation of the Bible.

In these case notes, Duden discovered the traces of a body very different than the one we think we know today, a body in which substances we would not recognize find pathways we would regard as anatomically impossible—a body dominated by humours, in which blood ebbs and flows, rather than circulates.

Most contemporary historians encountering this alien body reinterpret it from the superior standpoint of biomedical science, transforming what people thought they experienced into what science now permits us to know they really experienced. Barbara Duden takes a different and more radical tack: she takes the women of the early eighteenth century at their word and uses their experience as the basis for a critique of modern categories.

Barbara Duden teaches history and conducts research at the Institute for Advanced Studies in Essen, in western Germany. Her second book, *Woman's Body as Public Space*, has just appeared in Germany and is currently being translated. Over the last few years, David Cayley has followed Barbara Duden's work closely and recorded several conversations with her. Tonight and tomorrow

night on *Ideas*, he presents a distillation of those conversations.

David Cayley

On May 17th, 1722, in the town of Eisenach, a young girl went for an hour-long walk with her sweetheart, danced at a village dance, and drank some pear wine. When she returned home, she complained of a headache and retired early. The next morning, the doctor had to be summoned. He found the girl, in his own words, "struck by a fit of senselessness." She could not swallow medicines, so the doctor applied a blister-inducing plaster to her calf. His efforts were in vain and two days later the girl died.

The doctor was Johannes Storch, permitted by decree of the local duke to act as a town *medicus* in Eisenach. He kept detailed accounts of his cases and, towards the end of his life, published seven large volumes entitled *Diseases of Women*. In these notes, he reflects on the case of this young girl and pieces the circumstances together in this way: The girl's monthly period, he concludes, had risen into her head. There the blood had been agitated by her amorous feelings, and the dancing and the pear wine had intensified this turbulence. He regrets that he did not override the girl's parents' wish that she not be bled at the feet, as he had recommended, since this bleeding might have relieved the intolerable inner pressure which led to her death.

The case is strange to modern ears, but no stranger than many of the other cases which Barbara Duden quotes from Storch's seven volumes: A woman who feels that her husband has handled her too roughly during sexual intercourse complains about "a wind" in her uterus and then reports the next day that "the wind has all gone out through her ears;" a country chambermaid tells the doctor that, when her period doesn't arrive, the blocked flow finds a way out of her body through bloody spitting; other women report nose bleeds or bleeding from old wounds when they experience their menstrual periods as blocked. Breast milk also finds unexpected pathways: A young girl has a plaster placed on her swollen breasts, "whereupon," Storch reports, "the menses broke out, which in colour, smell and taste resembled milk." On another occasion, he makes an incision for bleeding through which, instead, "pure milk" flows.

In Eisenach, these events are not curiosities, but expressions of a very different common sense than we know today. The bodies of the women of Eisenach cannot be isolated from their surroundings in the way that modern bodies can. These are bodies whose interiors cannot be precisely visualized and are therefore imagined either by the way this interior is experienced or by analogy with the visible world. Nor can this body be separated from the words in which it is spoken: No distinction can be drawn between the anatomical heart, which pumps blood, and the metaphorical heart, which leaps and trembles, soars and swoons.

Barbara Duden belongs to a small number of contemporary historians who want to take this pre-modern body seriously. Instead of dismissing the cases she finds in Storch's pages as fantastic misconceptions or failed gropings towards real scientific knowledge, she tries to set aside her own prejudices and tune her ear to the voices of the women of Eisenach. In this respect, she finds Dr. Storch an invaluable resource because his case notes are often virtually verbatim transcriptions of what the women said to him.

I first met Barbara Duden in 1988, when she was teaching at the Pennsylvania State University. There, along with Wolfgang Sachs, Ivan Illich, and other friends, she took part in a group which was attempting what they called "an archeology of modern certainties," an effort to unsettle contemporary prejudices by unearthing their roots. Duden's contribution was a critique of the modern body as anatomized, defined, diagnosed and manipulated by biomedical science. Her way of exposing this taken-for-granted reality was to contrast it with the very different forms of embodiment she found among women in the past. Duden's work in body history grew out of her involvement in the feminist movement in Germany, where she began doing women's history in the mid-seventies. The conversation which makes up tonight's program begins at the point at which she realized that history needn't stop at the skin.

Barbara Duden

Gradually it dawned on me that the kind of history that we did was just not deep enough or was not radical enough, because usually the kind of history that is being done leaves the body out. So when we did history of childbirth in the late eighteenth century, then usually we would do a history in which we would ask: Now, what

is the history of the change of the birth attendants, history of midwifery, for instance, so we would do that and consider the professionalization of midwifery, or the different practices that were being involved. But we never questioned the experience itself, or saw that you can ask, "But what is this body of these women that does something?"

And so I realized that, in the effort to do women's history, the very physicality would be a subject to inquire about. I realized that, even when we did women's history, somehow the body seemed to be something given or natural. We took it for granted that blood circulates, the uterus is pregnant, there are always ovaries, there is the fertilized egg, a pregnancy is something that can be described as cell division and so on, and of course that's since antiquity and so that's a realm that belongs to the natural sciences or to biomedical sciences and not to the historian.

