

ILO Office for Japan “The Future of Work” Interview Series #3

“From Employment Security to Career Security in the Age of Artificial Intelligence”



(Photo credit: JILPT)

Interview with Prof. Shinya Ouchi, Professor of Law at Kobe University Graduate School of Law

National dialogue on the Future of Work took place on 12 May 2017 in Tokyo co-hosted by the Japan Institute for Labour Policy and Training (JILPT) and the ILO. The forum discussions focused on key factors including technological innovations and aging population with declining birthrate, which are expected bring significant changes in the world of work. Following the forum, ILO Office for Japan had an in-depth discussion with Prof. Shinya Ouchi, Professor of Law at Kobe University Graduate School of Law, who was the coordinator during the panel discussions at the forum, on issues such the importance of intellectual creativity and self-education in the age of artificial intelligence (AI) as well as the need for increased support to self-employed workers.

1. Education in the age of artificial intelligence (AI)

Education system must develop intellectual creativity

ILO Office for Japan (ILO): In the age of AI, there are notions that skills such as communications and problem-solving skills and the ability to work independently will be important for non-routine work, which is difficult to be replaced by the machines. Given that Japanese are said to be generally not particularly good at these skills, what education system will be needed?

Prof. Shinya Ouchi (SO): This is a very important topic that relates to various issues. I think it is better to focus on building on one's strength rather than trying to cover weaknesses. For example, how much do communication skills contribute to productivity, and should the Japanese who are not good at these skills improve them? For non-routine jobs, the most important competency will be creativity. What kind of education system can develop creativity needs be examined by people engaged in education sector, but I think it is a shared awareness that current education system has not focused on creativity. If you are exceptionally creative, communication skills might not be necessary. It is important to focus on the essence of work, and if the essence of work in the future emphasizes intellectual creativeness, education for that core aspect will be key. In addition to creativity, if you also possess good problem-solving and communication skills, that may be advantageous. However, as advances in information and communication technology (ICT) enables work to be performed without face-to-face interactions, and work styles change, competencies such as the ability to work in a team and communication skills may lose value. Again, creativity will be increasingly important as it is creativity that adds value. In addition, in these fast-changing times, in which today's cutting edge skills and technology might be obsolete in 5 to 10 years, adaptability will be needed. Important quality then is not cutting edge skills and technologies, but basic and fundamental competencies that can develop adaptability. Some might not be particularly good at intellectual creativity and adaptability, but it is important that the education sector examines this and indicates goals towards developing intellectual creativity.

2. Job training in the age of AI

Critical ability of self-education and self-reliance

ILO: What kinds of framework for training, both within the company and outside of the company by public institutions, are needed as there are notions that more professional, job-based work style will be increasingly common amid rapid advances in technological innovation?

SO: This is also related to the expansion of self-employment in the future. Today, about 90 percent of workers are engaged in employed labour, but in the future, it could be expected to fall below 50 percent with the increase of people engaged in self-employment. In principle, there is no on-the-job training by companies for self-employed workers, and thus the key will be self-education. Facilities for self-education is being developed today, and information can be obtained through internet. Many successful self-employed, independent contractors today are those that have left companies and taught themselves. So having the mindset for self-education, and efforts to utilize available tools to teach yourself are important. On-the-job training provided by companies has been very sophisticated and contributed to increasing productivity of Japanese workers, but this may be less relevant in the future. It could even work against yourself to spend years learning skills and jobs within a company that might not be relevant 10 years in the future. In the similar manner, off-the-job training for employed workers may not be expected to deliver great results. All in all, school education will be critical for youth for the future. It will be even more important for schools to deliver education that improves adaptability and basic and fundamental education.

The mentality for self-education will also be needed. Japanese culture has a focus on getting on the right side of the authority or system. In school, you get on the right side of teachers and exam questions, and in companies, you get on the right side of your boss. Those that are able to get on the right side get benefits. I feel that it will be difficult for this kind of system to continue anymore. This is related to the earlier topic of intellectual creativity, and what is needed now is not to think about

getting on the side of authority or system but to decide on your own. Education that allows this mentality and the sense of self-reliance is therefore needed. This might not sound too realistic now as the people and institutions involved in the education sector are quite comfortable with the current setting. However, in the age in which lifetime and stable employment is becoming elusive, one must learn to think for herself or himself rather than only listening and following what the parents and teachers say. In the similar manner, it will also be important for teachers to change their mentalities to adapt to future needs.

People that have been out of school for years and decades also have to change their mentalities. This would be particularly challenging for people in their 40s. Technological innovations requiring changes in skills and work styles may happen two or three times in their careers. Thus, developing your career based on self-reliance and self-education will increasingly be needed. Long working hours in Japan has many issues including health related issues, but the biggest problem is that it takes away the time to think, especially towards the future when the ability to plan, manage and build your own career will be crucial.

ILO: People that have received higher education might be able to change to build their own careers through self-education, but not everybody has that capacity. What about those without the capacity to adapt?

