

# Godspeed Questionnaire Series: Translations and Usage

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**Abstract** The Godspeed Questionnaire Series (GQS) is one of the most highly cited and used questionnaire in the field of Human-Robot Interaction and Human-Agent Interaction. Since its inception in 2009 it has been translated into 19 languages. In this chapter we discuss the history and development of the GQS as well its psychometric properties. For the first time we make the collected translations that have been provided by the research community, available in a formal publication. This will allow future authors to better reference the exact translations they used. We review the psychometric properties of the translations when available. We discuss the merits and limitations of the GQS, with a particular emphasis on the contribution of making measurements instruments available openly.

## 1 Introduction

Measurement instruments are essential for all scientific disciplines. It allows the scientists to observe reality and to draw conclusions based on these observations. In the fields related to engineering, measurement instruments are also used to monitor technological progress. The field of Human-Robot Interaction (HRI) is at the intersection of engineering, psychology and design (Bartneck et al., 2020). Steinfeld et al. (2006) called for common metrics for HRI, in particular for evaluating the performance of the robots. To be able to compare the performance of one robot to another, particularly if these robots are developed at different labs, well defined tasks and context are necessary in order for results to be comparable. Slight variations in the environments in which the robots operate might already influence the performance of the robots. The need for standardisation for the test of technologies is shared with other related fields, such as in computer science or mechanical engineering. For

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example, large test scenarios and sample databases have been developed to test the performance of face recognition algorithms (Lyons et al., 2014) or automatic speech recognition (Varga and Steeneken, 1993).

One of the challenges in the field of HRI is that the performance of the robots relies on the humans that interact with them. At times, the perception of the humans are the success criteria. For example, a robot that is likeable is more successful. Arguably, the most common approach to measure the perceptions that humans have of robots are questionnaires. The field of HRI inherits this approach from the wider field of psychology in which questionnaires are also the most common measurement instruments.

Standardisation is again key to being able to compare results of HRI studies. Slight variations in the wording of the questions can already produce different results. This is particularly important in the current “replication crisis” that has affected not only HRI, but also the wider field of psychology (Irfan et al., 2018). Many studies described in the literature could not be reliably reproduced. One of the contributing factors for this crisis is the imprecise definition of the measurement instruments and their usage.

This chapter discusses the Godspeed Questionnaire Series (GQS) that consists of five concepts relevant to HRI: Anthropomorphism, Animacy, Likeability, Perceived Intelligence and Perceived Safety (Bartneck et al., 2009). This questionnaire series is the most often named questionnaire in the field of HRI (Zimmerman et al., 2022) and it is the most cited paper in the International Journal of Social Robotics according to Scopus. It is common for method papers to be amongst the most highly cited papers (Small, 2018). While the GQS is widely available and even meta-analyses have been published (Weiss and Bartneck, 2015; Mara et al., 2022), the adoption of the questionnaire in the community and in particular its translations deserve additional attention.

## 1.1 History of the questionnaire series

The GQS was first discussed during the Ro-Man conference in Hatfield in 2006. Elizabeth Croft and I exchanged ideas about measurement instruments in HRI and decided to write a paper for the Metrics for Human-Robot Interaction Workshop in Amsterdam in 2008 (Bartneck et al., 2008). Kulic and Croft (2005) had worked on measurement instruments on safety, which included a questionnaire as well as physiological measurements (Kulic and Croft, 2006). For my own PhD thesis, I had developed questionnaires for Anthropomorphism, Animacy, Likeability, and Perceived Intelligence (Bartneck, 2002). We integrated the feedback we received from the workshop and submitted a revised manuscript to the inaugural issue of the International Journal on Social Robotics where it was published in 2009 (Bartneck et al., 2009).

We refer to the GQS as a series since it consists of five scales that can each be used as a stand-alone questionnaires. The GQS is not intended to be always used

with all of its questions, particularly due to the overlap between anthropomorphism and animacy as discussed below. Instead, researchers should pick the concept most relevant to their own research.

The name for this questionnaire series was inspired by the name of the rock band “Godspeed You! Black Emperor”<sup>1</sup>. I was unfamiliar with the term “Godspeed” and upon learning its meaning (“a prosperous journey”) it seemed appropriate for a tool that would enable others in their research journeys.

## 2 Development of Godspeed Questionnaire Series

The anthropomorphism scale was based on the work of (Powers and Kiesler) and was first used in (Bartneck et al., c) (Cronbach’s alpha of 0.87) and (Bartneck et al., a) (Cronbach’s alpha of 0.92 for the human condition, 0.92 for the android condition and 0.85 for the masked android condition). The animacy scale was based on the work of (Lee et al., 2005). It was first used in (Bartneck et al., b) and reported a Cronbach’s alpha of 0.70. The likeability scales was based on (Monahan, 1998). It was first used in (Bartneck et al., c) (Cronbach’s alpha of 0.86) and (Bartneck et al., a) (Cronbach’s alpha of 0.92 for the human condition, 0.87 for the android condition, and 0.84 for the masked android condition). The perceived intelligence scales was based on (Warner and Sugarman, 1996). It was first used in (Bartneck et al., a) (Cronbach’s Alpha values of 0.75), (Bartneck et al., b) (Cronbach’s alpha of 0.76) and (Bartneck et al., d) (Cronbach’s alpha of 0.76). The perceived safety scales was first used in (Kulic and Croft, 2005, 2007) and they reported a Cronbach’s Alpha for the affective state portion of the questionnaire of 0.91. An extended description of the development process of this scale is available in (Bartneck et al., 2009). These five individual scales were then collectively described as the Godspeed Questionnaire Series in (Bartneck et al., 2009).

## 3 Subsequent Evidence of Psychometric Properties

Shortly after the publication of the GQS, Ho and MacDorman (2010) confirmed its internal consistency. Their test confirmed that the items within the likeability and anthropomorphism scale were highly consistent with a Cronbach’s alpha of around 0.92. The Cronbach’s alpha of animacy and perceived intelligence was not far behind with around 0.88. Only the Cronbach’s alpha for perceived safety was below (0.6) the original observation of around 0.75. Kulic and Croft (2005, 2006) had, however, shown that the perceived safety scale highly correlates with physiological measurements.

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<sup>1</sup> [https://en.wikipedia.org/wiki/Godspeed\\_You!\\_Black\\_Emperor](https://en.wikipedia.org/wiki/Godspeed_You!_Black_Emperor)

Six years after its publication, a first meta-analytic review of the GQS was published (Weiss and Bartneck, 2015). Of the 160 papers that referenced the GQS paper, only 69 conducted empirical research with the questionnaire series. One of the major obstacles identified was that there were many different factors included in those papers and that only 21 of them used the same robotic hardware. Hence it remained difficult to draw conclusions by comparing the results of those 21 studies.

Stroessner (2020) conducted another review of the application of the GQS and reported Cronbach's alpha values for anthropomorphism (0.86-0.93), animacy (0.70-0.76), likeability (0.84-0.92), perceived intelligence (0.75-0.92), and perceived safety (0.91). They concluded that the GQS is widely used in the HRI community.

