In his essay “In the Beginning Was the Command Line,” Neil Stephenson uses a car metaphor to describe the various players in the operating system dilemma. Apple had “sleek Euro-style sedans”; Microsoft had “colossal station wagons”; and BeOS (now defunct) had “fully operational Batmobiles.” And then there was Linux — “a tank ... of space-age materials and jammed with sophisticated technology” capable of 100mpg, reliable and robust, being given away for free.

Today, oil prices are rising. Demand for hybrid vehicles in the U.S. is higher than production. Can the last piece of Stephenson’s metaphor be turned around? Is it worth contemplating an open source car?

On July 21, 2003, the last (old-style) VW Beetle was produced in Puebla, Mexico. It was car number 21,529,464. One of a host of incredibly successful cars with common features harking to their original “design briefs,” the Beetle and its peers — the Citroen 2CV (3,872,583 cars made), Land Rover (2,400,000), Mini (5,250,000), Trabant (3,096,000), and Fiat 500 (3,678,000) — were utilitarian, efficient, maintainable, flexible, and the antithesis of the modern industry. The briefs were often charming: Boulanger (designer of the Citroen 2CV) was tasked with designing an “umbrella on four wheels” capable of getting two peasants and their 100Kg of farm goods to market at 60km/h (and 78mpg!). traversing a ploughed field without breaking the eggs it was carrying.

While none of these vehicles were “open sourced,” all of them endured any number of modifications and demonstrated modularity and flexibility in their lifetimes. Third-party industries arose to supply parts and modifications. This was taken to an extreme in the early 1960s when Bruce Meyers retrofitted a fiberglass body to a shortened VW chassis, giving birth to the “Manx” dune buggy. Only 7,000 Manxes were produced, but the phenom was so successful that nearly 300,000 clones were made worldwide. The vast majority were assembled and built with all types of modifications by end users.

After a 30-year hiatus, Meyers recently began producing dune buggy kits again. The new “Manxter 2+2” has improved safety features, but otherwise stays close to its Spartan and immensely fun roots.

Illustration by ebay.com
personalize your desktop, why not your car? A few savvy players like Mini and Scion are now offering the illusion of large choice via online ordering systems with “personalization” of body panel colors, wheels, stereo, and upholstery.

But why not go a lot further? Drive-by-wire technology, better electric motors, better batteries, within-hub motors, and (of course) hybrid concepts are changing the modularity of cars. The dominant architecture is up for challenge. Now you can choose your own optimal combination of gasoline engine and electric motor to tailor your hybrid to your driving style and conditions. Electro Automo-
tive (electroauto.com), founded in 1979 as a source for components to turn standard gasoline-burning cars into battery-powered electrics, will sell you a plugin (pun intended) electric conversion kit that, with minimal modifications, could bolt into the Manxter. (This could be the Red Hat of the bunch!) For $35,000 and minimal assembly, you’d be driving your own four-seat electric vehicle with a roll cage, 75mph-plus top speed, and 50-100mpg range. This might be the first electric vehicle you’d ever feel sexy in. Add one of the new, clean-burning, four-stroke engines found in snowmobiles and four-wheelers, and it’d be a long-range hybrid.

The web is peppered with how-to sites for converting your old car into an electric vehicle, but why not develop SourceForge-style documentation for an open source hybrid? Saul Griffith thinks about open source hardware while working with the power-nerds at Squid Labs (www.squid-labs.com).

The web is peppered with how-to sites for converting your old car into an electric vehicle, but why not develop SourceForge-style documentation for an open source hybrid? A preliminary step toward an open source electric vehicle is the solar-powered Vee 9, with downloadable plans available at www.solarvehicles.org.

Open source plans for a solar tricycle are available here: www.uprightsolar.com.