

A Story and a Challenge

First the story:

This is a true story. It is taken from Leo Tolstoy's *A Confession*, which is based on the author's journal and personal reflections. *A Confession* was written in 1879 when Tolstoy was 51 - after he was already well known and highly respected for *War and Peace* and *Anna Karenina*. Tolstoy already had fame and fortune and was enjoying the benefits of his success when he happened to visit Paris, France about 1865, the year in which these events occurred. At the time, Paris was regarded by Tolstoy and others as the intellectual center of the universe and a showcase for progress in a civilized society. Tolstoy was regarded as one of the leading lights of modern civilization.

He had gone to Paris to meet friends and have a good time. While cavorting in Paris, he chanced upon a public execution. At the time, France applied the death penalty for serious crimes and the form of execution was the guillotine. Executions were public, perhaps based on a belief that the horror of such executions would deter crime.

In any case, Tolstoy records in his journal something like the following: "When I saw the head divided from the body and heard the sound with which they fell separately into the box, I knew with my whole being that this was a bad thing."

This unplanned and unexpected event marked a turning point in Tolstoy's life. It is marked by the words recorded in his journal: "When I saw the head divided from the body and heard the sound with which they fell separately into the box, I knew with my whole being that this was a bad thing." He goes on to reflect about his prior beliefs with regard to civilized society, with regard to Paris as the cradle of civilization, with regard to progress proceeding from Paris throughout the rest of the world, and so on. He writes that his belief in progress included a faith that society was moving in a positive direction and that Paris was leading this movement.

And then he recalls: "When I saw the head divided from the body and heard the sound with which they fell separately into the box, I knew with my whole being that this was a bad thing." He knew with his whole being - he was fully engaged in this moment. He saw, he heard, he thought. As a result, he could no longer hold on to his prior belief in progress and faith that Paris was the cradle of civilization. He could no longer regard himself as one of the leaders of civilized society if this was what civilized society represented.

His faith in progress was shattered. He changed his life entirely based on this event. He gave away his fortune. He declared all of his writings public property. He began writing short moral tales for the common people rather than writing for the educated elite. He began advocating for the reform of peasant schools. He changed his life on account of having witnessed a public execution in Paris.

He learned something that day in Paris. That he learned something is marked by the fact that changes occurred that persisted through other events and for the remainder of his life. These changes included how he thought as well as what he did; they are observable in his subsequent writings and in how he lived his life after witnessing the execution. What he learned was not planned. He was not explicitly directed towards a goal nor guided by a plan to achieve a goal. What he learned might be characterized as incidental to his having witnessed the execution.

What did he learn? Perhaps this is difficult to say without knowing more. He learned that not all social practices in Paris were good. He learned that he could not accept a society that publicly executed criminals as civilized. He probably learned a lot more and that learning might well be regarded as a process that only began that day in Paris in 1865.

Now the challenge:

Why have I told this story? It provides a way to think about learning - learning is marked by stable and persisting changes in attitudes, behaviors, beliefs, knowledge, mental models, skills, and so on. Learning may be planned or unintentional. Learning in which an individual is fully engaged is especially effective. Full engagement often involves both perception and conception - multiple senses and cognition. And what of memory? We recall facts. We retrieve visual images from memory. Cognitive psychologists often distinguish word-based memory from image-based memory. They also distinguish working memory from long-term memory and have documented the limitations of working memory - seven plus or minus two - do the math - there are more things to remember than one can count on one or two hands. How to leverage the limitations of working memory? One method is to tell stories. Stories may represent a form of chunking that allows more to be recalled in a single chunk. Moreover, it may be the case that stories are encoded in long-term memory in a form different from other word-based items. The term for this kind of memory is episodic and it may involve both words and images together.

If one accepts these distinctions, it is possible to imagine using the story for multiple purposes - for developing a definition of learning, for explaining the difference between incidental and intentional learning, for elaborating the notion of engagement in learning, for explaining different kinds of memory, and so on. There might also be multiple audiences - students in a psychology course, instructional design students, high school students learning about Tolstoy, and so on. One might include multimedia items in a presentation of the story - pictures of Tolstoy, an audio file telling parts of the story, a movie of a guillotining if one is inclined to depicting such horror, and so on.

How many learning objects might be involved in this story? At what level of granularity is it appropriate to chunk learning objects? How might the objects be reused? How might they be tagged and indexed for storage, retrieval and reuse?

I do not have answers to these questions. I am not even sure these are good questions to be asking. I am willing to learn more about how to think about such things.