Suddenly it dawned on me that, listen, what happens if I really take seriously an experience of one's own self in a society, in the western society prior to the nineteenth century, in which there just aren't these defining agencies—science and medicine—that describe what I am inside and thus accordingly try to feel. So I moved into taking the body seriously as a subject for historic inquiry. I moved into a history beneath the skin—that's the title of this book.

David Cayley

Were there others doing the same thing at the same time? Or were you really on your own?

Barbara Duden

No. No one did this when I started with it, or not in Germany. Now a lot of people work on that.

David Cayley

So you had no particular mentors or inspirers?

Barbara Duden

No, no, no. Actually, when I started doing it, some of my professors thought that this was very strange indeed. I mean, you can do history of medical concepts so you are within a subdiscipline of the history of medicine, and you do history of obstetrics or history of gynecology, but of course the body is naturally given, you cannot start inquiring into that. Now, for me, it was very

important that I worked with one particular source, this Johannes Storch in Eisenach. He was one of the very first physicians in the early eighteenth century who kept diaries in order to go back to their cases and he wrote down what the women told him and, at a later point in his life, he organized all these notes, these protocols in high German into medical cases and he published these cases to instruct younger colleagues, other physicians, about women's diseases.

David Cayley

So did you get the idea when you encountered these books? Or did you have the idea and then you found this gold mine?

Barbara Duden

No, I mean, imagine, imagine...I had been reading sources like this before, but it never came to me that I could read them in a different voice. So usually you read an early eighteenth-century case that starts, say: There comes a woman and she is very pale and she's a sailor's wife and then he says she comes to see him on the seventh of April in 1725 and she complains about cramps in her stomach and that these cramps then moved to her head, and she feels something is stuck in her head, and so on.

So when you read something like this, you can ask yourself, now what does this woman really have? I mean, how can you understand that? And you can try to make a modern diagnosis, a medical diagnosis about what this woman really has. So you might say this is chronic headache or something and that's completely disconnected from what she feels in her stomach. And I realized that this wouldn't make any sense, that I would never be able to understand what was going on and I tried to set out to understand what is actually going on in this practice? What is this interior that these women talk about? What do they talk about? Basically it involved two forms of mental or intellectual awareness. One side of this awareness is that these women forced me to reflect on my embodied otherness by reading these cases because I don't feel these kind of pains and, if I complain to a physician, I complain in a completely different way, so that is one way that I was forced continually to reflect on myself and on the other side to try to understand: What is this, what do they talk about, what is this biology in the true sense of a biology as a spoken revelation of what one feels in one's insides?

(editor's note: Etymologically, the word "biology" combines the Greek words bios, or life as it is lived, and logos, meaning speech.)

David Cayley

Can you give an example of a case or a class of cases from Storch, the kind of thing you were dealing with, to give some sense of what this lived body was for the women of Eisenach?

Barbara Duden

Yes. I have a case: An old woman comes and she has had a fight with the man who was renting her a room and, in the course of this quarrel with words, this man takes her at the arm and kind of throws her out of the room or something. So she's extremely angered and very agitated, and she runs to this physician and she wants to get rhubarb, she asks him for rhubarb, she knows exactly what she wants in order to get rid of this anger. I mean a modern woman wouldn't do that. If she gets crazy or something, she goes to a psychiatrist—I mean she doesn't go to a GP, or only if it becomes chronic that she actually feels what is called a "somatic reaction," and then she would go to a GP.

So, in order to understand this woman, I would ask myself: What is this body that she imagines being in which an anger with this rental lord is actually something that enters her so much that she feels she has to do something to get rid of it, so she takes rhubarb to get rid of that anger. Somehow she imagines that in her body there is a material connection or relation between anger and anger entering her and getting stuck somewhere in her innards so that she, not only symbolically, but really wants to take rhubarb and shit properly in order to get rid of it, and then she feels better.

This woman doesn't imagine her body as closed, first thing, it is not closed, but anger may enter her. Second, anger is not something that's, say, purely mental, but it has a material effect on her. So this is an example of a very different way of thinking about the interior than a modern woman would do. Does that make sense to you?

David Cayley

Yes. So experiences that for us would be purely metaphorical, like saying "I have a broken heart," are

not experienced as figures of speech, but are actually lived in the body.

Barbara Duden

Yes, lived in the body.

David Cayley

Do hearts break in fact? In Eisenach?

Barbara Duden

I think so, yes; and they sink and they rise and they have contortions and, if you have too much anger that gets stuck then the heart starts eating it; or there might be too much blood and the blood coagulates and gets stuck around one's heart and then it might get very heavy and it weighs down. So it's very clear that all the words that these women would be using do have a different epistemological status, these words have a different status as to the reality they would bespeak.

They speak about a heart that can break, and so, when a woman says, "I have a broken heart," she imagines something being broken inside herself. I wrote a piece posing this question: How does it come that basically all the words that we can use today about emotions that are being lodged in the interior, in the bodily interior, are only used metaphorically anymore and don't have a material basis? The emotions have been disembodied. We express them in words that have only a metaphorical ring and are in this sense not real anymore, but it's very clear that here we have a pre-nineteenth-century body in which the experience of the flesh is expressed in words that carry this materiality with them.

David Cayley

Do these women experience themselves as physically powerful in a way that...physically, in a way that contemporary women don't?

