**Transcript of “ Pasteur ”**

**In: Interviewer**

**R: Respondent**

*Ultrasound, 00: 08-00: 35*

*Stimulus: [125 Hz, Circle, 8]*

I. Cool.

R. So, that's a special feeling, right ? It's a bit like being blown away, somehow, even if it is not [indistinct word, 00: 46/47] . I think it was… Well, that was good feedback. You could clearly feel that something was happening, yes. If it makes sense?

I. Yes, for sure. You say "good feedback", what is it that makes it good?

R. Well, that you can clearly feel what is happening, because it… So, when I think of this type of stimuli, it is also that typically you think "okay, but I can not feel it" , and then you do not get any feedback, but here you can very clearly feel it, so you are in no doubt that you get some kind of feedback on something. In this case, it is not something I have done, but it would be a good feedback on something that had been done. Such an indication, yes. So that's what I mean by 'good', also because you can clearly feel it. It's not vague. It's not like it's just a little bit. You have no doubt that something is happening.

I. If you were to describe this stimulus, how would you look, what words would you put on it?

R. Vibrating

I. Vibrating?

R. Yes. I would probably say that. Vibrating can also be used, but vibrating is probably more actual, that's how it felt. So like, yes, comfortable too.

I. And if you… So, if you try to relate it to something you've experienced before, is there anything that comes to mind?

R. A milder version of when my phone vibrates in my hand. But a milder version of it, I think. It's like that… Yes, so you get the same feedback, and the feedback itself is just as powerful, but the feeling on the hand is milder, and I really like that. I think it's very nice that it's not quite as disruptive in feeling, yes.

I. What do you think is it that makes you associate this stimulus with a vibration from your mobile, for example?

R. Well, it was there that it came like that in steps. It was a slightly vibrating stimulus, if you can call it that, so it ran, and then it got just milder, and then it ran again at a higher level, or something, or it did it a three times before it stopped. And that's what makes me think, or that makes me connect it with it, it's the one with you having some small breaks now and then, where if it was constant, I would not connect it with a telephone. Well, yes, I do not quite know what I would connect it with, but just the one with it, it's like a phone that also vibrates strongly and so little not, a break, and then again. So it's the same… For me it's the same association.

I. It makes sense, yes. If you were to describe this stimulus to someone who has not tried this technology before, how would you describe it?

R. Such as… a light, almost tickling sensation on the skin surface, is probably how I would describe it. And at the same time also a bit as if you are being breathed on. So a mild version of those hand blowers that are in the bathrooms, right ? Such a mild version of it, it's that feeling of being blown away, even though you do not. It's just, it's that way it moves the skin that it reacts with the skin, it's a bit the same as if you were being blown away. It's a little tickling, yes.

I. That sounds just fine. Now you felt it like that three times in a row. Is there… So, when did you start thinking like that, that it was vibrating, for example, or pulsating, like you said?

R. Immediately.

I. Right away, okay.

R. It was in the first stimulus. Or in such the first time it drove through, yes. Because that, that was what I connected it with right away. It is just pulsating / vibrating.

I. Was that also where you came up with the mobile phone, or was it only later, like that connection arose?

R. I think it was right away? But it's mostly because it's the only thing… So it's something you're used to, you've been used to for many years now, so it's the first thing that pops up in your head when it's , I'm thinking of something that gives a similar feedback, so it popped up pretty much right away too, I would say.

I. Cool. Are there any other things you think about this stimulus?

R. Not straight on standing foot.

I. It's super.

R. I'll try to see if I can think of anything more later.

I. That's fine. I'm thinking, so if you have nothing more to say, should we not try another stimulus?

R. Yes, let's do it.

I. And just see what comes…

*Ultrasound, 06: 26-06: 51*

*Stimulus: [250 Hz, Point, 1]*

R. It feels much more as if you are just being breathed on. So it is milder. It's just somehow not as powerful as the other, I think. Yes. And I think I associate it the most with you being breathed like that, actually. That's just what I think when I'm feeling it. It's not like that, there's nothing in my contemporary life where I think 'hey, it's the same as this feeling'.

I. If you put some words on how it is like that, now you say many abstract words,

R. Yes, sorry .

I. No, that's fine, you have to keep at it, but how do you describe it in such a concrete way? What kind of words do you want to put on it?

