

Evaluation Transcript: Participant 3

The evaluation was carried out virtually on 20.03.2023 from 16:00-17:30. One expert (E) and the study director (L) took part.

This is a transcript of the audio recording of the interview, which will be made available to all participants of the interview. The transcript is subject to the conditions of the previously signed consent form. This transcript has been completely anonymized. The recording was started at the beginning of the "Think Aloud" process. Prior to this, the study participant (E) completed a training phase in which he/she was able to test the prototype.

This evaluation was originally conducted in German. Unnatural English formulations can be attributed to that fact.

SL: And then I would ask you to start now. Once again as a reminder: always read the questions out loud. Pretend I'm not even in the room. Just say everything you think and signal to me if you think you've completed a task.

E: General and visualization. Download the choreography with the name "Evaluation choreography". It is located in the "Downloads" folder. I.e. I go to "Load" ... um, ok ... I actually have to go to "Load" and then "Upload". Then I go to "Downloads" and there is the evaluation choreography at the top. And now I can load it. Like this. Exactly. The name is also at the top here, i.e. I have loaded it.

What is your current view on the choreography? Explain the content of the visualization in your own words. I have the triangle up here. This shows that the front is here, so the audience is sitting at the top. Then I have a top-down view and I can see each individual dancer separately. Um, exactly. I also have numbers, so I know which couple they belong to. The dance floor here is numbered overall. Positive upwards and negative downwards and positive to the right and negative to the left. Um, exactly. And I've chosen the smaller grid here. Theoretically, I could also say that I want the grid to be coarser. Exactly. Simply for overview purposes.

On which position is the lady with the number 8 in pattern 0 and with which part of her body is she standing on the position? I can go to "Positions" and have a look: Ok, 8, ladies ... she's standing at -1 and -4, or if I go here, I can also look ... wait ... in pattern 0, I'm on there right now. Lady 8. -1 and -4.5. Good thing I can distinguish between blue and red. Would be really difficult even for colorblind people, wouldn't it? No, that's red and green. I'm stupid. Um, exactly. Which part of her body is she standing on? I can see that in "Orientations". Now it's loading a bit. Am I not in edit mode? Now I can look at the orientations and click on it? Or hover over it? Where was it? "Analysis"? No, it was "Analysis" as a whole. That's the wrong pattern here.

SL: Keep talking.

E: I don't know where I can look to see which part of the body is on the defined position. Because she's actually standing in the middle, i.e. with her whole body. The position is indicated here, but not with which foot or whether is the body center Exactly. I can't find that here right now ... I don't know where to find it. I thought in "Orientations", because you can set the body orientation there. I would say she is standing with closed legs on the defined position. Exactly. So that's how I would deduce it. But it could also be that the instructions state which foot they are all standing on and they are standing on their position with their right foot. So, with the right foot in position -1 and -4.5.

What screen position would a coach be on when standing in front of the dancers? As I said earlier: Up here, because of the triangle, because this is the front, and he is looking at the dancers from the front.

Exactly. Then analyze the choreography. On which position are dancers most frequently located during the choreography? I can easily check this by going to "Analysis" and then I have the most frequently used part of the area here with 2 and 4.5. I can deduce this from the color intensity. I.e. the red is the darkest here. I can also say that the frequency is a little lower and then the other positions become just as dark because the highest one takes on the color. And yes, 9 is the highest, that's why it's darkest here. So, 2 and 4.5, exactly.

Which parts of the dance floor are used particularly often, and which are not? Um, mainly the middle of the dance floor. The last 2 meters to the outside and back, and 1.5 meters to the right, are not used at all. And here in the middle around the zero line or here at 2 and 2.5 are often positions where dancers are located.

Find the lady or gentleman with the lowest movement distance during the entire choreography. I can look here, under "Analysis". And here you can see in the bar chart for pair 5, the man has 48.5 meters in total and the woman has 48.3 meters movement distance throughout the whole choreography. Exactly. Otherwise, you would only be able to see the distance of one pattern, who moved how much.

