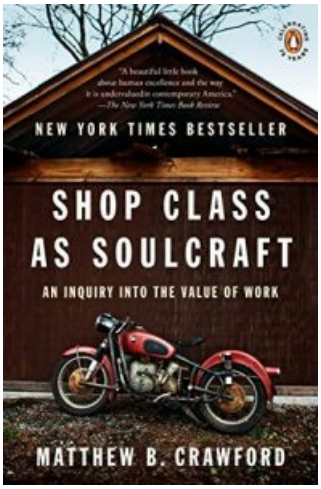

Book Shop Class as Soulcraft

An Inquiry into the Value of Work

Matthew B. Crawford
Penguin Press, 2010

Recommendation

Matthew B. Crawford earned his PhD while working as an electrician and motorcycle mechanic. After receiving his degree, Crawford headed a prestigious think tank in Washington, DC. In only months, he became dissatisfied with the abstract nature of his work and the internal politics that seemed more important than any results. He left and opened a vintage motorcycle repair shop. Working with his hands on intractable mechanical beasts granted him insight into his own intellectual and metaphysical processes. He found working with his hands on complex mechanical problems often more intellectually satisfying than the rigorous intellectual work he earned his doctorate to perform. Crawford decided to investigate his own processes and America's history of, and attitudes toward, skilled manual labor. Thus, he parses the meaning of labor in the Internet age and bemoans a society where repairing what you own has become a lost art. *BooksInShort* recommends these thoughtful essays to those whose day job doesn't satisfy their soul, who love motorcycles or who would rather be in a workshop than at a desk.

Take-Aways

- Manual work can be intellectually rigorous and spiritually fulfilling.
- Useful work is, by its nature, meaningful.
- However, a lessened understanding of tools and of the virtues of repair can make your relationship with your belongings "passive and dependent."
- Work in the 20th century separated "thinking from doing," and advertising provoked materialism and encouraged debt.
- When Henry Ford unveiled the assembly line, skilled "workers simply walked out."
- Doing high-level manual labor entails embracing the "material world" and its limits.
- Repairing arbitrary, frustrating machines limits your narcissism.
- Motorcycle repair, like all freelance work, entails moral choices about billing.
- The master performs the same labor as the apprentice, "only better."
- In construction – where walls often conceal quality work – as in life, the moral truth and the standard of excellence are the same.

Summary

Distanced from Your Own Life

If a society no longer values tools and their use, people wind up living at a distance from the "artifacts" that surround them. The old Sears Roebuck catalog, for example, routinely included blown-up diagrams of products and their parts on the assumption that folks would want to fix what they bought. When you can't repair what you own, your relationship to that object becomes "passive and dependent." Computers and modern cars, for example, require repair by experts who are more likely to discard and replace whole systems than to figure out which element is busted. Thus both owners and experts forsake intimate knowledge of the devices that shape their lives.

Useful Labor

A "craftsman" and a "tradesman" are different. The crafts expert lives an ideal, artistic existence, quietly working away on some arcane specialty that clients treasure. That fantasy seldom proves financially viable, however. The more likely reality rests with people who know a trade – such as carpentry or electrical work – who

learned a complex set of skills and techniques that allow them, foremost, to be employed every day. Their labor, though often undervalued in the marketplace and by society, possesses profound meaning because it is useful. Both the artisan and the electrician pursue the same goal. They seek an "individual agency" that grants them spiritual freedom while they work and a constant standard against which to test their skills and insights.

> "Craftsmanship means dwelling on a task for a long time and going deeply into it because you want to get it right."

While both take pride in their work, both also know that most people will never value what they do at its proper worth. Consumers today discard things that work perfectly well to indulge their craving for something new, a craving the marketplace created and nurtured. College today offers the opposite of craftsmanship. Being an artisan calls for investing deeply in learning one thing and mastering that skill. Because the main appeal of college is the suggestion that students might become anything or anyone they desire, it offers a far more diffuse experience.

Shop Class

Most boys in US public high schools once had to take shop class, where they learned how to use tools and understand the basics of carpentry or mechanical repair. Shop students might build a birdhouse or work on a car engine. The Smith-Hughes Act of 1917 provided federal funding for shop classes nationwide. Such funding appeared only four years after Henry Ford unveiled the assembly line, creating a demand for workers with basic mechanical skills. The white collar/blue collar divide arose from the assembly line because line workers performed limited tasks.