SO: That is a very good question, because actually, I think the college-educated high achievers are the ones at risk. The project of a robot trying to pass the entrance exam for the University of Tokyo was mentioned during the forum. That robot managed to score 57 in the standard deviation score, which is way above ordinary people. Most of what the white-collar workers are doing today is mainly routine work that does not require too much creativity and may be replaced by robots. On the other hand, the people that might not have excelled in school under the current education system have great opportunities. They may not have been great at accumulating knowledge for examinations or processing information, but they might excel in areas that AI and robots are weak in such as those requiring human aspects or even communication skills.

3. Globalization and companies' human resource policies

New and different business opportunities

ILO: If the advances in AI reduce barriers of international business as well as languages, will companies' human resource policies further globalize? What measures (including education and training) are needed in order for Japanese workers to successfully compete at the international level?

SO: This should be viewed as an influence of internet society as well as AI. Since there are no borders in the internet society, information circulates freely across the globe. Of course, physical transfer of goods requires moving across borders, but as information gains importance in a more digitalized industrial society, barriers of borders become less significant. Moreover, development of automatic translation will reduce the language barriers enabling companies to hire people without consideration for borders. Japanese people can also do business with companies from across the world without language barriers. People that had ability to deliver service but could not speak good English can be hired by American or British firms, or do business with them as self-employed

workers. As far as the companies' human resource management is concerned, it is expected to further globalize and Japanese work style will shift to a more Western, job-based work style.

It may seem that Japanese workers will be exposed to an increased international competition, but that is not necessarily the case. There may be business opportunities in the future society that you would not have imagined before. For example, many people are using smartphones to start small businesses, which is quite different from business trend 10 years ago. Even Toyota feels the need to change, and they may not manufacture cars in the future. Thus, if you compete doing what everybody else is doing, then that might be difficult, but there will be various new possibilities and business opportunities. In order to be well prepared, you need to think about what you are good at. For example, you can think about what you are good at, and see if that might be good business using the smartphone.

4. Support to self-employed workers

From stability of employment to stability of career

ILO: It was pointed out during the forum that in the face of the expected expansion in self-employment work, it will be critical to consider support to self-employed workers in addition to the traditional concept of labour law and social security that was developed to protect workers. What kinds of institutions and policies are needed?

SO: Self-employed workers, without an element of dependency, is not covered by labour law. Labour law was developed for protection of workers working in dependent conditions. By definition, self-employed workers would not be working in the condition of personal subordination, while they may be economically dependent. Thus, there is no policy framework focusing on protection of self-employed workers as they are deemed to take individual responsibilities. However, I believe there is a need to examine this. In fact, I think the need to protect dependent workers only partially explains the origin of labour law. The other half is because employers during industrial revolution realized that in order to sustain industrial and economic growth, sustainable labour was required. Sustainable labour in turn required healthy labour, and occupational health and safety had to be improved. Similarly, as self-employed workers increase to take 50 or 60 percent of labour market towards the future, their share of labour market will be enormous. If the market is not safe and healthy for them, then that will be disadvantageous for the economy as a whole. With this logic, if self-employed workers greatly increase, the government needs to be engaged to create good working conditions for them.

From this perspective, there are three areas that the government can look into. First is to create clear rules upon signing a contract so that self-employed workers are reassured when they sign contracts. This is especially so as traditionally, Japanese business culture has not been as contract-oriented. There needs to be rules for disclosure of contract terms, and unfair contracts need to be regulated and controlled. These are issues that the Antimonopoly Act and Subcontract Act deal with, and instruments such as the Subcontract Act can be referred to. The second area that the government needs to engage in and support is education and training. Important concept here is the right to develop a career, which is the right for people to build and fulfill their careers throughout the working life. In a way, this is a preventative and proactive way of safety net, which is aimed at preventing cases that workers and people are exposed to vulnerable conditions such as poverty and unemployment. Basic idea behind labour law is that workers are vulnerable a priori, and thus need protection. However, I believe that it is important to think about ways that they don't fall in

vulnerable conditions to begin with. This is the case for ordinary workers and even more so for self-employed workers. Policies need to focus on preparing workers to be in strong bargaining positions and strengthening their employability. This might sound idealistic but rather than jumping to the conclusion that realizing employability is not possible, I think more efforts should be focused on strengthening people's employability throughout the working life.

The third area is safety net for those that, despite the efforts for education and training, and strengthening employability, lapse into unemployment or poverty. Social security system for self-employed workers is not well developed compared to ordinary workers such as for health insurance. Employed workers have worker's accident compensation insurance. Self-employed workers do not have employment insurance, while employed workers have favorable pension scheme. Employed workers enjoy much more favorable treatment. If the safety net system is to be more equal and fair, today's social security system needs to be fundamentally reexamined.

5. Collective representation of interests for self-employed workers

Loosely tied network for collaboration and information sharing

ILO: It was also pointed out that as self-employed workers increase, the traditional collective mechanisms to represent workers' voices need to be reviewed, and new mechanisms explored. In your view, what institutions and rules are called for?