Um, then edit choreography. Create a new pattern for the choreography, which should contain a rectangle. Arrange the pattern in the center as best you can. So now from pattern 0 I make a new pattern. I'll call it "march in". Exactly. This was created at the end of the choreography here. Since I'm in edit mode, I can now simply move each dancer as I like. I can click on it once and select the dancer and then use the controls to select all the ladies and move them all together. And if I now want to have a rectangle, then I can say ... uh, I can also simply ... is of course easier. Now I want them to be in a line here. A rectangle with 8 people is really nasty, isn't it? No, it's not. Exactly. Now they have to stand on half. And here to the front ... Hm, left click doesn't work right now. I can't select them individually by left clicking. I've just made a rectangle here with the ladies. And now we'll arrange the men in the same way. You simply make exactly the same rectangle, i.e. the positions are mirrored. The position in the rectangle is always 2, 4, 1 and the men behind it are also 2, 4 and 1. Exactly, that was ... and place them in the middle, i.e. I want them to be in the middle and now place the men another meter in front. And now the center is here between the two squares, if that was the goal.

Uh, exactly. Now change the choreography so that the newly created pattern is placed in the first beat of bar 36. In other words, I can select the new pattern that I have just created in the timeline below. And I want it to be reached here in bar 26 on beat 1 and I set it now and it shifts here from bar 34 to bar 36.

Add another pattern with a rectangle in which the back row of dancers forms a diagonal falling by 75, or 45 degrees, from left to right. By a rectangle, do you mean the position of the dancers?

SL: Rectangle is simply the name of a pattern.

E: I see. I thought they were supposed to be a rectangle ...

SL: All good. Keep up the good work. Everything has been great so far.

E: Ok. I'll just call the pattern "rectangle" now. Exactly. I create it and it's now one bar later after bar 25, which I've now moved. It starts in bar 37. I'm going to make a little space at the back here and I only want to move the gentlemen ... to the back and place them into a row. Now I can select them all and rotate them by 45 degrees. Wait a minute. Can I just select them? No. Why can't I do that now? Do I have to rotate them in the other direction? Yes, I don't speak English. Oops, never mind. So, now I've selected the left one and can rotate him. Exactly. And the diagonal now goes from left to right. In other words, it now slopes downwards from left to right. And now I can simply align the women's

positions here. If the boys want to go back to their position. Like this. And then we rotate again and now I can continue. Exactly. If I have selected something, then I first have to click on the area so that they are no longer selected, because otherwise it will jump around somehow, because they are still selected and are also moved. In other words, I've just moved the men all the way down, off the surface, and that's why they were arranged next to each other and not in a diagonal. Now I take gentleman 4, 2, 3 and 1 and then I simply place the ladies one meter in front of them in the diagonal. What I think would be cool is if you could now set here how far you want to move. For example, you want to move the person by one meter or the entire pattern by one meter to the right or left. Then I can select all of them and I can only select one meter, i.e. I don't have these half meters, but I can only select the entire straight line, or you can make the whole thing even finer so that you can even select quarter meters, so that you have different setting options. Exactly. I'll have a quick drink if that was for me.

SL: Yes

E: Exactly, where were we? Choreography editing is now finished.

Now it's time for the dancers' orientations. The task is: In which direction are the ladies in pattern 8 looking? To do this, I first have to select pattern image in the bar below and choose pattern 8. I can look here at "Orientations". And there you can see that the ladies 2, 1, 4 and 6 are looking to the left and the ladies 3, 5, 8 and 7 are looking to the right. You can also recognize the ladies by their red color. Exactly, this is the viewing direction, here the black line.

Next question: Are the ladies in this picture facing the men with their bodies or not? The ladies are facing away from the men. You have the 2 semicircles here. The dark semicircle shows the body orientation, i.e. the body orientations are diagonal. And the gentlemen's bodies are facing forwards. The right row of ladies is facing to the right and the left row of ladies is facing to the left.

