

## **Annotated Bibliography on Climate Change Science by Daniel Salomon**

### **The Science behind Kingsolver's *Flight Behavior***

- Sue Halpern, *Four Wings and a Prayer: Caught in the Mystery of the Monarch Butterfly* (Vintage, 2002). See Kingsolver's "Author Note," 435.
- Clive Hamilton, *Requiem for a Species: Why We Resist The Truth About Climate Change* (Routledge, 2010). See Kingsolver's "Author's Note," 435.
- Michael Wines, "Climate Change: Monarch Butterflies Falter Under Extreme Weather," *The New York Times*, January 29, 2014. Planet Church member Vern Groves discovered this article.

### **Scientific Organizations Addressing Climate Change**

- American Meteorological Society, [www.ametsoc.org](http://www.ametsoc.org), for the latest news, information and scientific findings about climate change.
- American Geological Society, [www.geosociety.org](http://www.geosociety.org), for the latest news, information and scientific findings about energy related topics.
- Natural Science Collections Alliance, "Collective Knowledge: The Value of Natural Science Collections," <http://nscalliance.org/>, see "About Climate," 6.
- NOAA, [www.noaa.gov/](http://www.noaa.gov/), for the latest news, information and scientific findings about climate change and other planetary topics, as well as oceans and fisheries.
- USDA Pacific Northwest Research Station, *2012 Science Accomplishments*, "Climate Change," 15-20.

**The Triggers for Climate Denial Mentioned in Barbara Kingsolver's *Flight Behavior* (New York: Harper Collins Publishers, 2012)**

**Daniel Salomon**

Some of the triggers which Kingsolver identified might surprise you!!!

- **Economic Dependence:** Dellarobia, the main character, was a young housewife and mother who lived in Tennessee's Appalachia. She was a stay at home mother with a high school education. Her husband, a miner of some type. Her neighbors, marginal independent tree farmers. Decay is the primary metaphor Kingsolver used to describe Dellarobia's rural American community. Dellarobia's son even qualified for the school lunch program. They were barely surviving the winter, let alone thinking about what life would be like "seven generations" later. They also had to be careful about questioning the very industries which they relied on for physical survival, like the mining industry and the timber industry.
- **Apocalyptic and Compartmentalized Thinking:** Some of the Christians in Appalachia were still holding onto this theology that bizarre changes in the environment are somehow "signs" about the impending "end of the world." Yet, the pastor at the local church was successful in moving the local congregation from "end of the world" thinking to "God's Creation" thinking. Yet, less dramatic and more insidious was Dellarobia's struggle to systematize a constellation of environmental changes in her community from a neighbor's failed orchard to a swarm of monarch butterflies stranded on her neighbor's tree farm in November to even the real reason why she was "poor," to the global climate crisis. We live in a society which requires fragmenting bodies of knowledge into academic disciplines like science and religion which makes it difficult for individuals to "put the world together."
- **Introjections and Projection:** Introjection means "expert knows best!" Trusting someone's wisdom over your own. Many of the Appalachians in the novel are very trusting of authority figures including scientists. So when the media puts on television both climate disrupting scientists and climate denying pseudo-scientists, they are confused about who to believe. They project themselves onto the Natural World and natural disasters, such as attributing a damaged crop yield to Divine punishment for adultery. They also seem to be lacking the category of "society," meaning they assume that "anything which happens" is "natural" not "human-induced."
- **Cynicism:** Yet, even the climate disruption scientist, Ovid, was *not* immune to "climate denial." He felt that "the cold scientific," being objective, dispassionate and disinterested would somehow protect himself and his family from an impending global climate disaster. He felt that just scientifically documenting climate disruption was sufficient. Never in his wildest imagination did it occur to Ovid that once he undiscovered this "hidden knowledge," he was now morally responsible for this "knowledge," including a solution. By Ovid not wanting to save the butterflies' lives and helping the local community, Ovid was "no better" than "the climate deniers" he had contempt for.
- **Untenable Recommendations:** Most disturbing of all, Ovid handed Dellarobia a "boiler plate" list of private consumer actions which would help mitigate climate disruption, but were completely non-applicable to Dellarobia's community. For example, the hand-out called for one to take public transportation. There most likely was *not* a public bus, let alone a light rail, in Dellarobia's community. It called for everyone to fly less on airplanes, yet most of the people in Dellarobia's community including Dellarobia never flew on an airplane in their entire life and many have never traveled outside Appalachia. Ovid "got further" with his mission to "convert" the local community to the sobering reality of "climate change" when he gave local high school science students a fieldtrip to see the displaced butterflies, when he acted "hothead" on national television and helped Dellarobia go to college.

