

The Perception of the Beneficiary for Japanese Bowing in Different Situations at the Reception

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Abstract. We inspected the effect on the recipient of Japanese bowing (ojigi) in proper keirei style and in one's own style. First, we performed eleven variations of bowing and examined the impression of each bowing. The results were that keirei made the best impression on the recipient. Second, we set up two situations regarding five variations of bowing; absence of any people except the parties (extra 0), and presence of two people (extra 2). Then we examined whether the evaluation for these bowings changed or not depending on the two situations. As for keirei, extra 0 showed a significantly-high score. In "bowing deeply" and "bowing unsteadily," extra 2 showed a significantly-high score. Keirei made the best impression in situations where there were no outside factors. On the other hand, "bowing deeply" could achieve almost the same impression as that of keirei, despite its being in one's own style, in situations such as extra 2.

Keywords: Ojigi · Japanese bowing · Japanese hospitality

1 Introduction

The number of foreign visitors to Japan is rapidly increasing. Since April 2003, when the "Visit Japan Campaign" promotion to attract tourists from abroad was begun by the Ministry of Land, Infrastructure, Transport, and Tourism [1], overseas publicity regarding travel to Japan, domestic infrastructure for the sake of foreign visitors, and other such developments have intensified. Despite the Great East Japan Earthquake in 2011, proliferation of the middle class brought on by a weakened yen and economic growth in various neighboring Asian countries led the number of foreign visitors to

jump from a mere 5.24 million in 2004 to 13.41 million in 2014, with forecasts that the number would exceed 19 million in 2015.¹ The government is considering drastically increasing its target of 20 million visitors for the year 2020 to 30 million.²

In terms of Japan's tourism resources which pique the interest of people from other countries, there are factors such as its beautiful scenery of nature as an island nation, its rich historical and cultural heritage, and other cultural resources. However, after it was decided that the 2020 Summer Olympics and Paralympics would be held in Tokyo, it seemed to become inevitable that the Japanese way of hospitality—known as “omotenashi”—would also rank as an essential tourism resource. This was especially true because of the attention that would be drawn to lodging facilities like hotels, traditional inns, and bed and breakfasts, as well as dining and drinking establishments from casual eateries to high-end restaurants, and other places visitors are certain to see.

The Japan Tourism Agency is supporting regional pre-emptive initiatives as the “Regional ‘Omotenashi’ Improvement Project Directed at the 2020 Olympics and Paralympics”.³ Concomitant with this movement, there are also efforts to attract customers by strengthening the spirit of “omotenashi” within the service industry, but in order to do so a proper understanding of “omotenashi” is imperative. The Japan Productivity Center has defined “omotenashi” as “work to provide uncompromisingly heartfelt service while valuing the perspective of customers and/or residents” [2]. “Valuing the perspective of customers and/or residents” can be rephrased as “mutualistic service whereby the provider considers the circumstances of the beneficiary and responds with his or her whole heart,” as differentiated from service which is unilateral from the side of the provider only. It can be thought that analogous concepts in other countries such as “hospitality” (the U.S.), 待客之道 (China), and “hospitalité” (France) vary from “omotenashi” on this point of whether the service is or is not mutualistic [2], and we can say that it safely passes as a peculiarly Japanese tourism resource.

There has been much debate over the question of what kind of service “omotenashi” entails. But even if we start from the basis of the saying that, “‘Omotenashi’ begins with a greeting and ends with a parting,” it seems that we should note the Japanese way of bowing (*ojigi*) as a first step to studying “omotenashi.” The history of bowing being an action of greeting for Japanese people is long, as in the third century Chinese text the *Gishi-wajin-den* it is recorded that, “When meeting with an important person, Japanese people go to their knees and cast down their heads.” Furthermore, the action of casting down one's head, or bowing, has been regarded as showing that one has no enmity toward his or her counterpart, due to the fact that it exposes the back of the head, a point of vulnerability [3].

