平成21年9月入学・平成22年4月入学 大学院博士(前期)課程入学者選抜学力試験

注意事項

- 1.試験開始の合図があるまで,この問題冊子を開かないでください.
- 2.問題は1ページから6ページにあります.ページ番号のついていない紙は下書き用紙です.
- 3.解答用紙は3枚に分かれているので,すべての解答用紙の所定欄に受験番号と氏名をはっきりと記入してください.
- 4.解答冊子の表紙の所定欄に受験番号と氏名をはっきりと記入してください.
- 5.下書き用紙2枚が解答用紙と一緒にあります.
- 6.試験中に問題冊子の印刷不明瞭,ページの落丁・乱丁および解答用紙の汚れ等に 気がついた場合は,静かに手を上げて監督員に知らせてください。
- 7.試験終了後,問題冊子および下書き用紙は持ち帰ってください.
- 8.問題ごとならびに問いごとに配点が記されています.

I Reading Comprehension

Read the article below and answer the following questions. (配点 70点)

PROJECT FUTURIUM: Do Futurists Dream of Electric Sims?

Science fiction writers create stories about possible and impossible future worlds - often disturbing dystopias. Futurists on the other hand, research and analyze the future using various methods and tools, with the aim of creating and communicating alternative images of the future. With this in mind, futurists are always looking for new predictive technologies.

①Imagine this scenario in 2019: ②You and your friends step into an Internet-based synthetic environment with virtual-reality-type headsets and other sensory peripherals. Using a futures-making tool-box, you create an alternative future world: a future community for the 'new olds' averaging 130; a 100% recyclable future toilet; or a unique lifestyle which could transform the future. After making this future world, you are ready to experience it. How does it taste, feel, smell, sound, and look? You can also change it - ready for other people to use, evaluate and re-design.

Sound like science fiction? It has long been a dream of futurists to create a new kind of synthetic environment which allows people to not only simulate possible future worlds, but also to actively 'co-create' them. With the help of state-of-the-art Information, Communications and Media Technologies (ICMTs), a group of futurists are now working on Project Futurium.

The Project Futurium concept is supported by media theorist and entrepreneur Brenda Laurel, who claims: "Good simulations will not only help us learn about systems, they may help us evaluate policies and form political goals. Simulations can also strengthen accountability by helping us to understand the effects of actions taken by particular companies, industries or governments."

The emergence of the so-called 'experiential industries' created by a new kind of professional called the 'experience designer', was predicted in the 1970 best-seller 'Future Shock' by Alvin Toffler. Consider three precursor technologies. SIM City is a popular well-known game in which one can design and manage a whole city. Second Life, a topical virtual world developed by Linden Lab and accessed

via the Internet, enables its 'residents' to interact with each other through avatars. Residents can explore, participate in activities, create and trade virtual property, or travel throughout the world. Finally, is *Exploratorium*, a public science museum in San Francisco renowned for its creative use of the human senses for communicating science and technology concepts.

Though significant, the <u>Smissing link</u> in all these is the concept of 'co-creation' - the ability for multiple users to create visualizations of future scenarios. This makes Project Futurium radically different to existing synthetic environments.

To illustrate the concept, students at a Japanese university have made a number of prototypes. In one, named *KidzPlay*, students designed a synthetic environment which allows children to create their own play-spaces: playgrounds for and by kids. Results of child-user prototype tests produced novel types of play adults couldn't imagine.

In another, named 4-Us, users played a political game in which they could see, smell, hear, taste and touch the effects of policies created by political parties. A policy such as "Japan as long-living society 2029" where the average age was 130 or more, for example, could be experienced as if in real life. Before-after surveys reveal that one-time only users gained an 80% advantage on Futures Awareness Surveys over non-users who found it difficult to imagine and articulate the consequences of such a future society. One-time users were also able to make detailed descriptions of this society, identify multiple problems, and suggest creative solutions. By experiencing such a future society, the user is enabled to make informed decisions about how to best prepare for such a society - here and now.

Despite many technical obstacles, a synthetic environment such as Project Futurium could revolutionize how people think about the future, transforming them from passive consumers of other peoples' futures to active co-creators of future worlds.