Look at pattern 2 and align the ladies so that they are facing the men. Then we go back to pattern 2 in the timeline. Now I can ... I'm in the settings menu ... I can select all the ladies here, but I don't want to. Wait a minute. Now I have to think about what that was like. Now I have to click on it and I can ... no, I don't want to align all the ladies. Because they have to be aligned in 2 different directions with their bodies and heads. The body is now pointing to the right encoded in the dark semicircle. And then we rotate the heads by another 90 degrees. I'm going to do this for all four of them, with their bodies and heads facing the men. And we do the same for the other group. 270 degrees for the bodies and 90 degrees for the heads for all 4 dancers. And now the ladies in the left row are looking to the left towards their men. And the ladies in the right row look to the right towards their men and are also aligned with their bodies. Exactly.

Next group of tasks: 3D mode and poses. Which pose have the ladies in pattern 3 taken? I'll go to pattern 3, so you can see from the pencil that you're currently viewing pattern 3. And um ... now ... no, still editing and 3D view. Exactly. And now I just want the ladies, because I want to know what the ladies are doing, so I click on a lady. Where are you? Left- and right-clicking is not working right now. But I can see from the pattern that the ladies are standing there with their arms hanging down. But I don't know why I can't select anything here. Have I selected a dancer? Let me select lady 3 here in pattern 3. Now I'll go to the 3D view. Wait until it has loaded. No, it's not selected. Theoretically, I could change the body orientation here. And right now, I can't select it by left clicking. Just carry on?

SL: Just continue. Exactly, if something doesn't work, then just carry on.

E: Now make sure that all the men in the same picture raise their left arm. In other words, I now take the left arm and rotate them outwards along the blue line. Wait a minute. And they now raise their

arm, that's a bit extreme, right next to their head. And that's what we're doing for the men now. It looks like all the men have been selected. And here you can see in the view that all the men here are raising their left arm. Exactly. I could also save this now as "Left arm up" or something else and then load it here again.

Transitions. Find a potential collision of 2 dancers in the choreography and explain why this is a collision. So, I leave the 3D view and go into the "Transitions" view. I first go through the patterns to see where there could be a collision. It looks good so far. I can also see from the lines where exactly they are moving. Ah, no. There's no collision here. It just looks strange because at the end of the pattern... so in the next pattern the 4 is now in the position of the 1 and that's why the 1 is gone here. Exactly. They remain. That's why the numbers are outlined like that. Was there a ... wait a minute. No, there wasn't. Then pattern 9. There could be a collision in this picture. On the one hand, lady 5 and gentleman 3, because they cross here. But I wouldn't say that there is a collision, because this color gradient shows that gentleman 3 is already through before Lady 5 is even on this position. If you pay attention to the body, then it could be that they collide. Otherwise here: Gentleman and lady 8, they are crossing, but he is walking along in front of her. You can see that here too. It's still gray for gentleman 8 and almost red for Lady 8. I.e. it is relatively late during the transition. The same here. Exactly. Everything works again. Okay. That also looks good for the same reasons. It's difficult to understand. These intermediate patterns have been inserted here, where you can then say: Here you are in between. These are the pairs that have moved. But there is no collision. That looks exciting. So, the previous pattern, pattern 17, everyone is dancing as a pair and if I now go to pattern 18, you can see: Ok, gentleman 5 goes here, lady 5 goes here. They separate. Exactly, they split up altogether. And there could most likely be a collision between lady 8 and gentleman 7 because the color gradient is pretty much the same at this position where they cross. Here on the left, the same applies to gentleman 4 and lady 6, because the color is roughly the same in this area. That's why there could be a collision. Should I look for more or is that enough?

SL: That is enough. You have completed the task.

E: Ok. At the transition from pattern 19 to pattern 20, change the path of pair 3 so that it no longer collides with pair 7. Pair 3 ... ah, here you can see the collision. Now I can ... wait a minute. I need to think for a moment about what that was like. I can define intermediate positions. I simply click here somewhere between pattern 19 and pattern 20. And then I have a position that I can define for each pair in this bar, i.e. at the beginning of bar 30. Now I can say that pair 3 should simply take this detour here. And so, there is no longer a collision here, but a detour for pair 3. Exactly. But I have changed the path of pair 3.

Now animate this transition. To do this, I first have to go out of edit mode, as you can see here on the eye, and can now animate. I'm going to select pattern 19 because that's the pattern I want to start with. Now leave "Transitions", go to "Animate" and I only want to animate one transition and play it. And now you can see here how it runs. And you can also see that pair number 3 is taking this detour. I'll go back to pattern 19 and animate the whole thing. And here pair 3 is taking the detour to avoid colliding. Exactly.

