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**Aging Population, Knowledge Spill-Over
and Civil Society**

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1. Introduction

This article deals with the impact on Japan's civil society of demographic change and knowledge transformation. We base our work on the supposition that there are two different spheres, each with different approaches to new technologies. One sphere is the economy where new technologies are developed and extensively used. Material resources are abundant and the state acts as a third party in support of technological development. In contrast to this, while the non-government organisations and non-profit organisations of civil society have less access to new technologies, they do possess a pool of experienced people, i.e. they have human capital and time at their disposal. The state exerts influence via (the amendment of) laws and financial support. One of the most distinct differences between both spheres is the amount of time people can spend on certain projects.

This paper is meant to provide the (theoretical) background for our research project on "Aging Society, Knowledge Society and Civil Society in Japan." In the first section, we deduct the definitions we use from the literature, thus explaining the discourses we are referring to (parts one to four). We then derive several hypotheses (part five), which are currently being tested in a large-scale survey. The analysis of the survey data and the interviews we conduct will enable us to summarize the findings

and test our hypotheses. Consequently, this should lead to our next publication.

2. Japan's Aging Population: Data, Facts and Figures

Japan has a rapidly aging population. In 2000, the life expectancy was about 85 years for Japanese women and 78 years for men. It is expected to increase even further to 89 years for women, and 81 years for men by 2050. Combined with a low and even declining birth rate, this means that the ratio of old people in Japan is exploding. While in 2005, the ratio of persons older than 65 years is quoted as being about 20% of the total population, it is expected to rise to 26.3% in 2015, and to about 39% in 2050 (IPSS 2000). Within this group, the share of persons older than 75 is also growing quickly.

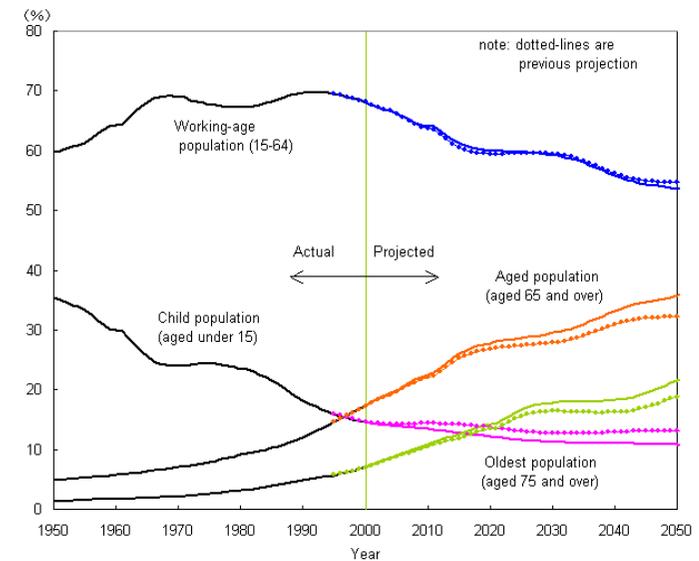


Fig. 1: Trends in the Percentage of Major Age Groups (Source: IPSS 2002)

The trends shown in Figure 1 imply a number of challenges that Japan either faces now, or will face to an increasing degree in the future. Among them are: the social security system, the savings system and its relation to wealth, and the labour market.

The Social Security System

Japan's social security system operates on a "pay-as-you-go" basis (Conrad 2002: 97), i.e. the pensions paid out today are paid for through the contributions of today's working population. With the declining number of people of working age and the rising number of retired people, the burden on each employed person

will rise in the future. The necessity to reform the system is obvious, and the reforms that were begun at the end of the 1990s, including the introduction of US-style 401k plans, have a positive impact on the financial status of the pension system (Conrad 2002: 115). However, it is also clear that the Japanese state sees its role primarily as providing a moderate basic level of retirement arrangements, urging individual citizens to take care of their pension arrangements above this level. Due to changes in the system and diversifying savings practices and abilities (cf. next paragraph), it can be expected that future income distribution will be less equal than today (Conrad 2002: 117).

Savings and Wealth

Households accumulate wealth if they either put away a part of their income or if the value of their existing savings increases. It has become clear that there will be more retired households than households in their prime saving years in Japan within the next 10 to 20 years. Considering that current “younger households” save less than the older ones, and that the savings they will be able to rely on will be even less, we can expect that the savings rate will decline in Japan (Farrell & Greenberg 2005: 4). Moreover, given the low return on savings, it comes as no surprise that Japan’s financial wealth will shrink (cf. Figure 2). This may bring down living standards in Japan, if no countermeasures are taken.



Fig. 2: Slowly Declining Wealth (Source: Farrell&Greenberg 2004: 5)

The Labour Market

Equally important are the challenges to the labour market. The decline of the workforce calls for further changes. One solution would be to increase immigration. According to Campbell (2004:159), “[b]y welcoming more Asian immigrants, Japan could gradually become a pan-Asian nation with a strengthened identity and gene pool”. There is, of course, some immigration in

present-day Japan (Morris-Suzuki 2002), but this is dominated by low-income personnel for the service industry (under the broadest definition this also includes restaurants, bars and clubs), the construction industry, and other “3K” industries¹. Increasing the number of immigrants, however, does not seem to be favoured by either the government or the bureaucracy.

