

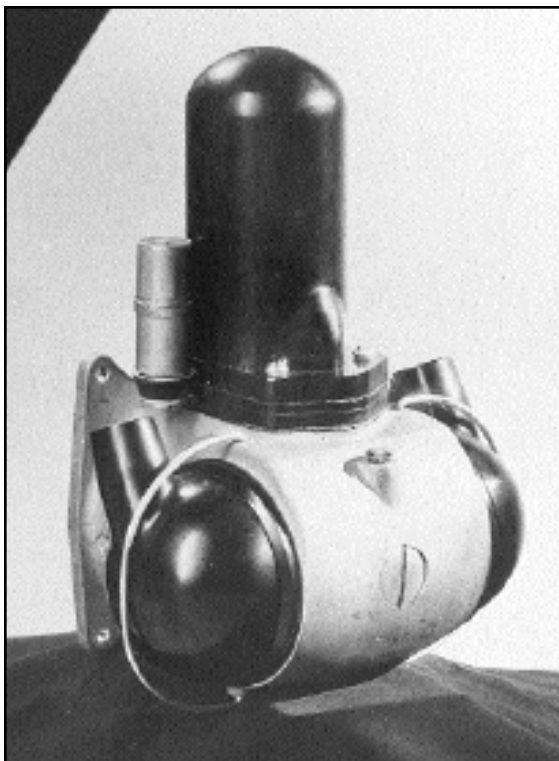
# How Empathy Engineered the First V-8 Engine

*The Levels in Action: How Empathy Engineered the First V-8 Engine*  
*An amusing, unpublished story from one of Henry Ford's engineers has a lesson that still resonates*

**Ford Engineer Don "Sully" Sullivan**

By John Keenan, Editor  
Spitzer Center for Ethical Leadership

If you think your own boss is tough, imagine working for Henry Ford. Ford is often seen today not just as the founder of the car company named for him, but also as the founder of the "My Way or the Highway School of Management." The world has neither forgotten nor quite forgiven his quip about the Model T: "Any customer can have a car painted any color that he wants so long as it is Black." It is often quoted to illustrate the man's legendary intransigence.



1932 V-8 "tall" coil.



Ford Engineer Don "Sully" Sullivan

One might assume Ford was equally imperious when dealing with his subordinates, but at least one employee knew how to deal with Ford. A family friend of mine named Cheryl had the pleasure of knowing Don Sullivan ("Sully"), whom Henry Ford called his "wild Irishman."

When Cheryl was an engineering trainee at Ford, she worked in the same building with engineers from Ford Racing. That's how she met Sully. "At the time, he was in his 80s," she recalled. "He had hip replacements, but he still put in eight to 10 hour days standing at a drafting board."

Sully was famous within Ford for his work on the flathead V-8, the first V-8 engine designed for mass production. He used to tell tales of the old days working for Henry on that project, and Cheryl - aware that I'm always on the lookout for Spitzer Center material - shared one memorable anecdote with me:

Sully disagreed with Henry Ford on one of the designs specs for new V-8 engine. The distributor was mounted low on the engine, and Sully realized that was the wrong place to put it. It should be on top. The distributor is an electrical component; as it spins, it sends sparks to the individual cylinders to ignite the fuel. Because it's electrical, it won't work if it gets water in it, and if the distributor isn't working, the engine doesn't work.

Back in those days - it was 1932 - they didn't have many paved roads outside cities. They had dirt roads and roads through fields, and when it rained you had lots of puddles. When cars with the new V-8 engine hit a puddle, the distributor could get splashed and the car could stall. That's

why Sully wanted to move the distributor to the top of the engine, but he couldn't get Henry Ford to listen to him. Ford made many of the detailed design decisions himself, and he didn't like to be told to change his design.

So one day after it rained, Sully went out and got a bunch of test cars and lined them up at the edge of a field near Ford's engineering building. He drove each car through the wet field until it stalled out, and he left each sitting where it stopped. Then he went back to Mr. Ford and said, "I need to show you something very important." Ford agreed to go with him.

When they got to the field, Sully didn't say anything.

Ford looked at all the stranded cars and asked, "What's wrong with them?" Sully said, "The distributors got wet."

Mr. Ford said, "Put it on top." They got back in the car, returned to the engineering building, and neither said another word about it. The position of the distributor on the flathead V-8 was changed.

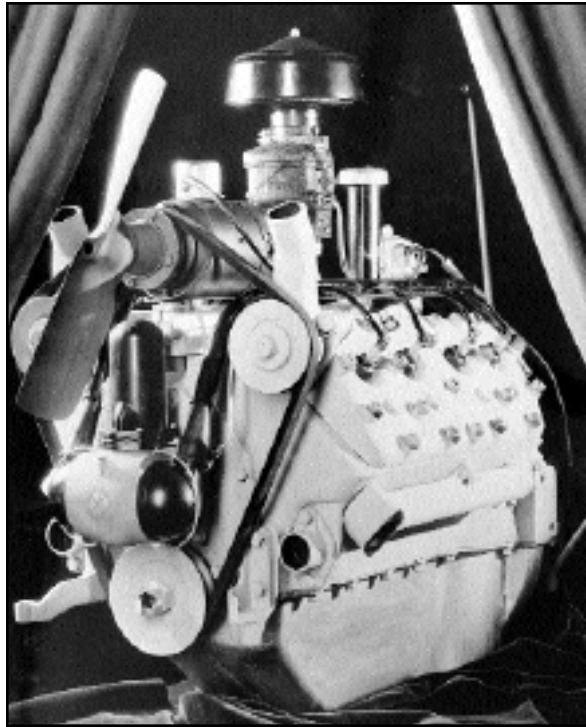
Cheryl told me this story months ago. While the editor in me salivated at the thought of using an unpublished Henry Ford anecdote, I couldn't quite see its relevance to the Spitzer mission or message. A conversation last week with Cheryl showed me what I was missing.

"A lot of people saw Henry Ford as inflexible and a pain in the neck, but not Sully," she told me. "He could see that Ford was a very rational man with an engineering mind. He needed data. Sully knew that when Ford saw the data, he would make the right decision, and he did."

In the *Journey to Excellence*, Sully's approach is called looking for the good news, not the bad news. A Level Two mindset zeroes in on people's flaws and weaknesses (e.g. Ford's reputation for pig-headedness).

A Level Three mindset looks past flaws and looks for the good that resides in just about everyone (in this case, Ford's desire to make rational decisions and fix design flaws).

My friend's observation calls to mind a flaw of human nature (Definition: a flaw of my own which I presume to be universal): Level Threeness flows sideward and downward far more readily than it flows upward.



1932 V-8 engine.

There's a tendency to think that people up the ladder from us don't need our empathy. They have enough advantage as it is without our adding to their good fortune. This conviction grows as hard as an engine block when the higher-up has flaws or personality traits we dislike. One can almost hear the ghosts of Sully's colleagues saying, "Empathize with Henry Ford? Are you nuts?"

But people don't deserve empathy due to their status or lack of status. They deserve it because they're endowed with the same intrinsic human dignity we all have - the same humanity. We're tempted

sometimes to deny a person's humanity to punish his status and flaws.

Unfortunately, in doing so we sacrifice some humanity of our own.

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