

ENGINEERS ARE IN A REALM OF THEIR OWN

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Have you ever noticed an interesting phenomenon in various occupations and the personalities that accompany them? Politicians are always in the center of a group telling funny stories or jokes. Lawyers always seem to be trying to get to know as many people as possible and remembering their names to solicit future clients. Engineers, on the other hand, have an entirely different attitude toward relating to others. One of the requirements in my general engineering course was that I had to attend an outdoor picnic. It was interesting to observe engineers, teachers, and engineering students trying to communicate with one another. Engineers have different objectives when it comes to social interaction. Normal people expect to accomplish several unrealistic things from social interaction: stimulating and thought-provoking conversation, important social contacts, and a feeling of connectedness with others. In contrast to normal people, engineers have rational objectives for social interactions—how to get this over with as soon as possible without getting invited to something unpleasant.

To engineers, all matter in the universe can be placed into one of two categories: (1) things that need to be fixed, and (2) things that will need to be fixed after having a few minutes to play with them. Engineers like to solve problems. If there are no problems handily available, they will create their own. Normal people don't understand this concept; they believe that "if it ain't broke, don't fix it." Engineers believe that if it ain't broke, it doesn't have enough features yet. No engineer looks at a television remote control without wondering what it would take to make it into a freeze gun.

Dating other people is never easy for an engineer. A normal person will employ various indirect methods to create a false impression of attractiveness. Engineers usually are incapable of placing appearance above function. Bill Pratt, my next door neighbor, is a chemical engineer. To many, Bill may have a funny appearance. His dress is a bit peculiar. When he dresses up for a special occasion, he wears an out-of-date, light blue suit and a very plain tie. In his mind he thinks that the formal dress obligation has been fulfilled and therefore why should he go out and buy an entirely new suit when the one he has on is in perfectly good shape (no rips). Clothes are the lowest priority for an engineer, assuming the basic thresholds for temperature and decency have been satisfied. If no appendages are freezing or sticking together, and if no genitalia or

mammary glands are swinging around in plain view, then the objective of clothing has been met. Anything else is a waste. Fortunately, engineers have an ace in the hole. I've heard that they are widely recognized as superior marriage material: intelligent, dependable, employed, honest, and handy around the house. While it's true that many normal people would prefer not to date an engineer, most normal people harbor an intense desire to mate with them, thus producing engineer-like children who will have high-paying jobs long before losing their virginity.

Engineers can sometimes be taken advantage of if they're not careful. The fastest way to get an engineer to solve a problem is to declare that the problem is unsolvable. No engineer can walk away from an unsolvable problem. No illness or distraction will get the engineer off the case. These types of challenges quickly become personal—a battle between the engineer and the laws of nature. This attitude says a lot about an engineer's ego. Solving problems means everything to an engineer.

If there is one trait that best defines an engineer, it is the ability to concentrate on one subject to the complete exclusion of everything else in the environment. This sometimes causes engineers to be pronounced dead prematurely. Some funeral homes in high-tech areas have started checking resumes before processing the bodies. Anybody with a degree in electrical engineering or experience in computer programming is propped up in the lounge for a few days just to see if he snaps out of it.

Nothing is more threatening to the engineer than the suggestion that somebody has more technical skill. Normal people sometimes use that knowledge as a lever to extract more work from the engineer. When an engineer says that something can't be done (a code phrase that means "it's not fun to do"), some clever normal people have learned to glance at the engineer with a look of compassion and pity and say something along these lines: "I'll ask Bob to figure it out. He knows how to solve difficult technical problems." At that point it is a good idea for the normal person not to stand in the way of the problem and the engineer. The engineer will be on the problem like fly on honey.

There's one thing that engineers hate. Risk. They try to eliminate it whenever they can. This is understandable, given that when an engineer makes one little mistake the media will treat it like it's a big deal or something. Some examples of bad press are Apollo 13, the Titanic, and the Ford Pinto. The risk/reward calculation for engineers looks something like this:

RISK: Public humiliation and the death of thousands of innocent people.

REWARD: A certificate of appreciation in a handsome plastic frame.

Being practical people, engineers evaluate this balance of risks and rewards and decide that risk is not a good thing. The best way to avoid risk is by advising that any activity is technically impossible for reasons that are far too complicated to explain. If that approach is not sufficient to halt the project, then the engineer will fall back to a second line of defense. Many say, "It's technically possible but it will cost too much."

"ALTERNATIVE FUTURES"

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The United States government has placed all of our futures in jeopardy through its dependence on, and support of, fossil fuels as the country's primary energy source. These fuels, mainly oil and coal, have been extensively studied, and their negative effects on the environment are well documented. The burning, mining, and refinement of fossil fuels contributes to global warming, air pollution, deforestation, and deadly diseases that afflict humans. Despite the destruction that fossil fuels create, our government has not dedicated itself to the search for safer, cleaner, alternative energy sources. Why have efforts not been made to invest in replacements for the current suppliers of power? Unfortunately, the research that needs to be completed on alternative fuels, and their implementation as the country's main source of energy would require large amounts of money (Knott 32). In addition, individuals and businesses whose wealth and prosperity depend on the consumption of fossil fuels form an extremely powerful political lobby (Alternative). As a result, government funding for alternative fuel research has been inadequate.

Many citizens are led to believe that alternative energy sources are science fiction, or at least, that they will only be available in the distant future. In fact, technologies that utilize alternative fuels in order to generate electricity have been in existence for several decades. A substantial number of scientists and engineers have centered their careers