A sound symbolic analysis of the monster names of *Monster Hunter*

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Introduction

- Kawahara et al. (2018) showed that as Pokémon characters become bigger, their names are more likely to contain voiced obstruents and more morae (e.g., go-o-su (3 morae) $\rightarrow go$ -o-su-to (4 morae) $\rightarrow ge$ -to-to0.
- The current issue: It is unclear whether either of these effects
- the effects of voiced obstruents and of length in morae— is enough singly to express the largeness of monsters, or whether both are necessary.
- The current study examines whether the voiced obstruents and the length in morae are related to the size (height) of the monsters in a computer game named *Monster Hunter* (*Monhan*), a series of computer games that was first released in 2004 by Capcom.
- In Monhan, players slay and trap monsters that inhabit different places.
 Each monster has a different size, although there seem to be individual differences in size for each monster.

ANALYSIS

 The current study extracted 155 names from the website (https://matome.naver.jp/odai/2141802741963299701),

but excluded 65 of them from analysis because their sizes have not been publicly released, and analyzed the remaining 90 names.

• Since some monsters are less than one meter in size while others exceed 400 meters, their real size (m) was log-transformed (base = e).

e.g., meraruu = 0.39 m \rightarrow 1.59 log m dara amadyura = 440.397 m \rightarrow 4.64 log m

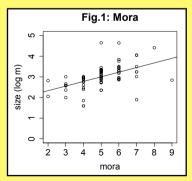
• The current analysis performed regression analyses with the log-transformed sizes as dependent variables and with the numbers of voiced obstruents and morae as independent variables.

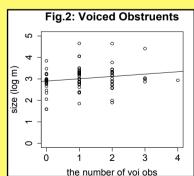
TAKE-HOME MESSAGE

The size of the monsters in *Monster Hunter* is expressed by the length of their names. → Voiced obstruents and morae together may not necessarily express the sizes of monsters.

RESULTS & DISCUSSION

- Regression analysis showed a significantly positive correlation between size and the number of morae (t = 5.55, p < .001), while the effect of number of voiced obstruents on size was not significant (t = 1.98, n.s.).
- This result suggests that voiced obstruents and morae together do not necessarily serve to express the sizes of monsters.





(Figure 1 shows the relationship between size (log m) and morae, and Figure 2 the relationship between size (log m) and number of voiced obstruents. Tables 1 and 2 indicate the average log-transformed size by morae and by number of voiced obstruents, respectively.)

Table 1: Average log-transformed size by mora

Mora	Ν	LogSize
2	2	2.44
3	6	2.53
4	17	2.60
5	30	3.10
6	25	3.29
7	8	3.27
8	1	4.41
9	1	2.84
ALL	90	-

Table 2: Average logtransformed size by voiced obstruents

VdObs	Ν	LogSize
0	25	2.82
1	34	3.10
2	23	3.10
3	5	3.26
4	3	3.14
ALL	90	-