

# Representations of foreign nationals in Japanese disaster risk reduction policy: increasing alignment with a “whole community” discourse

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Disaster  
Prevention and  
Management: An  
International  
Journal

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Received 12 August 2024  
Revised 14 November 2024  
Accepted 24 December 2024

## Abstract

**Purpose** – This article examines how foreign nationals have been represented in the disaster risk reduction (DRR) policy discourse in Japan in recent decades and analyses the consequences these representations have had for foreign nationals’ DRR there.

**Design/methodology/approach** – The article reports on a monolingual, corpus-based, critical discourse analysis of 23 years of White Papers on Disaster Management in Japan to assess the discourse representations of foreign nationals in the policy texts over three chronological periods: 2001–2008, 2009–2016 and 2017–2023.

**Findings** – The article finds that the way the Government of Japan has communicated to stakeholders about foreign nationals through its policy has increasingly included them into a “whole community” discourse of DRR. This is significant because research has shown that foreign nationals have long gone un- or under-recognised in relevant DRR policies and have been insufficiently considered at local levels. If they are now better represented in policy as local community members, there is hope that their risk of negative consequences in times of disaster will truly be reduced.

**Originality/value** – This contribution is novel in that it addresses a nexus between discourse, policy communication and a social problem of inclusion and engagement of foreign nationals in DRR that has not been published elsewhere, but that nonetheless engages with ongoing academic conversations about inclusivity, vulnerability and community-based DRR approaches.

**Keywords** Japan, Disaster risk reduction (DRR), Policy texts, Foreign nationals, Representations, Critical discourse analysis (CDA)

**Paper type** Research paper

## Introduction

The aim of this research is to assess how foreign nationals have been represented in disaster risk reduction (DRR) policy discourse in Japan in recent decades and to evaluate the consequences that these representations have had for foreign nationals’ DRR.

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The policy texts that have been analysed as source data in this study have been processed from a website of the Cabinet Office of the Government of Japan under a section (in Japanese) on White Papers on Disaster Management: <http://www.bousai.go.jp/kaigirep/hakusho/index.html>. Here follows a required corpus data attribution statement in Japanese:

出典:「防災白書」(内閣府) <http://www.bousai.go.jp/kaigirep/hakusho/index.html> (令和6年1月19日に利用)を加工して作成。

**Funding:** The author received financial support in the form of teaching buyout under the 2023 Journal Booster Scheme of Research and Innovation Support (RIS) of Dublin City University.

**Declaration of conflicting interest:** The author declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

**Ethical approval and informed consent statements:** There are no human participants in this article and informed consent and institutional ethical approval are not required.



Disaster Prevention and Management:  
An International Journal  
Vol. 34 No. 6, 2025  
pp. 1-17  
Emerald Publishing Limited  
e-ISSN: 1758-6100  
p-ISSN: 0965-3562  
DOI 10.1108/DPM-08-2024-0221

Japan faces many hazards and pursues an active DRR policy agenda (Cabinet Office of the Government of Japan, 2023). Japan is in an area of high seismic activity and is reported to be the country most exposed to earthquake disaster risk worldwide (Noy *et al.*, 2023). Japan and its surrounding areas experience on average approximately 10% of the world's earthquakes annually (Japan Meteorological Agency, 2024). Furthermore, Japan is home to approximately 15% of the volcanoes in the world that have been active since 1950 (Smithsonian Institution, 2013). It is prone to serious flooding because of frequent torrential rain, typhoons and snow falls, and approximately 50% of its population and 75% of its economic assets are in flood-prone areas (OECD, 2009). Japan periodically experiences great loss of life and significant economic losses as a direct result of large-scale disasters. For instance, more than 5,000 people lost their lives in the 1959 Ise-wan Typhoon (Cabinet Office of the Government of Japan, 2015) and more than 21,000 people lost their lives in the 2011 Great East Japan Earthquake (Reconstruction Agency of Japan, 2024). In an analysis of 2015 UNISDR data, Japan was cited as the country with the highest predicted annual average losses from disasters at more than US\$60bn per annum (United Nations, 2016), and the economic cost of the 2011 Great East Japan Earthquake alone was estimated to be more than US\$235bn (Reconstruction Agency of Japan, 2024).

While Japan is highly exposed to hazards, it also has high coping capacity (United Nations, 2016). Japan has elevated levels of experience, expertise and resources to deal on its own with the hazards to which it is exposed (OECD, 2009). This can clearly be seen in its INFORM rating. The INFORM Risk Index is an influential risk assessment tool for humanitarian crises and disasters (European Commission, 2024a). Japan is ranked at "low risk" in this index and is considered only the 152nd most at-risk country in a ranking of 191 countries in the 2025 version of the tool (European Commission, 2024b), despite all the hazards to which it is exposed.