Instead, the ruling elites favour the support of technical research and development projects to increase the effectiveness of production. The use of robots in production plants, or at least in parts of the production line, is already a reality. However, the assignment of robots in the service industry is aimed at achieving current goals rather than developing new fields of application and coping with labour shortage (Plate 1997). The car industry, in particular, seems to be eager to diversify into the field of robot technology. Honda’s “Asimo” robot demonstrates state-of-the-art technology to every visitor at the company’s headquarters, and Toyota’s new use of “partner robots”² is an explicit attempt to make the most of the new sector. However, future development

¹ “3K” is the abbreviation for three adjectives, “kiken, kitsui, and kitanai” meaning dangerous, hard and dirty. This term is often used to describe those jobs that are not popular among the Japanese workforce.

² Toyota’s shows at the EXPO in Aichi give a good impression of that idea. According to the homepage, “Robots that function as people in various activities will become “partners” for people in the future. These partners will work with us, manipulating not only musical instruments, but also various tools, with their hands.” (http://expo.toyota-g.com/english/index_en.html).

will show whether this approach alone is sufficient to address the challenges outlined above. We anticipate that a combination of various approaches may be necessary to deal with the changing (aging and shrinking) labour market.

3. Age and the “Digital Divide”

Although the term “digital divide” was originally a concept employed to denote an inequality of access between highly developed Western countries and less developed countries, it does exist within Western countries as well. The existence of a domestic digital divide (in each country) is increasingly acknowledged with references to “informational black holes,” mostly in inner-city areas. Socio-economic factors are cited as a cause for unequal access (Castells, quoted in Millward 2003; Norris 2001: 68–92).

In addition to the inclusion of domestic inequality factors, the digital divide is no longer only seen in binary terms as a distinction between “access” and “non-access”. The category of “access” sometimes includes even the theoretical opportunity to access the Internet in a library, or to buy a computer if one so wished. In reality, however, many non-users have Internet access within their household but avoid using it (DiMaggio et al. n.d.: 8). Instead of the “access digital divide,” it may therefore be necessary to re-conceptualise the digital divide to recognise the

“second level digital divide” (Hargittai 2002) or “social digital divide” (Harper 2003). These concepts focus on motivation, skills, content, and social (support) networks, rather than on hardware and autonomous access, thereby acknowledging the gap between enthusiastic and skilled users on the one hand, and on the other hand those who may have access but avoid using the Internet for various reasons.

The **digital divide** can thus be defined as:

an inequality of access or use of, as well as benefit from the Internet depending on factors such as a person’s country or region, race, socio-economic status, profession, education, gender, and age.

Two aspects of the digital divide are of particular interest here, namely age and employment status. The digital divide by age is only too obvious in all statistics, but rarely elaborated on. The expectation that the digital divide by age will gradually disappear is presumably based on subscriber statistics. In the US, surveys show that seniors (over 65) and older adults (55-64) have the highest increases in Internet users (Greenspan 20.11.2003). Although, even this does not mean that the gap is closed, as user rates among younger generations are already reaching saturation and the seniors are just starting to catch up. Even in the US, the share of senior Internet users is still far lower than in other age

groups (Fox 25.03.2004), albeit higher than among Japanese seniors (SeniorNet and JRI 2002).

Some studies reveal that older people’s reluctance to use the Internet is rarely due to a genuine lack of access, but that skills and motivation play a major role. A survey in Britain found that many of the Internet users answered that they used it “hardly ever,” and that non-users often cited a lack of interest as their main reason. Based on follow-up interviews, the author speculates that these answers were given as an “easy way out” by many who feared the humiliation of not being able to operate relatively simple functions. Pride, he argues, appears to be a major trait in the current generation of elderly, resulting in their avoidance of the new technology if they lack the relevant skills (Millward 2003). Hargittai, based on a US survey, agrees that skilled and efficient use of the Internet is significantly related to age, with younger people accomplishing tasks much more quickly and more successfully.

[I]t is not enough to wire all communities and declare that everyone now has equal access to the Internet. People may have technical access, but they may still continue to lack effective access in that they may not know how to extract information for their needs from the Web. (Hargittai 2002)

Considering the characteristics of the digital divide outlined

above, it is even possible to predict, contrary to most expectations, that the effective gap will widen in spite of the narrowing access gap. The combination of motivational and skills barriers, and the constant development of new technologies³ may mean that unskilled, reluctant or rare users of the Internet fall back even further over time because with every new step in technology these barriers increase. In contrast to younger generations, older generations, particularly those above retirement age, are under no pressure to learn how to use a new programme. Their motivation to buy the necessary hardware and software may be lower, especially if their social networks do not rely on the newest technology, and in turn, if they lack the skills to use these new features even if they had a moderate level of Internet skill before. In that case they

[...] may be discouraged by the difficulties of finding information on the Web and thus may end up spending less time with the medium. Given that time spent on the Web is also associated with level of Web skill, lower level skills may persist over time. (Hargittai 2002)

Japanese statistics show the digital divide by age both with regard to Internet use and the related issue of mobile phone

³ Michael Oden at the AoIR conference, *IR 5.0: Ubiquity*, 19.09.2004 in Brighton.