Barbara Duden

That's a very difficult question because I meet these voices of women who are long dead in a situation of pain and misery and discomfort. I think they are powerful in this sense perhaps that they find ways to make this bearable, to deal with it in a way that they decide themselves. The ways a woman could go in pain are ways that she can decide on herself. So I studied the encounters between a physician and these women where the women chose to go to this physician, but before or

after they might also go to other healers, to other women, to neighbours, or discuss the situation with their mother or with their sister. They in fact know actually very well in which direction relief would be and often, when they say they feel better, they feel well, it is very contrary to ways in which I would think today I felt better. And I have to take that seriously.

For instance, they very often ask for bleeding. In a biomedical model of the body, bleeding of course takes strength from the body, it doesn't make any sense to get rid of an excess of blood. So, when you bleed a person today—say, someone is bled in order to donate blood—they know they have to eat more because it's a weakening of the body and they should take care because they wouldn't feel so well.

And here in the early eighteenth century, these women copiously get bled, I mean have blood taken, and they want this themselves and then they say they feel much better—they feel lighter, they feel more agile. So I have to take seriously that one's very flesh allows for very different ways in which you feel better. So there is not one objective way to say now actually you are sick or now you are...but that well-being is part of one's fleshly orientation in which one gives meaning to what has happened.

David Cayley

How do they think of the doctor? Is he a particular authority for them?

Barbara Duden

I think they use him, they know what they want from him, but in no way is he in a power situation, in which he has knowledge about a body that he treats and they are basically patients.

David Cayley

They didn't even have the beginning of these ideas yet?

Barbara Duden

No. They search for his services and they leave him when they think he can't help them anymore, or they change physicians. There is no medical system that is there and which monopolizes the definitions of the body as well as, say, the therapeutic procedures in which you get well. They all compete, all these physicians, in a way. They are in a way like a patron-client relationship

in which the physician actually is more like a client who has to woo the patient and see that he does that what these women want. And that's also what other people found—that for the eighteenth century the impetus to go here or there stays with the sick person. There is not a professional *corpus* or institutions that have the power to define what's going on, but it is the women or the lay public that knows. But in a way also then they share the same body of knowledge. I mean the physicians, the healers, the midwives, the mothers, the neighbours—everyone. They are steeped in the same culture in the understanding of the body.

David Cayley

The women who suffer, do they suffer in a different way than we would suffer?

Barbara Duden

They don't believe there is a fix. They don't believe that there is some fix you can do, which is probably true. I mean there is no fix there in this culture.

David Cayley

Meaning what? That suffering is always to a degree accidental and arbitrary for us because we don't think we should suffer because there should be a fix?

Barbara Duden

I think we can't suffer anymore. I mean in almost any situation we ask for a medical diagnosis and then a fix. In fact, if you look at pregnancy, medicine has much more capacity for diagnosing diseases than fixing them. But at the same time they instill into the public that there is this capacity to mend everything. So in a way they instill into the public an image of the body that is a mechanism that can be almost ultimately fixed.

And so, if your heart is broken, you get a new one. Nothing of that is present in the eighteenth century, really nothing. So I mean you are born with this body and you try to get to terms with it. I'm really impressed with this capacity of suffering that they have.

David Cayley

In English the word *suffer* itself has an interesting older sense that people may still know from the King James Bible—you know, "Suffer the little children to come unto me"—that suffering is actually an allowing of experience, in the older English meaning of it.

Barbara Duden

It is a part of being in the world, that as much as you have joy, so there is also the shadow side in which you suffer and the two belong together. Isn't it?

David Cayley

Yes.

Barbara Duden

One thing that impressed me very much is that this physicality, this body, that they talk about as *being* in no way is mentally objectified. So when a woman talks about a pain in the area of her heart, it is her pain, it is her self. What she talks about is, say, the story of her life and there is no body as a physical body that could mentally be abstracted and be delivered to medical care.

I see the history of the body as a history in which gradually the lay public learns to perceive its own flesh and blood as an objective, viable mechanism that almost has no self, and you can imagine it in the ways in which it is being described in medical textbooks. It can be treated in these different ways, but somehow as if it were possible to make a distinction between what you are yourself as a self and then your organs. In no other way could it be possible that in this culture we can perceive actually of people who believe that they can have their heart taken out and a new heart put in. Here the heart has lost all sense of what a heart meant. I mean that is the *locus* of emotion and of self and of one's own history that you cannot take out or you cannot get in someone else's because it has its own history in this other body. So you have to have this history of a disembodiment of a body that becomes an objectifiable assembly of organs and a set of physiological functions.

David Cayley

So for the woman you were talking about a moment ago, there is no body that she *has*?

Barbara Duden

No. These women don't have a body, they *are*. So I am the sailor's wife or the cobbler's wife, or this servant girl, or this pregnant, unmarried wench or something. This is what she *is* and what happens inside that is she herself in her life story. So therefore in these cases, or in these encounters with the physician, the women tell all these hundreds of stories. They cannot talk about an interior, they cannot talk about their heart as just an

organ, but they tell all these stories, what happened to their heart, in order to have it bettered, so all these stories are part of it, otherwise it cannot be grasped—you cannot talk about it in a different way.

