

# Future Language for Collaborative Design

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## **Abstract:**

This study presents a new method—Future Language—for designing the future of place, community, and life. Future Language is a new kind of language comprising Future Words to discuss visions of a desired future. Well-chosen Future Words capture what the desired future achievement is, why it is important and how to achieve it. By using Future Words, people can share their visions and collaborate towards a future defined by the words. This paper illustrates how future languages are created in a “Future Mining Workshop.” In a Future Mining Workshop, participants and generators, a special type of facilitator, first think freely about a desirable future state and write their ideas on sticky notes. Next, they consider present problems and difficulties and write those on sticky notes. After that, they develop ideas to realize each desired state and finally, they produce a Future Word that expresses the solutions to these problems. Although the process is designed to encourage divergent thinking in the participants at every step, the process also functions unconsciously to promote convergent thinking. As a result, as non-professionals find it easy to participate in creating a Future Language, workshops are lively and dynamic. In this paper, we demonstrate four applications of this method: renovating a workplace, designing a new café restaurant, developing a vision of a regional community, and involving children to make a play park livelier. Results and feedback from these cases indicated that the method was practical and effective. Note that this method is close to “Project Pattern Language” to ascribe the desired patterns residents (or users) have, as in the patterns at the University of Oregon and the Eishin school, which were conducted by Christopher Alexander and his collaborators. Based on these practices, the Future language method is structured as a thinking and communication procedure, especially in a workshop style, to create new common vocabulary to design new things.

**Keywords:** *Future Language; Future Mining, Project Pattern Language; Pattern Language; Collaboration;*

# 1. Introduction

When thinking and talking about the future, we tend to use our existing vocabulary. However, as the future may refer to something that does not exist today, in principle, our current vocabulary is insufficient to describe the future. This study proposes a method called Future Language to build a new vocabulary to describe the future (Iba, 2015). Using Future Words, people can share their visions and improve collaboration towards a future based on these words. The following sections indicate how future languages are created and demonstrate several applications of this method.

## 2. Future Language

Future Language is a new kind of language that comprises Future Words, which enables us to discuss a future vision (Figure 1). Future Words have three aspects: they represent approaches to realize a vision, they represent solutions to current problems, and can be used when talking about the future (Figure 2). Therefore, people who create and share Future Words can describe their visions, share them with others and construct prototypes.

The process of obtaining Future Words through dialogue is called Future Mining, which usually occurs over a four-hour workshop. More than two facilitators called ‘generators’ facilitate the process and share their ideas with the participating group. The generator is a role played by the workshop organizers who have two functions to successfully create future words: facilitation and creation (Akado et al., 2016; Nagai et al., 2016). Generators sit on one side of a table or room with participants on the opposite side (Figure 3). As discussed later, this arrangement enhances the flow of thoughts and actions from the past to the future using sticky notes to capture the participants’ ideas.

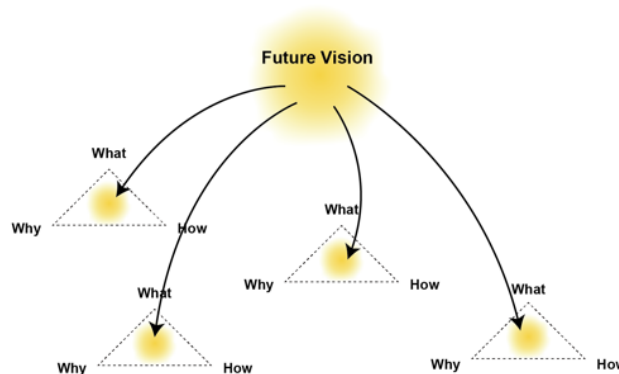
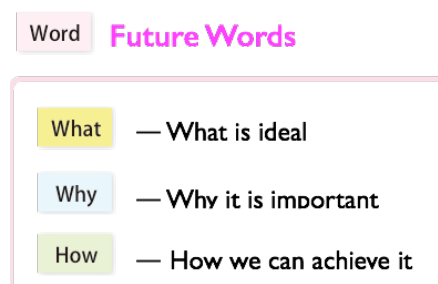
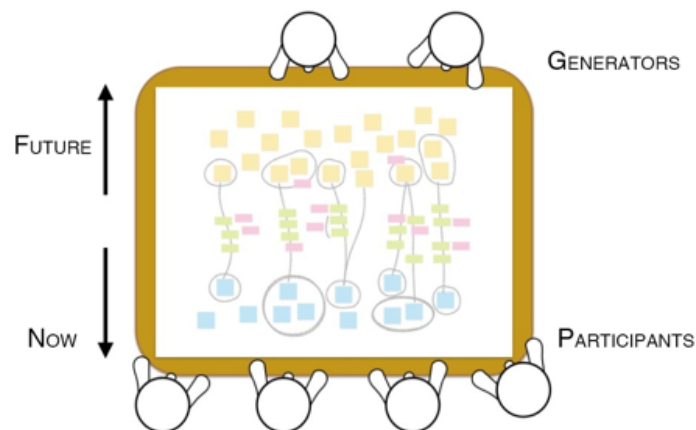


Figure 1: Future Language: Future Words to Represent a Future Vision



**Figure 2: Three Aspects of Future Words: What, Why, and How**



**Figure 3: Workshop Setting for Future Mining**



**Figure 4: Future Mining Workshop on Pattern Community at PLoP2014 Conference**

As an example, Figure 4 depicts a Future Mining workshop that was held to create a future language for a project involving an academic community; the Pattern Language of Programs Conference (PLoP2014); in the USA (Iba, 2014). Workshop participants were able to broaden their image of a future pattern community and discover connections between the present and future.

