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# Becoming Sympathetic to the Needs of Future Generations: A Phenomenological Study of Participation in Future Design Workshops

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Becoming Sympathetic to the Needs of Future  
Generations:  
A Phenomenological Study of Participation in  
Future Design Workshops

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## **Abstract**

Many important problems threatening global sustainability contain an inherent intergenerational dilemma, in that actions taken by present generations in their own interest could place additional burdens on future generations. Previous research in future studies has applied participatory approaches such as backcasting and scenario planning in an effort to identify effective sustainability strategies as well as to encourage social learning and empowerment. However, few of them considered how it can be expected that participants to workshops adopting these approaches become sympathetic to the needs of future generations and threaten the benefits of their own.

This phenomenological psychological study aimed to resolve this intergenerational paradox by applying Future Design, a new variant in the family of future studies approaches, in workshops conducted by a municipal government in Japan. Qualitative study of the participants' subjective experiences determined that the experience of playing the part of the member of a future generation leads to the recognition that identities of the present and future generations have already been coexisting inside a single person. This discovery produces a sense of intellectual satisfaction, rather than dissonance, because acquisition of the future generation identity enables the person to reflect on the present generation identity with a sense of superiority. The fruit of this satisfaction can be enjoyed only at the expense of the cognitive load of becoming disengaged from the present. The positive emotions that accompany this achievement were identified as a motivation to adopt positions that favor sustainability and the needs of future generations. Practical implications for future studies scholars who wish to maximize the benefit of stakeholder participation are also discussed.

**Keywords:** future design, phenomenology, future studies approach, sustainability

## **1. Introduction**

Many important problems currently threaten global sustainability, such as climate change, environmental deterioration, and government debts. For this reason, the scholarly discipline of future studies has focused heavily on sustainability in recent decades.

Backcasting is one of the primary approaches adopted by such scholars. The essence of this approach involves explicating what a desirable future is and then working backwards from a particular and desirable future end-point to the present in order to determine the physical feasibility of that future and what policy measures would be required to reach that point (Robinson 1990). Giurco (2011), Wangel (2011), and Svenfelt (2011), among others, have applied this approach to addressing sustainability issues. The widely recognized fact that achieving sustainability requires “a systemic societal transformation” (Vergragt and Quist 2011, p. 748) seems to explain the popularity of backcasting in sustainability studies because this method is considered most effective where “there is a need for major change” (Dreborg 1996, p.816).

Another common approach is scenario planning (also called scenario analysis). Although the boundary between this approach and backcasting is ambiguous since some studies combine the two approaches (e.g., Kok et al. 2011), the former is distinguished from the latter by its exploratory rather than normative nature. Specifically, it is a systemic method for thinking creatively about possible complex and uncertain futures (Peterson et al. 2003) and developing proactive strategies to adapt management to these uncertainties (Palomo et al. 2011). This approach is designed to generate strategies that are robust in their ability to respond to changes in conditions that may threaten social sustainability.

Scholars applying both of these approaches to sustainability issues have increasingly included stakeholder participation (for backcasting, Quist and Vergragt

2006; Robinson 2003; Robinson et al. 2011; Carlsson-Kanyama et al. 2008; for scenario planning, Patel et al. 2008; Chakraborty 2011; Duckett et al. 2017). Commonly heard reasons for involving stakeholders include (1) increased stakeholder buy-in regarding the resulting scenarios, (2) social learning, and (3) community empowerment (e.g., Wangel 2011; Robinson et al. 2011), among others. With regard to social learning, Robinson (2003), drawing on Wynne et al. (2001), argued that it should be seen as a process of moral and cultural development, as well as cognitive change, in society. As for community empowerment, Neuvonen et al. (2014) argued that stakeholder participation empowers community members to take part in the formation of sustainable futures by adopting their own sustainable lifestyle patterns.

Intergenerational dilemmas are inherent in many of the problems threatening sustainability, because a present generation's actions may be in their own benefit but may lead to increased burdens on future generations (Nakagawa et al. 2016). This situation raises several questions. Even if they are willing to sacrifice some of their own prospective benefits, how and why can participants in workshops on sustainability be expected to agree with strategies that favor future generations? How can they experience moral and cultural development so as to live their lives in more sustainable ways? Conventional workshops in future studies adopt a time horizon of 50 years (Vergragt and Quist 2011), by which time participants may well be no longer alive and thus will not enjoy the benefits gained by their willingness to bear additional burdens today.

To the best of our knowledge, no previous scientific studies have attempted to resolve this paradox, so we have chosen to tackle it. As research subjects, we selected the participants in a series of workshops adopting Future Design (Saijo 2015), a new variant within the family of future studies approaches. We conducted a phenomenological psychological study to investigate the participants' subjective experiences. Our analysis

focused on grasping the psychological process by which they became sympathetic to future generations by agreeing to sacrifice their benefits as members of the present generation.

To suit this research objective, we carefully selected research subjects who exhibited strong evidence of the ability to be sympathetic to the needs of future generations. We adopted this strategy in the belief that it would yield richer practical implications than if we recruited a larger number of typical participants and identified commonalities among their experiences. Thus, the present paper should be evaluated not in terms of the extent to which the findings apply generally to participants in future studies workshops, but in terms of whether it offers practical implications for future studies scholars (regardless of their approach) who wish to maximize the benefits of stakeholder participation, as well as those concerned about the drawback of involving “participants safeguarding their vested interests” (Wangel 2011, p. 880).

## **2. A Brief Introduction to Future Design**

The Future Design framework adopted in this study (Saijo 2017; Saijo 2015) asks participants to take on the role of members of a future generation (hereafter called the imaginary future generation) and engage in designing strategies to be adopted by the present generation. The design procedure can incorporate negotiation between the imaginary future generation and the other participants, who express the perspective of the present generation, to build an intergenerational consensus. Saijo, an economist, proposed this framework out of concern that the market and democratic institutions consume future resources without remorse, and that an alternative device is necessary to incorporate the preferences of future generations in policymaking.