R. So very comfortable, I think, very calm in some way too, so it is… Have you tried to hold your hand over something that has such a fair amount of wind blowing upwards? So it's like that, it's very chill when you just sit and run your hand like that back and forth, and it's the same feeling a little bit, I get that you feel like just sitting and getting a gentle massage almost, if you can say it like that, by the palm of your hand. It is very mild, pleasant. It does not source properly, but it is such a mild stimulus. So, it's even milder than if you run your fingers just as quietly over it. Very quiet and comfortable, I would say. It's a little hard to make concrete, I think, but that's what kind of windy feeling I get, even if it's not wind.

I. Now you say massage…

R. Yes.

I.… mild massage. What is it that kind of makes it massage that pops up?

R. Because it's comfortable. So, when I think of massage, I think that you are stimulated, that is, the skin and the upper layer of the muscles and such are stimulated, but that it is, it gives you what to say, such a little redemptive feeling afterwards. . That you have such an "okay, now I'm just, that part of my skin, that part of my body, it's like relaxed, is a little more calm, is like that, is not tense". So relaxed is probably really the correct word to use. And it's the same feeling I get when it's run like that, or where it's hit my hand, and while it's hitting. Well, it's such a very pleasant light pressing feeling, where it, yes, I associate it such a bit with light massage of the gentle kind.

I. That sounds perfectly fair. And if you were to describe it to someone else who has not tried it before…?

R. Yes, I would probably describe it as such a light wind, if you can put it that way, that is, even if it is not windy, it feels a bit the same way. And that it is a mild but pleasant feeling and relaxing. So because I would feel relaxed if I just sat with my hand over it. So yeah, that's how I would describe it if I were to describe it to others.

I. That sounds nice.

R. Yes, I think it is.

I. Cool. And again, these would mean that you have to spend for these processes. Are there any other things you're thinking about this?

R. No, because I've been thinking about whether I can connect it with something you know, and I do not really think I can, so it's like that, no, I do not know when I think of that, then I think like that a bit too, if you go outside on a beach, for example, and take like that, I was going to say “mild breeze”, but it's kind of a little more than mild, if it's going to feel just as strong on hand, but yes, it's in the way that it's such a bit what one associates with it. It's a very, very calm picture I have of it.

I. Yes, so it's a little more abstract maybe than?

R. Yes, I think so. Well, I can not, it is not so concrete, because I can not say anything concrete there, that it is what I associate it with. With the other one, I could very clearly say "that feeling I can easily associate with getting a definite feedback", where here, I would have a harder time knowing what it meant if I just experienced it out in the something. So, depending on what it was. I would have a hard time knowing what I was going to understand it as. I would think it was mega comfortable , but have a hard time saying " orv , this is specifically what it reminds me of", if you have to try to create associations with something you know. Yes, so it's very abstract to me.

I. That sounds perfectly fair. Cool. If there is no more you think needs to be added, then…

R. Shall we take number three?

I. Yes, should we not try it?

R. Jo.

*Ultrasound, 12: 09-12: 36*

*Stimulus: [250 Hz, Random, 8]*

I. What do you think?

R. Yes, that's it. It is also vibrating or pulsating, in that it runs, small pause, runs, small pause, but the second, the first, it was like one particular place, more or less, it ran, or at least the same place [indistinct, 13:04] , where that here, it was as if it was moving, so it was different places on hand. And that… I do not connect it with a phone. Well, it's a vibration, no doubt, but it's not the same way. Well, I think here, who would it, yes… So, it's a bit of that, I think it might be relevant to use it in a situation where you can, for example, if you have to put your hand, so then it can indicate, well “where is there enough pressure, where is there not enough pressure, what do you hit where it should?”, so that is how it was very focused on different places where it moved around. And I can see that it can be useful. So it's in a different way, but more future-relevant, I think, than the first one was where the first one was, so it was definitely just the phone I was thinking. So here, I am definitely thinking surfaces where one should have the right feedback somehow whether you are doing something right or wrong. So it's a slightly different association, even though it's still vibrating / pulsating.

I. Now you say a surface that says whether it is right or wrong. Would this, then, this stimulus then indicate that it was wrong? Or would it be right, or?

R. Not necessarily wrong, but that… so I think, well, somehow I would feel that if I did, that is, because it moved from different places on my hand, then I would think that where it vibrated, the piece, it vibrated that it could be, it was not right. Or that it was right. But then that you get such a clear feedback that there is probably actually something that is not quite as it should be. And it's only based on the fact that it vibrates in different places on the hand, rather than it being like the same place. At least that's how I imagine it in my head. Also because there is, now I say "flat", but of course, you do not touch anything directly, in theory, but that, it would be, I think it a bit, as if you have a touch screen , and so that you should put your hand there, and you do not put it completely where it is, your hand should, then it just indicates "hey, there is something here that is not quite as it should be, you just have to move a little" . That's how I associate it with.