Today, when someone comes to the physician and you have a broken heart because your lover has left you, that is something that the physician discards immediately because it's not part of an anamnesis, because the anamnesis is purely the anamnesis of an organ. And here it's a life story, so therefore this source is full of all these stories.

David Cayley

But did you find this embeddedness, this embodiedness, frightening to contemplate from a modern perspective, as well as liberating? If you put yourself in that situation, do you find it frightening too?

Barbara Duden

I'm dealing here with a world that is lost, but at the same time I learned something from these women that caused me to stop my health insurance. I don't have health insurance anymore because I think I won't go there, and I stopped with these continual tests...that in order that I know, say, that my uterus is not having untoward growths, I have to have all these Pap tests and so on, I don't do that anymore. So for myself, of course, it was important. Yes.

David Cayley

So it was not frightening. You want this embodiedness back, as much as you can have it.

Barbara Duden

Yes. I really learned something from these women about, say, trying to put myself back into my own flesh. Yes. I learned to stop perceiving myself as Barbara Duden who has this body and if something is going wrong, I ask a physician. And it also has, in thinking back, implications for how I deal with friends or relatives when they are sick.

My father's death was really a medicide, a clinical death—that's many years ago—I tried to help him and I was there for three weeks and I allowed and actually encouraged his doctors to do anything. I mean he went through all this torture before he died and that was because I believed then that they could do something. I

never understood that this is an old man, he's seventy-six, who might be dying, so how do I relate to him as this person that I love and respect? How do I create that space in which this old man might be able to die in a decent way? I mean he was basically slaughtered in the effort to keep him going for a little bit longer and I would never do that again. I would never. I mean I would take him out or I would stay in the hospital and not have them do the operations but stay with him, because I see it in a different way. I would see him as my dying father. But then I saw my father on the one side, and his body on the other, and of course this body had to be treated according to the advice that was being given. And this I learned from these women. Yes.

David Cayley

The women of Eisenach gave Barbara Duden a place to stand, a place from which she could reinterpret her father's death, and a place from which she could view the modern body in a new light. By taking these women at their word, she raised the possibility, as she says in her book, "that the thinkable actually becomes reality." With this thought, she follows philosophers of science like Gaston Bachelard, who argued that it is our imaginations which endow reality with form.

"I cannot and do not wish to clarify," Duden says in her book, "whether the surgeon who recorded a periodic menstrual flow from a wound, or the doctor who on several occasions saw a nun from Eichsfeld urinating through her mouth, were describing something real. But if Bachelard teaches me to take the imagination seriously as a source of material reality," she continues, "I do not deny the possibility that the thinkable actually becomes reality."

This suggests that the modern body has no different status than the body of Eisenach: It too becomes what we imagine it to be. The modern body, in other words, is not, as we commonly assume, a discovery, but an invention.

In his influential book *The Birth of the Clinic*, published in France in 1963, Michel Foucault attributed this invention to the power of what he called the clinical or medical gaze. "Toward the end of the eighteenth century," Duden says, paraphrasing Foucault, "the modern body was created as the effect and the object of medical examination. The clinical and investigative gaze

crystalized as *body* that which it perceived. This new clinical discourse had the power to repress older modes of perception and to create new realities."

Following her work on Storch's records, Barbara Duden concentrated her attention on how medical and scientific definitions constitute this new object, the modern body. She focused particularly on technologies like ultrasound scanning, which allow the interior of the body to be visualized, and she used her historical research as a way of highlighting the novelty of the contemporary body.

Barbara Duden

The encounter with women in the past is very helpful to understand something about the uniqueness of the modern situation that we have in the last twenty years, because, looking from an early eighteenth-century perspective, taking that seriously, as *one* way of coping and *one* way of being pregnant, allows one to see something about the factitiousness—and fictitiousness—of the modern situation.

Take the abortion issue: Since perhaps ten years, there is a new figure in this debate, and that is the fertilized egg and then the foetus. These figures play a role in the debate about the possibility and the legitimacy of a woman's decision whether she wants to continue with a pregnancy or not. This entity, the fertilized egg and then the foetus, is certainly new. In the history of pregnancy, women were pregnant and at some point they were pregnant with child—after quickening, in the second part of pregnancy. But there was just no basis for a political or public discourse. The content of the womb was not nameable. Now the unborn is named as a foetus to which is imputed personhood, rights, patienthood, and so on and so on.

I wrote a piece on the history of the emergence of the public foetus to understand something about the novelty of the terms in which the debate is being couched, because we have to understand something about the technologies that make it possible—that suddenly, say, a fertilized egg is something that my neighbour and the secretary in the program that I work with, and the committed feminists, all dispute about and so they take it for real. It's something that is real, that is being debated—and of course no one has seen it.

David Cayley

They've seen a picture.

Barbara Duden

Yes, of course, they have seen pictures, but I'm interested in how we came from a fairly clear situation in which women were pregnant, and in due course they gave birth to children, into a situation in which, say, the uterine environment is a *locus* of public dispute in which there is this new being, the fertilized egg, that then becomes a foetus and that can mentally be disembedded from the interior, from the innards of a woman and becomes an agent in itself. Of course this is related to techniques of visualization, to ultrasound, so that in the last ten years almost everyone has come to know something about foetal development and how big a foetus is at a certain stage of pregnancy, and so suddenly what pregnancy meant has shifted.