(*keitai*) use. A study in 2001 even found that the gap between high-use groups and low-use groups (distinguished by gender, education, and age) has expanded rather than closed (Internet Usage Trends in Japan 2002). This is particularly obvious in the use of mobile phones, one of the key access media to the Internet in Japan (see Figure 3). While at least 30% of people in their 20s “can’t imagine life without a mobile phone,”⁴ and almost every teenage boy owns one, only 15% of over 70-year olds use a mobile phone at all (Asahi Shinbun 17.11.2004, Asahi Shinbun 12.01.2005).

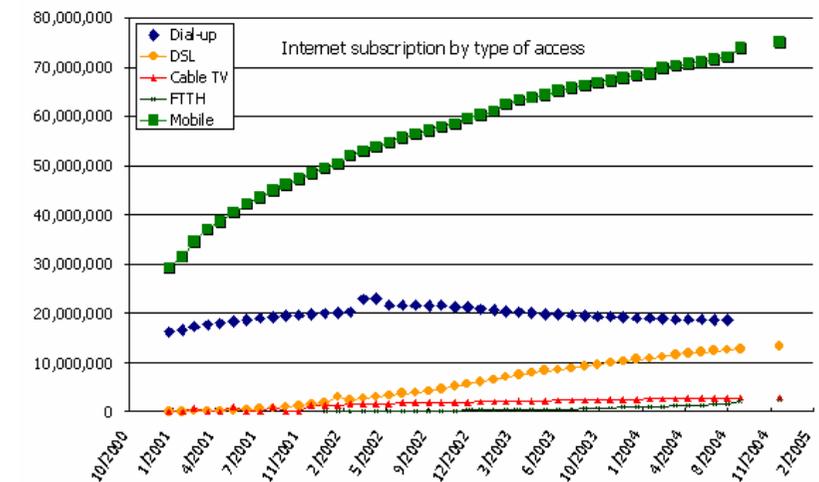


Fig. 3: Internet Subscriptions in Japan by Type of Access. (Source: based on Sōmushō 2004.)

⁴ Another survey conducted in 2003 found that 78% of people aged 20-24 find their mobile phone indispensable (NHK hōsō bunka kenkyūjo 2004: 189).

Compared to other countries, Japanese seniors may face even more hurdles in getting used to the new medium, just as it took computers and the Internet far longer to reach a larger share of the Japanese population as a whole. Some experts relate this to the writing system and the long absence of an easy-to-use typing interface which led to a strong preference for the fax machine (Tanikawa 06.10.2003). Even though interface and coding problems are now largely solved, a whole generation may still stick to their established preferences. Considering that the (further) life expectancy for a Japanese woman at age 65 is currently a staggering 23 years (OECD 2004), this generation of non-users will be around for decades, even assuming that the following generations should become users and thus close the gap.

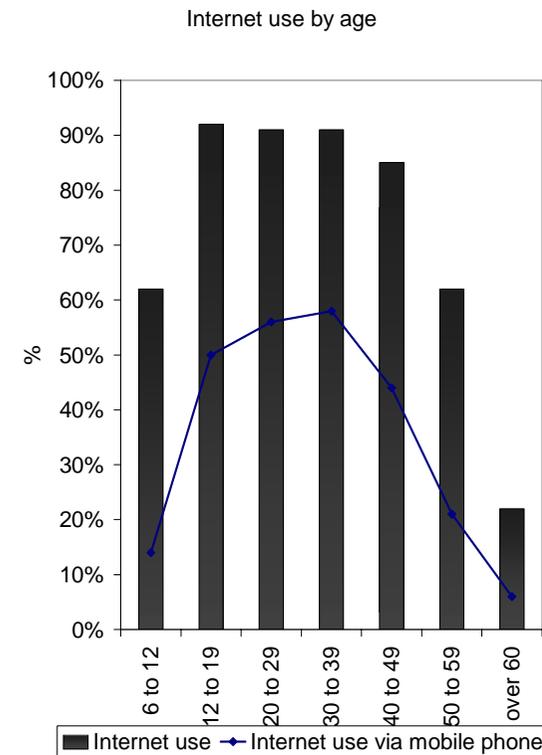


Fig. 4: Internet Use by Age in Japan (Source: based on *Asahi Shinbun*, 07.07.2004: 10.)

