2016.1

As Artificial Intelligence (AI) becomes increasingly sophisticated, there are growing concerns that robots could become a threat. This danger can be avoided, according to computer science professor Stuart Russell, if we figure out how to turn human values into a programmable code.

Russell argues that as robots take on more complicated tasks, it's necessary to translate our morals into AI language.

For example, if a robot does chores around the house, you wouldn't want it to put the pet cat in the oven to make dinner for the hungry children. “You would want that robot preloaded with a good set of values,” said Russell.

Some robots are already programmed with basic human values. For example, mobile robots have been programmed to keep a comfortable distance from humans. Obviously there are cultural differences, but if you were talking to another person and they came up close in your personal space, you wouldn't think that's the kind of thing a properly brought-up person would do.

It will be possible to create more sophisticated moral machines, if only we can find a way to set out human values as clear rules.

Robots could also learn values from drawing patterns from large sets of data on human behavior. They are dangerous only if programmers are careless.

The biggest concern with robots going against human values is that human beings fail to do sufficient testing and they've produced a system that will break some kind of *taboo*（禁忌）.

One simple check would be to program a robot to check the correct course of action with a human when presented with an unusual situation.

If the robot is unsure whether an animal is suitable for the microwave, it has the opportunity to stop, send out *beeps*（嘟嘟声）, and ask for directions from a human. If we humans aren't quite sure about a decision, we go and ask somebody else.

The most difficult step in programming values will be deciding exactly what we believe in moral, and how to create a set of ethical rules. But if we come up with an answer, robots could be good for humanity.

46.What does the author say about the threat of robots?

A)It may constitute a challenge to computer programmers.

B)It accompanies all machinery involving high technology.

C)It can be avoided if human values are translated into their language.

D)It has become an inevitable peril as technology gets more sophisticated.

47.What would we think of a person who invades our personal space according to the author?

A)They are aggressive. B)They are outgoing.

C)They are ignorant. D)They are ill-bred.

48.How do robots learn human values?

A)By interacting with humans in everyday life situations.

B)By following the daily routines of civilized human beings.

C)By picking up patterns from massive data on human behavior.

D)By imitating the behavior of property brought-up human beings.

49.What will a well-programmed robot do when facing an unusual situation?

A)Keep a distance from possible dangers. B)Stop to seek advice from a human being.

C)Trigger its built-in alarm system at once. D)Do sufficient testing before taking action.

50.What is most difficult to do when we turn human values into a programmable code?

A)Determine what is moral and ethical. B)Design some large-scale experiments.

C)Set rules for man-machine interaction. D)Develop a more sophisticated program.

Why do some people live to be older than others? You know the standard explanations: keeping a moderate diet, engaging in regular exercise, etc. But what effect does your personality have on your *longevity*（长寿）?Do some kinds of personalities lead to longer lives? A new study in the *Journal of the American Geriatrics Society* looked at this question by examining the personality characteristics of 246 children of people who had lived to be at least 100.

The study shows that those living the longest are more outgoing, more active and less *neurotic*（神经质的) than other people. Long-living women are also more likely to be sympathetic and cooperative than women with a normal life span. These findings are in agreement with what you would expect from the evolutionary theory: those who like to make friends and help others can gather enough resources to make it through tough times.

Interestingly, however, other characteristics that you might consider advantageous had no impact on whether study participants were likely to live longer. Those who were more self-disciplined, for instance, were no more likely to live to be very old. Also, being open to new ideas had no relationship to long life, which might explain all those bad-tempered old people who are fixed in their ways.

Whether you can successfully change your personality as an adult is the subject of a longstanding psychological debate. But the new paper suggests that if you want long life, you should strive to be as outgoing as possible.

Unfortunately, another recent study shows that your mother's personality may also help determine your longevity. That study looked at nearly 28,000 Norwegian mothers and found that those moms who were more anxious, depressed and angry were more likely to feed their kids unhealthy diets. Patterns of childhood eating can be hard to break when we're adults, which may mean that kids of depressed moms end up dying younger.