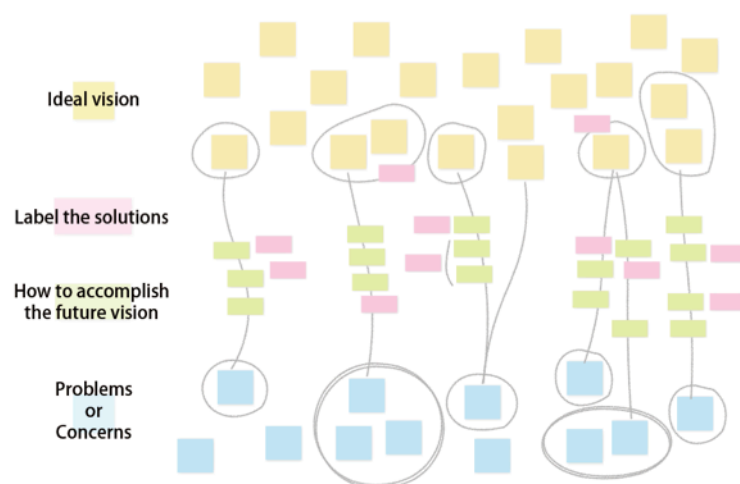
As a way of conceiving the future in the present, Future Language is a sister to Pattern Language (Alexander 1977, 1979)—a method of learning from the past. Future language is a way to learn from a future vision in the present and create new vocabulary to design new things that don't yet exist. It is similar to "Project Language," which seeks to ascribe desired patterns on the residents (or users), such as the patterns at the university of Oregon and

Eishin school conducted by Christopher Alexander and his collaborators (Alexander, et al., 1975, 2012; Neis, 2015). Based on these practices, the Future language method is structured as a thinking and communication procedure conducted primarily in a workshop setting.

### 3. Process of Future Mining

The initial step in Future Mining Workshops is for participants and generators to think freely about a desirable future state and write their ideas onto sticky notes. Then, they consider present problems and difficulties and write those on sticky notes. After that, they develop ideas to realize each desired state and finally, they produce a Future Word that offers solutions to those problems.

Participants place each sticky note in a specified location on a shared table (Figure 5). They write their visions of a more ideal future on yellow sticky notes and affix them to a location on the table farthest from themselves—i.e., nearest the generators. They write down current problems on blue sticky notes and affix them nearest to themselves on the table. The middle of the table is reserved for green sticky notes, on which participants write the means for achieving the future goal, and pink sticky notes on which they offer the solution. In this way, the Future Mining Workshop produces a map spanning the present to future.



**Figure 5: Configuration of Colored Sticky Notes during a Future Mining Workshop**

More concretely, the Future Mining process is as follows (Figure 6):

1. Brainstorm a desired vision of the future (Figure 6-A)
2. Brainstorm current problems (Figure 6-B)
3. Group the current problems elements (Figure 6-C)
4. Group the ideas for the visions of a more ideal future

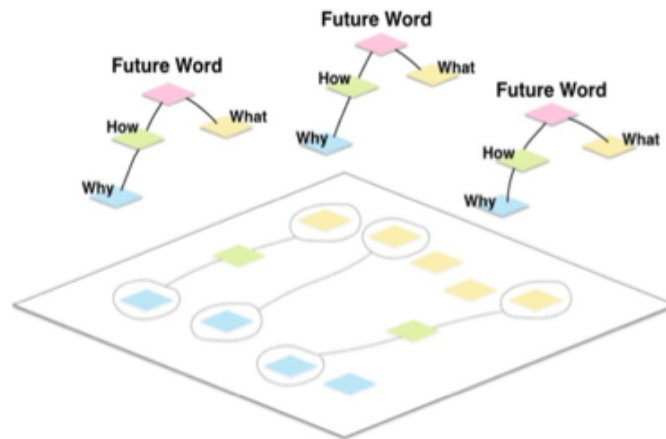


5. Connect the current problem groups to the visions of the future groups (Figure 6-D)
6. Brainstorm solutions to the problems and methods for achieving the future vision (Figure 6-E)
7. Brainstorm a name (Future Word) for the idea (Figure 6-F)

Each Future Word created during a Future Mining Workshop encompasses all three connected elements (Figure 7). The process is designed to encourage participants to use divergent thinking so as to promote convergent thinking. As a result, non-professionals find it easy to participate in creating a Future Language, so workshops are lively.