Of course, some Internet-based projects aimed at older people exist and generate considerable publicity – for example, an international exchange forum in the run-up to the Soccer World Cup 2002 (*Asahi Shinbun* 27.05.2002: 7). Official initiatives have tried to encourage senior Internet use, but apparently with little success. Out of eight “senior network activities” in Japan

enthusiastically mentioned by Kumagai (2001: 15), five did not exist three years later (including one organised by METI), one had changed its web address, and the remaining two were almost inactive. Considering the user groups, the activities in one or two of these networks may have declined due to illness or death of an active leader; but not all networks depend so much on individual personalities. We can infer that most of these networks must have disappeared because of a decline in interest – which might indicate a different kind of digital divide.

Clearly, whether someone is in employment or not is a major factor determining the effective digital divide between those who use the Internet often and skilfully and find it useful, and those who use it rarely or avoid it. For example, among Japanese respondents to a survey in 2001, only about 50% thought that the Internet was “helpful for work” – and these were mostly older (but not retired) male respondents who were likely to use the Internet in their jobs. On the other hand, new users, both old and young, tended to find it very unhelpful for work (Internet Usage Trends in Japan 2002). Another, non-random survey among senior Internet users in Japan and the US produced the unexpected result that Japanese users spent almost as much time online as their American counterparts, although Japan usually lags far behind the US in similar statistics. However, 63% of the voluntary respondents in Japan were younger than 60, compared

to only 13% in the US sample. Thus, a majority of those who answered the Japanese survey were actually in full-time employment and not entirely comparable with those seniors who are already retired.

We can therefore assume that Japanese seniors after retirement use the Internet far less than people in employment, and also less than seniors in the US. Even increasing usage rates among Japanese seniors will not easily close this gap, especially considering their high life expectancy. Although recently retired people may be more likely to use the Internet, the very old, whose share is growing, may not take it up. In addition, even a minimum level of “Internet usage” does not bridge the digital divide in terms of skills and motivation.

4. Civil Society in Japan

Concept and Definition

The concept of civil society can, depending on the definition, focus on the sphere in which certain actions take place, or on one social unit (the unit formed by the social contract), or a number of actors grouped together. We use the term *public sphere* (Habermas 1994) to describe the

forum where the state and various associations and movements (the civil society), including the organisations studied here, communicate on political topics.

Different interpretations, regarding the nature of the associations making up civil society, range from the classical notion of “bürgerliche Gesellschaft” to liberal and activist views. The classical concept focuses on *all* associations (Tocqueville c. 1840) and defines civil society in opposition to the state of nature but not in opposition to the nation state. The fact that people form associations defines civil society, as the arena in which such associations are formed, even if the associations have no political aims or political impact. Much of the more recent liberal interpretation also sees civil society not in opposition to the state but as complementary, for example, NGOs and voluntary associations take over some tasks for the state. Key terms used with this concept are the “common good” and “non-profit.” Activist interpretations, in contrast, see civil society as a balancing counterpart on a similar level to the state’s executive, although this concept also requires a higher authority to ensure the rule of law. Some interpretations of this activist view are normative in the sense that they define as “civil society” actors

only those associations with a particular (“progressive”)⁵ stance.

In our view, civil society does not include completely apolitical groups. The groups may be complementary to the state in the liberal sense often employed in Japan, or opposing or balancing in the activist sense, but they do engage in deliberations in the public sphere. Even if political influence is not their main objective, they contribute to a strong democracy by broadening the public deliberation of political topics (Barber 1984; cf. Schwartz 2003; Edwards 2004). In addition, they are concerned about the “common good” – although the scope of the common good may be subject to debate (as in the question of domestic violence being a private or public issue, see Fraser 1997: 86). This definition excludes profit-oriented economic enterprises. *Civil society* thus means

the totality of non-governmental and non-profit associations engaged in political deliberations in the public sphere and concerned about the common good.

We use the term *citizens’ groups* to describe these associations making up civil society. The term is quite similar to the widely used, broadest meaning of NGO, but lends itself more easily to including small, spontaneously formed networks without a formal

⁵ We are aware of the difficulties in using terms like “progressive” since their understanding/ meaning differs with respect to their surroundings.

organisational status, while “NGO” seems to imply stricter conditions for the legal status of the “organisation”.

Citizens’ Groups, Volunteers and Senior Citizens in Japan

In Japan, the concept of civil society gradually began to be promoted by the Japanese government in the 1980s and 1990s, after economic affluence had been achieved, and becoming a “global civilian power” that would promote peace and civilization throughout the world seemed an attractive alternative to the (constitutionally forbidden) military option of enhancing national prestige (Funabashi 1994; cf. Maull 1990/91). These strategic considerations coincided with a growing need in the population for a new purpose in life, since, as Hirata (2002: 162f.) argues, many had ignored their civic life for the sake of the national economy. With increasing prosperity, they found that the previously neglected civil society had to be rebuilt.

Civic grassroots movements had existed earlier, some triggered by environmental scandals such as Minamata disease, others in protest against the AIDS scandal of the 1980s or the introduction of Juki Net. While these were civil movements in the activist sense, the concept of civil society in Japan is dominated by the liberal view. It refers mostly to non-profit organisations working to supplement state activities in the welfare sector.

