

# Crosslinguistic Notions of (In)definiteness \*

ISHIKAWA, Kiyoshi  
Hosei University  
kiyoshi@fujimi.hosei.ac.jp

## Abstract

We argue that both Russellian and Heimian definites exist in natural languages. Our account captures both the commonality and difference between the two. Further, we suggest that the Russellian/Heimian distinction extends to indefinites too.

## 1 Introduction

One morning, Alice tells (1) to her husband, John, who doesn't read newspapers. Her use of *the president* is dependent on the uniqueness of president in the fixed domain she is talking about (i.e. the U.S. politics situation). Let's call it a *Russellian domain* (R-domain) and such a use of definite description *Russellian definiteness* (R-definiteness).

(1) Hey John, the president resigned!!

In the evening John describes a scene he saw in the afternoon with (2). Clearly, the described scene contains at least two dogs, thus the uniqueness of dogs on which his use of *the dog* is dependent is not w.r.t. the scene as a whole, but rather w.r.t. a domain dynamically constructed by his first sentence. Let's call such a domain a *Heimian domain* (H-domain) and such a use of definite description *Heimian definiteness* (H-definiteness).

(2) I found a dog on the lawn. The dog was biting another dog.....

An R-domain  $r$  is something out there, not necessarily within our comprehension in its totality. An H-domain  $h$  is the part of such an  $r$  which is known, or already familiar, to the conversation participants, which grows as the conversation proceeds. Then, assuming the lattice-theoretic ontology of [1], we say the denotation of a definite description is  $\max(d, p)$ , where  $\max$  is a function that maps an R- or H-domain  $d$  and a property  $p$  to the maximal individual which has  $p$  in  $d$ ; the uniqueness, then, follows from the singular morphology of the NP.

The Russellian/Heimian distinction (hereafter, the R/H distinction) is a result of the choice of the domain (cf. [2]). Regarding such domains as

*resource situations* in the situation semantic sense, we argue for the significance of the R/H distinction for English and other languages.

## 2 Inclusiveness

H-definiteness is named after [3], which reduces definiteness to familiarity. We formulate familiarity in terms of domains (situations), while [3] formulates it in terms of individuals (*file cards*). Here, [4]’s *inclusiveness* analysis is formulated as the maximality function *max*. For example, in (3), *the boys* refers to the three boys the speaker met.

(3) I met two boys at 10:00. I met another at 11:00. The boys were.....

This is only natural, since the H-domain contains three boys when *the boys* is uttered.<sup>1</sup>

## 3 Accommodation

Cases like (1) could offer a problem for reduction of definiteness to familiarity, since the president wasn’t introduced explicitly in the discourse beforehand; hence [3]’s appeal to *accommodation*. However, we want to have some characterization of when accommodation is or isn’t possible.

In our view, “accommodated” definites are simply R-definites. (1) is a case in point; John knows that there is only one president in the U.S., so he only has to identify the R-domain (the U.S. politics situation). In contrast, in (2), it isn’t part of Alice’s knowledge that the H-domain (the witnessed scene), or some other R-domain, contains a unique dog, hence the oddity of starting with (2’).

(2’) I found the dog.....

The two kinds of definiteness can interact (*associative use*). In (4), the first sentence constructs an H-domain, which contains a car *x*. It is part of common knowledge that a car has a unique fence, so it is known that *x* has a unique fence in its car situation, which is an R-domain (cf. [5]). This is why *its fence* is felicitous. In contrast, if *x* wasn’t initially introduced in the Heimian way, we wouldn’t have no clue as to which car’s *car situation* is used as resource; hence, starting the conversation with the second sentence of (4) is infelicitous.

(4) I saw a car. Its fence was.....

## 4 Crosslinguistic ranges of definiteness

While *that president* can’t replace *the president* in (1), *that dog* can replace *the dog* in (2). Here we follow [6], [7] and [8] in treating both *the P* and *that P* (and proper names etc.) as definite descriptions. This means that, in explaining the replacement fact, we can’t appeal to something like

the description/direct-reference distinction; rather, we have to explain it as commonalities and differences between two kinds of descriptions.

My proposal here is that *that P* requires an H-domain while *the P* is compatible either with an H- or R-domain. The replacement fact about (1)–(2) follows from this proposal; *the* and *that* partially overlap in meaning (see also [9]).

Seen from this perspective, some languages appear to mark the R/H distinction overtly. For example, in Japanese, *inu* can appear either with or without an article, depending on the context (*inu* roughly means *dog*). The article *sono* can attach to *inu* only when it is used as an H-definite. Thus, *sono* can't attach to the translation of *the president* in (1), while *the dog* in (2) can be translated into *sono inu*. Thus, *sono* corresponds to both *that* and the Heimian *the*.<sup>2</sup>

Further, I suggest that Japanese is not the only such language. For example, consider the examples (5)–(8) of Bavarian ([10], p. 69; originally from a paper by Hannes Scheutz) of Bavarian; *da* is Russellian and *dea* is Heimian (we assume that names are R-definites).<sup>3</sup>

- (5) Da/\*Dea Kare is kema.  
'Karl has arrived.'
- (6) Da/\*Dea Kini is gschoabm.  
'The King has died.'
- (7) Da/\*Dea Schnaps is daia.  
'Schnaps is expensive.'
- (8) I hab a Bia un Schnaps bschdait. Dea/\*Da Schnaps war daia.  
'I have ordered a beer and a schnaps. The schnaps was expensive.'