Personality isn't *destiny*（命运), and everyone knows that individuals can learn to change. But both studies show that long life isn't just a matter of your physical health but of your mental health.

51. The aim of the study in the *Journal of the American Geriatrics Society* is____.

A)to see whether people's personality affects their life span

B)to find out if one's lifestyle has any effect on their health

C)to investigate the role of exercise in living a long life

D)to examine all the factors contributing to longevity

52. What does the author imply about outgoing and sympathetic people?

A)They have a good understanding of evolution.

B)They are better at negotiating an agreement.

C)They generally appear more resourceful.

D)They are more likely to get over hardship.

53. What finding of the study might prove somewhat out of our expectation?

A)Easy-going people can also live a relatively long life.

B)Personality characteristics that prove advantageous actually vary with times.

C)Such personality characteristics as self-discipline have no effect on longevity.

D)Readiness to accept new ideas helps one enjoy longevity.

54. What does the recent study of Norwegian mothers show?

A)Children's personality characteristics are invariably determined by their mothers.

B)People with unhealthy eating habits are likely to die sooner.

C)Mothers' influence on children may last longer than fathers'.

D)Mothers' negative personality characteristics may affect their children's life spans.

55.What can we learn from the findings of the two new studies?

A)Anxiety and depression more often than not cut short one's life span.

B)Longevity results from a combination of mental and physical health.

C)Personality plays a decisive role in how healthy one is.

D)Health is in large part related to one's lifestyle.

2016.2

Declining mental function is often seen as a problem of old age, but certain aspects of brain function actually begin their decline in young adulthood, a new study suggests.

The study, which followed more than 2,000 healthy adults between the ages of 18 and 60, found that certain mental functions—including measures of abstract reasoning, mental speed and puzzle-solving—started to dull as early as age 27.

Dips in memory, meanwhile, generally became apparent around age 37.

On the other hand, indicators of a person’s accumulated knowledge—like performance on tests of vocabulary and general knowledge—kept improving with age, according to findings published in the journal *Neurobiology of Aging*.

The results do not mean that young adults need to start worrying about their memories. Most people’s minds function at a high level even in their later years, according to researcher Timothy Salthouse.

“These patterns suggest that some types of mental flexibility decrease relatively early in adulthood, but that the amount of knowledge one has, and the effectiveness of integrating it with one’s abilities, may increase throughout all of adulthood if there are no diseases,” Salthouse said in a news release.

The study included healthy, educated adults who took standard tests of memory, reasoning and perception at the outset and at some point over the next seven years.

The tests are designed to detect subtle (细微的) changes in mental function, and involve solving puzzles, recalling words and details from stories, and identifying patterns in collections of letters and symbols.

In general, Salthouse and his colleagues found, certain aspects of cognition (认知能力) generally started to decline in the late 20s to 30s.

The findings shed light on normal age-related changes in mental function, which could aid in understanding the process of dementia (痴呆), according to the researchers.

"By following individuals over time," Salthouse said, "we gain insight in cognition changes, and may possibly discover ways to slow the rate of decline."

The researchers are currently analyzing the study participants' health and lifestyle to see which factors might influence age-related cognitive changes.

46. What is the common view of mental function?

A)It varies from person to person. B)It weakens in one's later years.

C)It gradually expands with age. D)It indicates one's health condition.

47. What does the new study find about mental functions?

A)Some diseases inevitably lead to their decline.

B)They reach a peak at the age of 20 for most people.

C)They are closely related to physical and mental exercise.

D)Some of them begin to decline when people are still young.

48. What does Timothy Salthouse say about people's minds in most cases?

A)They tend to decline in people's later years.

B)Their flexibility determines one's abilities.

C)They function quite well even in old age.

D)Their functioning is still a puzzle to be solved.