This framework can be used in conjunction with either backcasting or scenario

planning. When it is combined with backcasting, workshop participants as the imaginary future generation describe a desirable future world that they feel happy to live in and then work backwards to design strategies that enable the imaginary world to come true. When scenario planning is used, workshop participants representing the imaginary future generation are requested to assume that one of several scenarios has been realized in the future, but without knowing which one. They are then supposed to work backwards to design robust strategies for the present society, based on their own subjective probability distributions about which scenario has been idealized in their era, as well as their understanding of the positive and negative aspects of the scenarios.

Future Design is still an emergent method, and we do not yet know what flavor it can add to these existing major approaches. (Answering that question is beyond the scope of the present study.) Our main reason for using it here is that, as Vergragt and Quist (2011) argued, participants in conventional future studies workshops often have severe difficulty in becoming disengaged from the present, typically because they are experts bound by their knowledge or stakeholders representing present-day interests. Future Design is expected to help participants in overcoming this difficulty, because assigning them to represent an imaginary future generation entails an explicit recommendation that they stop possessing the perspective of the present generation. Thus, we believed that this relatively strong intervention would give us a greater likelihood of observing participants who could successfully disengage from the present.

### **3. Method**

#### **3.1 Data Collection**

The present study is based on the transcripts of comments by participants in a series of workshops held by the Yahaba (Iwate Prefecture, Japan) municipal government



in 2015 and 2016, as well as the transcripts of interviews with two of the participants. The municipal government organized these workshops to obtain input as it developed a comprehensive long-term strategy looking toward 2060. Two of the present study's authors (Hara and Saijo) proposed using the Future Design framework, and the municipal government, represented by Mr. Ritsuji Yoshioka, agreed to do so. These three people were primary responsible for designing and implementing the workshops.

Yahaba is in northern Japan, and its local economy has traditionally been based on agriculture, primarily rice cultivation. However, due to its proximity to the major city of Morioka, light industries and warehousing have been increasing in importance (Wikipedia, 2017). As of 2015, the town had a population of about 27,000 and a population density of 404 persons per km<sup>2</sup>, fairly typical of a rural municipality.

The design and outputs of the workshops have been briefly summarized elsewhere (Hara et al. 2015; Hara 2016; Hara and Saijo 2017). Between September 2015 and January 2016, four small-group workshops were organized (workshops 1 to 4 in the list of workshops in Table 1).

(Table 1 inserted about here.)

In each one, the members were requested to discuss their vision of the town in 2060 and the actions to be taken toward achieving it. In doing so, they were to imagine themselves as members of a future generation that would inhabit the town in 2060. Each group consisted of five local citizens and was facilitated by an officer of the municipal government, with Mr. Yoshioka personally facilitating one of them. The following guidance was provided to the participants at the beginning of the workshops:

*During your group discussions, please assume that you have become a person who lives in this town in 2060, and then make statements that represent the opinions of the generation of 2060. You are supposed to think not about your own interests as a member of the generation of 2015, but about those of the entire generation of 2060.*

To assist participants in keeping this instruction in mind, they were requested to wear happi coats (traditional Japanese coats that are commonly used in community festivals throughout the country) during the workshops. Also, facilitators frequently reminded participants of their role as members of a future generation.

Meanwhile, four other group workshops were also organized during the same period (workshops 5 to 8 in Table 1), and their participants were asked to do similar visioning for the year 2060 and consideration of actions toward achieving the visions, but as members of the present generation living in 2015, rather than of the imaginary future generation living in 2060. These groups also consisted of five local citizens and a facilitator. Some participants were members of more than one group, so we were careful to ensure that once a participant joined a group of people playing the role of an imaginary future generation, he or she never joined a group with the other setting, and vice versa.

After the abovementioned eight workshops (four in each time scenario), two additional workshops were independently organized in February 2016 (workshops 9 and 10 in Table 1), in which five participants from each time scenario came together to pursue a consensus regarding what actions the municipal government should take to plan toward 2060. (Hereafter, these two events will be called future–present joint workshops.) Specifically, the organizer identified a total of 24 policy options mentioned in the

proceedings of the eight workshops (as well as of several preliminary ones not shown in Table 1). Although some of these 24 were related to one another when they were from the same groups, these relationships were not identified and the 24 policy options were presented as independent of each other. The participants from both the imaginary future generation and the present generation were requested to reach a consensus regarding the prioritization of the 24 options. The same list of options was presented to both future–present joint workshops.

Mihoko (a pseudonym), a female local resident in her forties, attended two of the four workshops with the imaginary future setting. (See Table 1 for identifying workshops attended by Mihoko.) These two will be hereafter called workshops 1 and 2, and the discussions will be reported in detail and utilized in the analysis in the present paper. She also participated in a future–present joint workshop. After Mihoko had attended all three workshops, the first author conducted a two-hour interview with her, to understand her subjective experience of playing the role of a member of a future generation. In addition, a second female in her forties, Miho (also a pseudonym), who attended several preliminary workshops with the imaginary future generation setting in 2015 (not shown in Table 1) and a future–present joint workshop in February 2016, was interviewed.

Mr. Yoshioka recommended these two interviewees because he viewed them as having been especially good at “detaching from the present generation.” One of the objectives of the present study could be paraphrased as an attempt to understand the exact meaning of this meaningful figurative expression.

To summarize, our transcripts consisted of interviews with two research subjects and the content of two workshop discussions that involved 10 people each. The total amount of transcribed material was 130 pages, based on eight hours of workshop discussions and interviews. This is a reasonable amount of material when compared with

earlier studies that applied qualitative methods.