## 5 Extension to indefinite descriptions

If indefinite descriptions are to be analyzed in terms of existential claims on a given domain (i.e. *resource situation*), then we will expect the R/H distinction is applicable to indefinites too. When an R-domain is chosen, *a boy* is to refer to an arbitrary boy. In contrast, if an H-domain is chosen, it is to refer to one of the boys already introduced in the discourse.<sup>4</sup>

The distinction overtly marked in Turkish noted in [12] can be viewed as such a case. [12] attempts to capture this distinction by stipulating two kinds of *discourse referents*. In contrast, with the R/H distinction, we need no such new stipulation.<sup>5</sup>

## 6 Conclusion

In our analysis, H-definiteness is regarded as familiarity of H-domains, instead of familiarity of individuals; the latter is derivative from the former (also note that R-definites are also “familiar” in a sense; it is only that

Heimian familiarity, but not Russellian familiarity, is sensitive to discourse dynamics). Our move from individuals to domains is in line with [14]’s situation semantic arguments for the notion of *resource situation* (although not necessarily with his generalized-quantifier analysis of (in)definites).

From the considerations in the previous sections, we conclude that the Russellian/Heimian distinction is something too significant to miss.<sup>6</sup>

## Notes

\*I would like to thank Shûichi Yatabe for discussion. I would also like to thank Tomoko Inagawa, Masayo Iida, Motoko Katayama, Mika Kizu, Atsushi Shimojima and some students at Kokushikan University for native judgments on Japanese. Of course, all remaining errors are mine.

<sup>1</sup>In principle, a single conversation can involve two or more H-domains; each H-domain is part of some or other R-domain. However, the hearer can’t finely distinguish them without a good clue, in which case she only assumes one big H-domain subsuming all these small H-domains, as in (3).

<sup>2</sup>Here we are only saying that H-definites are explicitly so marked in the grammar by *sono*; we don’t intend here to analyze bare nominals in Japanese, which can mean not only R-definites but also indefinites and generics, and further, for some speakers, H-definites in addition.

In a more extensive study we will have to say that *this* in English and *kono* and *ano* in Japanese are also overt markers of H-definiteness (in fact, some Heimian uses of *the* translate to *kono* rather than *sono*).

<sup>3</sup>[10] cites a paper by Karen Ebert and says that Frisian also follows this pattern (p. 69). On the other hand, [11]’s data, also cited in [10], of Indonesian could also be interpreted as exhibiting a similar contrast (bare nominals vs. those with *itu* or *-nya*, the former of which is a demonstrative corresponding to *that* according to [11]).

Both [10] and [11] view the distinctions in terms of genericity. I can’t examine their positions in this paper (cf. n. 2).

<sup>4</sup>Put in [7]’s terms, the R/H distinction for an indefinite then resides in whether its *role* should be assumed in an R-domain or an H-domain.

<sup>5</sup>[13] observes that similar contrasts are overtly marked in German and Dutch etc. in terms of linear order. I have nothing interesting to say about this here.

<sup>6</sup>Due to lack of space I can’t discuss [15] or the technical details of the present analysis (quantification over situations, *novelty* of indefinites, etc.).

## References

- [1] G. Link. "The Logical Analysis of Plurals and Mass Terms." In R. Bäuerle, C. Schwarze and A. von Stechow (eds.) *Meaning, Use, and Interpretation of Language*, 302–323, Berlin: Walter de Gruyter, 1983.

- [2] J. Hintikka and J. Kulas. "Different Uses of the Definite Article." In J. Hintikka and F. Vandamme (eds.) *Logic of Discovery and Logic of Discourse*, 71–82, New York and London: Plenum, 1985.
- [3] I. Heim. *The Semantics of Definite and Indefinite Noun Phrases*. Ph.D. dissertation, University of Massachusetts, Amherst, 1982.
- [4] J. A. Hawkins. *Definiteness and Indefiniteness*. London: Croom Helm, 1978.
- [5] K. Ishikawa. "Situated Groups." In A. Ishikawa and Y. Nitta (eds.) *The Proceedings of the 1994 Kyoto Conference: A Festschrift for Professor Akira Ikeya*, 21–30, Tokyo: The Logico-Linguistic Society of Japan, 1995.
- [6] K. Bach. *Thought and Reference*. Oxford: Clarendon, 1987.
- [7] K. Ishikawa. *A Network Theory of Reference*. Ph.D. dissertation, University of Tokyo, 1995.
- [8] K. Ishikawa. "Individuation and Reasoning." To appear in E. Engdahl, J. Etchemendy, J. Seligman, H. Sirai and D. Westerståhl (eds.) *Language, Logic and Computation: The 1994 Moraga Proceedings*, Stanford: CSLI, In press.
- [9] J. P. Thorne. "On the Notion 'Definite'." *Foundations of Language* **8**: 562–568, 1972.
- [10] M. Krifka, F. J. Pelletier, G. N. Carlson, A. ter Meulen, G. Chierchia, and G. Link. "Genericity: An Introduction." In G. N. Carlson and F. J. Pelletier (eds.) *The Generic Book*, 1–124, Chicago: University of Chicago Press, 1995.
- [11] L. Portersfield and V. Srivastav. "(In)definiteness in the Absence of Articles: Evidence from Hindi and Indonesian." In H. Borer (ed.) *Proceedings of the Seventh West Coast Conference on Formal Linguistics*, 265–276, Stanford: Stanford Linguistics Association, 1988.
- [12] M. Enç. "The Semantics of Specificity." *Linguistic Inquiry* **22**: 1–25, 1991.
- [13] M. Diesing. *Indefinites*. Cambridge, MA: MIT Press, 1992.
- [14] R. Cooper. "Generalized Quantifiers and Resource Situations." In P. Aczel, D. Israel, Y. Katagiri and S. Peters (eds.) *Situation Theory and its Applications, vol.3*, 191–211, Stanford: CSLI, 1993.
- [15] N. Kadmon. "Uniqueness." *Linguistics and Philosophy* **13**: 273–324, 1990.