By 2022, the GQS has attracted 1,852 citations and while this provides a better basis for a second meta review, it has also become demanding to manually process the content of these papers. Here, we can conclude that the GQS has been widely adopted by the community and has become one of the de-facto standard measurement tools in HRI. It has to be acknowledged that a large number of references to GQS are not themselves empirical studies in HRI. For example, the most highly cited paper that references GQS is about Tourism and Innovation (Hall and Williams, 2008). Even a LaTeX template is available for creating well formatted printable questionnaires <sup>2</sup>

## 4 Translations of the Godspeed Questionnaire Series

In this section the translations that were reported back to the authors are discussed. The source of the translation, the translation process, and psychometric properties of the translated scales are reported from the original translators when available. If this information was not provided by the original translator, then a short literature review was conducted to gain at least a few psychometric properties from other publications.

### 4.1 English

Already in the original GQS publication, readers were encouraged to submit translations of the English questionnaire series to the author so that it could be collected on a web page (Bartneck et al., 2009). This open access approach to this measurement instrument proved to be successful. 16 translation have been collected as of 2022. While originally published on a web page <sup>3</sup> the GQS translations are now available in a more structured spreadsheet <sup>4</sup>. The full translation of the English Godspeed Questionnaire Series is available in Appendix / Figure 1.

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<sup>2</sup> <https://github.com/scheunemann/latex-questionnaire>

<sup>3</sup> <https://www.bartneck.de/2008/03/11/the-godspeed-questionnaire-series/>

<sup>4</sup> <https://docs.google.com/spreadsheets/d/1FNIZBcP03u3TqyBilBLrKVA1V612aXeH98YNZlzbq7o/edit?usp=sharing>

## 4.2 Arabic

Micheline Ziadee created an Arabic translation of the GQS and made it available to the website [Makatchev et al. \(2013\)](#). They reported Cronbach's alpha scores above 0.70. [Trovato et al. \(2013\)](#) also used an Arabic version of the GQS, but did not report on any psychometric properties of the Arabic scales. The full translation of the Arabic Godspeed Questionnaire Series is available in Appendix / Figure 2.

## 4.3 Basque

Xose Xavier Rodriguez Rivera provided not only a new Spanish translation, but also the Galician, Catalan and Basque translation. All four languages are being used in Spain and they are related to each other. In his original correspondence, Xose wrote that he had the support of native speakers and a philologist. Xose sent these translations in 2021 and was not available for further correspondence about the translations since then. He did not provide a literature reference and hence it is unclear in what context these translations were created. The full translation of the Basque Godspeed Questionnaire Series is available in Appendix / Figure 3.

## 4.4 Catalan

As mentioned in section 4.3, Xose Xavier Rodriguez Rivera provided the Catalan translation. The full translation of the Catalan Godspeed Questionnaire Series is available in Appendix / Figure 4.

## 4.5 Chinese

Bram Vanderborght, Jelle Saldien and Qiang Ma developed a Chinese translation of the GQS and reported it back in 2010. They reported on their own work a few years later [Saldien et al. \(2014\)](#). In 2010 they worked on a project for the Shanghai World Expo. They reported Cronbach's alpha values of well above 0.70 for the Chinese scales. The full translation of the Chinese Godspeed Questionnaire Series is available in Appendix / Figure 5.

#### 4.6 Czech

Matej Hoffmann provided a Czech translation in 2022 that was used in one of his studies [Lehmann et al. \(2020\)](#). No psychometric properties were reported for the Czech scales. They did find a positive correlation between the anthropomorphism score ( $r(38) = 0.55, p = 0.0002$ ) and the animacy score ( $r(38) = 0.43, p = 0.005$ ) with the distance between the human and robot. The full translation of the Czech Godspeed Questionnaire Series is available in Appendix / Figure 6.

#### 4.7 Danish

Franziska Kirstein provided the Danish translation of the GQS as part of their evaluation of a UV disinfection robot ([Rubaek et al., 2016](#)). They did not provide any psychometric indicators for the Danish scales. [Tan et al. \(2018\)](#) used the GQS in Denmark and reported on Cronbach's alpha values of well above 0.70. The full translation of the Danish Godspeed Questionnaire Series is available in Appendix / Figure 7.

#### 4.8 Dutch

The authors of the Chinese version (see section 4.5) also created a Dutch translation [Saldien et al. \(2014\)](#). The reported internal consistency measures are identical to that of the Chinese version. [Trovato et al. \(2015\)](#) reported on Likability having a Cronbach's alpha larger than 0.70. [Torta et al. \(2013\)](#) conducted a study with Dutch participants and reported a Cronbach's alphas between 0.77 and 0.92. The full translation of the Dutch Godspeed Questionnaire Series is available in Appendix / Figure 8.

#### 4.9 French

Wafa Johal provided the French translation of the GQS in 2014. Their first study using the GQS did not provide psychometric indicators for the French scales [Johal et al. \(2014\)](#). The full translation of the French Godspeed Questionnaire Series is available in Appendix / Figure 9.

#### 4.10 Galician

As mentioned in section 4.3, Xose Xavier Rodriguez Rivera provided the Galician translation. The full translation of the Galician Godspeed Questionnaire Series is available in Appendix / Figure 10.

#### 4.11 German

Mary Ellen Foster and Manuel Giuliani provided the German translation in 2012. Their original publication did not report on any psychometric properties of the German scales, but they validated the GQS by correlating it to behavioural measurements (Giuliani et al. (2013). Onnasch and Hildebrandt (2021) reported on Cronbach's alphas well above 0.70. The full translation of the German Godspeed Questionnaire Series is available in Appendix / Figure 11.

#### 4.12 Greek

Alexander Astaras provided the Greek translation in 2013. They used a double-blind translation process and published their results on their own website, which by now has been discontinued <sup>5</sup>(Astaras et al., 2015). They used the translation in a pilot study but did not report on any psychometric properties of the Greek scales (Moustakas et al., 2014). The full translation of the Greek Godspeed Questionnaire Series is available in Appendix / Figure 12.

#### 4.13 Italian

Stefania Operto provided the Italian translation in 2021. Her PhD thesis is written in Italian and hence it was not possible to extract psychometric properties of the scale (Operto, 2021). Akalin et al. (2017); Tanevska et al. (2020) are likely to have used an Italian translation and both reported on Cronbach's alpha well above 0.70 for the Italian scales. Their studies were published before Stafania's thesis and hence they must have used their own translation. The full translation of the Italian Godspeed Questionnaire Series is available in Appendix / Figure 13.

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<sup>5</sup> <http://medphys.med.auth.gr/godspeed>

#### 4.14 Japanese

Bartneck et al. (2009) translated the original English questionnaire to Japanese using the forth-and-back method. The English text was given to a bilingual speaker who translated the questions from English to Japanese. The Japanese text was then given to a second bilingual speaker who translated the Japanese back to English. By comparing the two English versions, problems in the translation could be identified and rectified. By going through several iterative cycles, it was possible to improve the translation although it has to be acknowledged that the sometimes abstract concepts used in the semantic differential scales are harder to translate than more common words and phrases.