Bowing is not limited to instances of greeting. It is also performed in various other settings such as to show appreciation or apologize, and is a commonly seen gesture in

¹ According to Japan Tourism Agency projections and a December 22nd, 2015, news briefing with the Minister of Land, Infrastructure, Transport, and Tourism.

² At the first meeting of the “Planning Commission for a Tourist Vision to Support Tomorrow's Japan” (chairperson: Prime Minister Shinzo Abe), which opened on November 9th, 2015, the Government's target of 20 million visitors annually by the year 2020 was raised to in excess of 30 million.

³ According to a presentation by the Japan Tourism Agency on June 17th, 2014.

the course of daily life [4]. Bowing can be done while standing or while sitting. For both there are multiple classifications according to the angle at which the upper portion of the body is bent. Within standing bows, based on the angle of the bow there are the classifications of *eshaku* (“greeting bow,” 15 degrees), *keirei* (“respect bow,” 30 degrees), *saikeirei* (“highest respect bow,” 45 degrees), and *hairei* (“worship bow,” 90 degrees) [5], or the classifications of *eshaku* (approximately 15 degrees), *keirei* (approximately 45 degrees), and *saikeirei* for the gods and buddhas (“highest respect bow used for the gods and buddhas,” approximately 90 degrees) [6, 7], among other ways of classifying. However, in most settings calling for conventional business etiquette, *eshaku* (15 degrees), *keirei* (30 degrees), and *saikeirei* (45 degrees) are practically being used as the three classifications of bows.

At the same time, unexpectedly, even Japanese people – who have ample opportunity to learn bowing as a proper manner – are almost exclusively doing so in a self-taught way [8]. Because of this, bowing without maintaining the correct angle or bowing lightly and repeatedly, et cetera, is often seen. As bows in a self-taught style, the following are commonly observable:

【Tendencies seen in Self-Taught Bowing】

- Errors in execution (too deep/not sustaining proper angle, rushed, not facing directly forward, hands held behind back, premature)
- Excessive movement due to carrying out without adequate preparation (with hesitation, unsteadily, repetitively)
- Repetition in order to correct previous uncompleted attempts
- Errors in knowledge (almost no movement, stiff)

As a case study of researching bowing through experimentation, Morishita and Iwashita (1985) [9] reported that as inexperienced persons lowered their heads when bowing, there was an intensification in the angle of the curvature of their backs; that in comparison to experienced persons the time of remaining still upon bowing was shorter for inexperienced persons; and that despite their being Japanese, the subjects predominantly bowed in a self-taught manner.

In other previous studies, there has also been research from the aspects of what kind of bowing is preferred, and what kind of impression is received. Henmi and Isayama (2010) [10] examined the duration for which pleasure was taken in various types of standing bows, making use of a “standing bow motion stimulus” with the body bent at 45 degrees that was created by three-dimensional computer graphics. Additionally, Shibazaki, Takahashi, Gyoba, et al. (2015) [4] conducted a pair of experiments, one investigating subjective impressions toward the action of bowing, and the other investigating the appropriateness of certain styles in given social contexts.

As stated at the outset, there is a movement to attract customers by strengthening the spirit of “*omotenashi*” within the service industry at this time. On this point, we have attempted to discover important knowledge as part of “*omotenashi*” by analyzing the impressions given to other people by bows in one’s own style versus proper bows backed by etiquette. In order to verify the impact that the motion of a bow gives to another person in as realistic an environment as possible, while pre-supposing the standing bow of a greeter as seen in the service industry we set not only one-on-one situations in which one individual was bowing and another was being bowed to,

but also situations in which other people were present, to measure the impression given according to the skill level of the person bowing. In concrete terms, in Study 1 we had an expert perform eleven varieties of bows ranging from standing bows befitting of a greeter to improper bows in a self-taught style, and evaluated the impressions through responses to a questionnaire. In Study 2, in addition to paring down the eleven types of bows to five, we set two different kinds of environments – one in which other people were present in the place where the action occurred, and one in which they were not – and examined whether the evaluations of the impressions changed.

2 Study 1

2.1 Purpose of Study

The purpose of this study was to investigate the degree to which persons being bowed to had favorable or unfavorable impressions regarding each of various types of bows.