**Figure 6: Future Mining Process**



**Figure 7: The Three connected elements of Future Words: What, How, and Why**

## 4. Applications of the Future Language Method

This section presents four case studies in which the Future Language Method was used to; renovate a workplace, design a new café restaurant, develop a future vision of a regional community, and engage children to make a play park more alive.

### 4.1. Renovating a workplace

Our first Future Language case study involves the renovating and enlivening of a workplace; the offices of UDS Ltd.—a Japanese company that supports community development by designing houses, offices and hotels (Honda, et al., 2015). Figure 8 shows their former office.

In March 2014, a Future Language Workshop was held with 30 employees from UDS Ltd. (Figure 9). In the workshop, 30 future words were generated such as “Non-Pressure Café” for “We want a space where there are no pressures from our boss” and “I want to work with a feeling that it is easy to get together, like in a music, art, or physical education class.” After creating their Future Words, participants used them in a subsequent session to discuss new ideas (Figure 10).

To create Future Words, workers considered and discussed what the desired workplace should be like, why these elements were desirable and how to achieve it. This process made it possible for co-workers to mine and share feelings and to fabricate solutions by applying a Future Word that could help define the characteristics of an actual space or design. Thus, by collaboratively creating and using Future Language, participants were able to compose their desired workplace.

During an Idea Competition session after the workshop (Figure 11), participants generated more than 100 ideas for spatial designs (Figure 11-2). They discussed and summarized the ideas into eight keywords which described the necessary design requirements (Figure 11-3). The Future Word “Non-Pressure Café” was included in the design requirements as “Café/Kitchen” and included in the blueprint as “Library Café” (Figure 11-4). The new office was completed as a do-it-yourself project by workers and construction professionals (Figure 11-5).

By adopting the Future Language Method, participants envisioned a new space, identified problems and solutions and created a more enlivened workplace. Following are their comments: “Because of the catchy Future Words, we can imagine many spatial images.” “Various dialogue styles occurred, so I think the quantity and quality of the dialogue improved.”



**Figure 8: Former Offices of UDS Ltd.**



**Figure 9: Future Mining Workshop for renovating UDS Office**



**Figure 10: Dialogue Session Using Future Words to renovate the UDS Office**

## 1. Future Words

"Between 2<sup>nd</sup> and 3<sup>rd</sup>" ... Create a place, which is more than a workplace and less than a café.

"SHIFT MYSLF" ... Create an unusual space for coming up new ideas.

"Planting seeds of talk" ... Sharing the time all workers do something.

"Nobita's drawer" ... There is a space workers can concentrate on working.

"Non-Pressure Café" ... Create workspace with a feeling that it is easy to get together like music, art, or Physical Education class.

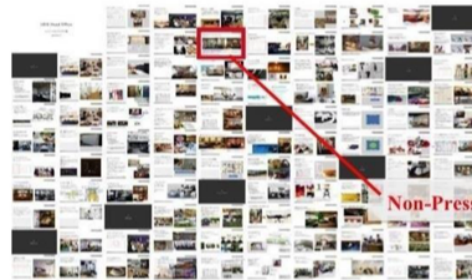
"Select Workspace" ... Create various workspaces based on each worker's work style.

"Natural Deodorant" ... There are natural light, plant, perfume, wind and terrace in workplace.

"Working Park" ... Create café where workers can get an idea and jobs by accepting diversity.

**Non-Pressure Café**

## 2. Idea Competition



**Non-Pressure Café**

## 3. Design Requirement



**Café / Kitchen**

## 4. Planning & Design



**Library Café**

## 5. Completion



Figure 11: Design Flow for renovating UDS Office using Future Language



After using the renovated office for two years, after the process of planning, designing, and constructing the interior, the company, UDS Ltd., has decided to move in March 2017. To think about the ideal space and systems in their new office, we recently conducted a Future Mining Workshop with 50 participants including executives and employees (Figure 12).



**Figure 12: Future Mining Workshop for new office of UDS Ltd.**

They are currently in the process of incorporating Future Language on space into the detailed design. In the workshop, 170 future words were generated in total. A few examples of the Future words they are planning to use are summarized below.

**Measurement Space:** Put measurement patterns on walls and floors in the café so that we can understand the size of materials during meetings with the clients. Even if the client is not familiar with design, they could understand the actual size by using this space.

**Decibel Level:** As sounds differ depending on the work, assign rooms and spaces based on the sound level. By creating differences in sound levels, all departments can work in the most suitable environment without worrying about disturbing others.

**Hospitality Entrance:** There is a space in front of the reception desk where visitors can wait. This would stop them feeling uncomfortable or having to wander around while waiting.

**Big Wall:** Place a bulletin board on the wall so it can also be used in meetings. Items such as a map of members' place of birth can be posted for communication hints.

**Center Copier:** Place the copier in the middle of the office so that it is easy to access from anywhere in the room. Design the motion line based on the Center Copier so that everyone can work comfortably.

**Display Storage:** To stay organized in the limited space, create storage space, including in the ceiling and the basement, so that all documents, materials, shipments, magazines, pamphlets, and samples are within reach.

**Comfortable Skype:** Make a booth for holding Skype meetings or conference calls comfortably, sound wise and space wise. This booth makes would make it possible to hold meetings easily with the Chinese office as well as with other offices.