Bartneck et al. (2009) reported on Cronbach's alpha values of well above 0.70 for the Japanese scales. The full translation of the Japanese Godspeed Questionnaire Series is available in Appendix / Figure 14.

#### 4.15 Korean

Elena Knox provided the Korean translation which was conducted by Jenna Lee in 2018. Their translation was based on the art project called "Omikuji"<sup>6</sup>, and a publication is upcoming. They did not report on any psychometric properties of the Korean scales. Chung and Shin (2015) reported on Cronbach's alpha values of well above 0.70 for the Korean scales. The full translation of the Korean Godspeed Questionnaire Series is available in Appendix / Figure 15.

#### 4.16 Persian

Ellie Sanoubari wrote a Persian translation and sent it to the online spreadsheet in 2021. Through several emails, I was able to confirm that she did not use it for an empirical study in HRI and that she did not publish a paper that referenced her translation. At this point in time, her translation has to be considered a good start, but further steps are necessary to ensure the quality of the translations.

Meghdari et al. (2018) used the GQS in two hospitals in Tehran, and they are likely to have created a Persian translation. They published a second study that had Iranian children as participants, and hence it is very likely that they used the GQS (Alemi et al., 2020). The full translation of the Persian Godspeed Questionnaire Series is available in Appendix / Figure 16.

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<sup>6</sup> <http://www.elenaknox.com/omikuji.html>



#### 4.17 Portuguese

Carina Dantas provided the Portuguese translation in 2015. Her work was based on the European Project “GrowMeUp”<sup>7</sup>. Oliveira et al. (2021, 2017) reported on good levels of consistency for perceived likeability and perceived intelligence. The full translation of the Portuguese Godspeed Questionnaire Series is available in Appendix / Figure 17.

#### 4.18 Spanish A

Javier Ruiz-del-Solar provided a Spanish translation in 2009. The Bender robot participated in the RoboCup @Home competition, and they used the GQS to evaluate the robot. No publication or report are available, and Javier did not respond to any further enquiries. Castro-González et al. (2016) conducted a study with Spanish participants, and they reported Cronbach’s alpha values of Anthropomorphism (0.89), Animacy (0.91), Likeability (0.90), Perceived Intelligence (0.81), Perceived Safety (0.80). It is unclear, however, if they used translation A or B. The full translation of the Spanish A Godspeed Questionnaire Series is available in Appendix / Figure 18.

#### 4.19 Spanish B

Xose Xavier Rodriguez Rivera provided the Spanish B translation in 2021. He claimed to have improved on the Spanish A translation (see section 4.18). As with his other translation, no publication is yet available. The full translation of the Spanish B Godspeed Questionnaire Series is available in Appendix / Figure 19.

### 5 Cultural considerations

As a result of the available translations, many cross cultural studies have been conducted (Trovato et al., 2013, 2015; Haring et al., 2014, 2016; Lee et al., 2015). The interest in cross-cultural aspects of HRI highlights the importance of standardised and translated measurement instruments. One of the main challenges for the GQS translations are their quality control. While even non-academic volunteers proposed translations, the quality of their work needs to be carefully assessed. This is of particular importance since some of the semantic differentials used in the GQS use abstract terms that can be challenging to translate.

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<sup>7</sup> <https://cordis.europa.eu/project/id/643647>

## 6 Scoring Instructions

The GQS is based on semantic differentials. Participants are asked to mark their answer on a five point scale that is anchored with opposing terms, such as “Unconscious” and “Conscious”. The task is made easier if all the positive terms are located on the right and receive the highest score. Researchers might want to reverse the order of the terms to force the participant to pay more attention, but then the researchers also need to be extra careful to reverse the scores in the data analysis for those questions. The GQS consists of five concepts that each have between 3-6 questions. An average score for each of the concepts can be taken to represent that particular concept.

## 7 Limitations and Recommendations for Future Research

There is an overlap between the anthropomorphism and animacy concepts, which is not too surprising due to their theoretical proximity. Both concepts include the semantic differential “Artificial – Lifelike”. There are two options to resolve this issue. First, only one of the concepts at a time should be included in each research study. Second, the semantic differential could be shown twice. Extra care needs to be taken that a randomisation of the question order does not present this repetition right after each other.

At times, researchers might not be fully satisfied with the scope of the five concepts included in the GQS. Hence, new scales have already been developed with GQS as its starting point. This included the Pertinence of Robot Decisions in a Human-Robot Joint Action Context (PeRDITA) (Devin et al., 2018), Robotic Social Attributes Scale (RoSAS), (Carpinella et al., 2017), humanness, warmth, eeriness, and attractiveness indices (Ho and MacDorman, 2010), The Human–Robot Interaction Evaluation Scale (HRIES) (Spatola et al., 2021), and the Trust Perception Scale-HRI (Schaefer, 2016). While most of these scales argue that they offer improved psychometric properties, their uptake is still below that of the GQS. This may simply be due to the fact that GQS is well documented, openly available and translated into many languages. The authors of new and improved scales should also make their work more accessible in order to allow the field of HRI to progress.

While it is easy to calculate the internal consistency of the five concepts based on their individual questions, true reliability and validity evaluations are much harder. To establish true reliability, the same experiment would need to be repeated several times. This would allow the researcher to then compare the results.

Part of the replication crisis is that repeating the same experiment several times in order to establish a reliability score is often not perceived as highly valuable by the research community. Instead, novel results take the limelight.

The same holds true for validity tests. There are two common practises. One could present the participants in a study with stimuli that have an established property. The measurement instruments should then show the predicted results. A second approach

is to compare the results with other measurement tools, which could include other questionnaires, but also physiological and behavioural data. This does add considerable complexity to the experiment. [Kulic and Croft \(2005, 2006\)](#) demonstrated that this is possible.

Another aspect that might not receive sufficient attention is the sensitivity of the measurement instruments. Many concepts under investigations in HRI have a medium effect at best. Hence it is not uncommon to observe a floor effect in which the measurement instrument is not sensitive enough to pick up the small differences. Less often, but still possible, are ceiling effects, where the measurement instrument is too sensitive and all participants score extremely high.

## 8 Conclusion

The wide adoption of the GQS allows researchers to better compare the results of their studies. This may help to overcome the replication crisis since it gives researchers established and easily available measurement instruments. Still, the replication crisis requires researchers to further improve their methodology and reporting.

First, researchers should report which language version of the GQS was used. Many researchers fail to report this important detail, even if the participants in their studies are non-native English speakers. Many, if not most, Dutch participants, for example, would be able to understand the English version, but to fully optimise the accessibility of the questionnaire, the Dutch translation should be used. The researchers should report clearly which language was used in all their measurement instruments and associated instructions.