> "There was more thinking going on in the bike shop than in my previous job at the think tank."

An assembly line worker might spend day after day turning two bolts on a partially assembled car as it came down the line. Such numbing work required virtually no skill and even less thought. The job was designed to separate "thinking from doing." The boom of US assembly-line labor also created the widely held notion that all manual labor is "as mindless as assembly line work" and that all nonmanual work is, by its nature, intellectual. But skilled manual labor can require all the rigor and sophistication humans need to develop in order to sustain their spirits. Conversely, white-collar work can be as mind- and soul-deadening as any assembly line.

> "Early motorcycles...made an issue of certain intellectual and moral qualities of the rider."

Shop class always bore a class stigma. Those who took shop were marked as part of the underclass of hand laborers who would never access the nirvana of the white-collar world. That attitude, insurance constraints, school budgets, the end of US assembly-line labor as a way of life and the rise of computers as the modern era's dominant tool ended shop class. Now few students leave high school with any notion of how to swing a hammer or take an accurate measurement.

"The Material World"

Skilled handwork engages the material world in a knowledgeable, "systematic" way. Surgeons and mechanics develop special sets of multilevel skills. They rely on learned behavior, technical prowess, intuition and judgment. Just as a surgeon learns that biological anomalies suggest certain tactics, so mechanics learn that sounds and smells deliver diagnostic data. Author Matthew B. Crawford found that shop work required more mental acuity than anything in the rarified land of the intellect.

> "Seeing a motorcycle about to leave my shop under its own power, several days after arriving in the back of a pickup truck, I suddenly don't feel tired, even though I've been standing on a concrete floor all day."

As more and more US jobs shift to foreign countries, work that cannot be outsourced becomes more valuable. A doctor cannot perform surgery over an Internet link; a carpenter cannot drive a nail from across an ocean. You can export work that follows basic procedures, but work requiring complex, individualized skills can function only in a local environment. This makes the artisan and the trade worker indispensable.

Thinking from Doing

Removing thinking from doing was "responsible for the degradation of work." In the early 1900s, manufacturers began deliberately to disconnect "brain work" from employee tasks. Bosses sought a less skilled and, thus, more dependent and less costly labor force. If managers made all the decisions and didn't require cognition from their workers, firms could replace expensive skilled labor with cheaper unskilled labor. Henry Ford's automotive assembly line took this concept to its logical conclusion. When he started his first line in 1913, "workers simply walked out." As skilled mechanics, they felt insulted by the line and wanted no part of its tedium. Ford reluctantly had to double wages to get workers to stay. He later realized it was "one of the finest cost-cutting moves we ever made." Ford sliced expenses by doubling and then tripling assembly line speed, proportionately cutting the time it took to manufacture each car. Divorced from the skills that once defined them, his workers could do a good job only by keeping up the pace. So they did, enabling Ford to wipe out his competition and, thus, any potential alternative employment for his workers.

> "Skilled manual labor entails a systematic encounter with the material world."

As wages stabilized, management focused on increasing workers' purchasing. People who made enough to meet their daily needs had little reason to work harder, since work was so uninspiring. Advertising cranked up to stimulate material desire. Owning at least a home and a car became the new working class standard of living. Giving in to this attitude required a huge cultural change, from seeing debt as immoral to seeing it as normal. Then installment plan purchasing appeared, so wage earners could commit to weekly payments and own something before fully paying for it. Once in debt, a worker was even less likely to leave an unsatisfying job.

The Virtues of a Trade

If "work is toilsome and serves someone else's interest," then what training should young people seek? The finest work, regardless of pay, is that which most engages the mind, spirit and body – the very aspects of being human that routine labor erodes. The trades offer work for those who need to live by their own skills, on their own schedules and according to their own discipline.

> "What ordinary people once made, they buy; and what they once fixed for themselves, they replace entirely or hire an expert to repair."

Early motorcycles demanded attention. They were temperamental, and each used oil at its own pace while offering few gauges to determine consumption. Owners had to become one with their bikes, learn their moods and bend to their will. Early riders – with study, time, and trial and error – had to recognize and serve their bikes' mechanical idiosyncrasies. Repairing what you own reduces narcissism: You know you are not the center of the world when your mere motorcycle frustrates you and makes demands that change without warning. Such learning is always beneficially humbling. Today's cars and cycles are designed to keep owners from ever having to interact with their machine's personality. A "Service Required" light appears on the dashboard. A mechanic plugs in a computerized reader and awaits instructions from the machine regarding its upkeep. Intuition has been removed from the maintenance equation.