Since the destructive 1995 Kobe Earthquake in Japan, influential DRR policy norms of inclusion, involving local communities in DRR, and locally led problem-solving have developed (Adu-Gyamfi and Shaw, 2022; Kitagawa, 2014; Okada *et al.*, 2013; Satoh, 2019). Even though the number and diversity of foreign nationals in Japan have increased in recent years (Adu-Gyamfi and Shaw, 2022; Sakurai and Adu-Gyamfi, 2020), research findings suggest problems with their awareness of, inclusion in, and engagement with DRR (Green *et al.*, 2021). In general, foreign nationals have been un- or under-recognised in relevant policies (Kikuchi, 2020; O'Brien *et al.*, 2018). Where relevant inclusive policies exist, implementation is inconsistent at local levels (Adu-Gyamfi and Shaw, 2022; Xiang *et al.*, 2021), and negative disaster effects on foreign nationals may even be disproportionate (Takeda *et al.*, 2003).

This study uses Japanese disaster policy texts and a framework of critical discourse analysis (CDA) to make claims about the representation of foreign nationals in these texts and the consequences of these representations for the social problem of inclusion and engagement of foreign nationals in DRR policy in Japan. First, relevant previous work will be discussed. Three themes will be covered in this discussion: (1) previous work on discourse and policy, especially in the DRR domain; (2) academic examination of social problems related to the inclusion of foreign nationals in DRR policy and (3) evidence provided in academic research of Japanese disaster discourse norms. Following this, the research questions, sources of data and discourse-analytical methods used in this study will be described. Then, findings will be presented and analysed, and finally, conclusions will be drawn.

### Previous work

Discourses are an important element of policymaking (Mosneaga, 2023; Marchezini, 2019). They show how communication may structure social experiences and express power relations (Wilkinson, 2019, 2022). Scholars have called for critical engagement with and analysis of discursive practices in disaster-related policy (Aldunce *et al.*, 2014; Hirono and Nurdin, 2024;

Mosneaga, 2023; Tagalo, 2020; Zaman, 2021). There is also an interest in analysing policy instruments to discuss the discursive construction of migrants in policy (Pérez-Paredes *et al.*, 2017; Riaño and Wastl-Walter, 2006). Some studies focus more on policy texts (e.g. de Rivera, 2022; Pérez-Paredes *et al.*, 2017; Riaño and Wastl-Walter, 2006; Zaman, 2021), others focus more on policy actors (e.g. Tagalo, 2020; Rusczyk, 2019), while still others triangulate the examination of both (e.g. Chmutina *et al.*, 2018; Satizábal *et al.*, 2022). Themes discussed in these examinations of discourse and policy include vulnerability and resilience (Aldunce *et al.*, 2014; Rusczyk, 2019; Tagalo, 2020), framings and impacts of policy discourse on preparedness principles (Chmutina *et al.*, 2018; Zaman, 2021), general principles of inclusion and equity (de Rivera, 2022; Pérez-Paredes *et al.*, 2017; Riaño and Wastl-Walter, 2006) and the role of community, localism and place-based knowledges in DRR (Hirono and Nurdin, 2024; Khan *et al.*, 2022; Marchezini, 2019; Pandey, 2019; Satizábal *et al.*, 2022). As such, these studies of discourse and policy tend to be guided by particular social problems.

The social problem that guided this study relates to foreign nationals' inclusion in and engagement with DRR (Grey and Severin, 2022; Guadagno *et al.*, 2017). Foreign nationals are frequently framed as vulnerable populations in DRR policy (Green *et al.*, 2021). They may even be portrayed as lacking in resilience or disloyal when they leave a disaster-affected area (Cadwell, 2019). However, they may be simultaneously vulnerable and resilient because of the inequalities they face and overcome in normal social life (Uekusa and Matthewman, 2017). Overall, it is important for policymakers to avoid simplistic consideration of vulnerability or resilience and remember the structural issues that may enable or constrain the resilience of a particular social group (Uekusa *et al.*, 2022). In short, vulnerability is not necessarily experienced identically by all members of any social group (Green *et al.*, 2021), and variations in the disaster-related behaviour of foreign nationals of different kinds in Japan have been shown (Green *et al.*, 2021). Policymakers must understand a social group's diverse needs, capacities, perspectives and backgrounds (Adu-Gyamfi and Shaw, 2021; Pérez-Paredes *et al.*, 2017). This should include their level of contact with Japanese nationals, as some research suggests that those foreign nationals with closer relationships to Japanese people may exhibit better disaster preparedness (Wakita, 2015). Measures to ensure effective communication are essential to successful DRR policy (Cadwell, 2023; Hada, 2020; Sakurai and Adu-Gyamfi, 2020). For instance, much useful research has been carried out in Japan to develop and use a simplified form of Japanese called Easy Japanese (*yasashii nihongo* [11]) to communicate better with foreign nationals (Sato, 2024), especially in one-to-many communication such as broadcasts. Overall, such policies and practices that involve centrally coordinated, top-down, one-way approaches (Grey and Severin, 2022; Shimizu, 2012) are common. However, these can lack the individualised content, speed and appropriate channels that a more inclusive policy on DRR communication requires (Kikuchi, 2020). Crucially, inclusive policies on DRR need to focus not only on response and recovery but on preparedness (Green *et al.*, 2021; Pandey, 2019; Zaman, 2021).

