



HIRAI

Floudini

TOSHIHIKO HIRAI

He spurned convention and took the world by surprise, but there are still more tricks up Toshiko Hirai's sleeve. PHIL SCOTT met the magician behind the MX-5 ... and the man behind the magician

"I THINK," says Mr Hirai, "that if I had stuck to the Mazda code, then the MX-5 would not have been a lightweight sports car but a tank..."

He laughs, eyes twinkling with mischief and good humour.

"I spent a lot of time saying no. No to different engines and no to more equipment, because I wanted to build a sports car – not a battle tank."

The MX-5 is a testament to his accomplishment. It is the most successful niche model built in 20 years, and arguably the hottest specialty car since the Mustang. Yet on this occasion, talk of cars, even of sports cars, seems entirely inappropriate.

We are sitting on a wide verandah overlooking a beautiful valley as twilight turns the sandstone cliffs to a rich honeycomb. Mr Hirai – nobody calls him by his first name, Toshiko – is filled with awe.

"How much is the cost of scenery tax here?" he says, an arm sweeping the vista, his face deadpan. Then comes the inevitable, cheeky schoolboy grin.

Between politely measured sips of low-alcohol beer, he presses wildflowers between the pages of an Australian road atlas and listens intently to the bird calls of the bush.

"Your Australian bellbird makes a beautiful sound. When I hear it I am feeling very peaceful, very restful..."

The large red-bellied black snake that slithered across his bushwalking path earlier that afternoon did nothing to shatter his composure. His first reflex was to reach for the camera and wonder out loud at the lithe speed of this deadly reptile.

Mr Hirai, project chief for the MX-5, is very much a nature boy; a man of boundless curiosity, great patience and ready humour. He is not the driven, one-dimensional Car Guy so typical of the world industry. Nor is he one for the company line or the established way of doing things. An original thinker and a bit of a maverick, his methods aren't always to be found in a textbook.

His standard Mazda business card is overprinted with Japanese *kanji* characters that translate loosely to "a oneness between horse and rider."

It is the philosophy he carried through the development of the MX-5. "The two must be as one," he explains. "Every moment and emotion must be shared."

Overprinting the almost sacred Japanese business card with such a message is like spraying graffiti on a Tokyo subway train. It just isn't done.

"Internally, Mazda – like all other companies – has testing codes and engineering codes," he explains later. "By sticking to such codes, anybody, not necessarily an expert, can develop a car. Because there are so many codes and standards, not just for

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industry but for Japanese society generally, it is difficult for one man to have a significant influence. But there are cases where an expert and a small team can produce a car earlier, cheaper, faster, lighter and, perhaps, better than a big team working to standard rules."

According to the rule book, for instance, the MX-5 simply shouldn't have happened. Eighteen months after release it is still running the production line at full capacity, an astonishing feat for a sports car where the initial honeymoon of high demand is, more



often than not, followed by an abrupt fall soon afterwards.

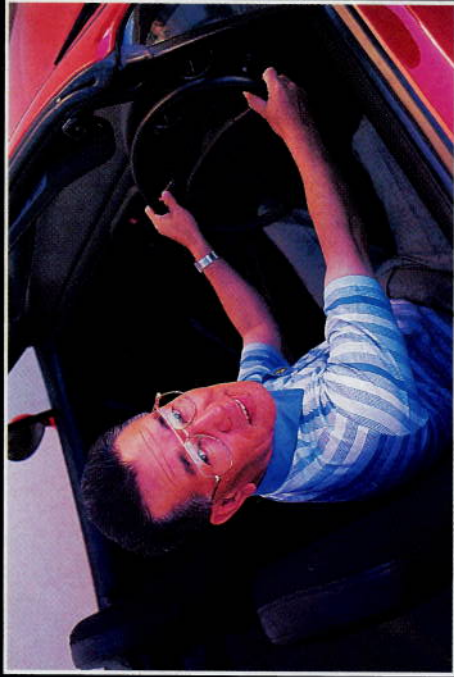
With many markets just getting into full swing, the Elan from Japan, as some European critics snootily labelled it, is having the last laugh.

Did those critics have a fair point?

