First Opinion: In the Light of Day-Glo

Barton, Chris. Illus. Tony Persiani. *The Day-Glo Brothers: The True Story of Bob and Joe Switzer's Bright Ideas and Brand-New Colors*. Watertown, MA: Charlesbridge, 2009.

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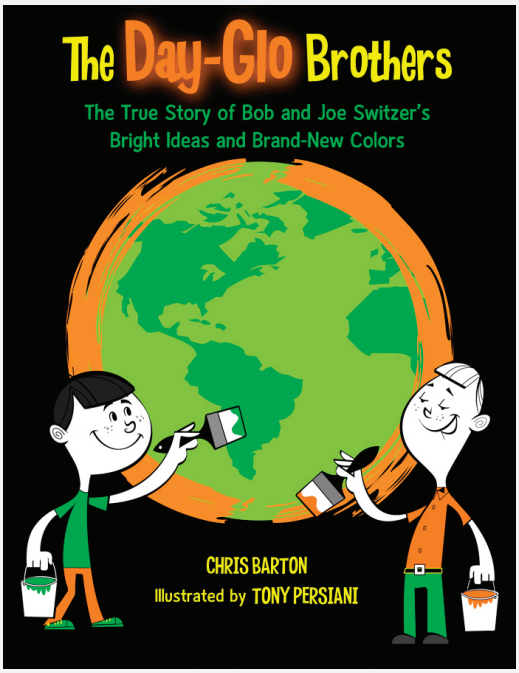

The Day-Glo Brothers chronicles the lives of brothers Bob and Joe Switzer as they grow up in Depression-era Montana and California; it is a story of invention and innovation. The sons of a pharmacist, Bob wanted to grow up to be a doctor, while Joe desired to be a magician. Despite such different goals, the brothers end up working together after an accident left Bob with a head injury, unable to continue his studies at the university. While recuperating in his parents' basement, Bob began to help Joe with his latest experiment. Joe had read about ultraviolet light in a magazine and decided to incorporate it into his magic act. Experimenting with their homemade ultraviolet lamp led the brothers to mixing their own fluorescent paints. They used the paint in Joe's magic show, and this led to their first business venture, selling their fluorescent paints to various customers for displays.

Two problems hounded the brothers: the paint was only visible under ultraviolet light (in the dark), and the paint faded with exposure to sunlight, rendering it unusable after a time. While working on a solution, Bob accidentally discovered a way to make the colors visible in the daylight. Not knowing exactly which method made this possible, the brothers decided to move their business east where most of their big customers were to continue selling paint and searching for better colors and solutions to the persistent problems with the fluorescence. Working with fluorescent dye and hot alcohol, the brothers solved both problems; they produced a paint that was visible in both daylight and ultraviolet light. They had invented a new color, and the Day-Glo company was born. The vibrant oranges, yellows, greens, and reds are colors we now take for granted, but at the time of their inception they ushered in a new era of safety and convenience.

Author Tony Persiani writes, "One brother wanted to save lives. The other brother wanted to dazzle crowds. With Day-Glo, they did both" (unpaged). This biography of the Switzer brothers is easily accessible for a wide range of elementary-age children. The story is told succinctly, with initial black and white illustrations becoming vibrant as the story progresses and the Day-Glo colors are introduced. The actual science of light behind the story of fluorescence plays a very small role, however. This is both positive and negative; understanding light is complex, and including the science within the story would weigh it down. The author instead includes brief explanations of both ultraviolet light and daylight fluorescence after the story concludes. This opens the door for children to experiment and research on their own. The roles experimentation and failure play in the brothers' work is highlighted consistently throughout the story, providing children with an introduction to how scientists work—persistence is key as there can be many failures before one success.

The book finishes with an interesting author's note on the research he completed in order to write the story of Bob and Joe Switzer. Because little had been written about the invention of Day-Glo, Chris Barton relied solely on primary sources from the family, including a personal history about their work written by Bob Switzer himself. *The Day-Glo Brothers: The True Story of Bob and Joe Switzer's Bright Ideas and Brand-New Colors* will appeal to those interested in history, art, science, invention, and anyone who believes that a little persistence can make big changes in the world.

About the Author

Susan Gran is a former elementary and middle school science teacher. She is currently pursuing a PhD in Science Education from Purdue University.