David Cayley

But this is normally thought of as good. I mean these are discoveries that have been made.

Barbara Duden

No, these are openings and peepings into the interior of the womb that are made possible through techniques of visualization that then are peddled by the media, so everyone sees it somewhere, it's being shown in newspapers and so on. Being able to see what is inside of the womb created this new reality.

David Cayley

That's right. But I'm asking why is that not real once it's been seen? Why shouldn't we act as if that is now reality since we have indeed seen it?

Barbara Duden

Yes, because there is a fundamental difference between what I feel, or what a woman feels inside—what she knows, say, through her interior senses—and what you can see on a screen on the outside. And suddenly what you can see on a screen outside is more real than what you feel. There is research being done on pregnant women in the nineteenth century and there's a long period in which women can say yes or no, they are not sure if they are pregnant, and then there is quickening and at a certain point a woman gains a certainty and then also socially she becomes a pregnant woman, so it is a history that is shaped through this central experience.

And, if a woman doesn't want to be pregnant, she doesn't have to deal with, say, the destruction of a life because there is no life in the uterus, she is pregnant herself and it either becomes a child or it is blood or something that she gets rid of. So it is something that stays within the central experience of one's own body. That's something very different than, say, a woman who is pregnant today who doesn't feel everything is all right if she has not seen it. So technologically mediated facts about what is happening in the womb create a different reality than what is actually accessible to the senses. Does that make sense to you?

David Cayley

It does. I understand it, but I think the...

Barbara Duden

You wonder why I see it so negatively, this is your question. Or, why I see it with a critical eye? Yes, because the question is, what does this tell us about what we can do in our flesh ourselves. It disempowers or incapacitates women to trust their own senses.

A woman that I know who is pregnant—a friend of mine—gets very worried if she doesn't have this continual professional supervision and actually sees it's still there. Somehow it is as if women transform themselves into uterine environments that have to be monitored in order that everything goes right. The machinery in a way invades the body and invades the senses so women cannot trust their own senses.

Bill Arney did this beautiful study on this shift in which a new technology like ultrasound was used in the seventies on very clear and precise diagnostic indications in so-called risk pregnancies. It was very helpful—but then there happened this shift so that a technology that was a help in precise incidents became a necessity for any pregnancy. In a way no pregnancy then is doing well if you do not have this technological invasion and the rectification of the interior ongoing being seen on the screen. And this tells a woman that she herself cannot trust what she does in her inside, but that she needs the technology and the professionals to continually tell her, "Yes, it's still okay, it's still okay."

I think this very deeply disempowers women, and it tears down a fundamental difference between ongoing in a laboratory or processes that could also happen in an

artificial uterine environment on a Petrie dish, and what happens in a woman's body. And I think the destruction of this deep fundamental difference, between what I am myself and what is a technological apparatus, this is very disconcerting to me.

David Cayley

There are two things that I'm interested in about this. One is how you can dispute that the knowledge gained through technology is real; and then the second question, equally interesting, is: If one can dispute that, can one then get away from this pervasive imagery? Can one refuse it?

Barbara Duden

It's a very important question to sort this out very carefully, this, for me, fundamental difference between a reality that is accessible to my senses and a reality that is produced through technologies that I even don't know how they work. They are two very different ways of knowing and I would say that for the second one, one cannot even say one can know it. The ultrasound picture gives the appearance—when a woman sits in front of a real-time ultrasound scanner—that she sees the interior of her womb. That is an illusion, because what she sees is the electronic mapping of physically defined matter, matter as it is being defined in physics. She doesn't even see a surface, and she doesn't see a body, but what she sees makes her *think* she can see this child in her interior. But in fact she buys into the necessity of having something visually represented that in fact she can grasp herself with her senses.

This is one incidence of this reversal in our culture, in which images and pictures seem to be more real than that what you actually can grasp and feel and sense and smell. I think at the same time what the ultrasound does is, when a woman thinks this is her baby—this electronic recording of physical matter—she learns at the same time something about surveillance: You must see it again. Actually, that is something that has been found out: Women want again and again to see it in order to know it's still there. It makes them dependent on this surveillance and it tells them something about the necessity to manage it. I think it's absolutely different between how you imagine and feel your baby and when you see it on the ultrasound and I'm interested in the effect of the mass application of this technology and then

the self-ascription of a pregnant woman that this is her baby, because it is not.

David Cayley

Is there any way out, in your opinion?

Barbara Duden

Yes, of course. You have to say no. I think women have to learn to say no to these procedures and they basically should trust their own senses. I mean, if a friend of mine is pregnant and she feels worried and she wants to go and discuss with her doctor how she feels and so on, I think there's nothing bad about that. But as a system, in its mass application, I think it deeply undermines women's capacity to bear, in the literal sense. I'm deeply convinced that the only way out is to say no to this and argue from one's own senses.

