Excerpt from “The Physics of Fire”:

I started to wonder what fire even *is*. In college I’d taken the one required science class and spent the rest of the time studying literature and languages. Even though my father is a physicist, I’d never taken a single class in physics.

In fact, my father was the *reason* I’d never taken physics. Math did not come naturally to me. When I had to ask my father for help, it ended in disaster. We would sit at the dining room table, him trying to explain to me why it was obvious that if the train left the station at 10:00 going sixty miles an hour it would arrive at the next stop at 11:00. And I would want to know what was the name of the train, and what did the stations look like, and who was on the train and where were they going and why.

My father, however, represented *order* to me, both in his unwavering Catholicism and in his mathematical certainty.

 “What is the equation for fire?” I asked my father. We were sitting in my parents’ kitchen. I’d traveled to in DC for a conference but got sick, and my parents came and brought me home. He was wearing his trademark outfit, jeans, white Seinfeld sneakers, a white long-sleeved polyester button-down shirt with a pocket right over his heart, where he keeps his pens and his glasses.

He knew why I was asking, but he was still pleased to be asked, as if he had been waiting all his life, all my life, for me to ask this question. He cleared his throat, the gravelly uh-hum that precedes his disquisitions.

 “Heat is high energy particles, they’re jiggling really fast.” He picked up the bottle of Amoxyicillin I’d picked up from the CVS that morning and started zooming it around like a little boy with a toy spaceship. “And cold is lower energy particles.” He picked up the Flonase bottle next to the meds.

The Flonase was lethargic. It just sat there in in his hand. But then he crashed the Amoxycillin into the Flonase and waved them both around wildly. “When the hot particles encounter the cold particles, the cold particles start zinging around too. High energy molecules excite other molecules to become high energy.”

“So fire is contagious,” I said.

“Yes. When a hot particle hits a colder one, it becomes hot too.” The Amoxycillin knocked into the Flonase again. “A burn front is created. And it doesn’t stop until all the fuel and all the oxygen is gone.”

“So my house was the fuel?” I asked him.

“Yes. And when things get hot enough, they turn from a solid to a gas.”

“So the fire was my stuff turned into gas?”

“The carbon of your furniture, your walls and floors, it all turned into carbon dioxide.”

“What’s the ash then?” I ask him. “Why is anything left at all?”

**Lecture:**

 One of the most difficult skills in writing Creative Nonfiction is braiding the different “blocks” of the piece: scene, which includes action, setting and sometimes dialogue; and information, which may be factual or may be backstory or explanation. Our project to write about the intersections of science and religion presented an additional challenge, because we were braiding two very different perspectives, religion and science, together with personal narrative, so we really had three strands.

 The hardest part is to establish the connections between your blocks of scene and your blocks of information or exposition, creating effective transitions that allow you to move gracefully between one block and the next.

 In the excerpt I have given you from my essay “The Physics of Fire,” I move from exposition to scene. The essay explores how I tried to understand the fire that destroyed my house from scientific and spiritual perspectives. To get the scientific perspective, I interviewed my father, who is a physicist. The research element in my piece was the interview, and this is often an effective strategy because it gives you not only information but character.

Throughout my piece, I braid interviews with my father about the physics of fire with narrative blocks in which I describe dealing with the fire’s aftermath and lyric blocks in which I reflect on the spiritual meaning of fire in the Catholic tradition.

 In this excerpt, I begin with exposition about how and why I decided to interview my father about fire. I include a bit of backstory on my own discomfort with science and my rocky relationship with my father. Then I move to an actual scene in which I interview him.

 The moment of transition from exposition to scene comes with the lines: “’What is the equation for fire?’” I asked my father. We were sitting in my parents’ kitchen. I’d traveled to in DC for a conference…” Notice that in the sentences leading up to that moment, I used the word “would” to establish the repeated actions of the backstory. When I enter the scene, I establish that it is a single moment by switching to direct verb constructions (“we were sitting..”) and establishing the time and place for the scene (my parents’ kitchen while I was at a conference in DC).

 As I describe the scene, I give actual dialogue from the interview, which I wrote down while the interview was happening. I also describe his mannerisms, gestures and appearance to bring the scene to life for the reader.

 He said many things during that interview, but the dialogue lines I used in the piece were the ones that were most imagistic and that resonated with some of the spiritual concepts I bring in later in the piece, like “contagious” and “ash.”

For instance, later in the piece, in a reflection about the spiritual symbolism of fire, I come back to the ash image when I write: “I thought about how my mother used to make the sign of the cross on my forehead when she kissed me goodnight, like the Israelites put blood on their doorposts in Egypt, so the plagues would pass them by. I wondered why it didn’t take with me, why my seal failed. But I started to do it with my daughter, a quick smudge like Ash Wednesday, though no one could see the ashes but me.” For me, lyric reflection was the strategy that worked best to bring in the spiritual perspective. I liked how the interviews and the lyric reflections had really different and contrasting textures in my piece.

In choosing which parts of my interview with my father to include, I wouldn’t have included a line like “fire is a very difficult concept” even if he actually said that, because it would be a boring line for the story. You can’t make dialogue up, but you can definitely choose what to include and what not to include, and you are not obligated to include every single statement.

 When braiding your blocks of scene, information and exposition and your thematic threads, the key is to select the most impactful moments, facts and dialogue and then weave the connection so that the reader can follow your leaps without tedious and wordy explanations on your part. The transitional sentence is the hardest part to nail down but one of the most important elements in the piece.