**UDS Shop:** A shop that sells products sold on UDS sites. This would help the members know more about other sites and also works as a promotion.

The following is the feedback received from workshop participants:

- “Compared to official meetings, with the help of the casual atmosphere, I was able to share my opinions more. I felt its effectiveness in how the core of the idea was incorporated into the design.” (Building Material)
- “We were able to share different points of view by gathering from various departments. While there are limitations when organizing premises alone, doing it in workshop style made our thoughts flexible and new ideas were created. I would like to use this method in the designing process from now on.” (Architectural designer)
- “The methodology itself was very new. I was able to understand the premises in the design when they were put into words. The process was simple and easy to work on. I'm interested in how the output design will come about.” (Architectural designer)
- “We tend to come up with only 2 or 3 ideas when thinking alone, so it was interesting how ideas grew when we discussed and mixed ideas as a group. I thought this method was highly effective in the way that it enabled us to come up with valuable ideas in a short time.” (Architectural designer)
- “Through discussions with members from various departments in today’s workshop, I was able to know what they are usually thinking about, and what their ideal office and work styles are. Naming the ideas as Future Words in the end helped us feel that we actually developed the idea by ourselves, which also helped us build ownership of our office.” (Planner & regional coordinator)
- “I was able to understand our usual work style and the history of the company by exchanging opinions with members from various positions. I got excited when we were able to create a unique system by creating Future Language. Thinking about the ideal work place made me think about the ideal work style too. I didn’t have strong complaints about the present situation, but we were able to find problems through dialogue and realize room for improvement.” (Public relations staff)

## 4.2. Designing a new café restaurant

The second case study involved designing a new café to open in Ebina City, Japan, during August 2015. Initially called ‘Output café,’ it ultimately was named ‘PUBLIE.’ This café was founded by RICOH, Japan.

This case concerns identifying the multiple stakeholders’ needs to mine their desired communities, identify problems and map the Future Words (Suzuki et al., 2015). When designing a Third Place (Ray, 1999) with multiple users, it is necessary to develop a place that fulfills disparate needs and desires. Designers attempt to create ideal spaces by examining the desires of multiple stakeholders and identifying problems. In this case study, the Future Language Method served that purpose.

We held Future Mining Workshops several times for housewives, employees of RICOH and UDS Ltd., members of a peripheral company in Ebina City and students from Iba Laboratory at Keio University (Figure 13). Participants described their vision for a new café restaurant and their current problems. The designer was included as a stakeholder because designers are potential customers.



**Figure 13: Future Language Workshop Including Employees (upper left), Housewives (upper right), Students (lower left), and designers (lower right)**

Through the workshops, 211 Future Words were generated by the five stakeholders. Future Words from the mothers included; “Baby Dishes,” “Vacant Space,” “Play-Area Centered,” “Alcove Space,” “Anytime Checking,” “Event Manager,” “Now Print,” “Express Counter,” “Bento Box Buffet,” “Family Bistro,” “Surrounded Area,” “Space Charter,” “Event Board,” “Exercise Terrace,” “Kids Café,” “Kids Monitoring,” “Kids Tools,” “Private Café Space,” “Play Instructor,” “Considerate Dishes,” “Entertaining Chair,” “Tatami Space,” “Omnidirectional Group Photo,” “CA (Child Attendant),” “Shared Kitchen,” “Shared Menu,” “Natural Toys,” “Indoor Tree House,” “Forest Window Display,” “Tapas,” “Center Play Area,” “Center Big



Tree,” “Table Rocker,” “In-store Baby-sitter,” “Nostalgia Light,” “Nostalgic Juke Party,” “Leaf Money,” “Exciting Secret Base,” “Family Comfortable,” “Sound Partition,” “Craft Paper Tablecloth,” “Buggy Wide,” “Mama Event,” “Morning Seminar,” “Comfortable Space,” “Graffiti Wall & Floor,” and “One-Coin Event.” Table 1 shows examples of the Future Words in detail.

**Table 1: Examples of Future Words mined by several stakeholders for the new café restaurant**

Future Word	Desired future	Ideas how to realize	Current problem
Family Bistro	Dishes that satisfy both adults and children.	Dishes that satisfy both adults and children.	Adults cannot be fully satisfied when sharing dishes with their child, and children don't have anything to eat when there are only dishes for adults.
Considerate Dishes	A restaurant you can recommend to people living outside Ebina.	A restaurant you can recommend to people living outside Ebina. A place with different atmosphere.	There are many chain stores with same kind of menus. Already been to most of the similar bars around here. Although the population is not small, there are not many considerate restaurants.
Baby Dishes	A place with a different atmosphere.	A place where you can eat delicious food with your children.	It is difficult to go to tasty restaurants with children.
Family Comfortable	A place where you can eat delicious food with your children.	There's no need to worry about other customers. Everyone can easily drop by.	When going to restaurants in a family, it bothers other customers if children start making noise
Buggy Wide	There's no need to worry about other customers. Everyone can easily drop by.	The path is wide enough so that baby buggies can go through smoothly.	It is hard to move around with baby buggies because of a lack of space.
Comfortable Space	The path is wide enough so that strollers can go through smoothly.	A place where you can eat delicious food with your children.	You can't bring your child to most tasty restaurants.
Storefront Single Seat	Women can easily enter the place alone. Want to be alone but want a little interaction with others too.	There are seats for single customers at the storefront.	Because the place is full of regular customers, there's an atmosphere that you can't enter alone. It's hard to enter restaurants alone at unfamiliar places, especially if you don't have any friends around there.
Alcove Space	Women can easily enter the place alone.	There are half-private rooms.	Want to talk about private things, but want to enjoy the atmosphere of the café at the same time!
Private Café Space	Want to be alone but want a little interaction with others too.	There are seats where tabletops are unseen from others.	There's no space for doing tasks when spreading documents on the table.