### **3.2 Analysis**

In essence, phenomenological research aims to retrospectively and consciously reflect on people's lived experiences (i.e., experiences that were not consciously reflected on when they were initially experienced). Manen (1997) admirably explains this task as an attempt to establish "a renewed contact with original experience" (p. 31) by finding "memories that paradoxically we never thought or felt before" (p. 13). In our judgment, one of the most successful examples of such an attempt was provided by Goodman (2010), who described adolescent females' experiences of injuring themselves by cutting their wrists as "one where they are struggling for well-being and hoping for more being by using their skin as a canvas upon which internal pain is expressed as tangible and real" (p.146). Obtaining such a description is meaningful not only for those who are seeking to know why and how some people have a specific experience, but also for those who actually lived the experience, if they have no idea as to how to represent their own experience with "a language that reverberates the world" or "a language that sings the world" (Manen, 1997, p. 13). A good phenomenological description of an experience can allow those who experience it to "nod" to it (p. 27) and can help them "to act more thoughtfully and more tactfully" (p. 23). The present study adopted Giorgi's (2009) phenomenological psychological approach, which is described as psychological because it focuses "on how individual human subjects present the world to themselves and how they act on the basis of that presentation" (Giorgi 2009, p. 135).

In analyzing the transcripts of our interviews with Mihoko and Miho, it was necessary to adopt phenomenological reduction as opposed to a natural attitude. This meant bracketing our prior and theoretical knowledge and instead considering the

concrete experience as a subjective indication of the present, rather than taking an objective view (Giorgi 1997). Our process contained the following steps:

- 1) *Reading for a sense of the whole.* The first step involved reading to get a general sense of the description's contents.
- 2) *Determination of meaningful units.* To determine the meaningful units within the descriptions, we reread them slowly. Each time the interviewee introduced a distinguishable new topic was unveiled, the place was marked and reading continued until a subsequent meaning unit was identified.
- 3) *Transformation of participants' natural expressions into phenomenologically psychologically sensitive expressions.* In this core step, each meaning unit, which had been originally expressed in the participant's own words, was transformed through a careful descriptive process into psychologically pertinent expressions without using mainstream psychological jargon.
- 4) *Expressing the structure of the phenomena.* The essential structure of the concrete lived experience was then described. The aim here was to identify the constituent parts that were essential for the phenomenon to manifest itself in this particular way, as well as to understand how the parts related to each other. In a study covering many topics, it is not necessary to determine a single structure for all of them, so we identified as many separate parts as seemed appropriate. We will hereafter refer to these constituent parts as themes.

After applying this procedure to the interviews with Mihoko and Miho and establishing the structure of the phenomena as described in step 4 above, we then investigated whether that structure was consistent with the content of the two transcribed workshop sessions (hereafter called workshops 1 and 2).

## **4. Results of the Workshops**

### **4.1 Workshop 1**

A facilitator and five participants, including Mihoko, participated in this group work for about three hours. We divided the entire transcript into 10 paragraphs; the discussions in each paragraph are summarized in Table 2.

(Table 2 inserted about here.)

The vision for Yahaba in 2060 that this group created is as follows. The integrative concept of their vision was “Keeping Yahaba’s Identity.”<sup>1</sup> Compared with the nearby major city of Morioka, Yahaba is much less urbanized and less densely populated, and it has fewer jobs. However, this was an advantage, not a deficit, from the perspective of the future generation, because other municipalities would have become more urbanized by 2060, making Yahaba’s heritage even more outstanding and valuable.

The group identified three possible ways to maintain and strengthen the identity that Yahaba possessed in 2015. The first was to preserve its rurality, which should become a valuable tourism resource by 2060. Second, the group recommended attaining food self-sufficiency by strengthening the town’s agriculture sector as well as strengthening its presence in the global food market. The third step was to maintain and strengthen interpersonal ties within the community, a feature that only rural communities can effectively develop. Through these actions, the group believed, the people in Yahaba could be proud of their town in 2060.

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<sup>1</sup> This concept was not stated explicitly by the group members during the discussion but by the authors who interpreted the transcript.

As for Mihoko's function in the group, first, in paragraph 1 (see Table 2), she played an essential role in orienting the initial discussion by conservatively expressing disagreements with urbanization. This orientation enabled other participants to focus on the values of agriculture and rural scenery in Paragraphs 2, 3, and 4. In paragraph 5, Mihoko appeared to be shifting the discussion when she referred to the possible social changes induced by technological development. However, her intention was to stress the importance of preserving what should be kept unchanged amidst a changing society, which coheres with her own statement in paragraph 1. When a participant expressed his concern about the out-migration of the youth from Yahaba in paragraph 6, a comment that might have oriented the discussion in a new direction, Mihoko succeeded in showing the linkage between this concern and the previous discussion (Paragraphs 1 to 5), explaining (in Paragraphs 6 and 7) how preserving the town's identity could solve this problem. Her basic idea was accepted by the entire group. In fact, in Paragraphs 8 to 10, the group members other than Mihoko concentrated mainly on identifying measures to realize this goal.

## **4.2 Workshop 2**

Again, a facilitator and five participants, including Mihoko, attended. Mihoko was the only person to participate in both workshops 1 and 2. The entire transcript was divided into nine Paragraphs, and the discussions in each paragraph are summarized in Table 3.

(Table 3 inserted about here.)

The integrative concept of this group's vision for Yahaba in 2060 was "Making

Yahaba Work for Everybody,”<sup>2</sup> driven by a desire to make the town a desirable place to live and thereby prevent depopulation by 2060. The targets of this effort included single mothers and elderly people, among others. This concept was derived for at least three reasons. First, group members were concerned that as of 2015, many high school graduates were leaving Yahaba to find jobs elsewhere. Second, the town had recently succeeded in attracting a university hospital, and so the group regarded health promotion among elderly people as an important component of their vision. Third, it was proposed that single mothers would choose to migrate to Yahaba with their children if the town’s work opportunities were outstanding.

The group identified two possible actions toward achieving this vision by 2060. The first was to invite companies that resonated with the vision to locate in Yahaba. One promising candidate was a health-food producer that not only hires elderly people but also contributes to creating income for farmers by procuring local agricultural products. A second proposed action was to make work and child rearing compatible for young mothers by promoting telecommuting and by equipping workplaces with child-care centers.