In order to tap the resources of civil society – mostly of time

but also certain skills and knowledge - the Japanese government increasingly supports civil society participation in various ways. A law making it possible to register an organisation as an NPO was established in 1998. In addition, many government agencies especially in the development sector (such as Zaimushō, Gaimushō, JICA), but also local governments, worried about the maintenance of care services after the introduction of a new health care insurance system in 2002, started to consider various ways of cooperating with citizens’ groups (*Asahi Shinbun* 18.02.2000: 17).

A new wave of charity-mindedness was caused by catastrophic incidents in the 1990s, including, first and foremost, the Kobe earthquake, but also the Sarin gas attack and the Monju incident, all in 1995 (Kingston 2004).

Since then, it has been argued that voluntary engagement has soared and even become fashionable. The loanword “volunteer” itself has become widely understood, although its meaning remains vague and debated. A professionally organised instruction meeting for volunteers for the municipal government of Tokyo as late as 2002 started with a lengthy explanation of the word “volunteer” and its meaning (Tokyo Municipal Industry and Labour Office 16.05.2002). In general use, the term volunteer does not necessarily include the concepts of “unpaid work,” “work for the common good,” or even a free decision to

participate, as the discussion about a new school subject of “voluntary work” (later renamed) shows (*IHT* 31.07.2002). Both volunteers and recipients of volunteer work are often aware that the purpose of this activity is “a social contribution on both sides” (Nakano 19.08.2002), and even people who speak to audiences about traumatic experiences such as the Kobe earthquake are regarded as volunteers, although it is understood that this activity serves a therapeutic purpose for the speaker (Yamori 19.08.2002). In other explanations of voluntary activities, the fun aspect of voluntary work and its compatibility with “one’s own hobbies” are stressed (*Yahoo Japan* 08.11.2004), and development NGOs advertise “study tours” for volunteers like expensive holidays (Shaplaneer, n.d., Life n.d.).

Thus, voluntary activities are mostly social and related to human interaction. This can involve welfare activities such as care for the elderly, or entertainment activities for the elderly, but other activities in groups also seem popular. According to a government-sponsored survey in 2002, 14% of Japanese had in the past year participated in activities cleaning streets and parks, and 8% in environmental voluntary work. The survey found that as many as 28.9% of the population had participated in some kind of voluntary activity (*Japan Today* 17.01.2003).

Age and Gender Structure of Civil Society Participants

Participants in such voluntary activities are, by most accounts, overwhelmingly people who are not in fulltime employment, such as students, women and, depending on the topic, also elderly people. Statistics indicate that many senior citizens prefer hobbies, gardening and sports groups to an engagement in NGOs (Seikatsu jōhō sentā 2004: 287, 295), but nevertheless they are visible in citizens’ groups too. In many cases, the leading positions of such groups are held by older men (Hase 2001: 108). The development organisation JICA has a special section and a catalogue for “senior volunteer” positions within JICA. While the number of these positions is lower than that for junior volunteers, it is increasing. In contrast to the junior positions, senior volunteer positions require expert skills (JICA 2004).



Fig. 5: “Citizen Volunteer” in Sapporo (Photo: Ducke)

Although the survey mentioned above (*Japan Today* 17.01.2003) found no large gap between men and women, and people in their early 40s even appeared to be the most active volunteers, these results are questionable. First, the results of the survey regarding the relatively large share of environmental activities are not very plausible, since organisations promoting voluntary activities usually list welfare activities first, followed by international cooperation and environment only later on (e.g. TVAC 2002). In addition, other surveys commissioned by the government find participation in voluntary activities to be much lower – only 11.4% of respondents in 2002 answered that they had ever participated in emergency voluntary work (with a high proportion being among the over 70s), and only 5.4% and 6%, on weekdays and weekends respectively, occasionally took part in local or community events, including local festivals (*matsuri*) and volunteer activities. Again, the share of older people was highest on weekdays and also rather high on weekends; but those in their 40s and 50s claimed to participate most on weekends (over 7%).

The rather high positive response rates for people in their 40s and 50s may to some extent be due to the fact that, as Asano and Yamauchi found, voluntary activities are regarded as “more voluntary” (in Japan as in other countries) the higher the net costs. For example, when a volunteer has a (highly) paid job, even a limited commitment (e.g. a few hours on a weekend) is regarded

as a valuable voluntary activity on a par with a much greater, perhaps daily, involvement by a housewife or retiree. Another factor that determines the degree of “voluntarism” is the respectability of the organisation the volunteer works for (Asano and Yamauchi 2001), which again enhances the status of current employees. The most respectable institutions can afford to select their volunteers, and often do so, on the basis of skills, including those acquired in current or recent full-time employment. It is therefore possible that the results of such surveys overestimate the voluntary engagement of men, and of people in their 40s and 50s, who are perhaps more likely than students and retirees to regard an event they participated in as “voluntary work.”