2.2 Method

2.2.1 Creation of the Video Used in the Study

The filming for the video utilized in this study was performed at the entrance of a restaurant which is commonly used for weddings and wedding receptions. For a model to do the bowing in the video, we selected one woman who provides instruction on receiving customers professionally. The model possesses eight years of experience teaching greeters how to welcome customers at dental clinics and other service businesses, and insofar as we could determine that her level of competency was sufficient to serve as the model for the video for this study, we had her perform all of the bows, from what would be conceived of as proper, all the way to those which would be viewed as improper and in a self-taught style. Figure 1 shows the floor layout plan at filming, and an image of the video is shown in Fig. 2.

There were eleven variations of bowing. First, at the entrance of the restaurant, our expert carried out a keirei bow that would be considered suitable for the proper bow of a greeter. Then, we recorded the ten types of bows other than keirei, which are referred to below as “B” through “K,” and which would be thought of as unsuitable bows done in a self-taught manner. “B” was a bow with hands behind the back; “C” was a bow while not facing directly forward; “D” was a bow that was too deep; “E” was a bow that was too fast or rushed; “F” was a bow that was stiff; “G” was a bow that was repeated over and over; “H” was a bow with arms swinging; “I” was a bow that was performed unsteadily; “J” was a bow that was almost completely lacking in movement; and “K” was a bow with hesitation.

In choosing bows “B” through “K,” selections were made from the categories shown in Table 1, below.

Table 1. Categories concerning selection of bowing variations

| | |
|--|--|
| Bows regarded as Typical for Students and Young People | |
| B | Bowing with Hands behind Back |
| E | Bowing Too Fast |
| F | Bowing Stiffly |
| Bows regarded as Typical in Business Settings | |
| D | Bowing Too Deeply |
| G | Bowing Repeatedly |
| J | Bowing with Almost No Movement |
| Bows considered Impolite regardless of Age and Circumstances | |
| C | Bowing while Not Facing Directly Forward |
| H | Bowing with Arms Swinging |
| I | Bowing Unsteadily |
| K | Bowing with Hesitation |

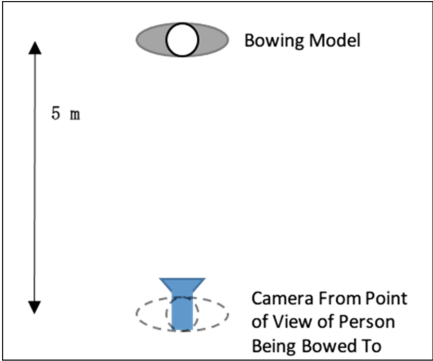


Fig. 1. Image of video used in study 1



Fig. 2. Image of video used in study 1

2.2.2 Study Procedure

The study was conducted on the web using Google Forms provided by Google Incorporated. Via a survey webform, we evaluated the level of favorability of people's impressions of the bowing they saw after they viewed and listened to the video. For the evaluation method, we used a five point Likert scale, with one representing the worst impression, and five representing the best. We followed a style whereby the eleven types of videos were allocated randomly, and participants were asked to evaluate the videos one by one. As we were adopting an online survey webform that required all questions to be answered, there were no deficiencies in the responses.

2.2.3 Respondents to the Survey

The respondents to our survey were 74 men and women who ranged in age from 20 to 70 years old (mean age: 39.50 years old; standard deviation: 13.59 years). The breakdown of men and women was 46 men to 24 women. Before implementing the survey, we provided an online explanation with respect to the purpose of our study, et cetera, then proceeded after securing consent from individuals willing to participate.

