Script 1.2

Judit Werner: Yes, that's right. At that time most people thought that learning two languages at the same time wasn't good for young children. They thought that children would be confused by two languages and that this would hold back their cognitive development. We disagreed with this idea. In our paper, we realised that the evidence wasn't very strong. For example, some studies found that monolingual children, those with only one language, had a bigger vocabulary than bilingual children. However, researchers were only testing the children in one language, and not counting the words they also knew in the other language. We actually found cognitive strengths in bilinguals.

Interviewer: So, they ignored half of the words the children had learnt?

Judit Werner: Yes, you could say that. Anyway, after a few years our work was accepted and we now understand that a bilingual upbringing is beneficial for a child's mental development.

Extract 2

Judit Werner: Yes, that tends to be true for most people. The areas responsible for linguistic processing are on the left hemisphere in about ninety-five per cent of right-handed people. These are the main areas responsible for processing language, but they couldn't do very much without other parts of the brain. Speaking and listening is complicated behaviour that involves many areas of the brain all working together.

Extract 3

Judit Werner: No, not really. What's been really interesting is to see how the languages of bilingual people interact in the brain. In general, a lot of the same areas of the brain are active when using different languages; in other words, the different languages occupy most of the same regions. But I think what's more interesting is the fact that when you speak your mother tongue, less of your brain is being used than when you're communicating in a language you know less well.

Interviewer: Really? Why is that interesting?

Judit Werner: Well, it suggests that that old view of learning, as 'filling someone up' with information, like water from a jug, is probably wrong, and becoming fluent in a language is about getting lighter and faster, not heavier. Think of fluency like driving a fast car, rather than carrying lots on a big lorry!

Extract 4

Judit Werner: What we are seeing is that bilingual people show certain neurological advantages. One thing they show is greater flexibility when it comes to doing tasks that need the brain to switch attention quickly, or do more than one thing at a time.

Interviewer: Why might that be?

Judit Werner: Well, if both languages are active at the same time, then this presents the brain with a problem: how does it stop itself confusing first and second languages and using, say, a Chinese word when speaking to an English speaker? We think that this has to do with the executive control centre of the brain, the part of you that makes decisions. In bilinguals it needs to constantly decide which language to speak, so it gets a lot of practice at switching between the two. This massive practice strengthens the brain's ability to cope with difficulties.

Extract 5

Judit Werner: That's right. There is a lot of truth in the saying that it's never too late to learn. Adults are less likely to achieve a native-like accent than children, that's true, but millions of adults learn languages to a high level. Not only is it possible to start well into your 40s, 50s, 60s or even 70s, there's some exciting evidence that it may be really good for you, too. We now know that bilingualism brings with it advantages in the fight against dementia …

Interviewer: Really? Like Alzheimer's, for example?

Judit Werner: Exactly, those diseases where people stop being able to think and behave normally. We've found that Alzheimer's sufferers who speak more than one language show fewer symptoms than monolingual people, and are mentally healthier than monolingual sufferers.

Interviewer: But is learning or speaking another language the only way to do this?

Judit Werner: I'm sure there are many things you can do to keep your brain active and develop your cognitive strength, but …

Interviewer: What like, Sudoku and that sort of thing?

Judit Werner: Yes, or playing chess, or just socialising and interacting with people. But none of these compare with language learning, which must be one of the hardest tests that we put our brains through. The only activity that has been shown to increase mental strength in preparation for old age better than language learning seems to be physical exercise. But that's something we should all be doing anyway, for many different reasons.