appropriate synonym. This problem is not addressed by works summarized in Non-Patent Document 1, and is illustrated in Figure 5. Figure 5 shows the context vector of the word バルブ[barubu] ("bulb" or "valve") and the context vectors of synonym candidates エンジン[enjin] ("engine"), 電球[denkyū] ("bulb"), and 弁[ben] ("valve"). The former context vector is compared to each of the latter context vectors. The incorrect synonym エンジン[enjin] ("engine") ranks first, since エンジン[enjin] ("engine") as well as バルブ[barubu] ("bulb" or "valve") are highly correlated with the words 光[hikari] ("light"), 点灯[tentō] ("switch on"), パイプ[paipu] ("pipe"), and 開ける[akeru] ("open"). However, バルブ[barubu] ("bulb" or "valve") is only highly correlated with the words パイプ[paipu] ("pipe") and 開ける[akeru] ("open") when it is used in the sense of "valve" (see also Figure 7). This in turn leads to a low similarity with the context vector of 電球[denkyū] ("bulb"). Similarly, バルブ[barubu] ("bulb" or "valve") is only highly correlated with the words 光[hikari] ("light") and 点灯[tentō] ("switch on") when it is used in the sense of "bulb" (see also Figure 7). This leads to a low similarity with the context vector of 弁[ben] ("valve").

~~The~~ Embodiments of the present invention seek to ~~addresses~~ address the problem of finding an appropriate synonym for an ambiguous input term which context vector is unreliable.

DISCLOSURE OF INVENTION

~~An exemplary object~~Embodiments of the present invention ~~is to~~ provide a term synonym acquisition method and a term synonym acquisition apparatus that solve the aforementioned problems.

An exemplary aspect of the present invention is a term synonym acquisition

context vector based on the context vector of the input term and the context vector of the auxiliary term; and a ranking function of comparing the combined context vector with the context vector of each synonym candidate to generate ranked synonym candidates in the original language.

The Embodiments of the present invention uses use additionally to the input term's context vector, auxiliary terms' context vectors in one (or more) different languages, and combines combine these context vectors to one context vector which may reduces reduce the impact of the input term's context vector's noise caused by the ambiguity of the input term.

The Embodiments of the present invention can overcome the context vector's unreliability by allowing the user to input auxiliary terms in different languages which narrow down the meaning of the input term that is intended by the user. This is motivated by the fact that it is often possible to specify additional terms in other languages especially in English, with which the user is familiar. For example, the user might input the ambiguous word バルブ[barubu] ("bulb", "valve") and the English translation "bulb", to narrow down the meaning of バルブ[barubu] ("bulb", "valve") to the sense of "bulb".

As a consequence, embodiments of the present invention may leads lead to improved accuracy for synonym acquisition.

BRIEF DESCRIPTION OF DRAWINGS

Figure 1 is a block diagram showing the functional structure of a term synonym acquisition apparatus (a term synonym acquisition system) according to a first exemplary embodiment of the present invention.

Figure 2 is a block diagram showing the functional structure of creation unit 40 shown in Figure 1.

Figure 3 is a block diagram showing the functional structure of a term synonym