One of the challenges in reporting on the use of the GQS is that the translations themselves are not normally available as a citeable source. It is highly useful that researchers reported back their translations since this allowed us to compile a translation collection. Still, the researchers often do not describe their translations in their own publications. While it was possible to identify the papers that first used the translations, they often did not include the actual translation itself. Hence researchers often cite only the original GQS paper.

Second, it is often unclear what method was used to translate the GQS. The papers offered by the translators often fail to include this important detail. Based on personal correspondence, it was possible to clarify the process for some but not all translations. It is highly advisable to use the forth-and-back method.

Third, it cannot be assumed that the translation collection includes all available translations. The collection is based on translators reporting back their work. While many researchers share a belief in the advantages of open access publishing they do not always make their work available. For example, it cannot be assumed that a study conducted in Spain used the Spanish translation offered on our website. The researchers could have created yet another translation. It goes beyond the means of the authors of this paper to maintain an exhaustive list of translations based on regular literature searches.

Fourth, it would be beneficial if the users of the GQS would report psychometric properties of the scales and their translations. This not only includes internal consistency, but also reliability and validity. Still, the psychometric properties reported in the literature indicate a very good internal consistency for all concepts, while acknowledging that the Perceived Safety internal consistency is often the lowest amongst the five concepts.

While not all translations used the same high standards for the translation process, their work can at least be used as a starting point for more rigorous translations and evaluations. The translators' efforts should be acknowledged and encouraged.

The success of the GQS can partly be attributed to its open access strategy. The authors encouraged researchers in their original paper to report back their translations which resulted in a collection of 19 translations. While it would have been possible to commercialise the GQS, the authors believe that society and universities benefit more from openly available research.

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## 9 Appendix

This appendix includes the full translations of the Godspeed Questionnaire Series.

## English

Translated by: Christoph Bartneck  
 Publication: <https://doi.org/10.1007/s12369-008-0001-3>  
 Instructions: Please rate your impression of the robot on these scales:

<b>Anthropomorphism</b>						
Fake	1	2	3	4	5	Natural
Machinelike	1	2	3	4	5	Humanlike
Unconscious	1	2	3	4	5	Conscious
Artificial	1	2	3	4	5	Lifelike
Moving rigidly	1	2	3	4	5	Moving elegantly
<b>Animacy</b>						
Dead	1	2	3	4	5	Alive
Stagnant	1	2	3	4	5	Lively
Mechanical	1	2	3	4	5	Organic
Artificial	1	2	3	4	5	Lifelike
Inert	1	2	3	4	5	Interactive
Apathetic	1	2	3	4	5	Responsive
<b>Likeability</b>						
Dislike	1	2	3	4	5	Like
Unfriendly	1	2	3	4	5	Friendly
Unkind	1	2	3	4	5	Kind
Unpleasant	1	2	3	4	5	Pleasant
Awful	1	2	3	4	5	Nice
<b>Perceived Intelligence</b>						
Incompetent	1	2	3	4	5	Competent
Ignorant	1	2	3	4	5	Knowledgeable
Irresponsible	1	2	3	4	5	Responsible
Unintelligent	1	2	3	4	5	Intelligent
Foolish	1	2	3	4	5	Sensible
<b>Perceived Safety</b>						
Anxious	1	2	3	4	5	Relaxed
Calm	1	2	3	4	5	Agitated
Still	1	2	3	4	5	Surprised

**Fig. 1** English (original)

## Arabic

Translated by: Micheline Ziadee

Publication: <https://doi.org/10.1109/HRI.2013.6483610>

Instructions: من فضلك حدد-حددي انطباعك عن الروبوت على المقاييس التالية:

التجسيم						
مزيّف	1	2	3	4	5	طبيعي
شبيه بالانسان	1	2	3	4	5	شبيه بالانسان
غير مدرك	1	2	3	4	5	مدرك
اصطناعي	1	2	3	4	5	يبدو حقيقي
حركه متصلبه	1	2	3	4	5	حركه انيقه
الحيوية						
ميت	1	2	3	4	5	حي
ساكن	1	2	3	4	5	حيوي
الي	1	2	3	4	5	عضوي
اصطناعي	1	2	3	4	5	يبدو حقيقي
جامد	1	2	3	4	5	متفاعل
لا مبالي	1	2	3	4	5	متجاوب
الاستجاب						
لا احبه	1	2	3	4	5	احبه
غير ودود	1	2	3	4	5	ودود
غير طيب	1	2	3	4	5	طيب
غير ممتع	1	2	3	4	5	ممتع
مقيت	1	2	3	4	5	لطيف
الذكاء المدرك						
غير كفوء	1	2	3	4	5	كفوء
جاهل	1	2	3	4	5	مطلع
غير مسؤول	1	2	3	4	5	مسؤول
غير ذكي	1	2	3	4	5	ذكي
غير عاقل	1	2	3	4	5	عاقل
الأمان المدرك						
قلقي	1	2	3	4	5	مسترخي
منفعل	1	2	3	4	5	مطمئن
هادئ	1	2	3	4	5	متفاجئ

Fig. 2 Arabic

## Basque

Translated by: Xose Xavier Rodriguez Rivera

Publication: none available from the author

Instructions: Mesedez, robotari buruz duzun iritzia eman honako alderdi hauei erantzunez, 1etik 5erako eskalan:

### Antropomorfismo

Faltsu	1	2	3	4	5	Natural
Makina	1	2	3	4	5	Giza itxuradun
Inkontziente	1	2	3	4	5	Kontziente
Artifizial	1	2	3	4	5	Erreal
Zurrin mugitzen da	1	2	3	4	5	Arin mugitzen da

### Animazitatea

Bizigabe	1	2	3	4	5	Bizidun
Motel	1	2	3	4	5	Kementsu
Mekaniko	1	2	3	4	5	Organiko
Artifizial	1	2	3	4	5	Erreal
Estatiko	1	2	3	4	5	Interaktibo
Axolagabe	1	2	3	4	5	Arretatsu

### Sinpatia

Ez gustuko	1	2	3	4	5	Gustuko
Antipatiko	1	2	3	4	5	Sinpatiko
Adeigabe	1	2	3	4	5	Adeitsu
Desatsegin	1	2	3	4	5	Atsegin
Itsusi	1	2	3	4	5	Polit

### Hautemandako adimena

Ezgai	1	2	3	4	5	Aditu
Ezjakin	1	2	3	4	5	Jakitun
Arduragabe	1	2	3	4	5	Arduratsu
Adimen gabeko	1	2	3	4	5	Adimendun
Burugabe	1	2	3	4	5	Zentzudun

### Hautemandako segurtasuna

Lehiatsu	1	2	3	4	5	Erlaxatu
Lasai	1	2	3	4	5	Urduri
Oharkabe	1	2	3	4	5	Harrituta

Fig. 3 Basque

## Catalan

Translated by: Xose Xavier Rodriguez Rivera

Publication: none available from the author

Instructions: Si us plau doneu la vostra opinió del robot quant als aspectes següents en una escala de l'1 al 5:

<b>Antropomorfisme</b>						
Fals	1	2	3	4	5	Natural
Màquina	1	2	3	4	5	Amb aspecte humà
Inconscient	1	2	3	4	5	Conscient
Artificial	1	2	3	4	5	Realista
Es mou rígidament	1	2	3	4	5	Es mou amb fluïdesa
<b>Animacitat</b>						
Mort	1	2	3	4	5	Amb vida
Aturat	1	2	3	4	5	Enèrgic
Mecànic	1	2	3	4	5	Orgànic
Artificial	1	2	3	4	5	Sembla Viu
Estàtic	1	2	3	4	5	Interactiu
Indiferent	1	2	3	4	5	Atent
<b>Simpatia</b>						
No m'agrada	1	2	3	4	5	M'agrada
Antipàtic	1	2	3	4	5	Simpàtic
Descortès	1	2	3	4	5	Amable
Desagradable	1	2	3	4	5	Agradable
Horrible	1	2	3	4	5	Maco
<b>Intel·ligència Percebuda</b>						
Incompetent	1	2	3	4	5	competent
Ignorant	1	2	3	4	5	Entés
Irresponsable	1	2	3	4	5	Responsable
Sense intel·ligència	1	2	3	4	5	Intel·ligent
Insensat	1	2	3	4	5	Assenyat
<b>Seguretat percebuda</b>						
Nerviós	1	2	3	4	5	Relaxat
Tranquil	1	2	3	4	5	Agitat
No sorprès	1	2	3	4	5	Soprès

**Fig. 4** Catalan

## Chinese

Translated by: Bram Vanderborght, Jelle Saldien and Qiang Ma

Publication: <https://doi.org/10.5772/58402>

Instructions: 请在以下尺度上评价您对机器人的印象

拟人化						
虚假的	1	2	3	4	5	自然的
似机械的	1	2	3	4	5	似人类的
无意识的	1	2	3	4	5	有意识的
人工的	1	2	3	4	5	逼真的
动作僵硬	1	2	3	4	5	动作流畅
动物性						
死的	1	2	3	4	5	活的
静止的	1	2	3	4	5	活泼的
机械的	1	2	3	4	5	有机的
人工的	1	2	3	4	5	逼真的
迟钝的	1	2	3	4	5	互动的
冷淡的	1	2	3	4	5	反应迅速的
讨人喜欢						
不喜欢	1	2	3	4	5	喜欢
不友好的	1	2	3	4	5	友好的
不亲切的	1	2	3	4	5	亲切的
不愉快的	1	2	3	4	5	愉快的
恶劣的	1	2	3	4	5	良好的
感知智力						
无能力的	1	2	3	4	5	有能力的
无知识的	1	2	3	4	5	有知识的
无责任的	1	2	3	4	5	有责任的
无智力的	1	2	3	4	5	有智力的
笨拙的	1	2	3	4	5	敏感的
感知安全						
不安的	1	2	3	4	5	放松的
冷静的	1	2	3	4	5	焦躁的
沉默的	1	2	3	4	5	诧异的

Fig. 5 Chinese

## Czech

Translated by: Matej Hoffmann  
 Publication: <https://arxiv.org/pdf/2009.01818.pdf>  
 Instructions: Ohodnotte, prosím, jak na Vás robot působil.

<b>Antropomorfizmus</b>						
napodobenina	1	2	3	4	5	přirozený
strojový	1	2	3	4	5	lidský
nevědomý	1	2	3	4	5	vědomý
umělý	1	2	3	4	5	jako živý
pohybuje se strnule	1	2	3	4	5	pohybuje se plynule, elegantně
<b>Živost</b>						
mrtvý	1	2	3	4	5	živý
statický	1	2	3	4	5	temperamentní
mechanický	1	2	3	4	5	organický, přírodní
umělý	1	2	3	4	5	jako živý
nečinný	1	2	3	4	5	interaktivní
apatický	1	2	3	4	5	vnímavý
<b>Sympatičnost</b>						
Nebyl mi sympatický.	1	2	3	4	5	Byl mi sympatický.
nepřátelský	1	2	3	4	5	přátelský
nevlídný	1	2	3	4	5	hodný
nepříjemný	1	2	3	4	5	příjemný
strašný	1	2	3	4	5	milý
<b>Působí inteligentně?</b>						
neschopný	1	2	3	4	5	schopný
neznalý	1	2	3	4	5	znalý
nezodpovědný	1	2	3	4	5	zodpovědný
hloupý	1	2	3	4	5	chytrý
pošetilý	1	2	3	4	5	rozumný
<b>Působí bezpečně?</b>						
úzkostný	1	2	3	4	5	uvolněný
klidný	1	2	3	4	5	rozrušený
poklidný	1	2	3	4	5	překvapený

**Fig. 6** Czech



## Danish

Translated by: Franziska Kirstein  
 Publication: <https://careware.dk/media/57159/uvdr-whitepaper-ouh.pdf>  
 Instructions: Angiv venligst dine indtryk af robotten på en skala fra 1 til 5:

<b>Menneskelighed</b>						
Unaturligt	1	2	3	4	5	Naturligt
Mekanisk	1	2	3	4	5	Menneskeligt
Ubevidst	1	2	3	4	5	Bevidst
Kunstig	1	2	3	4	5	Livagtig
Stive bevægelser	1	2	3	4	5	Elegante bevægelser
<b>Livlighed</b>						
Død	1	2	3	4	5	Levende
Ubevægelig	1	2	3	4	5	Livlig
Mekanisk	1	2	3	4	5	Organisk
Kunstig	1	2	3	4	5	Livagtig
Doven	1	2	3	4	5	Interaktiv
Apatisk	1	2	3	4	5	Modtagelig
<b>Sympatisk</b>						
Ikke tiltalende	1	2	3	4	5	Tiltalende
Uvenlig	1	2	3	4	5	Venlig
Uhøflig	1	2	3	4	5	Høflig
Ubehagelig	1	2	3	4	5	Behagelig
Frygtelig	1	2	3	4	5	God
<b>Tiltro til intelligensen</b>						
Inkompetent	1	2	3	4	5	Kompetent
Uvidende	1	2	3	4	5	Velvidende
Uansvarlig	1	2	3	4	5	Ansvarlig
Uintelligent	1	2	3	4	5	Intelligent
Tåbelig	1	2	3	4	5	Fornuftig
<b>Tiltro til sikkerheden</b>						
Ængstelig	1	2	3	4	5	Afslappet
Rolig	1	2	3	4	5	Urolig
Passiv	1	2	3	4	5	Overrasket

**Fig. 7** Danish

## Dutch

Translated by: Bram Vanderborght and Jelle Saldien

Publication: <https://doi.org/10.5772/58402>

Instructions: Geef aub uw indruk van de robot weer aan de hand van onderstaande schalen:

<b>Antropomorfisme</b>						
Onecht	1	2	3	4	5	Natuurlijk
Lijkend op een machine	1	2	3	4	5	Lijkend op een mens
Onbewust	1	2	3	4	5	Heeft een bewustzijn
Kunstmatig	1	2	3	4	5	Levensecht
Houterige bewegingen	1	2	3	4	5	Vloeiende bewegingen
<b>Levendigheid</b>						
Dood	1	2	3	4	5	Levend
Stilstaand	1	2	3	4	5	Levendig
Mechanisch	1	2	3	4	5	Organisch
Kunstmatig	1	2	3	4	5	Levensecht
Passief	1	2	3	4	5	Interactief
Apatisch	1	2	3	4	5	Responsief
<b>Aardigheid</b>						
Afkeer	1	2	3	4	5	Geliefd
Onvriendelijk	1	2	3	4	5	Vriendelijk
Niet lief	1	2	3	4	5	Lief
Onplezierig	1	2	3	4	5	Plezierig
Afschuwelijk	1	2	3	4	5	Mooi
<b>waargenome intelligentie</b>						
Onbekwaam	1	2	3	4	5	Bekwaam
Onwetend	1	2	3	4	5	Veel wetend
Onverantwoordelijk	1	2	3	4	5	Verantwoordelijk
Onintelligent	1	2	3	4	5	Intelligent
Dwaas	1	2	3	4	5	Gevoelig
<b>waargenome veiligheid</b>						
Angstig	1	2	3	4	5	Ontspannen
Kalm	1	2	3	4	5	Opgewonden
Rustig	1	2	3	4	5	Verrast

**Fig. 8** Dutch

## French

Translated by: Wafa Johal

Publication: <http://doi.org/10.1109/ROMAN.2014.6926393>

Instructions: Veuillez noter vos impressions au sujet du robot sur les échelles ci-dessous:

<b>Anthropomorphisme</b>						
Faux	1	2	3	4	5	Naturel
D'aspect Machinale	1	2	3	4	5	D'aspect Humain
Inconscient	1	2	3	4	5	Conscient
Artificiel	1	2	3	4	5	Paraissant vivant
Bougeant avec rigidité	1	2	3	4	5	Bougeant avec fluidité
<b>Animation</b>						
Mort	1	2	3	4	5	Vivant
Inanimé	1	2	3	4	5	Animé
Mécanique	1	2	3	4	5	Organique
Artificiel	1	2	3	4	5	Réaliste
Inert	1	2	3	4	5	Interactif
Apathique	1	2	3	4	5	Attentif
<b>Appréciation</b>						
Déplaisant	1	2	3	4	5	Plaisant
Inamical	1	2	3	4	5	Amical
Malaimable	1	2	3	4	5	Aimable
Désagréable	1	2	3	4	5	Agréable
Horrible	1	2	3	4	5	Gentil
<b>Intelligence Perçue</b>						
Uncompétent	1	2	3	4	5	Compétent
Ignorant	1	2	3	4	5	Cultivé
Irresponsable	1	2	3	4	5	Responsable
Inintelligent	1	2	3	4	5	Intelligent
Insensé	1	2	3	4	5	Sensé
<b>Suret� perçue</b>						
Anxieux	1	2	3	4	5	Relax�
Calme	1	2	3	4	5	Agit�
Serein	1	2	3	4	5	Surpris

**Fig. 9** French

## Galician

Translated by: Xose Xavier Rodriguez Rivera

Publication: none available from the author

Instructions: Por favor, dea a súa opinión sobre o robot nos seguintes aspectos nunha escala de 1 a 5:

<b>Antropomorfismo</b>						
Falso	1	2	3	4	5	Natural
Máquina	1	2	3	4	5	Semellante ao ser humano
Inconsciente	1	2	3	4	5	Consciente
Artificial	1	2	3	4	5	Realista
Móvese rixido	1	2	3	4	5	Móvese con soltura
<b>Animacidade</b>						
Morto	1	2	3	4	5	Vivo
Parado	1	2	3	4	5	Enérxico
Mecánico	1	2	3	4	5	Organico
Artificial	1	2	3	4	5	Semella vivo
Estático	1	2	3	4	5	interactivo
Indiferente	1	2	3	4	5	Atento
<b>Simpatía</b>						
Non me gusta	1	2	3	4	5	Gustame
Antipático	1	2	3	4	5	Simpático
Descortés	1	2	3	4	5	Amable
Desagradable	1	2	3	4	5	Agradable
Horrible	1	2	3	4	5	Fermoso
<b>Intelixencia percibida</b>						
Incompetente	1	2	3	4	5	Competente
Ignorante	1	2	3	4	5	Entendido
Irresponsable	1	2	3	4	5	Responsable
Sen intelixencia	1	2	3	4	5	Intelixente
Insensato	1	2	3	4	5	Xuicioso
<b>Seguridade percibida</b>						
Ansioso	1	2	3	4	5	relaxado
Tranquilo	1	2	3	4	5	Axitado
Non sorprendido	1	2	3	4	5	sorprendido

**Fig. 10** Galician

## German

Translated by: Mary Ellen Foster and Manuel Giuliani

Publication: <https://doi.org/10.1145/2522848.2522869>

Instructions: Bitte beurteilen sie Ihren Eindruck des Roboters auf diesen Skalen:

<b>Anthropomorphismus</b>						
Unecht	1	2	3	4	5	Natürlich
Wie eine Maschine	1	2	3	4	5	Wie ein Mensch
Hat kein Bewusstsein	1	2	3	4	5	Hat ein Bewusstsein
Künstlich	1	2	3	4	5	Realistisch
Bewegt sich steif	1	2	3	4	5	Bewegt sich flüssig
<b>Belebtheit</b>						
Tot	1	2	3	4	5	Lebendig
Unbewegt	1	2	3	4	5	Lebendig
Mechanisch	1	2	3	4	5	Organisch
Künstlich	1	2	3	4	5	Realistisch
Träge	1	2	3	4	5	Interaktiv
Apathisch	1	2	3	4	5	Reagierend
<b>Sympathie</b>						
Nicht mögen	1	2	3	4	5	Mögen
Unfreundlich	1	2	3	4	5	Freundlich
Unhöflich	1	2	3	4	5	Höflich
Unangenehm	1	2	3	4	5	Angenehm
Furchtbar	1	2	3	4	5	Nett
<b>Intelligenz</b>						
Inkompetent	1	2	3	4	5	Kompetent
Ungebildet	1	2	3	4	5	Unterrichtet
Verantwortungslos	1	2	3	4	5	Verantwortungsbewusst
Unintelligent	1	2	3	4	5	Intelligent
Unvernünftig	1	2	3	4	5	Vernünftig
<b>Sicherheit</b>						
Ängstlich	1	2	3	4	5	Entspannt
Ruhig	1	2	3	4	5	Aufgewühlt
Quiescent	1	2	3	4	5	Überrascht

**Fig. 11** German

## Greek

Translated by: Alexander Astaras

Publication: <https://doi.org/10.13140/RG.2.1.1314.9603>

Instructions: Παρακαλούμε βαθμολογήστε την εντύπωση που σχηματίσατε για το ρομπότ στις παρακάτω κλίμακες:

<b>Ανθρωπομορφισμός</b>						
Ψεύτικο	1	2	3	4	5	Φυσικό
Μηχανόμορφο	1	2	3	4	5	Ανθρωπόμορφο
Χωρίς συνείδηση	1	2	3	4	5	Με συνείδηση
Τεχνητό	1	2	3	4	5	Ζωντανό
Άκομψη κίνηση	1	2	3	4	5	Φυσική κίνηση
<b>Κινητικότητα</b>						
Άψυχο	1	2	3	4	5	Ζωντανό
Στάσιμο	1	2	3	4	5	Ευκίνητο
Μηχανικό	1	2	3	4	5	Βιολογικό
Τεχνητό	1	2	3	4	5	Μοιάζει ζωντανό
Αδρανές	1	2	3	4	5	Διαδραστικό
Απαθές	1	2	3	4	5	Ανταποκρίνεται
<b>Συμπαθητικότητα</b>						
Δε μου αρέσει	1	2	3	4	5	Μου αρέσει
Μη φιλικό	1	2	3	4	5	Φιλικό
Άγενές	1	2	3	4	5	Ευγενές
Δυσάρεστο	1	2	3	4	5	Ευχάριστο
Απαίσιο	1	2	3	4	5	Συμπαθές
<b>Εκλαμβανόμενη Ευφυΐα</b>						
Ανίκανο	1	2	3	4	5	Ικανό
Αδαές	1	2	3	4	5	Καταρτισμένο
Ανεύθυνο	1	2	3	4	5	Υπεύθυνο
Κουτό	1	2	3	4	5	Έξυπνο
Ανόητο	1	2	3	4	5	Λογικό
<b>Εκλαμβανόμενη Ασφάλεια</b>						
Ανήσυχος	1	2	3	4	5	Χαλαρός
Ήρεμος	1	2	3	4	5	Ταραγμένος
Ήσυχος	1	2	3	4	5	Ξαφνιασμένος

Fig. 12 Greek

## Italian

Translated by: Stefania Operto

Publication: [https://doi.org/10.15167/operto-stefania\\_phd2021-11-22](https://doi.org/10.15167/operto-stefania_phd2021-11-22)

Instructions: Per favore indichi le sue impressioni riferite al robot utilizzando le scale seguenti:

<b>Antropomorfismo</b>						
Falso	1	2	3	4	5	Naturale
Dall'aspetto di macchina	1	2	3	4	5	Dall'aspetto umano
Incosciente	1	2	3	4	5	Cosciente
Artificiale	1	2	3	4	5	Realistico
Si muove in modo rigido	1	2	3	4	5	Si muove in modo fluido
<b>Animazione</b>						
Morto	1	2	3	4	5	Vivente
Inanimato	1	2	3	4	5	Animato
Meccanico	1	2	3	4	5	Organico
Artificiale	1	2	3	4	5	Realistico
Inerte	1	2	3	4	5	Interattivo
Apatico	1	2	3	4	5	Partecipativo
<b>Simpatia</b>						
Spiacevole	1	2	3	4	5	Piacevole
Antipatico	1	2	3	4	5	Simpatico
Ostile	1	2	3	4	5	Amichevole
Sgradevole	1	2	3	4	5	Gradevole
Brutto	1	2	3	4	5	Bello
<b>Intelligenza percepita</b>						
Incompetente	1	2	3	4	5	Competente
Ignorante	1	2	3	4	5	Istruito
Irresponsabile	1	2	3	4	5	Responsabile
Poco intelligente	1	2	3	4	5	Intelligente
Insensato	1	2	3	4	5	Giudizioso
<b>Sicurezza percepita</b>						
Ansioso	1	2	3	4	5	Rilassato
Calmo	1	2	3	4	5	Agitato
Sereno	1	2	3	4	5	Sorpreso

Fig. 13 Italian

## Japanese

Translated by: Christoph Bartneck

Publication: <https://doi.org/10.1007/s12369-008-0001-3>

Instructions: 以下のスケールに基づいてこのロボットの印象を評価してください。

擬人観						
偽物のような	1	2	3	4	5	自然な
機械的	1	2	3	4	5	人間的
意識を持たない	1	2	3	4	5	意識を持っている
人工的	1	2	3	4	5	生物的
ぎこちない動き	1	2	3	4	5	洗練された動き
有生性						
死んでいる	1	2	3	4	5	生きている
活気のない	1	2	3	4	5	生き生きとした
機械的な	1	2	3	4	5	有機的な
人工的な	1	2	3	4	5	生物的な
不活発な	1	2	3	4	5	対話的な
無関心な	1	2	3	4	5	反応のある
好感度						
嫌い	1	2	3	4	5	好き
親しみにくい	1	2	3	4	5	親しみやすい
不親切な	1	2	3	4	5	親切な
不愉快な	1	2	3	4	5	愉快的な
ひどい	1	2	3	4	5	良い
知性の有無						
無能な	1	2	3	4	5	有能な
無知な	1	2	3	4	5	物知りな
無責任な	1	2	3	4	5	責任のある
知的でない,	1	2	3	4	5	知的な
愚かな	1	2	3	4	5	賢明な
安心感の有無						
不安な	1	2	3	4	5	落ち着いた
冷静な	1	2	3	4	5	動揺している
平穏な	1	2	3	4	5	驚いた

Fig. 14 Japanese



## Korean

Translated by: Elena Knox and Jenna Lee  
 Publication: <http://www.elenaknox.com/omikujji.html>  
 Instructions: 다음의스케일에따라로봇의인상을평가해 주세요.

인격화						
가짜같은	1	2	3	4	5	자연스러운
기계적인	1	2	3	4	5	인간같은
의식이 없는	1	2	3	4	5	의식이 있는
인공적	1	2	3	4	5	생물적
어색한 움직임	1	2	3	4	5	정교한 움직임
활동성						
죽어있는	1	2	3	4	5	살아있는
활기가 없는	1	2	3	4	5	생기있는
기계적인	1	2	3	4	5	유기적인
인공적인	1	2	3	4	5	생물적인
활발하지 않은	1	2	3	4	5	대화식의
무관심한	1	2	3	4	5	반응을 하는
호감도						
싫음	1	2	3	4	5	좋음
친해지기 어려운	1	2	3	4	5	친해지기 쉬운
불친절한	1	2	3	4	5	친절한
불쾌한	1	2	3	4	5	유쾌한
형편없는	1	2	3	4	5	좋은
감지된 지능						
무능한	1	2	3	4	5	유능한
무지한	1	2	3	4	5	박식한
무책임한	1	2	3	4	5	책임감 있는
무식한	1	2	3	4	5	지적인
어리석은	1	2	3	4	5	현명한
감지된 안전성						
불안한	1	2	3	4	5	안정된
냉정한	1	2	3	4	5	동요되는
평온한	1	2	3	4	5	놀란