Save the choreography. Um ... am I stupid? Actually ... the simplest one. What about control S? Or does that save the page?

SL: You are currently saving the page.

E: Yes, that is HTML. I don't want that. Um... I'm really struggling right now. You have to go to edit mode to save the choreography. Now I can save it. And it's downloaded directly. I can open the file path here and then you can see on the other screen that it's saved there. Exactly. But I'm still in edit

mode and can theoretically move the 4 again somehow and save them again. And then it will be saved again automatically. I'm sorry that I've now saved something unnecessarily.

SL: Everything is fine.

E: Exactly. What I also wanted to say about the transition is that if you look at the animation here from pattern 21 to pattern 22, you can't see when the couples separate. But you can see that the couples separate. I think it was the other way around. Wait a minute, I have to look for where the pairs are separated. If I animate here now, the ladies simply disappear, and the dots turn purple. In other words, I think it would be cool if you could set it so that you can define when they meet and that the two dots then move towards this from point, and you can set it so that you can define this transition exactly. And not that the ladies just disappear and that the dots then turn purple men they go to that point. Plus, I think it would be cool if I were animating here now and I said, I want to see the next 6 pattern ... if I want to see the progression of the choreography, I think it would be good if I said: Ok, I'm looking at this and I see a problem, that I can now pause the animation and go straight into edit mode. Simply because then the idea, or the error, is still fresh and you know what you want to change, and you don't have to wait until the animation is over. There are no more tasks. So, I think we're through.

SL: Yes. Thank you very much. Then I'll come to you so that I can be on the recording.

E: Is the pen still over there? I have it here.

SL: You have it there. Exactly. Then you can briefly fill in these 10 questions here. So, these are simply statements where you then express "I agree" or "I disagree" on a scale from -2 to 2. -2 is "I strongly disagree" and 2 is "I strongly agree".

E: Yes, the visualization of patterns from choreographies is intuitive. It's a mixture. With the choreography I've done so far, I had an idea of which pattern I wanted at which point in the choreography, but not for every single pattern, just certain points. And then I built up the choreography between these patterns so that it would ultimately flow. And I thought about it with the buddy I was doing it with: Which patterns would be interesting to make now? How could they be designed? So, you already have these standard patterns like diamonds or rows. But it still involves a bit of creativity to arrange them. That's why I would now mark a 0, because sometimes it's like this and sometimes like that.

Then. Positions of individual dancers can be easily read off. I see. Wait a minute. The presentation here? It's about the program. I'm stupid. Very intuitive, yes. You can see everything directly. I agree. Sorry. That was my mistake. Positions of individual dancers can be easily read off. I think so. Depending on how you set up the grid. We have the fine grid here if it's too confusing. I find that more difficult to read here. But since you have the option of making it a little coarser, I find it very clear because you have these lines. So, I like it very much. I completely agree with that. So, 2.

The representation of the viewing direction and orientation of the body are simple and intuitive. I think so too. But at the beginning, when I saw it on the video, I found it difficult to understand how it was meant and in patterns where the couples were standing close together ... I think the first pattern, where they were standing inside each other. I should look at the alignments. Was that pattern 0? Wait a minute, I'll have a quick look at the questions. Then I think it was the orientations in pattern 8. I found it difficult here for a moment because the marks overlap. But since the colors are also very different and the shading is also different, I think if you take a quick look and then look at it again, it's very clear where they're looking at. So, I would put a cross at 1 because ... you can't change that. It's difficult no matter what you do. If something overlaps, then it's not so easy to recognize. You could

also say, for example, that you make the circle size a little smaller or that you can adjust it for yourself. Depending on how it is clearer for you.

The evaluation of the utilization of the dance floor is simple and intuitive. Yes, so I've never had anything like it before and I think it's cool because you can also look at it because it's a scoring criterion: Am I currently fulfilling this with the choreography, or do I need to change something? Exactly. You can also change the fact that it's not just the individual squares, but also a...

SL: Simply a color gradient.