3 Results

Table 2 shows the participants' impressions according to differences in the eleven variations of bowing. From the results of our single-factor variance analysis, with the bowing types set as intrasubject factors, a significant main effect could be detected ($F_{10,730} = 119.0$, $p < .01$). That is, when using Scheffé's method to perform a multiple comparison test, keirei bowing (4.22 ± 0.86 [mean score \pm standard deviation], as illustrated below) was evaluated the most highly, having a significantly greater value than any other way of bowing. "Bowing stiffly" (3.01 ± 1.00) and "bowing too

Table 2. Evaluations concerning Impressions of Bowing

| | <i>M</i> ± <i>SD</i> | <i>n</i> |
|--|----------------------|----------|
| A Keirei | 4.22±0.86 | 74 |
| B Bowing Stiffly | 3.01±1.00 | 74 |
| C Bowing Too Deeply | 3.00±1.11 | 74 |
| D Bowing with Almost No Movement | 2.20±0.91 | 74 |
| E Bowing Too Fast | 2.16±0.99 | 74 |
| F Bowing Repeatedly | 2.04±0.88 | 74 |
| G Bowing while Not Facing Directly Forward | 1.86±0.83 | 74 |
| H Bowing with Hands behind Back | 1.64±0.73 | 74 |
| I Bowing with Arms Swinging | 1.62±0.66 | 74 |
| J Bowing Unsteadily | 1.41±0.60 | 74 |
| K Bowing with Hesitation | 1.08±0.28 | 74 |

deeply" (3.00 ± 1.11) were evaluated the next most highly, and they were unified into one subgroup. Another subgroup was formed from the most highly evaluated after that, which were "bowing with almost no movement" (2.20 ± 0.91), "bowing too fast" (2.16 ± 0.99), "bowing repeatedly" (2.04 ± 0.88), and "bowing while not facing directly forward" (1.86 ± 0.83), while another was formed from those that followed, "bowing with hands behind back" (1.64 ± 0.73) and "bowing with arms swinging" (1.62 ± 0.66). The subgroup comprised of "bowing unsteadily" (1.41 ± 0.60) and "bowing with hesitation" (1.08 ± 0.28) was evaluated with the lowest scores Table 2.

4 Discussion

In Study 1, we reproduced keirei bows, which are thought of as proper for professional greeters, and various improper bows of a self-taught style, which in general inexperienced persons are prone to, and upon verifying the impressions to the person receiving the bow, we found that the keirei style generated the most favorable response. The evaluation scores of keirei bows and bows in one's own style had wide disparities; in fact, we found that significant differences were recognizable between keirei and every single type of bow made in a self-taught manner.

One type of mistake which is often made by inexperienced practitioners but which looks correct at first glance is to bow too deeply, so it was of great interest to us that "Bowling stiffly" and "bowing too deeply" obtained the next highest evaluations after keirei. As we have previously noted, due to the fact that bowing is an action which involves the casting down of one's head and therefore leaves the back of the head (a point of vulnerability) exposed, it has been regarded as a way of showing that one has no enmity toward his or her counterpart. Perhaps it is for this reason that the action of lowering the head deeply in and of itself caused the person receiving the bow to harbor a positive impression. Or, since previous research [4] tells us that in a setting where a greeting is made actions that give an impression of elegance are most appropriate, and such factors as the shallowness of the angle or the shortness of the time of remaining still are associated with this impression, it could be that in this case the only difference between keirei and bowing too deeply is corrected simply by making the angle more shallow.

5 Study 2

5.1 Purpose of Study

In Study 2, looking at several types of bows, our objective was to examine how the degree to which the favorable or unfavorable impressions harbored by persons being bowed to would change based on the interposition of other individuals in the place where the bow was performed.

5.2 Method

5.2.1 Creation of the Video Used in the Study

Based off of the results of Study 1, we made a determination to use the five types of bows described below out of the eleven total variations. First, we adopted the bow that was evaluated the most highly (keirei) and the bow that had the lowest evaluation (“bowing with hesitation”). Next, we chose to adopt “bowing too deeply” and “bowing repeatedly,” as well as “bowing unsteadily.” “Bowling too deeply” was chosen because it is a characteristic tendency to which inexperienced persons are prone, while “bowing repeatedly” was chosen because it is commonly seen in ordinary daily living situations in Japan. Finally, we adopted “bowing unsteadily” because the difference between it and other ways of bowing is very noticeable.