DRR policy in Japan is subject to normative forces, as is the case in other jurisdictions. For instance, the Federal Emergency Management Agency uses a "whole community" discourse in the United States to create norms of shared responsibility in which multiple stakeholders—including individuals, families, businesses, schools, nonprofits and more—should work together with all levels of government on preparedness efforts (FEMA, 2020; Otsuyama and Maki, 2018). An equivalent discourse in Japan that emphasises the involvement of all members of the community—from local residents to government agencies, businesses and non-governmental organizations—in disaster preparedness efforts is termed "*chiiki bōsairyoku* [12]" (FDMA, 2014; Yamashita, 2010). This Japanese equivalent of a "whole community" approach rests on the interaction of three key concepts (Yamashita, 2010). These concepts have been discussed in much previous work (e.g. Adu-Gyamfi and Shaw, 2022; Daimon *et al.*, 2023; Haraoka *et al.*, 2009; Kitagawa, 2014, 2016; Murosaki, 2017; Okada *et al.*, 2013). They are: *jijo* [[1]], a type of self-help that can be translated as "Individual or Household Self-Reliance" (Okada *et al.*, 2013 p. 47); *kyōjo* [[2]], a type of mutual help that can be translated as "Neighborhood or Community Self-Reliance" (Okada *et al.*, 2013 p. 47) and

*kōjo* [[3]], a type of public help that can be translated as “Government Assistance” (Okada *et al.*, 2013 p. 47). This framework has been used to discuss disaster in Japan for more than two decades at the time of writing (Kitagawa, 2016; Murosaki, 2017) [4]. Understanding these three elements is vital to an understanding of DRR in Japan (Okada *et al.*, 2013). The tripartite framework is reflected in major policy instruments, such as the Basic Disaster Management Plan [5] and the White Papers on Disaster Management [6] (Kitagawa, 2016), the main data source of this study. It is also implied in laws such as the Disaster Countermeasures Basic Act [7] (Adu-Gyamfi and Shaw, 2022).

Overall, the policy discourse norms of individual or household self-reliance (*jijo*), neighbourhood or community self-reliance (*kyōjo*) and government assistance (*kōjo*) centre on the idea that DRR can be achieved through an effective combination of the three elements and that community-wide efforts (*kyōjo*) are key (Murosaki, 2017). They also assume that the level of bonding between people in a local community and the relationships between them in their daily lives determine the strength of a community’s disaster preparedness (Okanishi and Sadohara, 2006). This aligns with broader discourses in Japan about whole community approaches to problem-solving in policy and locally led engagement with government (Kitagawa, 2014; Okada *et al.*, 2013; Satoh, 2019).

The whole community approach to DRR in Japan is not without its critics. The approach can be criticized for its definition of local community as an entity made up of long-term residents with stable relations (Kataoka, 2016). This is seen to be at odds with the fluid nature of contemporary communities, in which members arrive and depart periodically and where bonds of community need to be continually formed and reformed (Kataoka, 2016). There is a call to rethink how local community can be defined in a context of long- and short-term residents in flux and with an increasing presence of newly arrived foreign residents in local communities in Japan (Kataoka, 2016). Approaches to DRR must consider various aspects of contemporary society; not involving foreign nationals in community-based DRR presents a partial view of modern society in Japan (Hosokawa *et al.*, 2024).

### Research questions, data and methods

Lexis is the vocabulary of a language, typically words. Selecting an appropriate lexical item to communicate about the social group affected by the problem above is challenging. The lexical item *gaikokujin* [8], translated here as foreign national, was chosen as the node around which to conduct the discourse analysis in this study for pragmatic reasons. Other possible expressions such as Japanese equivalents for migrant, immigrant, non-citizen, CALD community, minority, linguistic minority—which are concepts used in policy in other jurisdictions—were found in only a few instances in the Japanese policy texts. In contrast, there were 233 instances of *gaikokujin*/foreign national.

A similar lexical item in Japanese to *gaikokujin*/foreign national is *gaijin* [9], which is closer to foreigner in English and sometimes used pejoratively. It was also not found, as would be expected considering its pejorative force. Nevertheless, policy stakeholders may make a connection between the neutral *gaikokujin*/foreign national and the more pejorative *gaijin*/foreigner in their use of the policy texts. As is the case in many other jurisdictions around the world, Japanese governmental policy and public discourse have been criticized for their discrimination of minorities (Arudou, 2017).

Based on this pragmatic choice of a lexical item to examine and on the academic interest in discourse, policy and the social problems of inclusion and engagement of foreign nationals in DRR discussed above, the following research questions were posed:

RQ1. How have foreign nationals been represented in disaster risk reduction (DRR) policy in Japan in recent decades?

RQ2. What consequences have these representations had for foreign nationals’ DRR?

### *Japanese disaster policy texts*

This study used one authoritative and influential policy instrument in Japan as its source of data: the annual White Paper on Disaster Management. White papers are an important type of policy document used by a government to communicate and justify its policy and legislative intentions to stakeholders and the public (Mulderriig, 2012). They are consumed by a wide and varied readership and are made publicly available, nowadays often online (Mulderriig, 2012). The Cabinet Office of Japan under the Prime Minister is vested with the authority to oversee disaster-related issues in Japan under the 1961 Disaster Countermeasures Basic Act (Tanaka, 2012). The act requires the Government of Japan through the Cabinet Office to produce White Papers on Disaster Management annually, and they have been produced since 1961 (Tanaka, 2012). They are used to apply lessons learned and revise related acts, policies and plans accordingly (Tanaka, 2012). Of these plans, the most important is the Basic Disaster Management Plan, created in 1963 (Tanaka, 2012).