I. Yeah, so it's more like an "ah, something's going on here that needs to be different,” maybe?

R. Yes, different, viz. It's not necessarily bad or bad, as long as it's not quite the way it was intended to be, at least. So you get feedback on "well, you just have to change something". That's what I associate it with, at least. And that's how it is, that is, the fact that it moves around also means that, of course, it vibrated more than three times. Where the first one, it vibrated three times, and it is also typical with the phone, then it is that it runs there three times, then a little pause, and then it does it again. So it's one of the reasons why I also associated it with it, where I did not with it here, because it's just in a different way, it vibrates, it's in a different way, it feels, this feedback, I feel I get, so I can not, there is nothing where I think like "hey, this is what I have experienced in our daily lives", but I can see where I think it can be useful , like that going forward, and it is, but it's the one with that, that there's something that should be different, it's kind of what I connect it with. And I think the sensation was stronger than the middle one, so it was very clear that it was a feedback, where the middle one was me, so like I said, I would have a little hard time knowing what it was, I had to understand when it was, it happened. This one, I do not feel, one is in doubt, so you get a very clear feedback, but I associate it with the fact that there is something to be done differently, yes.

I. And again, now you felt it three times in a row, right?

R. Mmm .

I. When is it that you start thinking about this flat or this with it having to be done differently?

R. I first think it was the third time properly. So, the first time, I just had to figure out where it was, it hit, how does it feel. The second time it started to set some thoughts in motion, of course, but without being able to quite put a finger on it, so the third time I then got to concretize my thoughts around it. Well, already the first time I could of course feel that it was more powerful, so I did not think about the phone. I definitely thought "non-phone". So there were some things you could cross off from the start, but it was first concretized into this with the surface and something that had to be done differently, eventually. So it took some time of course, but it was mostly just to get my thoughts together, because there is not one concrete thing I can say "hey, it's like this".

I. Yeah, okay, so it's because it's a little different than things you've tried before, so you kind of just have to think about what's going on?

R. Namely. It's not because it's vague, it's not because I had a hard time, in the end, figuring out what it was, I thought it felt like, it was just about getting rid of all the things you know, and then say "okay, what do I imagine it could be?" or "what do I associate with it?" And that's exactly what it's about something that needs to be done differently, yes. And I think if I were to describe it to others, then I would say that it was such a clear vibration, which indicated that there was something that was not, that is, something that had to be done differently, enough. I would probably also describe it that way, precisely because it is placed in a certain place on your hand, so for me it's just the best way to describe it, really, so that's what I would associate it with, and that's what I would probably describe to others as well. But I would at least describe it as vibration and… So again, it is not, it felt comfortable enough, there is nothing that is uncomfortable, it is not as comfortable as the first, but it is still a clear feedback, as, yes. It shakes the skin like that, and you want to say that it springs, but it's not because it springs, but it's the way it is that it sparkles . Yes. Tinkling sensation. Sometimes I miss Danish words.

I. That's fine.

R. That's how I would describe it, at least, such a tinkling sensation placed in a specific place on the hand that it would then, if they were to try the exact same thing, then I would say that such a moved around.

I. So it's more, or you would more describe the meaning that you think this stimulus will try to draw attention to… *(loud noise outside)*

*(loud noise outside)*

R. Yes, it suddenly makes a lot of noise outside…

I. Than like that itself, okay, how is it a stimulus that runs around like that a little bit on the hand a little weird somehow?

R. Yes. And that's because, that's what I associate it with, where with the middle I would much more focus on the feeling, because I would not, it's the easiest way to describe it, where that here, where I feel, man can be a little more concrete, and then I will typically be. If I can be concrete, I will be too, but it's not always that easy.