David Cayley

But, it's not just that women imagine a baby after the ultrasound image, when that has nothing to do with what they're living or sensing at that moment, it's that we see the earth from the moon, it's that we speak of ourselves as systems, it's that we have medical names for all the parts of our bodies and we speak in those terms, and this objective language about ourselves is so much a part of everyday talk and it's so deeply internalized that saying no is almost unimaginable. One can talk about perhaps restricting the use of certain particularly pernicious technologies—ultrasound scanning or whatever—but it seems to go to every part of our lives and not to be just an isolated problem. I mean, to imagine oneself as living in an ecosystem, as everyone now begins to do, is just the same, isn't it?

Barbara Duden

Yes, yes.

David Cayley

It's still taking scientific information and naturalizing it and imagining that's what we live. I'm just trying to get at the fact that it's so pervasive.

Barbara Duden

The history of the transformation of pregnancy in the last twenty years might very well be used as a paradigm for what happens to the body, say, in the age of professional expertise and management in nutrition, in the health sciences. I think what happens to women is a

paradigm for what happens to our physicality in this culture anyway.

David Cayley

In trying to understand how scientific facts are domesticated and sentimentalized, Barbara Duden came across the work of a microbiologist called Ludwig Fleck. Thirty years before Thomas Kuhn put the word *paradigm* into circulation and other philosophers of science demonstrated that some conceptual lens is always necessary to turn the buzzing, blooming confusion around us into a coherent world, Fleck tried to puzzle out how something previously imperceptible becomes a scientific fact. He wrote up his results in a little book called *The Creation and Development of a Scientific Fact*. Through him, Duden was able to see the kind of training that is necessary before the imperceptible passes over into the taken-for-granted.

Barbara Duden

The work of Fleck has been very important for me because he's one person, this Jewish microbiologist, who in the mid-1930s, historicized scientific facts in the sense that he asked, "But how does it come that we take a fact as a fact?" It has been produced at some time but then suddenly it becomes a common consensus. So he did this for the history of syphilis, but you can as well apply his insights into the fact of the incarnation of a fertilized egg in a woman's innards, because you cannot feel it—no woman can feel a fertilized egg. It doesn't belong to the realm of that what is accessible to one's bodily senses.

So I got very interested in the migration of scientific facts: How do facts that are being produced in the laboratory and under the microscope, how do these travel into the mind of every individual woman so that she ascribes to herself something as fictitious as the fertilized egg? How does it happen that a woman who never sees it under the microscope—and, if she did, she would just see some blob or something (she wouldn't be able to recognize it; you have to be trained to see it)—she believes herself that this is what is going on in her interior?

David Cayley

For Barbara Duden, a scientific fact is a fact only within its proper sphere, which is science. An obstetrician can sometimes learn what he needs to know from a sonogram; the ecosystem may be a useful concept for the

ecologist. The problem for Duden comes when scientific facts invade everyday experience and the ecosystem becomes nature, or the foetus a political actor.

Barbara Duden

You can analyze this configuration as the merging of two completely separate spheres because on the one side you have what is being made visible through technology in the laboratory and on the other side you have an ethical or moral discourse that never before dealt with invisible things. I mean ethics traditionally dealt with persons, always, and ethical disputes were about the behaviour of persons. So you have a new situation in which an ethical discourse gives substance to invisible matter that is at stake in the laboratory and it's only in the public that these two merge because in the laboratory they don't deal with life, they deal with cells and cell division and tissue.

David Cayley

So how do you view the field of bioethics, this whole field that has grown up to deal with problems that are perceived as a result of these invasive technologies?

Barbara Duden

That is this new and growing and flourishing branch of medical science that gives the semblance of ethical questions to these new realities that I think have nothing to do with ethics. Tissue and cell division is not a substance in which there arises ethical questions. So I think the main role of bioethics is to give the semblance of ethical procedures in a basically unethical context. It is a scientific and a technological context, or it's an institutional or a management context, but it has nothing to do with ethics.

I think their main function is to make the general public believe that we are here dealing with issues that in a way resemble issues that have been discussed in ethics historically. But this is not being seen, this is not seen because of the power of science to create facts that are being taken for granted in the perception of almost everyone. The abortion issue basically deals with invisible stuff, invisible matter, that is being treated as having the same status as something that's as tangible as this cup, no?

David Cayley

In opposing the sensual to the scientific, Barbara Duden is trying to reclaim the privacy and the power of women's experience. Women, she says, must draw the shade on what one of her German colleagues calls "the glass womb." They must choose between the life which is ascribed to them as the uterine environment for the public foetus and their own aliveness.

Barbara Duden

I did some research on infanticide in the nineteenth century, court cases where women who had killed their newborns were being charged with murder. And you see a clash of two different ways of perceiving: On the one side there is the new science of embryology, doctors who say, "But this was a live birth, so you killed." And on the other side there are these country women, basically unmarried girls, who say "I never was pregnant. That was something that never was, and it didn't breathe, and it wasn't real." And all through these nine months they tried to insist that this was not a real pregnancy.

I would take side with these women against the power of science to ascertain another reality. Now, of course, today this is much more difficult because today we have this open womb or this uterine environment in which the womb is likened to a Petrie dish, and everyone knows what happens there because what happens is always and everywhere the same. It's very important for women to understand something about the conditions and the axioms under which this fictitious reality of science or of scientific facts is being produced and to make a difference between this reality and the reality that a woman feels herself. I think that's very important.

