

[The following passage is from the Introduction to my unpublished book *C: Elements of Style*.]

The fourth century (BC) Chinese philosopher Chuang Tse told the parable of Cook Ting. Cook Ting is a model for all people involved in difficult, creative endeavors. No two people see the exact same details in a software problem, and it is the same in translating from Chinese, so here are two versions. The first is quoted in Hsiang Ju Lin and Tsuifeng Lin, *Chinese Gastronomy*, London: Jill Norman and Hobhouse, 1982. No mention is made of the translator.

Prince Huei's cook was cutting up a bullock. Every blow of his hand, every heave of his shoulders, every *whshh* of rent flesh, every *chhk* of the chopper, was in perfect rhythm – like the dance of the Mulberry Grove, like the harmonious chords of Ching Shou.

“Well done!” cried the Prince. “Yours is skill indeed!”

“Sire,” replied the cook, laying down his chopper, “I have always devoted myself to Tao, which is higher than mere skill. When I first began to cut up bullocks, I saw before me whole bullocks. After three years's practice, I no longer saw whole animals. And now I work with my mind and not with my eye. My mind works without control of the senses. Falling back on eternal principles, I glide through such great joints or cavities as there may be, according to the natural constitution of the animal. I do not even touch the convolution of muscle and tendon, still less attempt to cut through large bones.

“A good cook changes his chopper once a year – because he cuts. An ordinary cook once a month – because he hacks. But I have had this chopper for nineteen years, and although I have cut up many thousand bullocks, its edge is as if fresh from the whetstone. For at the joints there are always interstices, and the edge of the chopper being without thickness, it remains only to insert that which is without thickness into such an interstice. Indeed there is plenty of room for the blade to move about. It is thus that I have kept my chopper for nineteen years as though fresh from the whetstone.

“Nevertheless, when I come upon a knotty part which is difficult to tackle, I am all caution. Fixing my eye on it, I stay my hand, and gently apply my blade, until with a *hwah* the part yields like earth crumbling to the ground. Then I take out my chopper, stand up, and look around with an air of triumph. Then, wiping my chopper, I put it carefully away.”

“Bravo!” cried the Prince. “From the words of a cook I have learnt how to take care of my life.”

The second translation of the same passage is by Burton Watson, as quoted in Chiang Yee, “Chinese Calligraphy”, Harvard, 1976.

Cook Ting was cutting up an ox for Lord Wen-hui. At every touch of his hand, every heave of his shoulder, every move of his feet, every thrust of his knee—zip! zoop! He slithered the knife along with a zing, and all was in perfect rhythm, as though he were performing the dance of the Mulberry Grove or keeping time to the Ching-shou music.

‘Ah, this is marvelous!’, said Lord Wen-hui. ‘Imagine a skill reaching such heights.’

Cook Ting laid down his knife and replied, ‘What I care about is the Way, which goes beyond skill. When I first began cutting an oxen all I could see was the ox itself. After three years I no longer saw the whole ox. And now — now I go at it by spirit and don't look with my eyes. Perception and understanding have come to a stop and spirit moves where it wants. I go along with the natural makeup, strike in the big hollows, guide the knife through the big openings, and follow things as they are. So I never touch the smallest ligament or tendon, much less a main joint.

‘A good cook changes the knife once a year – because he cuts. A mediocre cook changes the knife once a month – because he hacks. I've had this knife of mine for nineteen years and I've cut up thousands of oxen with it, and yet the blade is as good as though it had just come from the grindstone. There are spaces between the joints, and the blade of the knife has really no thickness. If you insert what has no thickness into such spaces, then there's plenty of room – more than enough for the blade to play with. That's why after nineteen years the blade of my knife is still as good as when it first came from the grindstone.

‘However, when I come to a complicated place, I size up the difficulties, tell myself to watch out and be careful, keep my eyes on what I’m doing, work very slowly, and move the knife with the greatest subtlety, until – flop! the whole thing comes apart like a clod of earth crumbling to the ground. I stand there holding my knife and look all around me, completely satisfied, and reluctant to move on, and then I wipe off the knife and put it away.’

‘Excellent!’ said Lord Wen-hui, ‘I have heard the words of Cook Ting and learned how to care for life!’

Cook Ting’s lessons for programmers are clear: don’t hack, follow the easiest path to the problem’s solution, take your time with the difficult parts, and store your tools properly. If your tools are carefully made and carefully used, they will serve you well for many, many years. The translators also provide a lesson: read the programs that other people write (even those in “foreign” languages), and imitate the good features, but don’t be afraid to try something that might be better.