After this, in order to examine changes in the impression held by the recipient of a bow according to the presence of other people where the action takes place, we positioned two individuals as extras presumed to be other customers conversing between the bowing model and the video camera. Then we filmed the situation with the video camera in the same way as carried out in Study 1. In terms of the filming location, we utilized the same restaurant as for Study 1, and we used the video from Study 1 for the case in which there were no extras. We strove to ensure that we could reproduce each of the five types of bows just as they had been performed in Study 1, and we visually confirmed that there were no such differences (Figs. 3 and 4).

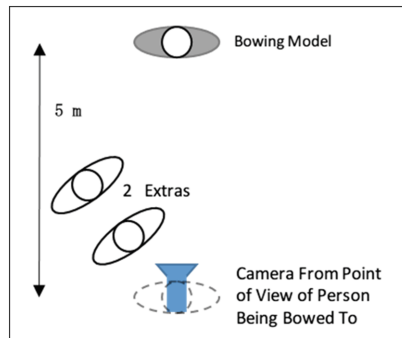


Fig. 3. Study 2 floor layout plan (with extras, from above)



Fig. 4. Image of video used in study 2

5.2.2 Study Procedure

In the same way as with Study 1, we conducted this study on web using Google Forms provided by Google Incorporated. Via a survey webform, we evaluated the level of favorability of people's impressions of the bowing they saw after they viewed the video. For the evaluation method, we used a five point Likert scale, with one representing the worst impression, and five representing the best. That there were five styles of bowing and two cases for each – with the presence of the extras, and without – brought about a sum total of ten types of videos, and the order of presentation for these was random. The format was for the participants to then evaluate the videos one by one. Again, as we were adopting an online survey webform that required all questions to be answered, there were no deficiencies in the responses.

5.2.3 Respondents to the Survey

The respondents to our survey were 60 men and women who ranged in age from 20 to 61 years old (mean age: 38.89 years old; standard deviation: 12.32 years). The breakdown of men and women was 36 men to 24 women. Before implementing the survey, we provided an online explanation with respect to the purpose of our study, et cetera, then proceeded after securing consent from individuals willing to participate.

5.3 Results

First, we examined the reliability of the survey responses through a comparison of the results for Study 2 with those for Study 1. With regard to the disparity between the evaluations concerning the videos for Study 2 which did not feature extras and the mean values for Study 1, we carried out a t-test for two independent between-groups. The results did not show significant differences within any of the five varieties of bowing.

Next, we performed a two-factor variance analysis with both the types of bowing (five levels) and the conditions of having and not having extras (two levels) set as intrasubject factors. We were able to recognize significant mutual interaction through our results ($F_{4,236} = 9.82, p < .01$). From that, we examined a simple main effect. For the videos in which no extras were present, the order from the highest evaluation to the lowest was keirei (4.40 ± 0.89), "bowing deeply" (3.57 ± 0.96), "bowing repeatedly" (2.15 ± 0.80), "bowing unsteadily" (1.37 ± 0.52), and "bowing with hesitation" (1.08 ± 0.42). Between the evaluations of any two styles of bowing, a significant difference could be found. In contrast, while the order of highest to lowest evaluation was the same as it had been for videos which did not include extras, a significant difference was not recognizable between keirei bows and "bowing deeply" in the case of videos which did (keirei [3.97 ± 0.92], "bowing deeply" [3.80 ± 1.01], "bowing repeatedly" [2.23 ± 0.85], "bowing unsteadily" [1.65 ± 0.80], and "bowing with hesitation" [1.23 ± 0.47]).

Finally, we examined the simple main effect for each bowing variation depending on whether there were or were not extras present. Whereas for keirei bowing the results showed a significantly higher value for the video without extras, for "bowing deeply" and "bowing unsteadily," the results showed significantly higher values for the videos

with extras. No significant difference based on whether or not there were extras present could be recognized for “bowing repeatedly” and “bowing with hesitation (Tables 3, 4 and Fig. 5)”.