Mihoko was again an active player in this group. In her first turn to talk in paragraph 1, she proposed the idea of making the town self-sufficient with regard to energy consumption citing a science fiction film to illustrate her idea. Although this idea was not accepted by the group as the central theme of its vision, it triggered another participant to mention achieving food self-sufficiency, which in turn led Mihoko to suggest inviting food enterprises to locate in Yahaba (paragraph 2). This idea was consistent with the town’s recent political efforts to attract new business enterprises and

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<sup>2</sup> As with workshop 1, this concept was not stated explicitly by the group members during the discussion but by the authors who interpreted the transcript.



was appreciated by the group, as shown in Paragraphs 5 and 9, in which other members acknowledged the importance of inviting enterprises that align with the town's vision. Furthermore, Mihoko's statements in paragraph 4 about the possible development of diagnostic technologies directed the group's attention to the welfare of elderly people (paragraph 7) and of single mothers and their children (paragraph 8). In this way, the group moved toward agreement that the town should emphasize making it possible for everyone to work (paragraph 9) and that doing so would also resolve the common problem of the isolation of elderly people.

#### **4.3 Remarks on the Two Workshops**

In both workshops, Mihoko played an essential role in creating the group's future visions and coming up with measures to realize the vision. In doing so, she adopted the strategy of creatively assuming social changes induced by technological innovations and other factors. Here an important question arises: is the adoption of such assumptions an essential component of the experience of sympathetically adopting the perspective of the member of a future generation? If the answer to this question is positive, then it is inevitable that attempts to induce participants to adopt the future generation's perspective and sympathetically create visions from that perspective will be limited due to the adoption of assumptions that may lack validity. This is a crucial question for future studies scholars, especially those who adopt backcasting.

The practice of imaginative variation<sup>3</sup> seems to suggest a negative answer to this question, however, despite the strong influence of Mihoko's assumptions on the group members. We say this because, in the present case, the visions and the measures proposed

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<sup>3</sup> The use of imaginative variation involves imaginatively considering different aspects of a phenomenon from the one that is currently present so as to determine which aspects are essential to the appearance of the phenomenon and which are contingent (Giorgi 2009).

to realize them do not include information on the assumptions used and the groups could have reached virtually the same conclusions without these assumptions. In our interviews with Mihoko and Miho, we sought to collect evidence that would indicate whether this speculation was accurate.

## **5. Results of Interviews with Workshop Participants**

### **5.1 Mihoko's Story**

At the beginning of her first workshop, Mihoko reported in our interview with her, she was at a loss because she did not really understand the exact meaning of playing the role of a 2060 resident of the town, despite the facilitator's guidance. Gradually, she came to understand the assignment in her own way by imagining what the town would be like and what she hoped that it would be like. These imaginations were guided by her own experience of reading, as a child, a series of Japanese science fiction cartoons titled *Astro Boy* and originally written and drawn by Osamu Tezuka (1928–1989) in the 1950s and 1960s.

However, these imaginations were not sufficient to really get her into playing the part of a future generation member. Later, a critical moment helped her to understand the meaning of her role to a greater extent. During her first workshop, a middle-aged female group member said that she did not have any serious problems in her current life and that she did not sense any need for the town to change by 2060. Another group member, a female university student, replied by saying that she would be about 60 years old at the time and expressing her own wishes as to what the town would be like then. The student's views seemed unexpected and even a bit crazy, but impressive as well. This comment functioned as a trigger and the other group members, including Mihoko, followed by expressing their own desires regarding their town's future. Mihoko gradually came to

believe that the imaginary world they were creating would come true and to feel as if she were actually living in it. Although she was not fully certain, she thought that she might have understood at that point what it means to play the role of a future generation member.

This imperfect confidence was further sharpened at the future–present joint workshop in February 2016 (see subsection 3.1), where five representatives of the imaginary future generation (not necessarily from the same workshop group) were asked to reach a consensus on actions to be taken toward 2060 along with five representatives of the present generation (not necessarily from the same workshop group). Mihoko anticipated that the present generation group, which insisted that the town should implement free medical services and education for children, would object that the idea generated by Mihoko’s group was unrealistic. She considered that if she had been functioning as a member of the present generation, she would have been happy to agree with this negative observation. However, she felt strongly that there was no use in adopting an idea for investing in the present generation when people living in 2060 would regret this decision. She earnestly hoped that the representatives of the present generation would not be preoccupied by short-term concerns and would support initiating necessary long-term actions. Mihoko thought that otherwise the world in which she was living imaginatively would be forced to disappear, because the actions recommended by the future scenario group were prerequisites for its attainment.

Throughout her participation, Mihoko came to acquire the skill of getting into the imaginary experience of the future generation. This enabled her to clearly distinguish those functioning in the same thinking mode as her (hereafter called the future mode) from those in the opposite mode (hereafter called the present mode) during the workshops. Whereas those in the present mode could be identified by their statements regarding particular present concerns (e.g., mothers’ lack of convenient access to child-care

facilities), those in the future mode were identified by their attempt to consciously forget these concerns. Mihoko observed that on one occasion, when a group member made a statement in the present mode, other members including Mihoko dragged that person back into the future mode. After several repetitions of that procedure, the group members came to stay consistently in the future mode.

Mihoko's thinking style while in the future mode was partly characterized by not regarding constraints as given and fixed. When her group was talking about the burden placed on young mothers by the unavailability or inconvenient location of child-care centers as of 2015, she questioned the implicit assumption that mothers would not be allowed to take their children to their workplace in 2060. When talking about the issue of elderly people dying alone in their houses, which has attracted considerable social attention in contemporary Japan, she was not willing to accept the idea that elderly people would have to spend most of their time inside their houses in 2060. In this way, she avoided formulating this issue in terms of the insufficient availability of other community members to watch over elderly people in their homes.