I. Well that's just fine. It sounds really good. Is there anything else you think needs to be said?

*(again loud noise outside)*

R. I can just think in the meantime.

*(the noise subsides a bit)*

R. Not specifically for it, no. There I will say no.

I. Well, but now that there are no other things, should we not try one more?

R. Jo.

I. You just need to wear the headphones.

R. When yes, I was just distracted by that noisy plane. I do not know exactly why they are there.

I. They should probably train something.

*Ultrasound, 21: 11-21: 36*

*Stimulus: [125 Hz, Brush, 1]*

R. It actually tickled a bit.

I. How would you describe such a concrete maybe, what, that is, what you have been feeling right now?

R. So I also think… It also felt like a stream of air, but then jerked from the bottom of the hand and then jerked until about the middle of the fingers. But it feels like an air stream, and it started to spring, about when it hits the fingers in front of the palm, yes. So it's so very concrete, then I would say, air. It did not feel vibrating or pulsating, so it was a constant, and it was more powerful than the second, so it was a very clear feeling that it was moving, and then it was a bit like one, I do not know, a wall that kind of moves so that the airflow was very clear, very specific, very flat, and then moving upwards. Or down, it's so. So that was how concrete I felt. But I do not quite know what I associate it with. It's a little hard to just put into words, I think. Yes.

I. What is it that makes it difficult to put into words?

R. That, among other things, I have not really felt it before in something specific, so the first thing that popped up in my head, it's things from sci - fi movies, you know where you get scanned by a laser or infrared something, you just know that red line that kind of runs up you. And that was what I was thinking. So maybe, well, in general, what you associate with, it's like in a movie where you put your hand on something and it just scans your fingerprints, and then that's it. So that's what I was thinking. And it's not something you've tried before, so I've seen it in movies, and that's what made me think of it, but I've not tried anything like it in reality, and that's what made it hard to put into words. I can not really say "hey, that's what makes me think", apart from this slightly airy sci - fi universe. So that, yes, it makes it a little hard to put into words for, I think.

I. Did you also use this scanning analogy when you had to describe it to someone who had not tried it before?

R. Depending on who it is, then yes. People I know who would know what I meant, there I would use that analogy because there would… So, I think I think it's the most descriptive. To my mother, who at least did not want to know what it was, I would probably describe it as one, that is, a stream of air that just as well moved up your hand. But I just do not think it is as descriptive. I feel that the scanning analogy is actually the one that hits best because it is a very specific place that kind of moves. It is not bigger, that is, my hand is too wide for it to be the width it is breathing on, or not breathing, but that I can feel the vibrations. So that's why I would say the scan is so very appropriate.

I. Yes. Cool. This scanning thing you said was the first thing that came to your mind. So, was it like that when you first felt it, or did it come a little later during…?

R. No, it came pretty much right away, actually. Not decidedly, it was only here when we talked about it that I came to think of a hand being placed on a plate and it scans, but the first thing I thought of was just being scanned. That is, that you see it that way, yes. I just have that picture of such a red line that kind of runs up and down to see who you are, and then that's it. So that's what I'd been thinking about almost immediately.

I. It makes sense in my head, at least.

R. Yes, I think so. But at least that was what I thought, and then it tickled. The others do not have the source. It actually tickled.

I. And I think you said at the beginning that it tickled most on the fingers, compared to?

R. From here and up. The palm does not, but like straight, I think it is when it, it was special when it hits the pieces between the fingers, that then that was where it started to spring. I do not quite know why, but it may have something to do with the height is a little different, after all. So that was, yes, that was where it hit. For it did not on the palm. So on the palm there was nothing, it was just this that feels a bit like a light touch. Yes.

I. Fat. Is there anything else you think needs to be mentioned.

R. No, I do not think so. Not around this one.

I. Super. Shall we, we just have one last one we can try?

R. Yes. I would like to.

I. Yes.

*Ultrasound, 27: 09-27: 40*

R. Can you check if anything came up at all? Because I could not feel anything.

I. Shall we just try again?

R. Yes, we try.

*Ultrasound, 27: 57-28: 24*

*Stimulus: [16 Hz, Point, 8]*

R. Ah, now I can feel something. *(said, in it, it starts).*

I. Super. It may have just had a little trouble finding your hand.

R. Yes, it may well be. I also just thought, I just had to wait and see, because it could well be, that was the point. But yes, the second time I could at least feel it. Well, it was very localized, I think. I would still describe it as pulsating at least. Probably not vibrating, but at least pulsating in the way it came with the feedback. I do not quite know what to associate it with, again, it was very, very localized, and it is not, nor something I have tried before. So I do not have anything concrete at least to connect it with, and I… It did not just start any thoughts about something I have seen either, or something… So I think it is difficult to place in anywhere if one should associate it with something one knows at least. It would of course be obvious for something completely new, but yes, because there were not exactly any concrete associations I could make.

I. Why do you think this stimulus is, that is, that you can not connect anything with it? You say you can not relate it to anything, but why is it you think you can not relate it?