Any authentic and naturally occurring White Paper on Disaster Management, in Japanese, made available by the Disaster Management Section of the Cabinet Office of the Government of Japan on its public website [10] was included in the corpus. This resulted in a corpus of the 23 most recent annual papers at the time of writing from 2001 to 2023 and constituted an exhaustive sample of online versions of the papers. The texts of the 1961 Disaster Countermeasures Basic Act and the Basic Disaster Management Plan were not included in the corpus to keep the analysis to one text type and one influential publication allowing for sharper examination of diachronic change (Wilkinson, 2019).

The White Papers on Disaster Management function both in the past and future tenses, often presenting separate sections on lessons learned from recent events and plans arising out of those lessons. These sections are then subdivided into chapters that are organised thematically, usually around hazards, plans or events of note in that period. The length of each White Paper from 2001 to 2023 was relatively constant, with a mean length of 144,014 words, a median of 129,045 words and an average deviation of 37,757 words.

### *Corpus compilation and query tool*

A corpus is a collection of texts, gathered not at random but for a motivated purpose. Computer programmes can assist in corpus analysis. The corpus query tool Sketch Engine (Kilgarriff *et al.*, 2004) was used to facilitate the examination of this corpus of digital texts that were gathered to investigate policy discourse. In total, the 23 White Papers on Disaster Management comprised 57 separate documents and realised a corpus of more than 3.3 million words in Japanese (see Table 1). The corpus of White Papers on Disaster Management was divided into three chronological subcorpora: the White Papers from 2001–2008, 2009–2016 and 2017–2023. This is a standard step taken in diachronic, corpus-based studies of discourse (see, e.g. Mulderriig, 2012; Potts and Kjær, 2015; Wilkinson, 2019, 2022). This resulted in an approximately 40:30:30 split of the total percentage of the corpus, corresponding to an 8-8-7 split of the numbers of White Papers in each subcorpus (see Table 2).

The method used to examine this digital corpus involved monolingual, diachronic analysis at the lexical level using collocations and concordances, interpreted through a framework of CDA. The goal of this research design was to avoid cherry-picking discursive data from the policy texts. The design sought first to identify through statistical methods the language that

**Table 1.** Description of the total corpus

Words	3,312,325
Sentences	549,479
Documents	57
<b>Source(s):</b> Author's own work	

**Table 2.** Description of the subcorpora

<i>Subcorpus</i>	<i>Tokens</i>	<i>%</i>	<i>No. of white papers in the subcorpus</i>
2001–2008	1,851,144	40.027	8
2009–2016	1,381,043	29.862	8
2017–2023	1,392,566	30.111	7

**Source(s):** Author's own work

was most closely associated with foreign nationals in the policy texts in three chronological periods. It then allowed the interpretation of these strong word associations qualitatively under a fundamental assumption that the ways in which a social category is repeatedly discussed may influence how it is thought about (Wilkinson, 2019).

#### *Monolingual analysis*

The policy texts in this study were written and disseminated originally in Japanese by policymakers in Japan. Only original Japanese texts were used in the analysis described below because the author can read Japanese and has professional and academic experience in the field. English translations and summaries provided in this article are the author's own, unless stated otherwise.

#### *Diachronic, corpus-based analysis*

Computational, corpus-based analysis of large volumes of data can make visible patterns that might not be seen in smaller amounts of data (Wilkinson, 2019). Searching first for statistically significant patterns and relationships and following this with further detailed qualitative analysis is often a feature of this approach (see, e.g. Bray, 2022; Mulderrig, 2012; Pérez-Paredes et al., 2017; Potts and Kjær, 2015; Wilkinson, 2022). Such methods can be used to avoid confirmation bias (Frayne, 2022). The initial unit of analysis in this study was lexis.

#### *Lexical analysis of collocations and concordances*

Lexical items were examined from the perspective of collocation and concordance. Collocation is defined broadly as the regular co-occurrence of lexical items in close context at a frequency that is statistically significant and greater than chance (see, e.g. Bray, 2022; Pérez-Paredes et al., 2017; Potts and Kjær, 2015; Wilkinson, 2019). Collocates tell us about the ideas that are associated with a target lexical item (Bray, 2022). Collocational analysis is a well-established technique to study discourse (Bray, 2022; Mulderrig, 2012; Pérez-Paredes et al., 2017; Potts and Kjær, 2015; Wilkinson, 2019, 2022). Different statistical measures can be used to identify frequent co-occurrence and suggest collocation candidates. This study used the logDice measure, in line with other similar studies (e.g. Pérez-Paredes et al., 2017; Potts and Kjær, 2015). A logDice value of ten or above is reported to suggest strong collocation (Rychlý, 2008) and was used as the selection measure in this study.

In-depth, qualitative analysis of concordance lines followed quantitative collocational analysis in this study (as in, e.g. Wilkinson, 2019, 2022). A concordance is a listing of each instance of lexical item in a corpus presented with the words that surround the item (Wynne, 2008). These strong word associations were then interpreted through a theoretical framework of CDA.