Civil Society and Information Technology

While civil society and voluntarism are on the rise in Japan, previous research shows that this sector does not seem to take up new technologies at the same pace as other sectors in Japan – although most NGOs and even very small citizens’ groups would have the means to use the Internet if they wanted to (Ducke 2003b). Anecdotal evidence suggests that many people in Japanese citizens’ groups use computers and the Internet less than average. For example, activists both in Japan and abroad complain that Japanese citizens’ groups rarely answer e-mails sent to them, or that they take weeks because they have to wait for

the next meeting to discuss what to do with the request (Cho 26.08.2004).

This is partly explained by the demographic structure of these organisations. Those who use the Internet and especially the Web most, and who think that it is useful for work, tend to be men in the middle age ranges – just the sort of people who are rare in civil society organisations. Younger people, on the other hand, occasionally apply for internships at (preferably foreign or international) NGOs hoping that it will be “some kind of English and computer course rolled into one” (Rossitto 02.10.2004). Indeed, the Internet use of these groups is often largely limited to mailing lists or even direct e-mails (Ducke and Lee 2004).

Of course there are efforts by citizens’ groups to use the Internet more for their own purposes (Ducke 2003a). In fact, the main purpose of a number of citizens’ groups is to provide other grassroots organisations with relevant technological means and skills.⁶ The use of the Internet seems to depend to a certain extent on the issue in which the group is active. In some cases of civil activism, e-mail is even mentioned as one of the main tools experienced by those targeted, e.g. in the case of Juki Net (*New York Times* 06.08.2002). Apparently, many women’s groups

⁶ E.g. <http://www.jca.apc.org>; Takahashi, 22.06.2004

barely use the Internet. It can be expected that advocacy groups use the Internet more than those offering social services and support, and that the age and gender of the members and volunteers influences the way these groups use new technologies.

5. Knowledge Society

Definitions of Knowledge and Organisational Learning

Industrial societies experience changes that can be referred to as the third industrial revolution. The first one was the shift from agrarian to industrial society; the second was the change from industry to services. The third is the movement towards a knowledge society. There are several factors behind this development, namely the development of new technologies in general, and information and communication technologies in particular, and the overall growth of knowledge combined with increasing specialisation of those who share the knowledge. To illustrate the growth of knowledge, Probst et al. (1998: 21) offer the following example (supposedly for the Western hemisphere): After the invention of printing technology by Gutenberg, it took about 300 years to double the information media available. Nowadays, the stock of knowledge available on a world-wide level doubles almost every five years. With a growing stock of knowledge, further specialisation is necessary since it becomes

impossible for a single person to accumulate, store or manage that knowledge.

Furthermore, in the last 30 years, the ratio of research and development staff (in relation to the overall number of employees) in western industrialised countries doubled. This leads to a much quicker development of new technologies, like ICT which allows knowledge to spread on a global basis, even if access to or distribution of the knowledge is not necessarily equal due to the existence and proliferation of information and communication technologies (see the discussion of the digital divide above).

To capture these processes, a definition of “knowledge” is necessary. Based on writings from the theory of organisational learning (Argyris & Schön 1978; Berthoin Antal 1997; Huber 1991, Nonaka & Takeuchi 1997 and Probst et al. 1998), we define **knowledge** as

the awareness and understanding of information gained in the form of experience or learning.

The process of knowledge creation and accumulation is possible through the following routines: several single signs are connected by a certain syntax, thus forming data. Data, put into a certain context, is information. Information, connected with other information (sources) and existing knowledge, forms knowledge.

Figure 6 demonstrates these linkages using the example of foreign exchange market mechanisms.

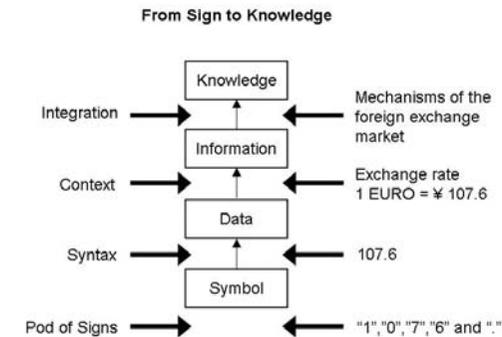


Figure 6: From Sign to Knowledge (Source: based on Probst et al. (1998: 34))

Influenced by the work of Nonaka and Takeuchi (1997), we also consider the distinction between **explicit** and **implicit** (tacit) knowledge as being important for our study. Knowledge is explicit if it exists in the form of written materials, copies, guidelines etc. Implicit knowledge is embodied in person(s) or organisations, and cannot be transferred as such. One has to “externalize” the (implicit/ embodied) knowledge by describing or showing. Nonaka and Takeuchi (1997) give the example of

Matsushita engineers who aimed at constructing a bread-baking machine and had to do an internship in a bakery, learning from looking at the chief baker how to pound the dough. Obviously, the baker had internalized knowledge (and skills) that enabled him to make delicious bread, but was not able to describe it sufficiently for the engineers to transfer that technology into a bread-baking machine. With respect to knowledge and skills, it is our understanding that the latter are more closely linked with implicit knowledge since they go beyond learning what is written and include bodily experience.