E: Exactly. I also think that's very good, because different people have different tastes.

The visual detection of collisions helps to create the choreography. Definitely. I remember the choreography creation I've had so far, where you could already see: Ok. Where is the person coming from or where is the person going now? But you could just see that it simply intersects. And I think that's very well presented here. Especially the fact that you can select it very simply and then you also have the color gradients here. Yes, I like it very, very much and would also expect something like this from a program.

Creating new patterns is easy and can be done without much effort. Yes and no, I don't remember how it was, if I select a new pattern here and name it "F", then I can't select where exactly, i.e. where I want the pattern to be. This means that if I now select pattern 3, it will still be pattern 27 in the last bar that I created. But I can't say now: Oh, I have to change something in the choreography, I have to draw in an intermediate pattern or something else, then I have to make pattern 27 and I can't move it either, but I'm forced to create the choreography sequentially. In other words, when you create a new pattern, it would be good to either say: I am now at pattern 24 and want to create a new pattern after pattern 24, then I go to "New pattern" here and it is automatically creating the new one after pattern 24 and not at the very end of the choreography. That's why I would go with 0.

SL: Do you think it would also work if you could promote the stopovers to full patterns? Or do you think it would also make sense to insert completely new patterns?

E: Um, both actually. Or I wouldn't put it on the same level ... so that's the first point about promoting: I wouldn't put it on the same level, but as a recognizable pattern... just visualize it so that it's a recognizable pattern. I.e. that it's not just a dot, but perhaps also a bar in a different color.

SL: Okay.

E: And at the same time that you can create the pattern here directly afterwards, because in my experience it has already happened. So, when I think of the last choreography we did: In the middle of it, when we really applied the pattern plan that we had already created and taught it to the dancers, we realized: We can't do it like that. We have to throw everything overboard again. And then it would be cool if you could say: Ok, I'm going to delete the pattern now or I have to change the three pattern or create new ones so that you can access them directly. So that has already happened, that we have taken a full pattern and then fed it directly here. In other words, you go to pattern 24 and on the first beat of bar 34 you have a new pattern when you load it. Exactly. That's why I go with 0 here, because I don't disagree with it at all, but I don't fully agree with it either.

SL: A brief explanation. You previously said that you had selected pattern 3 and wanted it to be the third pattern, i.e. when you had just created the new pattern.

E: Yes.

SL: I'll do that again. I may have explained somewhat erroneously. It doesn't mean that the pattern comes in third place, but that you copy the third pattern and place it at the end.

E: Ok. Point 7: The operation of the prototype in connection with the timeline is simple and intuitive. Totally. Compared to the other program I have, much easier. I also find the bars, or the beats that are drawn in there, make the whole thing more challenging for the coaches. You have more work because you always have to think about it: Where and in which bar are we right now? But I also think it's really cool because you can differentiate between the dances. Ok, but that's ... I don't know if that would be too blatant. We also count to different beats in different dances. I.e. a bar in cha-cha-cha a bar is 4 beats long, but a bar in paso doble, jive or samba is 8 beats long for us. I.e. what would also make it quite simple to differentiate between the dances is if you could set this. I'm working on this dance now and that's why the timeline for this dance is 8 beats long or not. It would just be a luxury, because I think it's very good and very clear as it is and then you can think about it: This is now Samba, I've called this picture Samba and then it's just 8 beats long. That's it.

SL: I also learned the yesterday that there are highlights in the upper leagues that are counted up to 16 or 20. Of course, it would also fit in if you didn't just have 8 beats in a bar.

E: Yes, you could say that there are 4 highlights in total. But it's difficult to present because ... it would be cool if you could say: I want this dance, call it this dance and I want to set how long the bars are and how many bars there are. In other words, you don't have to rely on the timeline and say: I'm going to create the dance Samba, the dance Samba is 4 bars long and each bar lasts 8 beats. And then, if you have a highlight, you create the highlight "Lankenau", i.e. a turn. This Lankenau is 10 beats long and lasts one bar. Exactly, that would be very nice, because even with the highlights ... each team dances it for a different length of time. So, some only have 8 beats, some have 10 beats, and some are completely insane and do over 20 beats. You can adjust that individually.