Although the series of workshops with the Future Design setting has ended, Mihoko stated that the impact of participating in them endures. She often feels, on various occasions in her daily life, that the present generation should initiate certain actions now so that society can attain specific objectives in timely fashion—such as strengthening ties between older and younger generations, providing facilities that foster interaction between the two generations, and securing workplaces for the elderly. She feels strongly that it is inappropriate for each generation to make investments based on what that generation considers necessary at the time. Rather, she hopes that each generation will make investments for which people living 30 or 40 years later would be grateful for doing so. She expressed her gratitude to the workshop organizers, the Yahaba municipal

government and Mr. Yoshioka, for providing her with the wonderful opportunity “to see what the future world is actually like *now*” and to acquire such a perspective. This ungrammatical expression implies how deeply she was immersed in experiencing life as a member of a future generation.

## **5.2 Miho’s Story**

Miho moved into Yahaba seven years ago with her husband and children. She participated in several preliminary workshops with the imaginary future generation setting that took place before September 2015 (the details of which are not presented here) and a future–present joint workshop in 2016. Similarly to Mihoko, she had difficulty in understanding what it meant to take on the role of a future generation member when she participated in a workshop for the first time, and she was unable to play the role effectively. Miho would be in her eighties by 2060, and it was difficult for her to imagine life at such an old age. However, she felt that she understood better what to do when another group member (not Mihoko) kindly explained to her that she did not need to think about problems that may be resolved within two or three years from 2015, because such problems should be resolved and totally forgotten by 2060. Miho felt that this advice enabled her to free herself from daily and short-term concerns like the insufficient number of garbage collection points and the prices of medical services for the present generation.

After this exchange, Miho did her best during her first workshop to assume that she was 45 years older and living in 2060. Under this assumption, she also did her best to imagine a future version of Yahaba the realization of which would attract and motivate her to keep living there. She made a conscious and careful attempt in this regard, without which she would have been trapped again by short-term concerns with a time range of two or three years. Miho and her group members gradually became accustomed to the

role of future generation members, although some did better than others. She recognized this change when she noticed that group members had stopped using prefixes such as “Although I will not be there in 2060” at the beginning of their statements. She understood that the group members, including herself, had begun to assume that they were living in 2060 with their age unchanged, rather than 45 years older than their present age. She considered it unfortunate that she would be able to live in the imagined world only after growing very old. This regret motivated her to assume that she was living in 2060 but at her current age.

Miho’s attempt to put aside short-term concerns was rooted in her trust in the present generation of Japanese. For example, the lack of available child-care centers had attracted considerable political attention in Japan as of 2015. Miho believed, or wanted to believe, that Japan is not so foolish as to continue suffering from the same problem until 2060. This belief can be partly explained in terms of her personal background, as Miho had overcome some painful experiences in her past life and felt that the support of her family, community, municipality, and country had enabled her to do so. These experiences strengthened Miho’s trust in her country.

By successfully putting aside short-term concerns, Miho’s group in one of the workshops developed a futuristic view of the town. In their vision, a new transportation system had been installed, with a motif from a famous Japanese children’s story entitled “Night on the Galactic Railroad.”<sup>4</sup> People in Yahaba were very proud that the author came up with this story with the town and its surroundings in mind. This transportation

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<sup>4</sup> This story was written by Kenji Miyazawa (1896–1933), a Japanese novelist and a utopian social activist, and was published in 1934. In a dream, a boy named Giovanni travels around various constellations on a railroad with his close friend, Campanella, and sees and talks with various people. Through these travels, he comes to understand that the significance of life lies in devoting oneself to others. This belief is tragically affirmed when, upon waking up, he learns that Campanella had drowned while trying to save others while Giovanni was asleep.

system connected various basic facilities and sightseeing spots within the town by means of self-driving vehicles fueled by a recycled energy resource. Such a system would help elderly people to maintain their social networks by facilitating their transportation. The group members, including Miho, were very much satisfied with this vision. They were even confident that the vision would indeed become reality and that the necessary actions to achieve it would be taken by 2060.

Miho recognized that those who have never imagined living as a member of a future generation would criticize such an unrealistic view and would probably not agree to initiate actions toward it in 2015. Indeed, she received such criticisms during the future–present joint workshop<sup>5</sup>, but she considered them quite understandable because she would have evaluated such an idea in exactly the same manner had she not participated in the workshops with the imaginary future setting. A sense of superiority relative to those who lacked the perspective of the future generation allowed her to receive this criticism graciously while discounting it.

## **6. Results of the Analysis**

### **6.1 Emerging Themes**

The participants provided detailed stories about their experience of the workshops. After several readings of the interview transcripts, we identified 33 and 13 meaning units in Miho and Mihoko’s stories, respectively. After we transformed them through a careful descriptive process into psychologically pertinent expressions, four clear themes emerged: (1) jumping back and forth to shake off present concerns, (2) having an illusion that the imagined world is real, (3) recognizing the present generation’s actions as a

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<sup>5</sup> The list of 24 options presented in the future-present joint workshops included ones derived in the preliminary workshop that Miho attended.

prerequisite, and (4) perceiving the coexistence of two conflicting identities. Each of these themes is detailed below. The transcripts of workshops 1 and 2 were also consulted to confirm these four themes. How these themes fit the data of the interviews and workshops are shown in footnotes.

### ***Theme 1: Jumping back and forth to shake off present concerns***

The process of imagining oneself as part of a future generation involves a significant cognitive load, because one must put aside his or her everyday affairs—something that people rarely do in their daily lives. Thus, the process is not straightforward. By repeating jumping back and forth between the present and future modes, he or she gradually succeeds in putting the present aside. The term “jumping” is used here because the shift from thinking about daily short-term concerns to not thinking about them is discrete rather than continuous. Once one attains the latter state, he or she can immediately distinguish those who are also in the future mode from those in the present mode.<sup>6</sup> Some people are better at jumping than others, due to background factors or personal characteristics.

### ***Theme 2: Having an illusion that the imagined world is real***

Once one succeeds in taking on the part of a future generation member, one expands his or her imagination about the future world so that he or she is very willing to live there. Gradually, he or she comes to put aside the obvious facts that the created future world is imaginary, that he or she might not be alive by that time, and that, if alive, he or she would be considerably older.<sup>7</sup> This is just like being immersed in the plot of a novel

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<sup>6</sup> See the last sentence of paragraph 1 in Table 3, for example, where a particular daily concern was expressed about the darkness of a school road at night.