Second Office	Want half-private rooms.	There's space outside the office where you can concentrate on work.	Due to the rules, you can't do overtime work even if there's a need for it.
Comfortable Table & Chairs	There are seats where tabletops are unseen from others.	Table and chairs that are suitable for working on tasks.	There's no place where you can spread documents on the table or chairs or where you can sit for a long time but don't get tired.
Writable Table	There's a space outside the office where you can concentrate on work.	There are tables you can write on.	You can't do activities where you need white boards and craft paper at places other than laboratories or offices.
Craft Paper Tablecloth	A café suitable for working on tasks.	There are places that allow you to use white boards and craft paper in groups.	You can't do activities where you need white boards and craft paper at places other than laboratories or offices.
Paper Tablecloth	There are tables you can scribble on.	Kids can play around while moving their body.	Kids eventually get tired of playing with toys.
Mother Events	There are places that allow you to use white boards and craft paper in groups.	A base for parenting increases within the local areas.	It is hard to have connection with other mothers. There is neither a place to ask for advice nor a place people can gather with their child.
Morning Seminar	Kids can play around while moving their body.	There are private rooms for customers like mothers groups. There is a base for parenting.	There's no place or opportunity to share parenting tips or teach hobbies. Even if there is a suitable place, you cannot use it when you want to, as it is booked, or the procedure is troublesome.
Live Music Bar	A base for parenting increases within the local areas.	Want to hear live music. Want to have a stylish café where you can relax.	Since Ebina is still an emerging area, there are no restaurants to go to with business clients.
Casual Events	There are private rooms for customers like mother groups. There is a base for parenting.	There's a place to do morning activities. Casual classes and workshops are held.	Information on classes and workshops in Ebina are disorganized and hard to reach. It is difficult to spend leisure time in Ebina.
Event Manager	Want to hear live music. Want to have a stylish café where you can relax.	You can easily organize events or parties.	Places you can go in big groups are limited.
Event Manager	There's a place to do morning activities. Casual classes and workshops are held.	There are private rooms for customers like mother groups. There is a base for parenting.	Even if there is a suitable place, you cannot use it when you want to because it is booked, or the procedure is troublesome.
Friendly Nickname	You can easily organize events or parties.	Staffs are friendly and easy to talk to.	Tend to feel hesitant when a restaurant is too fancy.

After creating the Future Words for each stakeholder, we then mapped them. In this mapping process, Future Words with similar meanings were collated according to whether they were symbolic, concrete, and feasible (Figure 14).

Although the visions of desirable designs and their justifications differed, some solutions overlapped. Consider these three examples of Future Words; “Fluffy Sofa” is a place to have a long stay; “Nap Chair” is a required space for taking a nap; and “Footrest Place” implies a place to sit and stretch the legs. These Future Words differed in the needs expressed, but there were commonalities as each refers to relaxation.

We also found differences in the participants’ visions of a desirable place. Housewives favored a “Family Bistro” with meals that satisfied both mothers and children. In contrast, the ideal space for one member of the peripheral company featured “Craft Beer” as a beverage beyond coffee and tea. These two Future Words revealed that stakeholders envisioned different features for the space but the purposes were generally similar. The Future Language Method identified the overlaps in the diverse stakeholders’ needs and clarified their commonalities.



**Figure 14: Mapping the future words mined from different type of stakeholders**

The café restaurant ‘PUBLIE’ opened in August 2015 (Figure 15). More than 15 Future Words were incorporated in the final plan for the spatial design of the café restaurant ‘PUBLIE.’ Future words that actually came true were:

**Baby Dishes:** Not only can an adult enjoy good food, there is also tasty baby food for toddlers and special menus for children.

**Craft Paper Tablecloth:** A paper Tablecloth is put on the table so that children can doodle and workers can visualize ideas before or after their meal.

**Second Office:** There are sofas for negotiation as well as single seats for finishing up quick tasks. Customers are starting to use the sofas and glass tables like this.

**Morning Class:** Hold classes in the morning to utilize the free space. Morning yoga classes were held around two times, but didn’t attract many customers.

**Mother Events:** There are events held for mothers when children are at preschool. As they have a top housewife blogger as a staff member, she is holding such events.

**Event Manager:** As a staff member manages the mothers' gatherings or events, it is easy to ask questions and get advice when needed. Brought-in events and PUBLIE presented events are both held.