SL: Would you say that fine... so you can add a new bar here at the moment using this "+". That you simply take this "+" and then say: I'm not just adding a new bar, I'm adding a completely new dance and then say how many bars there are and how many beats are in a bar.

E: I think that would be good. Because you already have the music for the choreography, i.e. you can set it directly: The dance has this length, and you can adjust everything to it. I think that would be really cool. Is it the case that when you create a completely new choreography, you really only have one bar or is it preset to have 60 bars?

SL: I think I set 60 bars as standard and if you want more, you can add more.

E: Okay. That would be another idea that could be incorporated. Exactly. But I still find the timeline really easy to use and I really like it. That would just be a luxury for the trainers, so to speak.

Creating poses in 3D is simple and intuitive. Um, from the program's point of view, yes, I found it difficult to think in 3D at first, but I think it's easy to get into. Simply because you can move these semicircles or circles and they are displayed in 3 directions and you always have to ask yourself questions: Ok, am I on the correct axis now and am I moving in the correct direction? But this is more a point that concerns the trainer himself and not the program. For the program, I think it's really cool that you can take every single joint and adjust all kinds of things. And, above all, that you can save the whole thing, because you can sit down for an hour in advance, save all the poses and then set them for the different positions. So, I really like it, which is why I give it a 1, because I sometimes found it a bit difficult when it came to these rotation handles.

A 3D view adds value and should exist in parallel to the 2D view. Um, totally. What I know from the other program, but I don't know how to do it, is that you can animate the 3D view. In other words,

you can go to the 3D view and say: Ok, I'm at pattern X now and I want it to ... so you can't set that I only want 5 patterns. Everything is played directly. And then you can see the different figures move across the surface.

SL: But there are no animations of the bodies?

E: No.

SL: Okay.

E: So, the people who are standing ... I hope you don't have any poses ... that's how they're standing there. They're not walking or moving their arms; they're just standing there, and you can see them moving across the surface. So, they're kind of floating. Exactly. Nevertheless, I completely agree with that. That would just be another bonus, which I know from the other program. Exactly. Because you also have these rows again in 3D, which you don't have in 2D, and how they develop, what it looks like when the person actually leaves the row at this point. It looks even better in 3D and as a check ... we first looked at everything in 2D, but for the final check we always look at it in 3D to see: What does it really look like with humans? And there have to be ... there are now these positions, so the body positions ... if you can add that now, that you say: Ok, during the animation they just stand when they move and then they take the pose or you say: Ok, if you really only animate in 3D now, then they just stand there and don't use the poses at all. So yes, I don't think that would matter. Because I also think that if they just float, then that's completely sufficient for the purpose it serves.

SL: I had also experimented with capturing movements via webcam and then transferring them to these models so that you can animate movements yourself, but unfortunately it didn't work so well.

E: Is that then with these points, i.e. with the markers or by video?

SL: What you mean is motion capturing. I've tried to do it with a webcam, i.e. with a neural network that recognizes me. But so far, the recognition is too imprecise to be transferred to the models.

E: But could it work at some point, so that the detection precise enough that it can be recognized?

SL: I hope so. It's just a problem to recognize the depth of body parts. Such things are always difficult, which is why the experiment has unfortunately failed for the time being.

E: But I think it's cool. A good approach. Inserting intermediate patterns and animating the choreography are simple and intuitive. Um, yes. I always have to remind myself that I have to insert the stops on the timeline. So, before I thought: Ok, where was that again? Because I thought here: Ok, I want a stopover for this couple. That's why I have the route here and can simply click on the route. Because sometimes you only have a different route or a detour for individual pairs and not for all of them and down here you create a stopover for all pairs. Exactly. Nevertheless, I think adding intermediate stops is really cool and if you have them all, you can only change them for one pair and don't have to change the others just because you have an intermediate stop. So, I think it adds value and is also super easy to insert.

SL: Now please tell me: What did you particularly like or what would you say could be improved? Where did you have problems? You don't have to write that down. You can tell me directly.