Based on Huber (1991: 90-100), Antal (1997: 18f.) defines five different types of knowledge acquisition, out of which two are of special importance for our purposes:

- *Vicarious learning* (acquisition of second hand experience about the strategies, administrative practices, and especially technologies of other organisations)
- *Grafting* (acquiring and grafting on new members who possess knowledge not previously available within the organisation)

These two definitions relate to the methods that the institutions of civil society may use to obtain (technical and organisational) knowledge from business, and vice versa.

Organisational Learning

Learning, of course, does not only exist in the form of individual learning. Whenever people interact and do so on a long-term basis (or, at least, more than once), they will learn through these processes. Due to the interaction inside organisations combined with learning processes, these organisations may change their way of acting, i.e. they may learn. And, furthermore, the results they produce may be more than just the sum of what the individuals learnt. In our definition of *organisational learning*, we follow Argyris & Schön in saying that:

[o]rganizational learning occurs when members of the organization act as learning agents for the organization, responding to changes in the internal and external environments of the organization by detecting and correcting errors in organizational theory-in-use, and embedding the results of their inquiry in private images and shared maps of the organization. (1978: 29)

In this framework, several levels of learning are distinguished. The most simple is “single loop learning”, understood as correction of mistakes, regulation and change within a certain system. The next level is “double-loop learning”, meaning the analysis of single-loop learning processes, including the analysis and possibly the change of norms and values that create the

regulation. Later on, Dierkes and Marz (1998) added a third dimension – “deutero learning” which included thinking about *why* an organisation is learning.

For our investigation, it seems necessary to stress that in principle the same framework of organisational learning applies to both organisations in civil society and those in the economic sphere. In terms of organisational learning, the origin of the organisation does not matter, although the size of the institution or group is likely to affect the practice of learning.

Problems of Unlearning and Loss of Knowledge

Unlearning is one precondition of successful learning, since it allows the necessary re-grouping of existing information and integration of new information. However, this process is not easy since organisations build up routines to reinforce their knowledge structure (Probst & Büchel 1998: 73). Thus, one has to distinguish between intended and unintended loss of knowledge.

Avoiding the loss of implicit knowledge is one of the crucial points in modern knowledge management. Enterprises can prevent this loss by creating an atmosphere that gives the employees an incentive to stay and share knowledge with others, and they can organise learning processes in the company to gain access to implicit knowledge. Cooperation and learning alliances are a further way of dealing with the potential loss (Moerke 2001:

13). With respect to demographic change, Probst et al. (1998: 297ff.) describe the case of ABB, a multinational firm that created a company-intern consultancy that mainly employed retired managers, thus making sure that the enterprise would not lose access to the implicit knowledge of these people. This example not only stresses the importance of elderly people to companies, but also, as we argue, to civil society as well.

Organisational Learning in Japan

Japan has a tradition of (organisational) learning that dates back many years. The adaptation of Chinese characters to the Japanese language is only one element in that tradition. Even the Tokugawa period, when Japan seemed to be quite isolated and restrictive towards foreign influences and knowledge, was not as static as is often assumed (Richter 1994). In particular, after the ban on Western books was lifted in 1720, “Western” technology and other knowledge spread throughout Japan (Görtzen 2001: 3). In the Meiji period, the state became the dominant player when it came to the domestic dissemination of (foreign) knowledge, by inviting foreign advisors and establishing companies that functioned both as production facilities and education centres (Pauer 1996). After World War II, state institutions tried to catch up through industrial policy, but had to limit their role more to information collection and information dissemination, as well as

to the arrangement of industrial research collaborations.

Certain characteristics of the Japanese enterprise system have been shown to influence learning processes. On-the-job training, regular job rotation as well as the *ringi*⁷ system in the process of decision-making, are all responsible for widespread transmission of information in Japanese institutions (including corporations) (Görtzen 2001: 4). Research and development are embedded in the production and supply chain, making sure that the information which forms the basis for learning processes is spread between the parties involved (Albach 1994). This is combined with a corporate governance style that is characterised by a strong stakeholder (especially employee) orientation (Moerke 2003; Yoshimori 1995). Contrary to the U.S. or British enterprise models, Japanese managers have a higher preference for keeping employees employed, while shareholders' interests rank second. The employees, knowing this, are not afraid of adopting new technologies and learning. In other words, the "not invented here" syndrome is less prevalent in Japan.

⁷ The "ringi" system or "hanko" system is "...the 'bottom-up' circulation of a document to collect the signatures of relevant parties before a formal decision is made" (Inagami & Whittacker 2005).

Our concern is, of course, how all these characteristics change both within a changing economic environment and under the influence of a rapidly aging society.

6. Deriving Questions and Hypotheses

Based on the theoretical considerations set forth above, we think that the following questions need to be asked:

Organisations can acquire knowledge and thus learn; but they can also lose knowledge in various ways, which we refer to as "unlearning." What happens with the knowledge that people have acquired when they leave an organisation? Are there ways of keeping this knowledge in the organisation?