> "While manufacturing jobs have certainly left...to a disturbing degree, the manual trades have not. If you need a deck built or your car fixed, the Chinese are of no help. Because they are in China."

Such "layers of abstraction" stand between the vehicle's user and its functioning. The most egregious example of this trend is that new Mercedes-Benz cars are likely to lack a dipstick for measuring oil levels. That basic interaction between driver and car no longer exists. If you don't have to take care of your car, you don't think about how you use it. You value it less; that makes it more disposable. A prevalent modern paradigm is that "self-realization" and personal autonomy spring not from honoring and caring for the old, but from forever embracing – which means purchasing – the new.

> "Creativity is the by-product of mastery...that is cultivated through long practice."

"Intellectual virtue and moral virtue" are not wholly distinct. Being true to your mind and your processes eliminates hypocrisy, and helps your actions align with your thoughts. Living with honor first means seeing the world as it is. That is no easy task, and repairing complex machines for which no manuals exist forces a mechanic to see without illusion, to act on what he or she sees and to own the mistakes that might spring from not seeing clearly. Grasping what's in front of you means escaping your preconceived ideas. If your machines never insist that you understand them, you pay less attention to the world and vest, instead, in self-created notions.

Moral Dilemmas of Motorcycle Repair

The complexity of the work and the time required demands a moral choice on almost every motorcycle repair. If a mechanic suspects a performance defect arises from a single costly break, he can save hours of time by performing that single, major repair and charge a hefty fee. But if the mechanic first wants to make sure the problem does not derive from one of several smaller issues, he will use even more time and charge an even higher bill. Yet if none of the small problems are the source, the owner gets socked twice: once for the fact-finding labor and again for the major repair.

> "The hardheaded economist will point out the 'opportunity costs' of spending one's time making what can be bought."

Crawford estimates that he has never – ever – charged a client for the full amount of hours he has spent working on any motorcycle. His discussions with fellow mechanics suggest that none of them ever have, either. Most set in their minds, before they begin, an imaginary guideline of what the repair should cost in some perfect world, and then try to finish the work within that time/cost framework. If Crawford commits a major judgment error, he won't pass on the cost of that mistake, even though, with vintage cycles, such errors are part of the repair equation – as are the usual hours spent disassembling the bike and cleaning its parts just to get a sense of its wear and tear. He sees that time as a function of the art of repair and is often uncertain of how to bill for it.

Master and Apprentice

When Crawford first began repairing motorcycles, he sought out mechanics who knew more than he did. Treating them as mentors, he went through the usual cycle of initiation: doing grunt work and clean ups around the garage before his mentor deigned to let him perform the most basic repair. As his mentors trusted Crawford with more demanding tasks, he learned a fascinating, counterintuitive truth. Most of what they did was not arcane, complex or opaque. Most repairs required applying common sense, clear vision and experience to basic problems, and sorting out the best order for doing simple tasks, even if proper sequencing might prove complicated.

> "This book grows out of an attempt to understand the greater sense of agency and competence I have always felt doing manual work, compared to...knowledge work."

The difference between Crawford and his mentors was their speed, skill, grace, economy of thought and effort, and decisiveness. Their tasks were the same. How they approached those tasks and solved problems showed the gulf between him and them. From this he learned that the master and the apprentice do the same jobs, but the master always does them better.

The Simple Zen of Skill

To "bend conduit" means to shape the pipe that contains electrical wires. It's a demanding skill. Poor benders waste time, money, material and space. Good benders leave an elegant trail forever hidden behind the walls of the structure where they work. No one understands their level of craft and discipline except their fellow workers.

> "Perhaps more surprisingly, I always find manual work more engaging intellectually."

After his time in academe and at the think tank, Crawford tired of worlds dominated by talk and lacking any objective standard of morality or a true measure of a job done well. In construction, the moral truth and the standard of excellence are the same: "Either you can bend conduit, or you can't."

About the Author

Matthew B. Crawford, PhD, once headed a prestigious think tank in Washington, DC. He decided to quit, and today he works as a motorcycle mechanic.