E: Okay. I like the way it looks. The fact that you have a relatively large area here and a legend of things you can do on the left. I also think the functions that you have, with the remarks, the analysis of the distances or the positions, that you can look them up directly, I think that's very good. The functions, as I said, including the analysis, I don't know that at all, and I think it's really good because it's also a scoring criterion. Even if you can't see it so clearly as a judge, I think it's important. The

body alignment is something completely new for me and offers completely new possibilities for creating a choreography. I really like that. The 3D view is also super exciting and what I think is really cool is that you can not only see the color, i.e. you can differentiate based on the color, but also based on the ...

SL: Models, right?

E: Models. Exactly. You can recognize men and women by their models, even if they're the same color. I think the settings for the different body axes are super, so I think it's really good that you can model it so finely. But I can also imagine that it's too much for the choreography overall if you really want to adjust everything. Because you have to adjust every joint, there's no other way. Um, exactly and it's ... how should I say this now ... creating choreography is rather secondary. So, it's not your job and you don't earn any money and then you have to look at: How much time do I want to invest in it? It does take up a lot of time. When I think about the new choreography we're doing, I can't say: I'm definitely not going to do this. But I also can't say: I'm definitely going to use this. So, it's more like, yes, intuitively ... do I take the time to do it? Because it's very difficult to apply this to a 6-minute choreography with the number of positions you define. Just the time aspect and not the fact that it exists. I still really like the fact that you have the option. Here's the switching between the patterns, I didn't even use it earlier, but I find it super practical, also that it's such a big bar, because that annoyed me so much. In the other program, you have to keep scrolling up all the time. You've practically scrolled or searched yourself to death. Exactly, I like it very much. "Shapes" are probably preset images that you can save, I guess.

SL: In fact, the idea was that you ... well, patterns often contain geometric shapes. That you visually mark them again for the dancers, so to speak. You select them and it automatically draws a blue shape. The only problem was ... there are different shapes, and it was pretty difficult to recognize what you actually wanted without putting a lot of effort into it. And it turned out in other interviews with coaches that this didn't add enough value, because you can tell at first glance what a pattern should contain.

E: About "Shapes". What I imagined it could be ... no, I shouldn't go into that now.

SL: You're welcome to go for it.

E: I'll do it here. I'll start by ... No, wait a minute. I can ... I didn't even use that here. I can do "Join all" here? There are so many different patterns. A classic one is the diamond. So, this would be a diamond here, for example. They come in all colors and shapes, you can turn them around and whatnot. So that you can save the different patterns. So that it's not already preset, but that you can say: Ok, I have a diamond here with distance of 1.5 meters and a width of 1 meter. That you can say: Ok, this pattern is not at that exact position, but I just want to save these positions of the people in relation to each other.

SL: What you can do is save the complete pattern. That was right click on it and then "Save as draft".

E: Ah, ok. That's enough.

SL: This would now save exactly one copy of this pattern. I can't remember whether the rotations and poses are all transferred in 3D. I think so, but I'm not sure.

E: But if you can save it as a draft, it's definitely enough, as you can select everything here. I think it would be cool if you could then name it, because you can expand the whole thing a bit, i.e. that you can take this and go to 1.5-meter distances. And then you have a draft here, for example, called

"Diamond 1.5 depth 1.5 width" or "Diamond 1.5 depth 1 width". You can set it so that you have already preset the diamonds.

SL: That...

E: ... you can do that?

SL: You can give it a name here, with which it will then appear in the menu.

E: Never mind. It's good that way.

SL: It's good that we have at least thought of such a function.

E: I think it's very good. Well, I haven't used it yet.

SL: All right.

E: Yes, I think that's very good. Exactly. What else is there? Um. I find the different functions depending on the view or editing function ... I think you can get into that. But it was really strange for me because I thought: Ok, I want to create a new pattern now. Wait a minute, why can't I do that? I had to think about it for a moment and then realized: I was no longer in edit mode. I don't think that's a bad thing in principle. But it's not essential for me. From experience, I didn't need to have a view mode and a ...

SL: ... edit mode.

E: Exactly ... to have an edit mode. But I also think it's quite good, because then you can say: I just want to look at it and don't want to move anything. I also think that's positive; you just have to get into it. It was something completely new for me, so it was still unfamiliar. But if I were to use the program for a longer time, I think ... it would feel better than with the old program, where there is no such thing.