What do people do after leaving an institution/enterprise? Considering the Japanese practice of re-employment (although with lower wages) of retirees, one may suppose that many are still in the labour market. Might some of them instead resurface elsewhere, e.g. in the institutions of "civil society"?

Are there any other interfaces between enterprises and civil society, e.g. in the form of regular employees concurrently taking active part in civil society?

Our contribution is concerned with links between the economic sphere and civil society within the context of demographic change and a shift to a knowledge society. We presuppose that different approaches to new technologies are prevalent in both spheres, and

that organisations in both spheres differ a) in the amount of time available to them, and b) in the level, and perhaps the type of knowledge that they possess and employ. We further assume that knowledge transfer between both spheres is possible and desirable. Therefore, we derive the following hypotheses:

Hypothesis 1: The interface between both spheres is the group of people that leave (for retirement or other reasons) enterprises and seek new fields of activity.

Hypothesis 2: Civil society is interested in the participation of people from the economic sphere since they can dispense knowledge concerning the latest technology that is still rare in civil society. On the other hand, for these people civil society provides a field of useful activity.

Hypothesis 3: Enterprises realise the value of the knowledge incorporated in the people that leave, and try to provide them with opportunities to further participate in the economic sphere. For this reason, they are not available for the institutions of civil society.

Hypothesis 4: In civil society, people gain implicit knowledge different from that found in companies. Due to increasing interaction between both spheres, the knowledge from the civil sphere turns out to be useful for industry. Therefore, companies

choose several strategies from cooperation with NPOs to the employment of persons from civil society to get access to that knowledge.

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Appendix 1

Please fax to 03-3222-5420, Ducke/Moerke

Questionnaire for the Project „Knowledge Society and Demographic Change in Japan“

1. Do you know anybody who moved between institutions of the economy and of the civil society (including one-way movements)?

Yes No

If the answer was "no", please proceed to question 5.

2. If "Yes", into which direction?

economy → civil society civil society → economy both directions

3. Who are the driving forces behind that transfer – the enterprises or the civil society?

economy civil society

4. Could you tell us why? Please give a short comment. (For longer comments, please refer to question 10)

5. Do you think that such a movement of persons is (or could be) accompanied by a transfer of knowledge?

Yes No

If the answer was "no", please proceed to question 10.

6. If yes, do you consider this a transfer of useful knowledge that would otherwise be under-represented or missing?

Yes No

If the answer was "no", please proceed to question 10.

7. If the transfer is seen as useful, who benefits?

the enterprises the civil society both

8. Do you see any disadvantages with this movement of knowledge?

Yes No

9. Could you tell us which? Please give a short comment. (For longer comments, please refer to question 10)

10. Would you agree to a face-to-face meeting to discuss questions of knowledge economy and aging society in Japan? If yes, please let us know

Your company or institution

Your position

Your name

Your e-mail

Your phone

Your fax

Your address

11. Do you have any further comments or advices?

Thank you very much!

Appendix 2: DIJ Working Papers

In 1994 the DIJ launched a series of working papers. The series is intended to convey the preliminary results of our ongoing research. Recent and backlisted DIJ Working Papers can be accessed from our website (<http://www.dijtokyo.org>). If you wish to obtain a hard copy, please contact us, quoting the working paper number.

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- 00/4 Jörg Raupach-Sumiya: *Chinese Firms as Emerging Competitors – Challenges for Japan's Industry.*
- 01/1 René Haak: *Produkt- und Prozeßinnovationen in der Produktion – Schlaglichter auf die Entwicklung der japanischen Fertigungstechnologie.*
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- 01/3 René Haak: *Market Leadership in the Chinese Automobile Industry – Strategic Management in a Dynamic Environment.*
- 01/4 René Haak: *Internationalization of Japanese Companies. Recent Strategies towards China – A Theoretical Approach -*
- 02/1 René Haak: *Internationalisierung – Herausforderung an das japanische Management. Der Wirtschaftsraum Mittel- und Osteuropa*
- 02/2 René Haak: *Strategy and Organization of International Enterprises. German-Japanese Business Cooperation in China.*

- 02/3 Harald Conrad: *Towards a New Public-Private Pension Mix in Japan.*
- 02/4 Sven Saaler: *Pan-Asianism in Meiji and Taishō Japan – A Preliminary Framework.*
- 02/5 Harald Dolles: *Spielt Vertrauen eine Rolle? Analysen deutsch-japanischer Unternehmenskooperationen.*
- 02/6 Isa Dücke: *The History Textbook Issue 2001. A successful citizens' movement or foreign intervention?*
- 02/7 Andrea Germer: *On the Genesis of Feminist Historiography in Japan: National and International Perspectives.*
- 03/1 Harald Dolles and Michael Babo: *The Development of Entrepreneurship in Transitional Economies: The Perspective of Chinese and South African Entrepreneurs.*
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