#### *CDA*

CDA is a well-established approach to the critical examination of social inequality that interrogates how discourses can produce, reproduce or challenge social power as exercised by

a dominant social group or institution (van Dijk, 1993). It aims, through its analysis, to have an impact in society and advocates for making suggestions for change to discourse to empower groups experiencing social inequality and orient better social practice (Blommaert, 2005). It has been successfully combined in previous corpus-based studies of discourse and policy (e.g. Chmutina *et al.*, 2018; Potts and Kjær, 2015; Wilkinson, 2019, 2022; Zaman, 2021). In line with such a framework, analysis in this study of the strong collocations of *gaikokujin*/foreign national in a corpus of influential policy texts was guided by the social problem of the inclusion and engagement of foreign nationals in DRR in Japan and led to conclusions that aimed at better DRR practices.

The next section will present the findings of the collocational and concordance examination of the three subcorpora in this study.

### Findings

Diachronic corpus analysis at the lexical level focusing on the target item *gaikokujin*/foreign national revealed a set of strong collocations in each subcorpus.

Strong collocations 2001–2008.

Table 3 illustrates that *gaikokujin*/foreign national collocated strongly with three lexical items in the 2001–2008 subcorpus for a concordance size of 26 hits of the total 233 hits.

The collocates *hairyo*/consideration and *tomo ni*/together with appeared in one section of the White Papers that was repeated in 2001 and 2002 only. In both cases, they were present in a chapter on disaster prevention in a final miscellaneous section. Through a close reading of concordance lines around these collocates, it became evident that the relevant passage, reported in just one sentence, was a request from the government to broadcasters to consider foreign nationals, the visually and hearing impaired and others while carrying out their important role in times of emergency and disaster.

There was one additional strong collocation between *gaikokujin*/foreign national and *hairyo*/consideration in the 2006 White Paper. A detailed examination of concordance lines around this collocate revealed that it was present in a chapter on taking action in disasters. This chapter discussed how to enhance disaster awareness, protect lives and livelihoods and expand local participation. The relevant passage discussed the many foreign tourists, including those from Japan, who were killed in the 2004 Indian Ocean Tsunami and underlined the importance of considering disaster countermeasures for foreign tourists and Japan’s increasing foreign resident population. It listed briefly efforts by some regions in Japan to prepare multilingual

**Table 3.** Strong collocates of *gaikokujin*/foreign national in the 2001–2008 subcorpus

Collocate	Freq	Coll. freq	logDice	In white papers from
配慮 ( <i>hairyo</i> ; translated here as consideration)	7	25	12.1349	2001 2002 2006
共に ( <i>tomo ni</i> ; translated here as together with) <sup>a</sup>	6	44	11.4557	2001 2002
メンバー国 ( <i>menbā-kuni</i> ; translated here as member countries)	3	49	10.3561	2006 2007 2008

**Note(s):** <sup>a</sup>Any items in Tables 3 and 4 or 5 displayed within chain brackets indicate an instance in which the Sketch Engine tool retrieved an incomplete lexical item as a collocate. The full and correct lexical item in each instance was checked in the concordance by the researcher and the results displayed in the tables were updated accordingly

**Source(s):** Author’s own work

disaster-related information, conduct drills for foreign nationals and provide training for volunteers such as interpreters.

The collocate *menbā-kuni*/member countries appeared in one section of the White Papers from 2006 to 2008. Close reading of the relevant concordance lines put it in a section on Japan's international cooperation efforts in DRR. The passage focused on regional cooperation in Asia and the establishment of the Asian Disaster Reduction Center, a multilateral network to promote DRR based in Japan. It detailed its programme for inviting foreign nationals from member countries to serve as visiting researchers at the Center.

Strong collocations 2009–2016.

Table 4 demonstrates that *gaikokujin*/foreign national collocated strongly with six lexical items in the 2009–2016 subcorpus for a concordance size of 72 hits of the total 233 hits (a more than three-fold increase in hits on the previous subcorpus).

Detailed examination of concordance lines demonstrated that the collocates *anpi kakunin*/confirming someone's safety, *sōdan taiō*/consultation services, *kibō suru*/wishing to and *hisai shichōson*/affected municipalities appeared in a chapter on disaster recovery measures repeated in the three White Papers from 2012 to 2014. These were in the three years that directly followed the massively destructive 2011 Great East Japan Earthquake. The passage in question detailed measures taken by Japan's Ministry of Justice to set up a legal support centre to provide information and legal aid to foreign nationals. It reported on how this centre worked to confirm the safety of foreign nationals in affected municipalities, provide information to their relatives and relevant diplomatic services and run consultation services at a major airport for those foreign nationals wishing to return temporarily to their countries of origin.