<sup>7</sup> See the last sentence of the second paragraph of subsection 5.2, on Miho’s story.



to the extent that one senses empathy for the protagonist and feels as if the story is real, even while recognizing in the back of one's mind that it is not real. The distinction between assuming that you will be older at a specified future time and assuming that you will remain at your present age at that same future time is essential. In fact, the latter assumption requires feeling empathy for people who can never exist in reality.

The worldview in which the participants are immersed is integrative in the sense that its components are placed in a single context. In workshop 1, the concept "Keeping Yahaba's Identity" connected various resources that the town possessed as of 2015, such as close community ties, rural scenery, and a rich cultural and historical heritage.<sup>8</sup> In workshop 2, the concept "Making Yahaba Work for Everybody" added new and coherent meanings to existing policies and programs implemented in 2015, such as the promotion of low-salt diets and recruiting new businesses to locate in the town.<sup>9</sup>

### ***Theme 3: Recognizing the present generation's actions as a prerequisite***

As participants become immersed in their newly formed worldview of the future generation, they soon come to recognize actions by the present generation as a necessary prerequisite to realize this worldview. The reason for this recognition is that inaction or unfavorable action by the present generation threatens the very existence of the imagined future world, as well as of the people living in it. Those immersed in the future generation feel a sense of urgency regarding this demand for appropriate action, because their visions usually take a long time to fulfill.<sup>10</sup> This tendency is partly a consequence of being freed, for the purpose of the exercise, from constraints that other

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<sup>8</sup> See the second paragraph of subsection 4.1, on workshop 1.

<sup>9</sup> See subsection 4.2 and paragraph 9 of Table 3, for example.

<sup>10</sup> See paragraph 6 of Table 3 for an example.

people would assume to be fixed and unalterable.<sup>11</sup>

Three types of prerequisites for fulfilling the future vision are of interest. First, those representing the future generation often adopt the strategy of making extremely long-range extrapolations of emerging social trends<sup>12</sup> to think about endogenous factors in the future. In doing so, they tend to realize that the natural and cultural legacies that they possess today will be more outstanding and valuable then, and so they desire that the present generation will not let them disappear. Second, some representatives of the future generation also express a desire to prevent the present generation from making short-range investments that are not absolutely indispensable. Third, they hope that the measures adopted by the present generation to realize the future vision will not be too expensive. They tend to prefer reusing or renovating existing facilities rather than establishing new ones. They want to avoid wasting prior public programs and investments, instead adding new meanings to them and connecting them with the future vision.

#### ***Theme 4: Perceiving the coexistence of two conflicting identities***

After recognizing that the present generation's actions on behalf of the future generation are a prerequisite for realizing the proposed future vision, the immersed participant also realizes that he or she has now acquired a new perspective and has two different identities functioning alongside each other. While still possessing the original present mode perspective and feeling empathy for those recommending actions that are beneficial to the present generation (e.g., free medical services and the establishment of more child-care centers), the participant is also inclined to support actions that will come to fruition only several decades later. Furthermore, he or she becomes willing to pursue

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<sup>11</sup> See the fifth paragraph in subsection 5.1, "Mihoko's Story"; another example can be found in paragraph 4 of Table 3

<sup>12</sup> See paragraphs 4 and 5 of Table 2, and paragraph 3 of Table 3, for example.

the latter benefits at the cost of losing the former benefits. This newly gained dual perspective is of a higher order, in the sense that it includes and encompasses the former present-only perspective whereas the reverse is not true. This higher order view enables the participant to remain free from cognitive dissonance despite possessing somewhat contradictory identities.

The motivation to prioritize this new perspective persists after the workshop has ended, for various reasons. In some cases, the residual effect of simulating life as a member of the future generation causes people to prioritize things in one's own favor, now that one is also (albeit only in an imaginary sense) a member of the future generation.<sup>13</sup> In other cases, the person wants to be appreciated by future generations for addressing their needs.<sup>14</sup>

## **6.2 General Structure**

As described in subsection 3.5, the fourth and the final step in Giorgi's (1997, 2009) data analysis method involves the integration and synthesis of the data into a structure that describes the overall meaning of the experience (Goodman 2010). Jumping back and forth to shake off present concerns (theme 1) is an attempt to relativize one's perspective as a member of the present generation, at the cost of a heavy cognitive load. Having an illusion that the imagined world is real (theme 2) is a process to establish a new identity as a member of the future generation by means of immersing oneself in the future worldview and strengthening one's relativization of the present mode perspective. This new identity causes one to recognize the present generation's actions as a prerequisite (theme 3). Only after this point does one perceive the coexistence of two

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<sup>13</sup> In Miho's case, the hope for fulfillment of the vision that her group had created (see the fourth paragraph of subsection 5.2) lasted long after the workshop session had ended.

<sup>14</sup> See the second-last sentence of the final paragraph of subsection 5.1.

conflicting identities (theme 4), which, even though they are not fully consistent with one another, do not induce dissonance.

In essence, the experience of playing the part of a future generation member leads to the recognition that identities of the present and future generations are coexisting inside a single person, followed by a feeling of intellectual satisfaction<sup>15</sup> rather than dissonance, because acquisition of the latter identity enables the participant to reflect on the former identity with a sense of superiority. The fruit of this satisfaction can be enjoyed only at the expense of the cognitive load of becoming disengaged from the present. Thus, this intellectual satisfaction is accompanied by a sense of accomplishment.

Now we are ready to answer the question posed in subsection 4.3. As this description of the Future Design participant's general cognitive structure does not include explicit reference to assumptions regarding social changes, we conclude that that holding such assumptions is not an essential component of the structure. Miho's story also confirms this conclusion. However, having prior experience with science fiction and of coming up with creative assumptions about possible social changes offers a greater chance of succeeding in taking on the perspective of a future generation, as Mihoko's story suggests. We will return to this issue in the final section of the paper.