**Friendly Nickname:** It is difficult to go in casually if a place is too fancy, so staff members are given nicknames to create a friendly, close atmosphere. PUBLIE "actors" (staff) all have nicknames and are actually called them by the customers.

**Storefront Single Seat:** Other than seats for groups, seats are provided for single customers to casually drop by. Glass table seats are mainly used by workers or single women customers.

**Live Music Bar:** There is a space for live performances and days when you can enjoy live music. It has become a routine event.



**Figure 15: The café restaurant 'PUBLIE' designed based on future language**

Now it has been a year since PUBLIE opened, we asked the management staff to look back on the future words that left a strong impression. For the future word "Family Bistro," which represents a place that both parents and children can eat delicious food, they commented as below.

- "Ebina Ougi-cho itself is still new and there are only a few citizens, so the customers at dinner time are mainly the workers from the companies close by. However, at lunchtime or on the weekends, customers are mostly parents and their children enjoying the same dishes together. Since it is a suburban area, elderly customers come as well, realizing



the “three generation bistro.” We have plans to make more of scenes like this as the families living in the city increase.”

It seemed that “Buggy Wide,” a future word to make all the paths wide enough for buggies, was receiving a good response as well.

- “We have been receiving comments from mothers with baby buggies that they don’t have to worry about blocking the path and can easily place the baby buggy beside them. Not a day goes by without customers coming in with buggies.”
- “There are many mothers with children at lunchtime and we have been receiving a lot of reservations for groups of mother with buggies, which is difficult to do at other places nearby. It’s been a year since we opened, and we have child customers that first came in buggies, but now come without. We feel that we were able to grow together with them.”

In addition to PUBLIE, we also held several Future Mining workshops to design an after-school facility for children called ‘COSCIE’ on the 3rd floor of the same building as PUBLIE (Figure 16). Workshops to create Future Language were held for this project as well, and the words were incorporated into the design and management process. Participants were parents who live in this area with their children.

The Future Mining Workshop was held under the theme “Ideal After School,” “Ideal Science Learning,” and “Ideal Science Learning part 2.” Workshops were done with two groups each time. For each workshop, we had 10 to 12 participants with 8 Generators. As a result, 133 future words were generated in total.



**Figure 16: Future Mining Workshops for After-School ‘COSCIE’**

For example, the future words created at the workshop were: “Back to Nature,” “Kids Atelier,” “Three Generation Game,” “Kids Kitchen,” “Communiteacher,” “Local Adventurous Map,” “Worker Investigation Team,” “Little Writer,” “Imaginary Maker,” “Extreme Laboratory,” “Lab Stay,” “Little Farmer,” “Toy Hospital,” “Experiment Diary,” “Tidy Upper Certification,” “Book On,” “Kids Exhibition,” “Shared Dog,” “Book Sommelier,” and “Children Staff.”

Out of these words, “Communiteacher” was one of the ideas that came true (Figure 17). This is a system where people from the community become teachers and teach something they are good at or know well about. From a teacher of a painting class to a lecturer at a guitar school, they have been inviting people from the community as teachers and hold events with them.



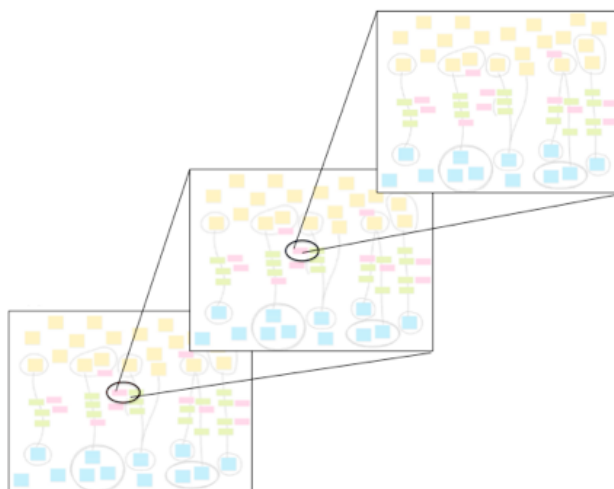
**Figure 17: After-School ‘COSCIE’ and its “Communiteacher”**

### **4.3. Envisioning a regional community**

The third case study concerns how Future Language workshops in Satsumasendai City, Japan, triggered a dialogue among residents about their visions of a desirable future for the community in a future center (Fujioka et al., 2015).

A Future Center is an open space where people can bring problems or ideas and gather diverse groups to discuss them. Future Centers are increasing in number throughout Japan, and many dialogues about them have been held. However, a methodology is needed to trigger that dialogue among the disparate community elements. The more the local residents discuss their communities’ futures, the greater the chance for new ideas or actions. To establish that dialogue, we applied the Future Language Method—in this instance, repeating the process of Future Mining whereby participants produced Future Words to define desirable futures and suggested effective actions to realize them (Figure 18).

To set the topic for the future mining workshops, we interviewed local government officers to investigate community issues as workshop topics. Topics that emerged included; ‘Local Future of Farming’ and ‘Local Future of Parenting and Working.’