The collocates *gaitō shinai*/not applicable and *handan sareta*/deemed to appeared in a later passage of the same chapter on disaster recovery measures repeated in the three White Papers from 2012 to 2014. Through a close reading of concordance lines around these collocates, it became evident that this was a technical passage explaining the legal basis for immigration control measures taken by the Ministry of Justice in response to the 2011 Great East Japan Earthquake. It explained how foreign nationals for whom a particular ministerial notification

**Table 4.** Strong collocates of *gaikokujin*/foreign national in the 2009–2016 subcorpus

Collocate	Freq	Coll. freq	logDice	In white papers from
安否確認 ( <i>anpi kakunin</i> ; translated here as confirming someone's safety)	6	26	10.9703	2012 2013 2014
相談対応 ( <i>sōdan taiō</i> ; translated here as consultation services)	3	5	10.3182	2012 2013 2014
希望する ( <i>kibō suru</i> ; translated here as wishing to)	3	5	10.3182	2012 2013 2014
該当し{ない} ( <i>gaitō shinai</i> ; translated here as not applicable)	3	8	10.263	2012 2013 2014
判断さ{れた} ( <i>handan sareta</i> ; translated here as deemed to)	3	11	10.2099	2012 2013 2014
被災市町村 ( <i>hisai shichōson</i> ; translated here as affected municipalities)	3	15	10.142	2012 2013 2014

**Source(s):** Author's own work

was not applicable had their periods of stay extended once they were deemed to fall under a pertinent article of the Immigration Control Act.

Strong collocations 2017–2023.

Table 5 shows that *gaikokujin*/foreign national collocated strongly with five lexical items in the 2009–2016 subcorpus for a concordance size of 135 hits of the total 233 hits (a further large increase in hits on the preceding subcorpora).

Concordance analysis revealed that the collocates *kaihatsu shita*/developed and *shodō taiō taisei*/first response system were found in two sections of the White Papers repeated from 2017 to 2022. One section was in a chapter on disaster prevention measures taken in previous years. The other was in a chapter on disaster prevention plans for the upcoming year. Both passages concerned a “Safetytips” application developed by the Japan Tourism Agency. The application was designed to be a first response system to provide foreign visitors to Japan with essential information when disaster strikes. One passage reported each year on progress that had been made in the preceding period on the development and deployment of the application. The other passage explained the plans to improve and further develop the application in each successive period.

The collocate *hisaiji*/in the event of a disaster was found through detailed examination of the relevant concordance lines to be in one section of the White Papers repeated from 2017 to 2022. In a chapter on disaster prevention measures taken in previous years, the White Paper reported on an automated multilingual voice translation system developed by Japan’s Ministry of Internal Affairs and Communications to support communication among foreign nationals in times of disaster. The passage reported each year on progress that had been made on the development and deployment of the translation system, along with the budget expended.

**Table 5.** Strong collocates of *gaikokujin*/foreign national in the 2017–2023 subcorpus

Collocate	Freq	Coll. freq	logDice	In white papers from
開発し{た}( <i>kaihatsu shita</i> ; translated here as developed)	12	43	11.1092	2017 2018 2019 2020 2021 2022
被災時 ( <i>hisaiji</i> ; translated here as in the event of a disaster)	8	14	10.7808	2017 2018 2019 2020 2021 2022
{コー}ディネーター ( <i>kōdinētā</i> ; translated here as coordinator)	6	6	10.4454	2021 2022 2023
初動対応体制 ( <i>shodō taiō taisei</i> ; translated here as first response system)	6	6	10.4454	2017 2018 2019 2020 2021 2022
マッチング ( <i>macchingu</i> ; translated here as match)	6	33	10.1927	2021 2022 2023

**Source(s):** Author’s own work

The collocates *kōdinētā*/coordinator and *macchingu*/match were found in two sections of the White Papers repeated from 2021 to 2023. Concordance work revealed that one section was in a chapter on disaster prevention measures taken in previous years. The other was in a chapter on disaster prevention plans for the upcoming year. Both passages concerned efforts by Japan's Ministry of Internal Affairs and Communication to train coordinators responsible for organising disaster-related information for foreign nationals and matching it to their needs, especially the needs of those foreign nationals in evacuation centres during disasters. One passage reported each year on progress that had been made in the conduct of the training programme, along with the budget expended. The other passage explained the plans to conduct and further develop the training programme in each successive period, along with the budget available.

### Analysis

Diachronic analysis of strong collocations suggested that Japanese DRR policy stakeholders represented foreign nationals in different ways in each of the three periods. Discourse traces in the policy subcorpora indicated that the social problem of the inclusion and engagement of foreign nationals in DRR gradually improved over the period, however, not to the point where there was no further cause for concern about the issue. Furthermore, the traces suggested a gradual progression in the discourse from representing foreign nationals initially as an external and temporary phenomenon, to one that was transient and administrative, before representing foreign nationals most recently as an internal and community-based phenomenon. This overview of the broad diachronic trends will now be discussed in more detail.

#### *2001–2008: foreign nationals as an external, temporary phenomenon*

The social problem of inclusion and engagement persisted in this period. Foreign nationals were little considered in policy in this period with only 26 mentions of the lexical item. When they were mentioned, it was mostly a brief mention to broadcasters to consider foreign nationals when broadcasting in a disaster. As has been critiqued elsewhere (Cadwell, 2023; Sakurai and Adu-Gyamfi, 2020) a DRR policy such as this one is deficient because it does not detail how effective communication with foreign nationals can be achieved nor consider the languages, cultural backgrounds or appropriate formats required. It is also lacking by being entirely top-down (Grey and Severin, 2022). Similarly, it fails by considering foreign nationals as one, homogenous group (Adu-Gyamfi and Shaw, 2021; Green *et al.*, 2021; Pérez-Paredes *et al.*, 2017).