## **7. Discussions and Conclusion**

This phenomenological psychological study has been conducted to understand the subjective experience of becoming sympathetic to the future generation in workshops adopting the Future Design framework, a new variant in the family of future studies approaches. By selecting participants who were especially good at immersing themselves in the role of future generation members, the study identified the general structure of the

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<sup>15</sup> See the last sentences of subsections 5.1 and 5.2.

phenomenon, as summarized at the end of the previous section.

The findings make three major contributions to our understanding. First, the difficulty and importance of disengagement from the present in future studies workshops has been recognized in the literature (Vergragt and Quist 2011). The contribution of the present study on this point is that this transition is discrete, not continuous, and is enabled only by intentionally paying the cost of cognitive load. Since a cognitive load is required, it is inevitable that some participants are better at taking this step than others. However, very few earlier studies have paid attention to this individual difference. To the best of our knowledge, we are the first to identify several characteristics that may predict this competence: (1) background factors such as reading experiences in childhood, (2) demographic characteristics such as family composition (e.g., having dependent children), and (3) personality characteristics such as optimism or fatalism. The first of these categories of factors may be associated with imaginative ability, whereas the second and third might affect the ease with which one can set aside daily concerns during the workshop. It is of practical importance for workshop organizers to understand participants' individual characteristics and, where possible, place participants who have relatively low competence of disengaging from the present in groups with people of higher competence, so that the latter can assist the former by leading the discussions.

Second, as a consequence of the discrete nature of this transition process, it becomes possible for those who have succeeded in disengaging themselves from the present to distinguish others who have made this transition from those who have not. This finding has two practical implications for organizing future studies workshops. First, it would be beneficial to explicitly encourage peer support among participants so that the successful, discrete transition of a single participant is propagated to other members. Our two research subjects both received significant help from other members in realizing this

transition. Second, to avoid the drawback of inviting “participants safeguarding their vested interests” (Wangel 2011, p. 880), it would be beneficial to strengthen peer pressure by letting participants explicitly state how they are observing others during the workshop discussions. This step would encourage participants with individual interests to put aside those interests temporarily or would at least give workshop organizers a means of conducting ex post facto evaluations of the workshops.

Third and most importantly, workshop participants who succeed in disengaging from the present eventually realize that two conflicting identities are coexisting within them.<sup>16</sup> This finding seems consistent with the understanding of many psychologists, sociologists, and philosophers who have recognized that people have multiple identities, including Hermans and Kempen (1993), who proposed the dialogical self theory and who conceptualized individuality as involving a constant conversation among multiple voices or identities, and Ramarajan (2014), who proposed the concept of an intrapersonal identity network. Although the present and future generations’ identities are in conflict with one another, the association is much more complex than a simply negative one. Specifically, the incompatibility of these two identities shows how difficult it is to overcome the necessary cognitive hurdles and acquire the new identity while still maintaining the identity of a member of the present generation. Because of this difficulty, attaining simultaneous possession of these two identities brings a sense of accomplishment and intellectual satisfaction. This argument is consistent with the view of Ramarajan (2014), who suggested that a single pair of identities can be connected both positively (i.e., in an association of integration) and negatively (i.e., in an association of

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<sup>16</sup> Here we adopt the loose definition of identity proposed by Ramarajan (2014), who argued that “subjective knowledge, meanings, and experiences ... are self-defining” (p. 593) and provide a “lenses through which we make sense of the world and [which] enable us to connect meaning and action” (p. 595).

conflict), drawing on Benet-Martinez and Haritatos (2005) and Rothbard (2001).

The present study concludes that these two positive emotions (i.e., a sense of accomplishment and intellectual satisfaction) nudge the participant toward prioritizing the future generation identity over that of the present generation and toward favoring actions that advance sustainability rather than the interests of the present generation. Workshop organizers are thus encouraged to seek ways of empowering participants by maximizing these positive emotions among their participants. One promising strategy would be to give them a chance to contrast themselves with those who lack a future generation identity, as the future–present joint workshops conducted in Yahaba did, and discover more clearly how they have matured intellectually as a result of the workshops.

The present study has some limitations. First, it did not aim to clarify the benefits of the arrangement by which people became members of imaginary future generations. Thus, it will be important to conduct experimental studies comparing the processes and outcomes of workshops adopting conventional future studies approaches with those that involve people role-playing as members of imaginary future generations. Second, the present study identified proposed predictors of the ability to become disengaged from the present. A quantitative study using psychometrically sound scale items and sociodemographic questions will be needed to investigate whether these predictors are indeed statistically significant.

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Table 1: *The list of workshops*

Workshop No.	Date	Number of Participants	Imaginary Future Generation Setting	Mihoko's Participation	Miho's Participation <sup>1</sup>	Detailed Descriptions Provided in This Paper
1	29/09/2015	5	Yes	Yes	No	Yes
2	19/11/2015	5	Yes	Yes	No	Yes
3	29/09/2015	5	Yes	No	No	No
4	19/11/2015	5	Yes	No	No	No
5	29/09/2015	5	No	No	No	No
6	19/11/2015	5	No	No	No	No
7	29/09/2015	5	No	No	No	No
8	19/11/2015	5	No	No	No	No
9	02/02/2016	10	Yes <sup>2</sup>	Yes	Yes	No
10	02/02/2016	10	Yes <sup>2</sup>	No	No	No

Notes. 1: In addition to Workshop 9, Miho participated in several preliminary workshops held before September 2015 with the imaginary future generation setting, which are not listed in this table. 2: This is a future-presetn joint workshop, and the imaginary future generation setting was applied only to five of the ten participants.

