Leaning Out of Windows
Excerpts from
Interaction log: Kate Metten and Carla Barquest

June 16, 2017
(Email from Carla to Kate)

Thanks for sending along the picture of your work in progress! I like the lines that you're exploring with the altered directionality. As a physicist they make me think of loops in Feynman diagrams, especially the middle one! (google image search for "loop diagrams Feynman" or here's a link with one as well:

http://www.quantumdiaries.org/2010/03/07/more-feynman-diagrams-momentum-conservation/)

These are definitely beyond the complexity of what I learned in my quantum courses, but maybe I can just say that they are graphical representations of quantum processes (and they tie into our antimatter theme!)
One thing I always liked about Feynman diagrams is that the same diagram can represent different processes if you just switch the x and y axis which are the dimensions of time and space (so if you read the diagram with time moving from left to right you have annihilation, and if you think of time moving from top to bottom you have scattering. These links talk about that a bit:

https://www.quora.com/How-do-you-understand-read-Feynmans-diagram#!n=12

and

https://physics.stackexchange.com/questions/110112/what-is-the-difference-between-these-two-feynman-diagrams)

You don't have to read through all the links I sent (I haven't read through them all, was just doing a quick search to give you an idea of what I was thinking of!) Can't wait to hear/see more later! One last thing I just thought of is that I like the idea of thinking of space-time in two dimensions (like the flat table, or floor) and then your sculptures would be expanding into yet another dimension... and what would that be (https://www.newscientist.com/round-up/beyond-space-and-time/ etc etc...) Just musing on all this! I don't have a background on higher dimension mathematics or physics so would have to talk with others, but it's fun to think about at least! Let me know if you have any questions or more to discuss :)

October 10, 2017
(Email from Kate to Carla)

I'm in the process of titling my sculpture and wanted to run it past you before submitting incase I'm off base. My proposed title for the Feynman diagram sculpture is "Triptych Dedicated to the Covariant Formalism for Quantum Field Theory" What are your thoughts?

October 11, 2017
(Email from Carla to Kate)

As for coming up with a title, it reminds me of a joke from computer science: "There are only two hard things in Computer Science: cache invalidation and naming things and off by one errors." (haha...) Funny but really true that naming things is quite difficult! And I suppose that's true across the board, no matter what field you're in.

As for the title, I might go for a bit simpler edition: "Triptych Dedicated to Covariant Quantum Field Theory" but what you had is find as well! Hope you're doing well, and looking forward to seeing your artwork in its complete form! Cheers,