There was one mention in the 2006 White Paper of efforts by some regions in Japan to prepare to support foreign nationals, especially tourists, with multilingual information as well as drills and training following what was seen to happen in other countries in the Indian Ocean Tsunami. This is somewhat in line with a policy norm of government assistance (*kōjo*) and inclusivity. However, it lacks the community-led focus that drives this norm (Kitagawa, 2016; Murosaki, 2017). Here, foreign nationals were discussed as passive receivers of assistance rather than members of a community who must rely on themselves and mutually assist others before relying on the government. This constructed foreign nationals as something inherently vulnerable to be specially protected with limited agency, resilience and capacity to contribute. This view does not reflect the holistic reality of foreign nationals in disaster (Green *et al.*, 2021; Uekusa and Matthewman, 2017; Uekusa *et al.*, 2022) or of disaster-affected people in general (Zaman, 2021).

Discussion of inviting researchers from Asia to a research centre in Japan for information sharing appeared to be in line with a policy norm of government assistance (*kōjo*) and inclusivity. However, it is outward looking and considers foreign nationals as people to be invited into Japan for assistance rather than as community members already in Japan. It appeared to be once again top-down and administrative and not at all community-led, as has

been a critique of many national and supranational DRR policies (de Rivera, 2022; Grey and Severin, 2022; Kikuchi, 2020; Sakurai and Adu-Gyamfi, 2020).

Overall, the discourse traces in this subcorpus suggested that Japanese policy stakeholders would think of foreign nationals as mostly an external or temporary phenomenon to be considered in some limited cases, and mostly to be considered by administrators at government level.

#### *2009–2016: foreign nationals as a transient, administrative phenomenon*

In this period, there was much greater presence of foreign nationals in the policy documents, with 72 mentions of the lexical item. We can say that foreign nationals were clearly recognised in this period, a period in which the most fatal disaster in Japan in recent years—the 2011 Great East Japan Earthquake—was widely discussed. This suggests that the social problem of inclusion and engagement was at least partly addressed. However, the associations with foreign nationals that policy stakeholders would have been primed to make by the strong collocations in this period were very restricted. All the discussion was about legal measures taken by the Ministry of Justice to confirm safety, provide information and facilitate temporary departure from Japan. These discourse traces suggested one-way, centrally coordinated, top-down thinking that has been criticised in previous work (de Rivera, 2022; Grey and Severin, 2022; Kikuchi, 2020; Sakurai and Adu-Gyamfi, 2020; Satizábal *et al.*, 2022).

Discourse in this period was firmly in line with a Japanese disaster policy discourse norm of government assistance (*kōjo*). Yet again, it lacked any element of community-led thinking (*kyōjo*) or self-reliance (*jijo*). The discourse reinforced an association between foreign nationals and disaster of temporariness and departure. Policy stakeholders would be primed to think from the discourse in this period that, when disaster hits, the most important thing is to establish that foreign nationals are safe and then help them to leave Japan. This discourse while broadly positive and intended to assist foreign nationals may also have unintentionally contributed to broader negative discourses that were noted in the period of foreign nationals as disloyal or lacking in resilience (Cadwell, 2019).

Overall, this subcorpus suggested a discourse about foreign nationals that primed policy stakeholders to think of them as an important issue that would require largely administrative, top-down and legalistic treatment.

#### *2017–2023: foreign nationals as an internal, community-based phenomenon*

This period saw the social problem of inclusion and engagement further resolved in the policy discourse, while still leaving cause for concern. There was a strong presence of foreign nationals in the policy documents, with more than half of all mentions coming in this period at a rate of 135 hits. The association of foreign nationals with the training of coordinators who would match disaster information with foreign nationals' needs—especially those in evacuation centres—moved the discourse more into line with the inclusive, community-led, local thinking that is characteristic of broader disaster policy norms. It could now be envisaged from the discourse traces in the policy documents that foreign nationals might not just be tourists or those immediately looking to leave Japan after a disaster. They might also be members of the community who would evacuate to centres just as other residents do. It was still a discourse of government-funded assistance (*kōjo*). However, there was more nuance. The funding was to train those in the community to lead efforts (*kyōjo*) that would match information to a foreign national's needs and empower them to help themselves (*jijo*) and possibly even others (*kyōjo*). The focus on needs matching implies that needs may be diverse and is in line with the importance of establishing effective working relationships with community connectors and community-led initiatives to avoid tokenistic state-led community engagement (Khan *et al.*, 2022; Satizábal *et al.*, 2022). It tends toward some recognition that foreign nationals should not be treated as a homogenous group (Adu-Gyamfi and Shaw, 2021; Green *et al.*, 2021; Pérez-Paredes *et al.*, 2017). The focus on training brought the discourse

firmly into the realm of decentralised preparedness and responsibility (Pandey, 2019), which answers critiques in previous work of overcentralised control (Shimizu, 2012).