R. I think it's because it's so local. So that was what roughly corresponds to the thickness, width, of a finger, around like that, a little at the top of my hand, and I… If it was the whole hand, then I would connect it with something that vibrates. But because it's such a very local place that has no more than maybe those two inches in diameter, well then I would not quite know what I should connect it as [indistinct, 30:10] . At least not when it's in the middle of my hand. Then it had to be because it was somewhere else. So, if you press something and it vibrates, it would make sense, but when it's so local in the middle of the hand, I can not see what I should, that is, use it for with / something [? , indistinct, 30:26] I can not imagine getting feedback so locally. So, that's what makes it hard for me to connect it with anything at all, because it's for… the location is somehow off in relation to what I would use my hand for, so that's enough much the, really, it lies in. Where the others there I can well see myself get feedback from something that way, but here… so, I would, to be able to get feedback there, then I would definitely should either have a flat hand on something, or one should hold around maybe a handle or something. And I can not really see otherwise how to get the feedback, I think that's what makes it hard for me to connect it with something, because I can not see, I can not imagine what I should do to get feedback right in that location when it's such a small area. Yes.

I. Cool. So it's a little hard to relate, to find something that makes sense, somehow?

R. Yes, I think so. I can not really relate it to something I know or something one has seen. Nor sci - fi- like or anything like that. I can not, I simply can not get put a finger on what it is, I think it should remind, if it is. So it was a very pleasant feeling, it was, well, again, it was clear that I was getting some kind of feedback, just not… There was enough power to make me feel like I was getting a response to something, i just can not see what. I simply can not imagine what it should be.

I. Now you say it's hard to describe somehow, but now I'm asking you to do it anyway. How would you describe it to someone who has not felt what you just felt?

R. Someone who pokes my hand. I think so, yes. There are some who just kind of prick me in the hand. That's probably how I would describe it. So a little pulsating in the dots, but basically just that you sit like that for a while in your hand, it's a little like I would describe it. And again, these would mean that you have to spend for these processes. So that's why it's so local. That's what makes me think, well then it's dot, rather than if it was the whole surface, then I would say it was something that vibrated. But when it's so local, it's what I associate it with.

I. It's super.

R. Yes, that's how I would describe it.

I. Yes, this one tingling in the hand, like . But it is some others who are teasing, and not yourself, teasing yourself?

R. Yes. Yes. I do not quite know why, but yes, it is not myself who pokes my hand. That's not how it feels. It feels different when other people do it. So it's a bit like it's another person or thing, or something. Well, I think what makes it hard for me to see in any context, it's like I said, of course, I have a bit of a hard time seeing how I should be able to use it, but it's very much the there with that I feel if I then have to have my hand on something and then get feedback here I would think there was something wrong. I somehow would not associate it with doing something right, at least. It would not be a positive feedback where the others can easily be, I think. But this one I would definitely define as something I thought was wrong.

I. So now you say "not positive", so more in relation to that there is something wrong, than that it is bad in some way?

R. Yes, so the previous one that… yes, either the last or the second last, I can not just remember what it was for one of them, I was like "okay, it's something to be done differently". It was neither negative nor positive. Where this one there I would say it's some kind of negative feedback. Either that I am doing something decidedly wrong, or that I need to be aware of something that is not right. So it will be like this… I would not associate it with a positive feedback, at least. If it's clear enough?

I. Yes, for sure. Cool. Is there anything else you think needs to be said for this one?

R. No, I do not think so.

I. And if we then take a small step back and just look at the whole bundle you have now tried. Is there anything that comes to mind there? Something you did not get to say, or something that [indistinct, 35:10]

R. Not to the specific in that way, but I think as a whole I can well see how they can be used. Except for the last one, I have a hard time with it. But all the others, so I can well see how you can use it as feedback, and I actually think the feedback is concrete enough that you would be able to use it. So you would not stand and think "what does that mean?" I do not think you get that feeling, and I also only think it was number two, that I thought it was so easy that you could be in doubt whether you got a feedback or not. Even there it would be positive, because that is at least what I associated it with, but it was perhaps a little too easy compared to at least people who could have problems with their feelings in the hands, so for possibly older people it might be a bit problematic, but otherwise I think it has been a lot, you get concrete feedback, and it is very clear that you get a feedback. At least I thought so. And I think for many, they will feel as if they are being blown on, more than that it is actually ultrasound waves. Yes. It's at least the closest sensation I can compare it to. I do not think I something like that otherwise [overlap, 36:37] I had just thought about.

I. It's super. But then I will stop this and try to turn off the microphone and see if we can make it…

R. I hope it will be useful.