SL: I have also heard this consistently so far, the feedback, i.e. not hiding individual functions in individual modes. The idea behind it was to give specialized versions to coaches and dancers. You can also use it on your cell phone and there is only the view mode, which is then used in training, but I understand that it is strange when you are searching for it in the wrong mode.

E: Yes, which is currently the case, when we share the choreography or the patterns with the dancers, I can print it. So, by printing, I really mean on a printer.

SL: On paper, yes.

E: Exactly. But Windows also has the "Print to PDF" function, I think it's from Microsoft, and then I can save it as a PDF and send it to everyone. I also think it's cool if you not only have it as a program but can also save it as a PDF so that you also have the history. I can show you that on my smartphone later.

SL: I actually already have such pattern plans.

E: Yes, I also find it very practical that you not only have the app on your smartphone, but also the pattern plan as a PDF. But I can't say whether you need it. I don't know what form you want to publish it in. Whether you can simply download the app and whether it's freely available ...

SL: You can already access it. The URL above, if you enter it on your browser, you will go to the website, also on your PC.

E: Okay. Because then I think it would be cool if you could say: As a team, you basically have an account and then you say: Ok, he has coach access and he has dancer access. Exactly. But I don't know how necessary that is, because theoretically if you set something up and save it, then it saves ... or does it overwrite the current file.

SL: You have just loaded the file from your computer and saved it again on your computer. And you would now have to send the file to your dancers and then when other people open the page, this choreography is not automatically loaded. There is always a standard choreography loaded that I once received. Of course, it makes sense to be able to create accounts with authentication and a backend. However, this is just a research prototype for my bachelor thesis. None of that is implemented now. But we've already thought about it.

E: Yes, exactly. Apart from that, as I said before, the two things with the animations. One problem is that pairs joint too early and the other problem is that the animation cannot be stopped or paused. And apart from that, I think it's already a nice prototype. So, if it's developed further and the few things I've mentioned are changed, then there's a very good chance that I'll simply drop my old program and if I could get hold of it, I'd probably use it.

SL: If it helps you, then that would of course be the best-case scenario. As I said, you can use it right now in theory.

[Participant takes a photo of the URL]

E: Other than that, I have nothing more to say.

Questionnaire

Please enter your age: 18-21 / **22-25** / 26-30 / 31-35 / 36-40 / 41-45 / 46-50 / 51-55 / 55-61 / >61

Please enter your gender: **Male** / Female / Divers / No answer / Own description

How many years of experience do you have as a dancer in a Latin formation and in which leagues: **8.5 years in Landesliga, Oberliga, Regionalliga, 2. Bundesliga**

How many years of experience do you have as a Latin formation coach and in which leagues: **1.5 years (Landesliga)**

How much experience do you already have with creating your own choreographies (in particular pattern and pattern development): **Created 2 choreographies (one for 6 pairs and 1 for 8 pairs)**

Wie viel Erfahrung haben Sie bereits mit digitalen Werkzeugen zur Bildentwicklung: **Used Choreo Maker for both choreographies for 1.5 years**

		I (strongly) disagree		Neutral	I (strongly) agree	
	Question	-2	-1	0	1	2
1	The visualization of patterns from choreographies is intuitive.					x
2	Positions of individual dancers can be easily assessed.					x
3	The representation of the viewing direction and orientation of the body are simple and intuitive.				x	
4	The evaluation of the utilization of the dance floor is simple and intuitive.					x
5	The visual collision detection helps to create new choreographies.					x
6	Creating new patterns is simple and can be carried out without great effort.			x		
7	The timeline is easy to use and intuitive.					x
8	Creating poses in 3D is simple and intuitive.				x	
9	A 3D view adds value and should exist in parallel to the 2D view.					x
10	The insertion of intermediate patterns and the animation of the choreography is both simple and intuitive.					x

What aspects of the prototype did you particularly like? Please answer in verbally or in key words: **Questions were answered orally and answers can be found in the transcript.**

What aspects of the prototype did you not like? Please answer verbally or in keywords: **Questions were answered orally, and answers can be found in the transcript.**