**Fig. 15** Korean

## Persian

Translated by: Ellie Sanoubari

Publication: none available from the author

Instructions: لطفا برداشت خود از ربات را در مقیاس‌های زیر ارزیابی کنید:

آنترپومورفیزم - انسان‌انگاری						
طبیعی	1	2	3	4	5	ساختگی
شبهه انسان	1	2	3	4	5	شبهه ماشین
هشیار	1	2	3	4	5	ناهشیار
واقعی	1	2	3	4	5	مصنوعی
با ظرافت حرکت می‌کند	1	2	3	4	5	با زمختی حرکت می‌کند
انیمیشن - سرزندگی						
زنده	1	2	3	4	5	بی‌جان
سرزنده	1	2	3	4	5	بدون حرکت
-ارگانیک -اندام‌وار	1	2	3	4	5	مکانیکی
واقعی	1	2	3	4	5	مصنوعی
تعامل‌گر	1	2	3	4	5	ساکن
واکنشگر	1	2	3	4	5	بی‌تفاوت
پسندیدگی						
پسندیده	1	2	3	4	5	منفور
دوستانه	1	2	3	4	5	غیردوستانه
مهربان	1	2	3	4	5	نامهربان
خوشایند	1	2	3	4	5	ناخوشایند
خوب	1	2	3	4	5	بد
هوش مشاهده شده						
باکفایت	1	2	3	4	5	بی‌کفایت
دانا	1	2	3	4	5	ابله
مسئولیت‌پذیر	1	2	3	4	5	مسئولیت‌ناپذیر
باهوش	1	2	3	4	5	کندذهن
عاقل	1	2	3	4	5	سفيه
ایمنی مشاهده شده						
آرام	1	2	3	4	5	مضطرب
آشفته	1	2	3	4	5	آسوده
شگفت‌زده	1	2	3	4	5	ساکن

Fig. 16 Persian

## Portuguese

Translated by: Carina Dantas

Publication: <https://doi.org/10.1109/ROMAN.2017.8172470>

Instructions: Por favor, avalie a sua impressão sobre as características humanas do robô nas seguintes escalas:

<b>Antropomorfismo</b>						
Falso	1	2	3	4	5	Natural
Com aspeto mecânico	1	2	3	4	5	Com aspeto humano
Inconsciente	1	2	3	4	5	Consciente
Artificial	1	2	3	4	5	Realista
Move-se com rigidez	1	2	3	4	5	Move-se com fluidez
<b>Expressão de vida</b>						
Morto	1	2	3	4	5	Com vida
Parado	1	2	3	4	5	Enérgico
Mecânico	1	2	3	4	5	Orgânico
Artificial	1	2	3	4	5	Realista
Estático	1	2	3	4	5	Interativo
Apático	1	2	3	4	5	Participativo
<b>Simpatia</b>						
Não gosto	1	2	3	4	5	Gosto
Hostil	1	2	3	4	5	Amigável
Antipático	1	2	3	4	5	Gentil
Desagradável	1	2	3	4	5	Agradável
Horrível	1	2	3	4	5	Simpático
<b>Inteligência Percebida</b>						
Incompetente	1	2	3	4	5	Competente
Ignorante	1	2	3	4	5	Sabedor
Irresponsável	1	2	3	4	5	Responsável
Pouco inteligente	1	2	3	4	5	Inteligente
Insensato	1	2	3	4	5	Sensato
<b>Segurança Percebida</b>						
Ansioso	1	2	3	4	5	Descontraído
Calmo	1	2	3	4	5	Aagitado
Sereno	1	2	3	4	5	Surpreendido

**Fig. 17** Portuguese

## Spanish A

Translated by: Javier Ruiz-del-Solar

Publication: none available from the author

Instructions: Por favor de su opinión del robot en los siguientes aspectos:

<b>Antropomorfismo</b>						
Falso	1	2	3	4	5	Natural
Con Aspecto de Máquina	1	2	3	4	5	Con Aspecto Humano
Inconsciente	1	2	3	4	5	Consciente
Artificial	1	2	3	4	5	Parece Vivo
Se Mueve Rígidamente	1	2	3	4	5	Se Mueve con Fluidez
<b>Animacidad</b>						
Muerto	1	2	3	4	5	Con Vida
Inactivo	1	2	3	4	5	Vivaz
Mecánico	1	2	3	4	5	Orgánico
Artificial	1	2	3	4	5	Parece Vivo
Estático	1	2	3	4	5	Interactivo
Indiferente	1	2	3	4	5	Atento
<b>Simpatía</b>						
Disgusta	1	2	3	4	5	Gusta
No Amigable	1	2	3	4	5	Amigable
Descortés	1	2	3	4	5	Amable
Desagradable	1	2	3	4	5	Agradable
Feo	1	2	3	4	5	Lindo
<b>Inteligencia Percibida</b>						
Incompetente	1	2	3	4	5	Competente
Ignorante	1	2	3	4	5	Culto
Irresponsable	1	2	3	4	5	Responsable
Sin inteligencia	1	2	3	4	5	Inteligente
Insensato	1	2	3	4	5	Juicioso
<b>Seguridad percibida</b>						
Ansioso	1	2	3	4	5	Relajado
Tranquilo	1	2	3	4	5	Agitado
No Sorprendido	1	2	3	4	5	Sorprendido

**Fig. 18** Spanish A

## Spanish B

Translated by: Xose Xavier Rodriguez Rivera

Publication: none available from the author

Instructions: Por favor de su opinión del robot en los siguientes aspectos en una escala de 1 a 5:

<b>Antropomorfismo</b>						
Falso	1	2	3	4	5	Natural
Con Aspecto de Máquina	1	2	3	4	5	Con Aspecto Humano
Inconsciente	1	2	3	4	5	Consciente
Artificial	1	2	3	4	5	Parece Vivo
Se Mueve Rígidamente	1	2	3	4	5	Se Mueve con Fluidez
<b>Animacidad</b>						
Muerto	1	2	3	4	5	Con Vida
Inactivo	1	2	3	4	5	Vivaz
Mecánico	1	2	3	4	5	Orgánico
Artificial	1	2	3	4	5	Parece Vivo
Estático	1	2	3	4	5	Interactivo
Indiferente	1	2	3	4	5	Atento
<b>Simpatía</b>						
Disgusta	1	2	3	4	5	Gusta
Antipático	1	2	3	4	5	Simpático
Descortés	1	2	3	4	5	Amable
Desagradable	1	2	3	4	5	Agradable
Horrible	1	2	3	4	5	Bonito
<b>Inteligencia Percibida</b>						
Incompetente	1	2	3	4	5	Competente
Ignorante	1	2	3	4	5	Entendido
Irresponsable	1	2	3	4	5	Responsable
Sin inteligencia	1	2	3	4	5	Inteligente
Insensato	1	2	3	4	5	Juicioso
<b>Seguridad percibida</b>						
Ansioso	1	2	3	4	5	Relajado
Tranquilo	1	2	3	4	5	Agitado
No Sorprendido	1	2	3	4	5	Sorprendido

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