Lister Sinclair

On *Ideas*, you've been listening to a conversation between historian Barbara Duden and *Ideas* writer David Cayley. Their conversation continues tomorrow night. Barbara Duden is the author of *The Woman Beneath the Skin*, published by Harvard University Press. The program was written and presented by David Cayley. Technical production by Lorne Tulk; production assistance: Gail Brownell and Faye MacPherson. The executive producer of *Ideas* is Bernie Lucht.

Transcription by Hedy Muysson.

Lister Sinclair

Good evening. I'm Lister Sinclair and this is *Ideas* about history beneath the skin. Last night, we presented Part One of a conversation with German historian Barbara Duden. Tonight we continue and conclude that conversation.

Barbara Duden teaches history and conducts research at the Institute for Advanced Studies in the German city of Essen. She specializes in what she calls body history, an effort to understand and describe how the very substance of the body changes over time. In this, Duden goes beyond the commonly accepted idea that representations of the body vary historically. She tries to take history beneath the skin, into the dark interior of the body where the deep imagination of each historical epoch shapes our very substance differently. Her first book, *The Woman Beneath the Skin*, has just appeared in English translation from the Harvard University Press. A second work called *Woman's Body as Public Space* has just appeared in Germany and is now being translated. She appears on *Ideas* tonight in conversation with David Cayley, who prepared these programs.

David Cayley

An American friend tells the story of a pregnant woman who was having lunch at a restaurant. She was approached by a stranger, who took her wine glass and poured out its contents. My friend says this kind of thing is now not unusual. The stranger presumably felt that she was performing a civic duty in upbraiding a woman who was endangering her foetus by drinking.

A pregnant woman is no longer just someone who is expecting a baby. She is a receptacle for life and the maintenance of life is everybody's business. Her belly is no longer a private space, her pregnancy no longer an event that acquires its meaning within the horizon of her personal history. Her interior has become a public space and the being who dwells there a political personage with rights that people in restaurants feel constrained to defend. Barbara Duden calls this being "the public foetus" and she has tried to understand how this new, now almost-taken-for-granted reality came into existence.

Barbara Duden is an historian. Her first book, now translated as *The Woman Beneath the Skin*, appeared in Germany in 1987. The book is a commentary on a seven-volume work called *Diseases of Women*, by one

Johannes Storch, a physician in the provincial German court city of Eisenach in the early eighteenth century. Storch kept detailed, often verbatim records of what the women of Eisenach said to him about their complaints; and, through his pages, Duden was able to discover the traces of an embodied existence utterly different than the one we live today. She concluded that the body itself changes historically, and she began to study what she calls the sociogenesis of the modern body.

Instead of taking objectified, scientific descriptions of the body for granted, she tried to subject them to criticism, asking herself not whether these descriptions are demonstrably accurate, but rather what they say to us about who and what we are. For example, what does it mean to a pregnant woman to identify the baby she imagines and awaits with the monster foetus which appears around her on billboards and placards as the emblem for an endangered resource called "life"?

At the time this interview was recorded, Barbara Duden was teaching in the U.S. at Penn State University. There she taught a course called "The Social Construction of Woman as a Scientific Fact."

Barbara Duden

Perhaps I could start best with telling you a story. I was teaching at Penn State for three years, and I got very interested in the students that I was teaching, and one of the students was Tracy. She was being trained as a social worker. I invited the students to have dinner with me, and the first time they didn't come—they thought this was an indecent invitation or something. But they came next time. I offered something to drink and then Tracy said she would not take apple juice because she would get a sugar high and she was not sure whether she could then control her impulses.

And that was an incident where I realized that this woman, twenty-two-year-old woman, in a way incarnated facts out of the nutritional sciences about levels of...I don't know, the chemical ingredients of sugar, levels of this stuff in her body that would then produce reactions in her body. I suddenly realized that she inhabited a body that for herself was basically a space in which scientific facts would react the way she has learned that they react in a scientific textbook. And the longer I was working with these students, the more I realized that the training they get as students does

something to their mind inasmuch as it blurs their capacity to make a difference between personal experiences like what it means being a woman, sleeping with a man, embracing a man, or embracing a woman, or eating something, or feeling the weather, or experiencing cold or whatever, and the same phenomena as they appear within scientific descriptions.

So my encounter with these students taught me something about a new situation in which scientific facts become part of the mental framework of these young people and then they gradually shape the experience of their own bodies, so that I got more and more interested in the sociogenesis, that is the historical genesis of scientific facts, and how they enter common parlance, becoming part of a pop science that then shapes the experience of women. My book is a contribution to...or will, I hope, be a contribution to this issue.

I wanted to do this in one particular area and that is in the area of the history of pregnancy, and so I am teaching a course on what I call "the social creation of woman as a scientific fact" on the gradual transformation of the experience of pregnancy through science coming into this experience and gradually redefining it in scientific terms.

David Cayley

We can't experience ourselves without metaphor and if you look through just normal talk, you'll find all kinds of metaphors of which we are unconscious, where we may compare ourselves to cars or horses, or God knows what. So do you see something radically new here? Something that human beings haven't always done? When Plato says that the universe is like a bow and lyre, or when someone in the twelfth century sees over the door of the church that God reads their sins in the Book of Life, then people are ascribing to themselves the qualities of books in that instance, aren't they? This has always been part of human life and must inevitably be part of it. So what is new here?