49. Although people's minds may function less flexibly as they age, they _____.

A)may be better at solving puzzles

B)can memorize things with more ease

C)may have greater facility in abstract reasoning

D)can put what they have learnt into more effective use

50. According to Salthouse, their study may help us_____.

A)find ways to slow down our mental decline

B)find ways to boost our memories

C)understand the complex process of mental functioning

D)understand the relation between physical and mental health

The most important thing in the news last week was the rising discussion in Nashville about the educational needs of children. The *shorthand*(简写)educators use for this is "pre-K"—meaning instruction before kindergarten—and the big idea is to prepare 4-year-olds and even younger kids to be ready to succeed on their K-12 journey.

But it gets complicated. The concept has multiple forms, and scholars and policymakers argue about the shape, scope and cost of the ideal program.

The federal Head Start program, launched 50 years ago, has served more than 30 million children. It was based on concepts developed at Vanderbilt University's Peabody College by Susan Gray, the legendary pioneer in early childhood education research.

A new Peabody study of the Tennessee Voluntary Pre-K program reports that pre-K works, but the gains are not sustained through the third grade. It seems to me this highlights quality issues in elementary schools more than pre-K, and indicates longer-term success must connect pre-K with all the other issues related to educating a child.

Pre-K is controversial. Some critics say it is a luxury and shouldn't be free to families able to pay. Pre-K advocates insist it is proven and will succeed if integrated with the rest of the child's schooling. I lean toward the latter view.

This is, in any case, the right conversation to be having now as Mayor Megan Barry takes office. She was the first candidate to speak out for strong pre-K programming. The important thing is for all of us to keep in mind the real goal and the longer, bigger picture.

The weight of the evidence is on the side of pre-K that early *intervention* (干预)works. What government has not yet found is the political will to put that understanding into full practice with a sequence of smart schooling that provides the early foundation.

For this purpose, our schools need both the talent and the organization to educate each child who arrives at the schoolhouse door. Some show up ready, but many do not at this critical time when young brains are developing rapidly.

51.What does the author say about pre-kindergarten education?

A)It should cater to the needs of individual children.

B)It is essential to a person's future academic success.

C)Scholars and policymakers have different opinions about it.

D)Parents regard it as the first phase of children's development.

52.What does the new Peabody study find?

A)Pre-K achievements usually do not last long.

B)The third grade marks a new phase of learning.

C)The third grade is critical to children's development.

D)Quality has not been the top concern of pre-K programs.

53.When does the author think pre-K works the best?

A)When it is accessible to kids of all families.

B)When it is made part of kids' education.

C)When it is no longer considered a luxury.

D)When it is made fun and enjoyable to kids.

54.What do we learn about Mayor Megan Barry?

A)She knows the real goal of education. B)She is a mayor of insight and vision.

C)She has once run a pre-K program. D)She is a firm supporter of

pre-K.

55.What does the author think is critical to kids' education?

A)Teaching method. B)Kids' interest.

C)Early intervention. D)Parents' involvement.

2016.3

Attitudes toward new technologies often fall along generational lines. That is, generally, younger people tend to outnumber older people on the front end of a technological shift.

It is not always the case, though. When you look at attitudes toward driverless cars, there doesn't seem to be a clear generational divide. The public overall is split on whether they'd like to use a driverless car. In a study last year, of all people surveyed, 48 percent said they wanted to ride in one, while 50 percent did not.

The fact that attitudes toward self-driving cars appear to be so steady across generations suggests how transformative the shift to driverless cars could be. Not everyone wants a driverless car now—and no one can get one yet—but among those who are open to them, every age group is similarly engaged.

Actually, this isn't surprising. Whereas older generations are sometimes reluctant to adopt new technologies, driverless cars promise real value to these age groups in particular. Older adults, especially those with limited mobility or difficulty driving on their own, are one of the classic use cases for driverless cars.

This is especially interesting when you consider that younger people are generally more interested in travel-related technologies than older ones.

When it comes to driverless cars, differences in attitude are more pronounced based on factors not related to age. College graduates, for example, are particularly interested in driverless cars compared with those who have less education: 59 percent of college graduates said they would like to use a driverless car compared with 38 percent of those with a high-school diploma or less.