Table 2: *The discussion in workshop 1*

Paragraph No.	Summary of the Discussion
1	Mihoko insisted that the town should cherish its natural resources and use them to create renewable energy sources and for other purposes, rather than allowing these resources to be reduced by urbanization trends.
2	Following the discussion in paragraph 1, a participant insisted that unlike the nearby major city, Morioka, the town should pursue a special status by preserving its farmland, advancing agricultural development, and thereby attaining food self-sufficiency.
3	Following the discussions in paragraphs 1 and 2, another participant expressed the hope that the town would attract tourists to its outstanding rural scenery and that the citizens would be proud of it in 2060.
4	A participant referred to the recent national trend toward an increasing number of agricultural corporations and the possibility that this trend would continue and even accelerate further in their town. He expressed the view that this would be a promising measure to maintain and advance agriculture so as to prevent the town's depopulation by 2060.
5	Mihoko changed the subject by referring to informatization, another social trend. She contended that the town should be able to feel proud of itself on a global scale in the information age. Another participant agreed with Mihoko and suggested that one way to do so would be to produce attractive agricultural products for the global market.
6	A participant changed the subject to concerns about the out-migration of youth from the town as of 2015. Given that this town cannot create employment as Morioka and Tokyo do, the only way to keep people in the town is to ensure that those who grow up there desire to raise their own children in the same place. Mihoko agreed with him and said that it would become more important in the future depopulated society to strengthen ties among children and across generations.
7	With the entire previous discussion in mind, Mihoko stressed that closeness to nature, an important part of the town's heritage, would become much more valuable in the future when major cities will be more urbanized, and that the town should attract people by means of this resource.
8	After a 10-minute break, the group proceeded to the subject of future infrastructure development that would ensure closeness to nature and tight community bonds. First, the members talked about various types of facilities, such as athletic fields and natural parks, that are insufficiently utilized as of 2015. Then a participant with a concern about the possibility of depopulation and decreased municipal revenues by 2060 argued that the town should keep or renovate existing facilities. Mihoko insisted that new transportation technologies such as flying cars should make it easier to make the best use of existing facilities even if they are relatively remote.
9	After the discussion in paragraph 8, the group realized the importance of investing in projects from which future generations would also benefit. At the same time, they expressed regret that the present generation had permitted some aspects of the local heritage, such as its traditional rice growing practice that had existed for several centuries, to disappear. The group members said that the present generation (as of 2015) should make decisions that will not be viewed so negatively in retrospect.
10	Looking back on the entire previous discussion, the group members considered what items to preserve and how to enhance them so that their town could establish its unique position as a rural community rather than following the path of major cities. They agreed that buying clothes and enjoying meals in restaurants can take place in the nearby major city, and that their town should pursue providing a peaceful quality of life so that people who share its basic values remain in this town.

Table 3: *The discussion in workshop 2*

Paragraph No.	Summary of the Discussion
1	The facilitator asked each participant in turn to provide ideas regarding their vision of the town in 2060. Mihoko referred to the DeLorean (a fictional automobile-based time-travel machine, using garbage as fuel, that appears in the film <i>Back to the Future</i> ), and said that this town could achieve energy self-sufficiency in 2060 by making use of garbage and renewable energy sources. After this comment, another participant expressed her concern that her daughter, a junior high school student, has to travel on through a dark road without lights when returning home from school.
2	A participant changed the subject by saying that the town could attain self-sufficiency with regard to food as well as energy in the future. Mihoko followed up on this statement and referred to the possibility that people in 2060 could be much more motivated to eat healthy foods, and that many companies seeking to meet this demand should emerge in their town.
3	The discussions in paragraph 2 triggered one participant, a farmer, to say that it would be nice if workplaces, including farms, were equipped with day-care centers so that employees could take their small children to the workplace. Mihoko and another participant referred to the possibility that informatization will allow a greater number of employees to work from home by 2060. Mihoko said that this is a less expensive measure than installing multiple day-care centers and is thus more suitable for municipalities with smaller revenue levels, such as their town.
4	The thought that such a working environment is especially appreciated by employees when their children become sick caused a shift in topic to health issues. Regarding care for elderly people, Mihoko and another participant insisted that rather than isolating the elderly by developing many nursing homes, it would be better to let them live in their own houses and to ensure that they can have regular contact with younger generations (including children) in 2060, when advanced medical technologies will enable elderly people to stay healthy and not die or have to retire as readily.
5	Mihoko's speculation that the younger generation's health would also be improved by advancements in health diagnostic technologies caused a change of subject to attracting new enterprises to the town, because she said that it would be nice to pursue businesses producing diagnostic robots. The group realized that the town should recruit enterprises that match its vision. (Attracting new businesses was a major policy emphasis in Yahaba as of 2015.)
6	After a break, the group discussed actions that were to have been taken in 2015. A participant expressed his concerns about energy issues by insisting that the town should be actively involved in worldwide efforts to reverse the trend of global warming in 2060. Mihoko reinforced this concern but stated that actions in this regard should be initiated in 2015, not 2060.
7	A participant expressed his concern regarding the welfare of elderly people. To reduce the isolation of the elderly, Mihoko stated that the town should work to change the minds of young people who are unwilling to marry and have children because they think that being single provides a more comfortable lifestyle, so that they will have children to support them when they become old.
8	Taking into consideration the fact in mind that one's willingness to marry is often associated with employment status, Mihoko shifted the subject by introducing information that she had learned recently from television about the emergence of househusbands. She then said that it would be interesting if their town could become more women-friendly and even women-centered, welcoming single mothers and their children as new residents. This goal could be achieved through creating women-friendly work environments.
9	A participant, asked by the facilitator to bring up his own subject, returned to the issue of attracting business enterprises and creating jobs (paragraph 5). Mihoko supported that person by saying that the town should invite companies that will not leave again within a short period of time. Another participant recalled the group's earlier statement that the new companies should also be aligned with the town's vision. Yet another participant pointed out that producers of health foods would be promising companies to attract because their town had already been implementing for some time a program to promote low-salt diets. The group was excited to hear this integrating idea because it would contribute not only to food self-sufficiency (paragraph 2) if the companies procured local agricultural products, but also to the welfare of elderly people (paragraph 7) if they were employed by these companies.