SO: Representation of interests for self-employed workers will be different from ways that trade unions are organized today. There could be groups or networks for information sharing among the self-employed with similar occupational interests, and these groups may indicate conditions in which they would take orders to those placing orders. However, there are possibilities that such mechanisms infringe antitrust law if a group is large enough to influence the market, which may be considered as a cartel. I think there will be more research and people looking into this area if it relates to antitrust law. Given that many self-employed workers are engaged in internet society, I think there may be groups of workers collaborating and sharing information online, and creating loosely tied associations. Solidarity is a basic and popular concept so it will likely continue in one form or another. For self-employed workers, I think it will be a bit different from the ways that trade unions organize today such as through strikes and collective bargaining. I am not certain that it can be referred to as a system for representation of interests, and it will probably not be as systematic as the current system.

6. Universal basic income

Values created by machines need to be distributed

ILO: There are those that believe as work becomes scarce, there is a need to consider universal basic income as a policy for income redistribution through tax system? How would basic income be possible financially?

SO: If this is tried as a measure to tackle poverty, there would be financial difficulties as you mentioned. However, in the context of discussion on scarcity of work, if AI and robot can replace humans for work, people will lose means for labour income, and some means for distribution will be needed. There is a need to distribute value that is created by the machines, and basic income would be a way to do this. People can only get income through either labour, capital or social security. If

labour will be scarce, and because many people do not hold means for capital income, people will have to rely on distribution from the government. I am not sure whether this would take the form of basic income, but there will have to be some means for distribution. In terms of what is needed to solve the issue of poverty in this day and age, basic income could be a good way. I do think that minimum wage policies, such as artificially raising the wage level, would not serve the purpose mainly because wage policies are not well targeted as it applies to every worker, even those that are not vulnerable to poverty. Effective poverty reduction mechanisms would target poor households, and that can be achieved through social security and social welfare, and not by wage policies. As far as basic income as a poverty reduction measure, it can also be problematic if it is not well-targeted. It is important to note that effective policy would ensure that financial assistance would reach those that are really in need, guaranteeing decent living standard for them.

7. Women and work

Promoting women's real life choices

ILO: How is AI expected to affect women at work positively and negatively?

SO: The reality in Japan today is that women do more housework than men. In this reality, ICT would allow options for women to work while staying home and engaging in care work. Thus, technologies and telework help create an enabling environment for women to work. In addition, as I mentioned earlier, in the age of AI and new technologies, intellectual creativity gains importance and elements of physical labour will likely decrease. Thus, technologies will help remove disadvantages that women have at many levels such as issues of physical strengths, and housework and care work, as well as bringing out areas in which women's strengths are fully utilized. Concerning today's initiatives in promotion of women's participation and advancement at work, important thing to keep in mind is for women to have real life choices. If the objective is to push women into labour force in order solve the issue of labour shortage, then that might not be promoting real choices for women.

8. AI and productivity

Balancing workers' and consumers' interests

ILO: Various initiatives have been undertaken in Japan in order to improve labour productivity. However, Japan's productivity has remained stagnant among OECD countries. How can AI contribute to improve labour productivity in white-collar work and service industry?

SO: In many industries in Japan, excessive service is provided for free or at no extra cost. For example, in restaurants, as soon as you are seated at the table, you are immediately served water and wet towel. The home delivery industry provides same-day delivery. Many stores and restaurants are open 24 hours a day. The problem is that the consumers regard these excessive services as a given, and the cost is not reflected in the price or wage of the workers who deliver the services. Usually, there are consumers' interests and workers' interests. In Europe, you could say that workers' interests are very well protected and consumers' interests are secondary. This is because consumers are also workers at different times, and thus workers' rights are respected. However, in Japan, the situation is reverse, and consumers are respected and workers are subordinate to consumers' interests. Thus, the issue of productivity in service sector has more to do with changing this mentality than the use of AI. Now, partly because of the issue of labour shortage as well as the

increasingly critical views towards overwork, there is a movement towards respecting workers' interests. Technologies including AI are powerful tools to help address the issue of reduction in labour force.

9. ILO's role

Need to go beyond employer-worker framework

ILO: As the factors that affect the world of work evolve, what roles are expected of the ILO?

SO: Understandably, the ILO has focused on promoting decent work in the world of dependent labour. However, if self-employed workers significantly increase as I mentioned earlier, it will be also necessary to think about how to support independent contractors. With its impartiality, the international mandate of the ILO will remain critical, particularly with regard to standards, regulations and rules in the globalized internet community. Concerning the important concept of tripartism, the future of the ILO hinges on the ability of the ILO to go beyond the employer-worker framework. As in the case for self-employed workers, it will be preferable for rules to be made in more market-oriented ways. These should be soft rules such as a requirement to disclose certain conditions upon signing of contract or restriction of certain articles. I think that these soft rules are more important in the future rather than supervisory and punitive measures. The ILO will do well by moving to this direction.

10. Meaning of "work"

You need to build your own life design

ILO: What does "work/to work" mean for you?

SO: Work is closely related to way of life. You need to proactively design life by allocating work and life in the limited time of life. Through self-initiative, you need to design life by the day and by decades, and decide what you would like to do at what age. This can include work, volunteer, community activities or running for office, but you need to build your own design. Today is an age that we can and have to do this.

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