Table 3. Questionnaire response results

| | Study 1 (<i>n</i> =74) | Study 2 (<i>n</i> =60) |
|------------------------|----------------------------|----------------------------|
| Keirei | 4.22±0.86 | 4.40±0.89 |
| Bowing Too Deeply | 3.00±1.11 | 3.57±0.96 |
| Bowing Repeatedly | 2.04±0.88 | 2.15±0.80 |
| Bowing Unsteadily | 1.41±0.60 | 1.37±0.52 |
| Bowing with Hesitation | 1.08±0.28 | 1.08±0.42 |
| <i>M</i> ± <i>SD</i> | | |

Table 4. Questionnaire response results

| | Extras | |
|------------------------|-----------|-----------|
| | Absent | Present |
| Keirei | 4.40±0.89 | 3.97±0.92 |
| Bowing Too Deeply | 3.57±0.96 | 3.80±1.01 |
| Bowing Repeatedly | 2.15±0.80 | 2.23±0.85 |
| Bowing Unsteadily | 1.37±0.52 | 1.65±0.80 |
| Bowing with Hesitation | 1.08±0.42 | 1.23±0.47 |
| <i>M</i> ± <i>SD</i> | | |

5.4 Discussion

In Study 2, we verified the impact (or lack thereof) that the presence of other people in a situation in which a bow is offered has upon the impression of the recipient of the bow. Regarding keirei style bowing specifically, when it was performed as a one-on-one exchange from the side bowing to the side being bowed to under the conditions that no one else was between the two parties (extra 0), the recipient evaluated the bow very highly. However, when it was performed under the conditions that two other people were present between the two sides (extra 2), then the bow did not receive as high of marks from the recipient.

On the other hand, there were cases in which extra 2 was actually evaluated more highly than was extra 0 for certain types of the bows considered improper and in one’s own style. In this study, “bowing deeply” and “bowing unsteadily” each received significantly higher evaluations under such conditions.

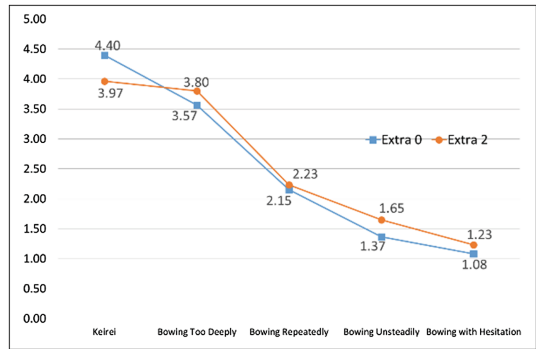


Fig. 5. Evaluation score of each bowing style (simple mean value)

6 General Discussion

Keirei bowing can give the best impression to the recipient in an idealized environment with no outside influences, but we found that in environments in which there are other influences fully conveying the good impression the correct motion gives to the recipient can be difficult. Conversely, we also found that because as stated in the discussion concerning Study 1 even an improper, self-taught styled bow such as “bowing deeply” involves the action of casting down and exposing the back of the head which is a point of vulnerability, and thereby indicates that one has no ill will toward his or her counterpart, under conditions such as those of extra 2 it can acquire approximately the same level of impression as a “correct” bow due to its clearly showing that meaning and intention.

With respect to each of the bows performed in both extra 0 and extra 2 conditions in Study 1 and Study 2, we took great care to ensure the highest possible standard of reproducibility by utilizing an expert, and that reproducibility was used in making strenuous efforts to visually ensure the identicalness of the bows. However, inasmuch as we were dealing with human beings, perfect reproducibility was difficult to achieve. For that reason, we predict that we could complete a more accurate study if moving forward we could carry it out with the heightened reproducibility of extra 0 and extra 2 conditions that would be possible through computer graphics, image compositing, et cetera.

Also, in accord with the promotion of “omotenashi” as part of aiming to make Japan a country which is a travel destination for tourists, the fact that just as “omotenashi” is an idea that is established within Japanese companies, among fellow Japanese people, bowing also is something that is primarily only understood among fellow Japanese people should be kept in mind. As future research, we believe that a study similar to this one which looks at how bowing is being perceived by non-Japanese people is necessary.

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