Where a person lives matters, too. More people who lives in cities and suburbs said they wanted to try driverless cars than those who lived in rural areas.

While there's reason to believe that interest in self-driving cars is going up across the board, a person's age will have little to do with how self-driving cars can become mainstream. Once driverless cares are actually available for sale, the early adopters will be the people who can afford to buy them.

46. What happens when a new technology emerges?

A) It further widens the gap between the old and the young.

B) It often leads to innovations in other related fields.

C) It contributes greatly to the advance of society as a whole.

D) It usually draws different reactions from different age groups.

47. What does the author say about the driverless car?

A) It does not seem to create a generational divide.

B) It will not necessarily reduce road accidents.

C) It may start a revolution in the car industry.

D) It has given rise to unrealistic expectations.

48. Why does the driverless car appeal to some old people?
A) It saves their energy. B) It helps with their mobility.
C) It adds to the safety of their travel. D) It stirs up their interest in life.
49. What is likely to affect one's attitude toward the driverless car?
A) The location of their residence. B) The field of their special interest
C) The amount of training they received. D) The length of their driving experience.
50. Who are likely to be the first to buy the driverless car?
A) The senior. B) The educated.
C) The wealthy. D) The tech fans.
Passage Two
Question 51 to 55 are based on the following passage.
In agrarian (农业的), pre-industrial Europe, "you' d want to wake up early, start working with the sunrise, have a break to have the largest meal, and then you'd go back to work," says Ken Albala, a professor of history at the University of the Pacific, "Later, at 5 or 6, you'd have a smaller supper."
This comfortable cycle, in which the rhythms of the day helped shape the rhythms of the meals, gave rise to the custom of the large midday meal, eaten with the extended family. "Meals are the foundation of the family," says Carole Counihan, a professor at Millersville University in Pensylvania, "so there was a very important interconnection between eating together" and strengthening family ties.
Since industrialization, maintaining such a slow cultural metabolism has been much harder, with the long midday meal shrinking to whatever could be stuffed into a lunch bucket or bought at a food stand. Certainly, there were benefits. Modern techniques for producing and shipping food led to greater variety and quantity, including a tremendous increase in the amount of animal protein and dairy products available, making us more vigorous than our ancestors.
Yet plenty has been lost too, even in cultures that still live to eat. Take Italy. It's no secret that the Mediterranean diet is healthy, but it was also a joy to prepare and eat. Italians, says Counihan, traditionally began the day with a small meal. The big meal came at around 1 p.m. In between the midday meal and a late, smaller dinner came a small snack. Today, when time zones have less and less meaning, there is little tolerance for offices' closing for lunch, and worsening traffic in cities means workers can't make it home and back fast enough anyway. So the formerly small supper after sundown becomes the big meal of the day, the only one at which the family has a chance to get together. "The evening meal carries the full burden that used to be spread over two meals," says Counihan.
51. What do we learn from the passage about people in pre-industrial Europe?
A) They had to work from early morning till late at night.
B) They were so busy working that they only ate simple meals.
C) Their daily routine followed the rhythm of the natural cycle.
D) Their life was much more comfortable than that of today.
52. What does Professor Carole Counihan say about pre-industrial European families eating meals together?

A) It was helpful to maintaining a nation's tradition. B) It brought family members closer to each other.
C) It was characteristic of the agrarian culture. D) It enabled families to save a lot of money.
53. What does "cultural metabolism" (Line 1, Para. 3) refer to?
A) Evolutionary adaptation. B) Changes in lifestyle.
C) Social progress. D) Pace of life.
54. What does the author think of the food people eat today?
A) Its quality is usually guaranteed. B) It is varied, abundant and nutritious.
C) It is more costly than what our ancestors ate. D) Its production depends too much on technology.
55. What does the author say about Italians of the old days?
A) They enjoyed cooking as well as eating. B) They ate a big dinner late in the evening.
C) They ate three meals regularly every day. D) They were expert at cooking meals.