**Figure 18: Process of Expanding Future Mining**

In September and October 2014, we held a Future Workshop on the theme “Local Future of Farming” with local young farmers in Satsumasendai. 10 future words were generated in the first workshop, and 31 future words in the second workshop. Through the workshop, we found out that they wanted to widely share the value of the locally produced agricultural products with the citizens. Because of the need for an area brand image, the brand “Riverfront” was developed from the future word “Unkai (Sea of Clouds) Brand” (Figure 19). Also, because there was a need for a place where consumers and producers could communicate directly, after considering the use of empty stores in a “shuttered street,” they decided to hold events riverside. Now they are holding “Riverfront Marche,” encouraging citizens to consume locally and communicate with the producers (Figure 20, 21).



**Figure 19: 1<sup>st</sup> and 2<sup>nd</sup> Future Mining Workshop for ‘Local Future of Farming’**





**Figure 20: Designing Implementation of their project based on their future words**



**Figure 21: Riverfront Marche Event implemented based on the Future Words**

The staff from the Future Center where we held the workshop commented on Future Language and the workshop;

- “We had a wide variety of participants from different occupations and ages, such as farmers, city officials, staff members from city planning groups, public consumers, and housewives at the workshop. Even in that situation, Future Language helped them hold smooth discussions and come up with a valuable result by creating a shared vocabulary between people who may have only met for the first time and talking about a serious topic. We ended up with a big idea of holding a “Marche,” but looking back now, almost all the Future Words we came up with are in use in some way or another.”

From city officials and third sector staff who participated in the workshop, we heard the following comments;

- “We have been getting ideas about how to utilize empty facilities in the shopping street, but couldn’t figure out how to actually do it. I was able to learn how to organize ideas and thoughts through the workshop.”
- “These kinds of events tend to be ready-made by the city hall, but we might be able to conduct events led by the actual organizers by using ideas we came up with today.”
- “Compared with last time when we talked mainly about farmers, it was interesting how we got to hear also from consumers and shop owners this time. I found out that when participants change, opinions, and the topic of discussion changes too.”

In addition to the future mining workshop for local farmers, another workshop we held at the Future Center was conducted under the theme “Local Future of Parenting and Working” (Figure 22). The first workshop on this theme included three housewives, from which 9 future words were generated. They proposed the Future Word ‘Shared Work’ to capture the idea of people sharing the same fulltime job, and then the second workshop focused on this topic; as a result, 28 future words were generated.



**Figure 22: 1<sup>st</sup> and 2<sup>nd</sup> Future Mining Workshop for ‘Local Future of Parenting and Working’**

Comments from the participants at the future mining workshop for ‘Future of Parenting and Working’ were as follows:

- “The direction towards realization was clear with a small number of participants and a speedy process.” (Kindergarten manager)
- “Seeing how mixed up opinions get organized logically, I felt that new things start from opportunities like this.” (Corporate Operator)
- “It was a meaningful since I got to share my thoughts and hear opinions from people who I usually do not have interactions with.” (Office Worker)
- “It was a good opportunity to talk with people from different positions and environments.” (Office Worker)
- “The flow of the ideal future, current situation, solution, and naming was easy to understand, which made it easy to participate.” (City Official)
- “The facilitator was skillful.” (Corporate Operator)

The staff from the Future Center who organized the workshops together pointed out that Future Language was effective as it directly supported actions to realize the ideas, functioning as a common grammar/language, and was a highly productive method:

- “We had the problem with ambiguity of the discussion topic when holding workshops with citizens, but the Future Language method made it very clear. Instead, of ending the discussion within the workshop, the Future Language method directly supported the participants in feeling some responsibility towards the ideas they came up with to make them actually happen.”
- “The participants have a variety of attributes, especially in the provincial cities. Since farmers, office workers, and housewives each have their own vocabulary, it becomes very challenging when it comes to dialogue or discussion about the local problems.
- “I think that even if the participants meet for the first time, the Future Language method makes it possible to hold creative discussions and share each other’s opinions and thoughts. In addition, giving catchy names to ideas as Future Words became the ‘common mark’ for consent from the people with different attributes, and created the base for the following activities.”
- “I feel it is also effective because of its reproducibility. Even though there were differences in accuracy, we were able to become Generators and conduct the workshop by ourselves later on, and it had enough efficacies as a method to initiate the first dialogue. I think that it is important that anyone can use the method and become a Generator, especially in areas with small populations of young people like here.”

Therefore, the Future Language Method was able to involve many people and sustain dialogues about their future of their community.

#### 4.4. Involving Children to make the Play Park Alive

The final case on future languages in this paper is the case which involved children in making their play park more alive. At “Kodomo no Mori” (Kids’ Forest) in Nerima, Tokyo, we held an outdoor Future Language workshop with the children as the participants. The concept of this park is “Nature × Adventure × Interaction,” enabling children to realize the rich environment through nature experiences and adventure activities (Figure 23). Even though it is a public park, it is new in a way, as public enterprises and an NPO are in charge of park management, from creating the space to controlling the operations.