There are some remaining causes for concern. The focus on budgets for the development and deployment of multilingual safety applications and voice translation systems, especially for short-term visitors to Japan, reinforces an idea critiqued in previous work (Adu-Gyamfi and Shaw, 2022; Green *et al.*, 2021) that supplying some multilingual information is all that foreign nationals need when disaster strikes. It also associates foreign nationals strongly with temporary visitors. Foreign visitors are an important social group that require consideration (Hada, 2020). Nevertheless, an over-focus on DRR for visitors could lead to a neglect of foreign nationals who are already embedded in communities in Japan. This could prevent the capacities for self-reliance and community-based reliance that foreign nationals could bring to DRR from being recognised and integrated into disaster policy, as argued in previous work (Green *et al.*, 2021; Khan *et al.*, 2022; Uekusa and Matthewman, 2017). While debate continues about the need to make a distinction between foreign residents and foreign visitors, essential principles of timeliness, accuracy, multiple channels and multidirectional communication apply to both groups (Hada, 2020).

Overall, Japanese policy stakeholders in this period would have been primed by this discourse to think of foreign nationals as: (1) community members with diverse needs who should be dealt with at community level in line with other community-based efforts; and (2) short term visitors who need language support and technology-based solutions for speedy first response.

### Conclusion

Guided by the social problem of the inclusion and engagement of foreign nationals in DRR in Japan, this research reported on a monolingual, diachronic, corpus-based CDA of 23 years of the Japanese Government's White Papers on Disaster Management to (1) identify representations of foreign nationals in the corpus and (2) examine the consequences these representations had for foreign nationals' DRR.

The research identified a changing trend in how foreign nationals were represented in DRR policy from 2001 to 2023. Each of three chronological subcorpora in the White Papers produced one strong discursive representation, evidenced through a set of strong collocations and pointed to an increasing alignment of the representation of foreign nationals with Japanese DRR policy norms for communicating about affected people. The 2001–2008 subcorpus was marked by a discourse that represented foreign nationals as an external or temporary phenomenon to be considered in some limited cases, and mostly to be considered by administrators at government level. This was almost entirely unaligned with the norms for representing people in DRR policy discourse in Japan, whereby individuals are to be represented as active agents of DRR in their communities. The 2009–2016 subcorpus also represented foreign nationals in a way that was largely unaligned with discursive norms for DRR policy, implying that they were a transient and administrative phenomenon. However, the discourse did at least represent foreign nationals as an important issue that would require action. The 2017–2023 subcorpus was marked by a discourse that was increasingly aligned with inclusive, whole community and local-leadership norms. Discourse traces here suggested that policy stakeholders represented foreign nationals as an internal, community-based phenomenon. They primed stakeholders to think of foreign nationals as community members with diverse needs who should be dealt with at community level in line with other community-based efforts or short-term visitors who need language support and technology-based solutions for speedy first response.

CDA is action based and prescriptive (Blommaert, 2005). These findings about Japanese policy discourse have implications for Japanese society and the way it includes and engages foreign nationals in DRR. The COVID-19 crisis intensely underlined that, in some crises, nobody is safe until everybody is safe. It showed that DRR for a whole society is weaker if

certain groups in that society are left-behind, uninvolved or ill-considered. Japan's DRR policy discourse rightly focuses on inclusive, whole community, locally led approaches to DRR as a result. Discourse traces in the White Papers on Disaster Management suggest that policymakers are no longer leaving behind foreign nationals or failing to consider them appropriately in the way they once were. This is to be praised. However, recent traces also suggest that there is still a strong focus in the discourse on temporary foreign residents, such as short-term tourists or business visitors, instead of on longer term residents. The engagement in DRR efforts of those who will reside in Japan over a longer term rather than a tourist or occasional visitor is critical to true whole community approaches. Policymakers in Japan should bear this in mind. Furthermore, there is a long-running impression in the discourse that foreign nationals are one homogenous group with identical needs and capacities. This is not realistic considering the number and diversity of foreign nationals now in Japan. Research has shown that foreign nationals are not uniform in their-disaster related needs or capacities, and policymakers in Japan need to consider how to focus resources on raising awareness among the specific cultural groups of foreign nationals that are less likely to prepare for a disaster. Targeted whole community approaches, rather than generic whole community approaches, require deeper understanding of the people that make up local communities in Japan. This points to fruitful potential issues of further research to examine local-level rather than national discourse—for example the disaster-related texts of an individual local authority in Japan—to see how well the discourse represents the people that make up the local communities in question.

The findings of this study should be seen in the context of their limitations. This is an analysis of discourse from only one category of text narrowed down to a CDA of collocational data. This is, of course, a partial interpretation of limited written data that is largely decontextualised from other aspects of policy making and implementation. This points to a second potentially fruitful avenue for further research: qualitative methods—such as interviews, focus groups or observations—could now be used to see how well the findings put forward here match the policymaking discourses experienced on the ground in Japan.

#### Notes

1. 自助
2. 共助
3. 公助
4. A fourth concept 互助—gojo, a type of mutual help given to acquaintances—has become deprecated and subsumed in kyōjo, that is neighbourhood or community self-reliance (Kitagawa, 2016; Murosaki, 2017).
5. 防災基本計画
6. 防災白書
7. 災害対策基本法
8. 外国人
9. 外人
10. See any White Papers made available by the Government (in Japanese) at: <http://www.bousai.go.jp/kaigirep/hakusho/index.html>
11. やさしい日本語
12. 地域防災力

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