"The Lotus Elan was a very important sports car and I personally respect Colin Chapman very much," says Hirai. "I can say, yes, the Elan was an influence on the overall philosophy of light weight and good handling, but the MX-5 was also influenced by other British and Italian sports cars. I don't think I copied the Lotus Elan or anything else. The MX-5 is unique. If people still think it's a copy of something else then I really don't care..."

He laughs again and continues, animated now: "Yaw moment is the most important factor in the MX-5's dynamics. I made it my most important point during chassis development. Lotus or any other sports car didn't tell me this, it was my interpretation."

Hirai's background in sports cars goes back a long way. Eighteen years ago he was sent to the USA on what he calls a "top secret" assignment.



"At the time there was a lightweight sports car being studied. Mazda wanted to know if it could build such a car using existing platforms and engines, so I travelled to the US and drove many, many cars to research the possibilities..."

That project didn't come off, partly because of Mazda's financial slide, a collapse that saw many company employees diverted to door-to-door selling. Even senior engineers weren't exempt. Hirai himself was transferred to a Mazda dealership to work as a service manager for two years.

"I think that time was very important for me in the later development of the MX-5," he says. "Direct contact with the customers told me what was important to them and what wasn't. It's difficult to explain in English but I can give you two examples. There are only three colours available on the MX-5 in the US market. Most other vehicles have seven or eight. This is not necessary to satisfy the customer if you have three or four good colours. The same lesson applies to engines, which is why the MX-5 has only one – a dohc 1.6 litre."

Hirai is adamant there'll be no turbo engine for his car and denies magazine reports of a 2.0 litre M2 version.

"Those reports are totally incorrect," he says, "although I don't think the current horsepower is enough. I would prefer another 10 hp and within two to three years we will be doing something for engine performance."

As he sees it, the MX-5 package would be better served by slicing 160 kg from its kerb weight.

"The engine itself should be lighter," he says. "If I could use a

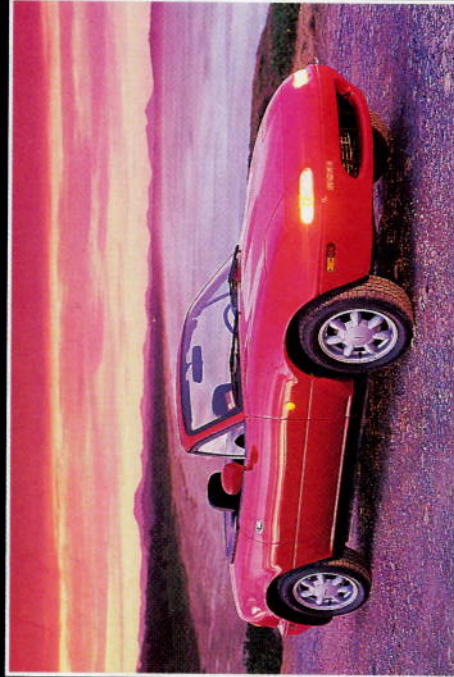
Honda engine then the MX-5 would be *much* lighter. The B series we are using is not so old, but very heavy and strong. The transmission also weighs too much because it is based on 929 components. If we prepared a purpose built transmission for a 1.6 dohc engine it could be much lighter. The cost of such development is, of course, the problem."

He constantly refers to aluminium as a very desirable material. Presently, it's only used on the MX-5 bonnet. If he had his time again, Mr Hirai would have liked less overhang on the nose. He says he could shave the overall length substantially but still retain the car's wheelbase.

The talk is hypothetical because the MX-5 will continue as it is for quite a while.

"Mazda should keep the current styling at least six years," he says, although mournfully admitting the interior will be reworked for the 1994 model year, when US legislation demands passenger side airbags.

The subject of styling is yet another MX-5 sore point. The Americans have claimed it as their own, the work of Mazda's



I would like to leave my grandchildren a beautiful earth. As an engineer, I should try to make lighter, more efficient vehicles

is a Honda and that is a Mazda. I believe we must work to give each car individual character and I mean more than styling, because styling alone will make it popular for only six months."

Will he play a role in developing such a philosophy at Mazda?

"I would like to develop one more car before retiring, a fun car, but not necessarily a sports car."

Then he winks and grins.

"Maybe it will be a Mazda, but who knows? I will, as you say, consider all offers..."