**Figure 23: A map overviewing “Kodomo no Mori” (Kids’ Forest) Park in Nerima, Tokyo**

We looked for hidden demands and came up with new ideas together with children, focusing on the park’s mission, facilities development, and events. The workshop was held outdoors in July 2015 inside the park and was held twice, once before noon and once in the afternoon (Figure 24). A total of 15 children participated in the workshop, from which 51 future words were generated. A few examples are given in Table 2.



**Figure 24: Future Mining Workshop at “Kodomo no Mori” (Kids’ Forest) Park**

**Table 2: Examples of Future Words mined at the “Kodomo no Mori” park**

Future Word	Desired future	Idea how to achieve it	Current problem
Parent vs Kids Tag	Want to play tag with parents/children.	Plan events families can play together.	There’s no opportunity for families to play together at home.
Selfish Plan	Adults and children can play together on even ground.	Children plan games that adults might even lose. Children decide on the content, schedule, and promotions. 1st round is “Adults vs Kids Tag.”	There are many opportunities for adults to plan children’s games, but they tend to go easy on children when playing together.

Baby Space	There is also play equipment for babies.	Next to the play equipment for kids, place play equipment for babies. For example, swings in two sizes.	Want to play together with babies, but normal size play equipment is unsuitable for them.
Low Mist	Set mist machines for the summer refreshment lower.	Set up mist machines on the ground like sprinklers.	As the mist machine is too high for children, the mist disappears in the wind before it reaches them.
Water Balloon Gun	Want to play with water balloons that are prohibited in other parks.	Make guns that can launch water balloons.	You can play with water balloons at other places, but can't play with them here.
Seasonize	Want to feel the seasons, summer-like in summer, winter-like in winter.	Make an environment where you can feel each season. For example, enjoy cherry blossoms in spring, eat shaved ice or ice creams in summer, or make snowmen in winter.	It's difficult to know the season when you're indoors.
Seasonal Event	We can enjoy events based on the season by ourselves.	Children plan seasonal events and adults prepare tools or opportunities for that.	There are not many seasonal events, so it's hard to enjoy the season while playing.
Season Festival	There's a festival held on the 2nd Saturday every season.	Play with water in summer, plant maple trees in spring, view the trees in autumn, and make snow huts in winter.	Without any different events based on season, there is not much purpose to visit the park that often.
Mud Pool	Able to play around in mud that is not stinky.	Create a "Mud Pool," that is made out of mud without roots or fallen leaves.	When there is a smell of roots and fallen leaves in the mud, you can't enjoy playing in mud.
Bicycle Practice Space	There's a place to practice riding bicycles safely and for a long time.	Make practice lanes inside the park and have bicycles for practice in various sizes for rent. You can also rent safety wheels if needed.	It's hard to practice riding a bicycle as you need a parent to accompany you and a safe road to ride on.

We received comments such as "The events were always planned by adults, but we want to organize events as well from now on!" (12 year old, boy) or "I had fun thinking about new activities. Big brothers and sisters helped me do the illustration since I'm not good at drawing." (10 year old, boy) from children who participated in the workshop.

Management staffs who were watching the children during the workshop commented, "It was an event where we got the chance to peek inside the head of kids who usually come by and play around freely. The comment "We want to plan the events instead of adults planning them." made a strong impression on me since it made me realize the importance of involving kids' curiosity and not just getting ideas from adults."

Staff commented on the flow of the workshop; "Some kids were hesitating to speak out at first, but seeing them start to share their ideas and opinions with the help of Prof. Iba and his students, I felt the importance of Generators. Further, I got to see another side of kids who are usually shy and quiet, since they were excitedly sharing their ideas as well."

Many of the future words created in the workshop were put into practice. For example, as an “Event or game where parents and their kids compete or work together” from the words ‘Parent vs Kids Tag’ and ‘Selfish Plan,’ events such as a tail-catching game and a water bomb party were held. In these events, they separated into an adult team and a kids team where they enjoyed a fierce game.

Inspired from the future word “Baby Space,” they created seats for babies called “Everyone’s Seat” and an event series called “First Outdoor Playing” for parents and children with little experience of playing outside, aiming for a park that would also be open for babies on weekday mornings.

## 5. Conclusions

In this paper, we presented the Future Language concept and method, and then gave several case studies, which demonstrated the method’s effectiveness, in which the Future Language Method was shown to encourage collaboration in diverse groups to create future visions using future words. We have conducted more than 20 workshops on such issues as designing a learning center, educational programs, community development outside Japan, and future visions of creative society (Nakamura & Iba, 2015; Kimura, et al., 2016a, 2016b). We intend to keep organizing workshops for diverse issues and documenting the results of the Future Language Method.

## Acknowledgements

We first acknowledge the other members of our project: Takuya Honda, Sumire Nakamura, Kosuke Suzuki, and Shoko Fujioka. We thank our collaborators, Keibun Nakagawa, Yuta Kanazuka, Ryo Tsukahara, Sakura Miyahara, Ai Tabata, and other members of UDS Ltd. We thank Yuma Akado for translating the future words and feedback into English and for support in writing this paper.

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