SOURCE: Unpublished research proposal: 2009

Notes

- Futurist 未来学者
- Futures Studies 未来学
- dystopias 反ユートピアの世界
- image of the future 未来像
- futures-making tool-box 未来作り道具箱
- predictive technologies 予測能力のある技術
- experiential industries 体験型産業
- precursor technologies 先駆の技術
- political parties 政党
- policy 公共政策
- human senses 人間の五感
- synthetic environments 人工的環境
- co-create 共同創作する
- visualization 可視化
- obstacles **障害物**

| froi | What does ① <u>imagine this scenario</u> indicate? Choose the best answer in the following. (配点 4点) | | | | |
|--|--|--|--|--|--|
| (A) | A true story from the future. | | | | |
| (B) | One possible real-world application of Project Futurium. | | | | |
| (C) | A paragraph from a famous science fiction film. | | | | |
| (D) | A new way of living. | | | | |
| 問2] | ranslate the underlined paragraph ② into Japanese. (配点 20点) | | | | |
| | What is the "missing link"③ between existing synthetic environments and ject Futurium? Choose the best answer from the following: (配点 4点) | | | | |
| (A) | Radical visualizations. | | | | |
| (B) | The concept of multiple users. | | | | |
| (C) | Significant technologies found in other synthetic environments. | | | | |
| (D) | Creating futures collaboratively. | | | | |
| | Alvin Toffler predicted that 'experience designers' of the future would do | | | | |
| 点) | ch of the following? Choose the best answer from the following. (配点 4 | | | | |
| 点) | ch of the following? Choose the best answer from the following. (配点 4 | | | | |
| 点) (A) | ch of the following? Choose the best answer from the following. (配点 4 | | | | |
| 点) (A) (B) | ch of the following? Choose the best answer from the following. (配点 4) Become the new wave of 'pop' art. | | | | |
| 点) (A) (B) (C) | ch of the following? Choose the best answer from the following. (配点 4) Become the new wave of 'pop' art. Design prototype simulations such as SIM City. | | | | |
| 点(A) (B) (C) (D) | ch of the following? Choose the best answer from the following. (配点 4) Become the new wave of 'pop' art. Design prototype simulations such as SIM City. Become a new kind of profession. | | | | |
| 点(A) (B) (C) (D) | Become the new wave of 'pop' art. Design prototype simulations such as SIM City. Become a new kind of profession. Create futuristic artworks using simulations. According to the text, what is the main goal of Project Futurium? Choose | | | | |
| 点(A) (B) (C) (D) 問5 A | Become the new wave of 'pop' art. Design prototype simulations such as SIM City. Become a new kind of profession. Create futuristic artworks using simulations. According to the text, what is the main goal of Project Futurium? Choose best answer from the following. (配点 4点) | | | | |
| 点(A) (B) (C) (D) 問5 A the | Become the new wave of 'pop' art. Design prototype simulations such as SIM City. Become a new kind of profession. Create futuristic artworks using simulations. According to the text, what is the main goal of Project Futurium? Choose best answer from the following. (配点 4点) To stimulate possible future worlds. | | | | |

- 問 6 What is the main point of Laurel's message about simulations? Choose the best answer from the following. (配点 4点)
 - (A) Simulations can help people in policy decisions.
 - (B) Simulations can strengthen accountants' abilities.
 - (C) Simulations help governments and companies understand our actions.
 - (D) Simulations are good but have limited potential for social improvement.
- 問7 Judge each statement below **true** or **false**, according to the text. (配点 30点)
 - (A) Project Futurium is already being applied in various organizations.
 - (B) The *KidzPlay* prototype produced astounding novels and plays.
 - (C) Exploratorium is known for its public science communication programs.
 - (D) Data from 4-Us surveys showed their educational value.
 - (E) The average Japanese in the future will live to 130.
 - (F) The Project Futurium concept derives from experiential designers described in Toffler's *Future Shock*.

II Academic Skills

Answer the following question about the research reported in the article. (配点 30 点)

Using your own words, describe the *purpose* behind Project Futurium, the *results* of student-made prototypes, and *future benefits*, as suggested in the article. Write your answer in English within 60-90 words.

問題は,このページで終りである.