Barbara Duden

I think what is new here is the stuff out of which basic terms are being shaped. I question the sense in which they relate to the body. When I look at the history of pregnancy or I look at the basic terms in which, for instance, conception was being imagined, and I read Aristotle, and I read within the Aristotelian tradition,

then the words that are there of course are metaphors, trying to convey something that you cannot see. But even so, they were metaphors that were very, very strongly related to one's central experience. They were related to, for instance, hot and cold, to something that you could touch, to matter that would be slimy, to the experience of some fermentation or what matter does or blood does—it coagulates, it sets.

So a woman in the popular culture in the nineteenth century, when she would imagine the growing in her insides, the metaphors she would use are related to the world in which she lives and that she has a command about and that she knows something about, while the terms that are being used now all come out of a world that has nothing to do with the senses, it is technologically mediated. The technology that mediates it, that makes it accessible to the vision, for instance, is a technology that these people don't know anything about. So what I have been concerned about as a grown-up woman in the last two or three years more and more is that the world in which I move now has changed inasmuch as the key terms that are being used to describe a woman's experience in being pregnant are drained more and more of being able to speak about something that you can feel and grasp and know in a carnal sense or in a visceral sense about yourself.

They are new words and they convey less and less something that is accessible to one's own central experience and thus that is something that is connected to one's own history as a woman and in one's relation to a man or someone one loves. And it seemed to me that, in the beginning of the women's movement, we said the personal is political. So we wanted to make personal experience visible and say we have a right to start from our personal experience and to express what happens to us as something that's politically relevant. And what happens now is that it's almost a reversal, and the realm of the personal of a woman now is being invaded by this popular-science terminology that redefines the most intimate and personal areas of her experience.

David Cayley

If we take this concretely, can you contrast the experience of a woman in the eighteenth century, which you've studied, or even of your mother, and now, in terms of how a pregnancy is experienced?

Barbara Duden

Yes. I did a talk once, a lecture, in which I went back. I started with the defining terms that a woman would use in the 1970s to describe what it means being a woman, and then I went back in time, say, like a crab, I went back in history. And it's very interesting how very soon terms that we cannot think away disappear, terms like *reproduction*, like *fertilization*, like *reproductive choice*; now we have *third-party reproduction*—all these new terms that came up in the last ten years disappear. My mother would not have carried a foetus: My mother was pregnant. When she was pregnant, she was carrying a child, she had some ideas about how this would be, but there weren't all these terms around in which she would speak today. And the more I go back, the more I realize that these modern terms fade and then I move into a different landscape in which the signs of the body, the words you can use, the observations you make, more and more seem to me to be related to, say, one's own story, and we move in a different world.

David Cayley

Where do you see the watersheds in this transformation?

Barbara Duden

The watershed in the history of the body is the late eighteenth and the early nineteenth century because I think the basic terms out of which the modern body is being created change at the end of the eighteenth and the beginning of the nineteenth century. Now, Foucault has described that very well as the creation of an objectified anatomical body of description that comes out of clinical practice and, for me, one thing is very important: In the late eighteenth century, women could still speak about bodily experience in which the *soma*, that is the flesh, and the emotion in the very terms you could use, were not separated. The inner movement in the body was still important. The nineteenth-century body then gradually is made up of completely different ingredients, and this body that was being defined by medicine in the course of the nineteenth century belonged to medical treatment and belonged to the terminology of physicians. In the course of the twentieth century it became an entity that more and more people learned and were trained to ascribe to themselves.

I think we are at the end of this history in which something that could be isolated and defined in the laboratory or in the clinic within the special language of

a profession moved out of this very defined area and moved over to become something that then bounces back into the experience of women themselves. Now when you ask women what they think it is when they bleed, they will come up with all these terms of premenstrual syndrome and they know that it has to do with sickness and they know something about the shedding of the uterus lining, and so something you cannot feel. No? And what this take-over of scientific terms into one's self-perception does to a woman is that it makes her dependent on professional counselling and so it deprives women of the capacity to make sense in a very different way, in a way in which their experience is rooted within their own personality.

I think it depersonalizes, very much so. When I speak with these women students in Penn State, I think they live in a world in which they are very poor because there is all this poverty of these terms that actually don't lend themselves to be metaphors, because they don't convey anything.

David Cayley

Don't people just make new stories out of these new entities that they learn to ascribe to themselves? So one learns to bond with one's baby, one talks with one's foetus, one puts the pregaphone against one's belly so that hubby can also speak to the baby? I mean, don't all these things in a way constitute new stories that people tell about these things or is it really so completely denatured and depersonalized that people just experience themselves as a general space, a typical instance of certain scientific phenomena?

Barbara Duden

I think you could not survive being a physical bundle of reproductive choices, sexual frequency, health in the standardized way, healthy nutrition, the necessary amount of sleep and so on and so on. I mean then you cannot live anymore. I'm quite convinced of that. So I think we live probably in a world in which people incorporate, say, different layers, so there are personal sides and then there are bits, often bits, of these fall-outs of scientific and professional descriptions, and elements of these different—and in a way incompatible—worlds are part of one's own mind frame. That is the sentimentalization of scientific facts, in a way. And I'm very afraid of that.