

<http://www.buyingfang.com/songsD3/display.html>

ABSTRACT

The refrain is a popular literary device that represents the repeated lines in the *Shijing*. Is there any similar way existing for appreciation? Driven by the problem mentioned above, this work uses visualization technology to convert the repetitive structure into visual data, mainly presented on interactive web pages with visual analysis and music visualiza-

-tion. It also includes physical visualization incorporating 'synthetic' techniques to enrich the visual representation. We hope that this attempt at visualization will serve as a feasible solution for the concrete dissemination of poetic rhyme. To a certain extent, this work has an enlightening impact on education and cultural transmission.

1 VISUAL ANALYSIS

Every square color blocks represent one poem in the *Shijing*. In the same square, different color scales indicate different proportions of refrain words. White blocks refer to the normal words, blue ones indicate repeated words, and green ones are the replaced words.

Normal words

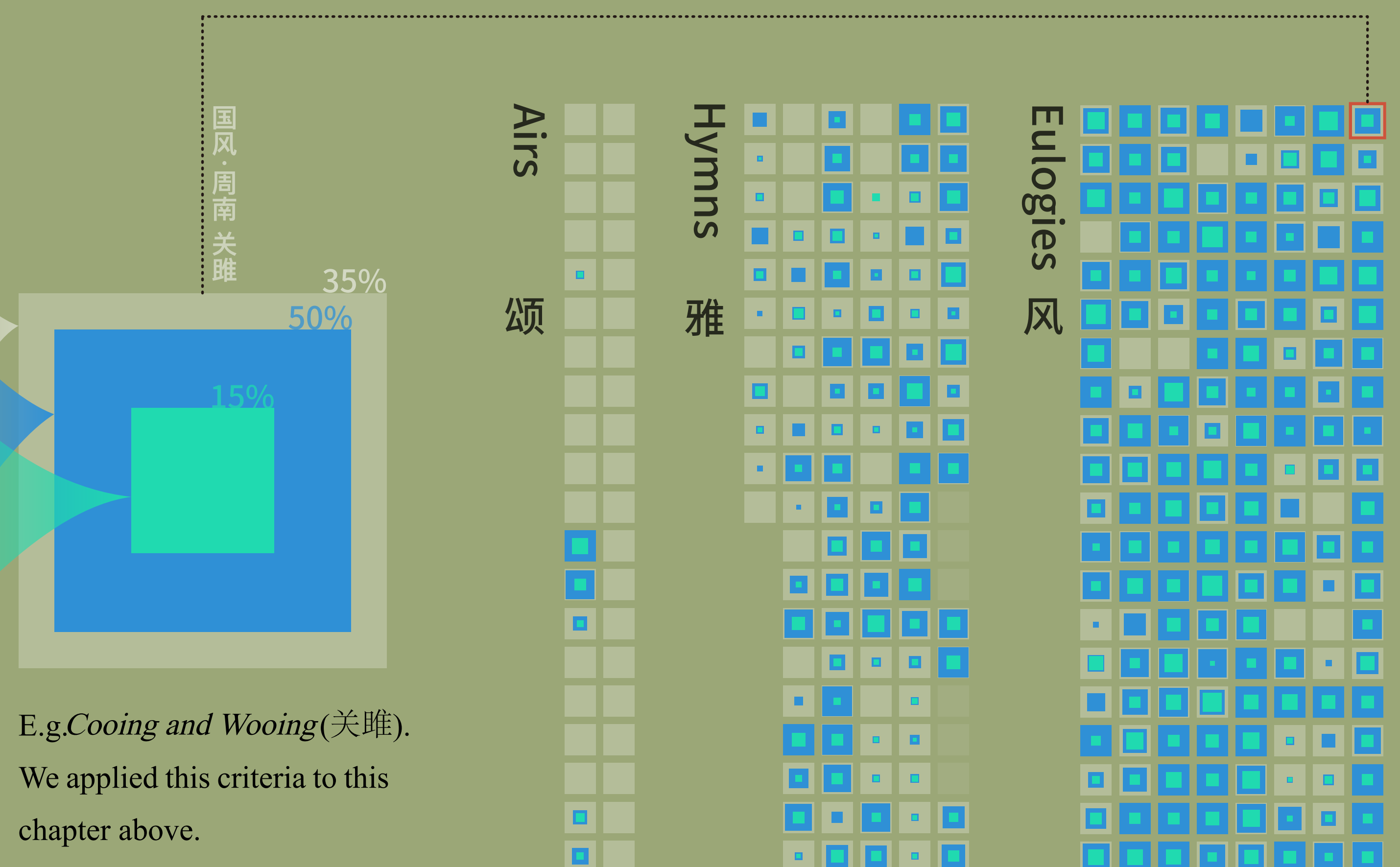
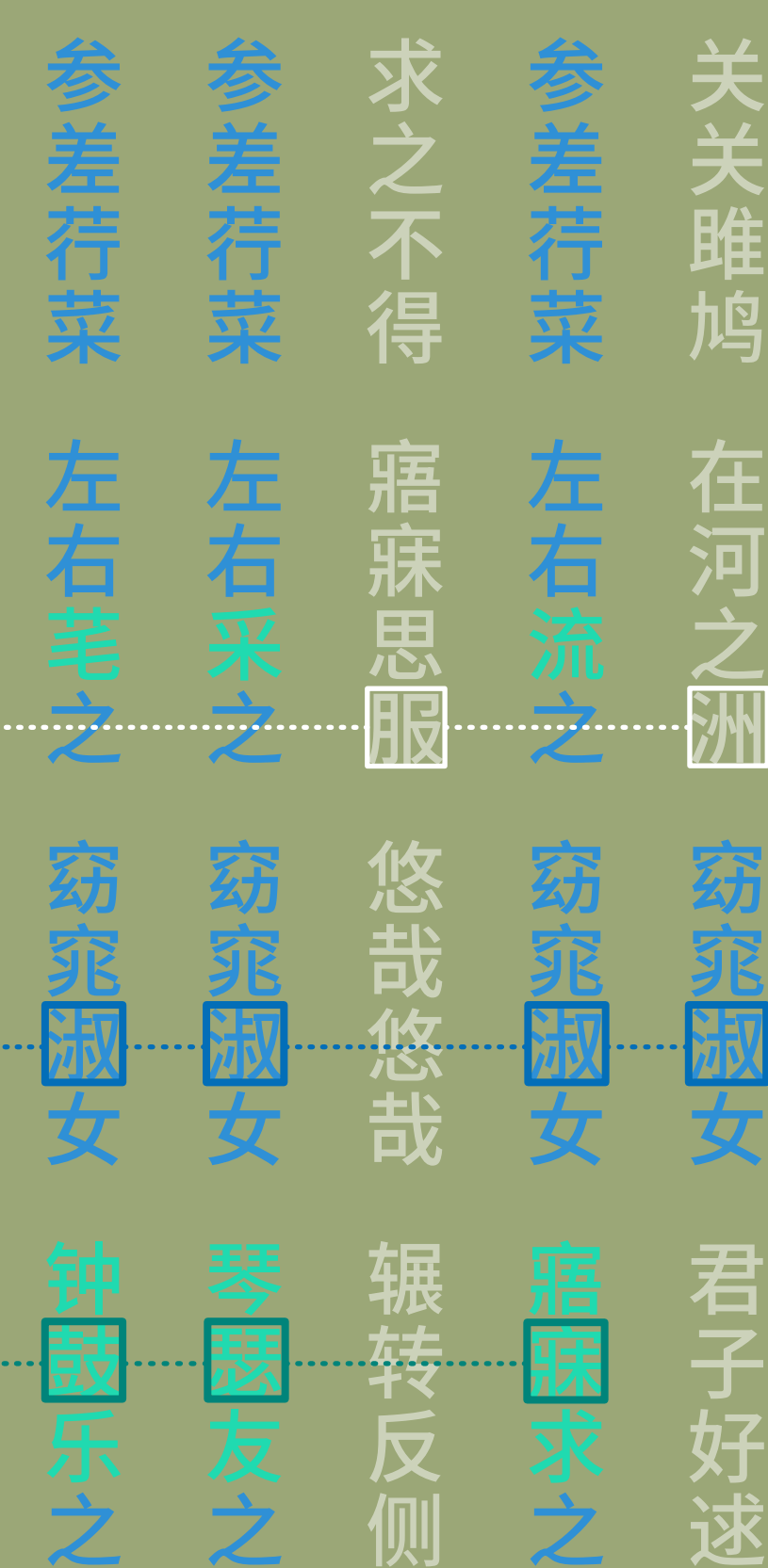
Repeated words

Words that appear twice or more in each sentence. “淑” (shū) is repeated words.

Refrain words

- Replaced words

Words that belong to refrain-words, while the corresponding words in the following sentences are different. “寐”(mèi), “瑟”(sè), “鼓”(gǔ) are replaced words.



E.g. *Cooing and Wooing* (关雎).
We applied this criteria to this
chapter above.

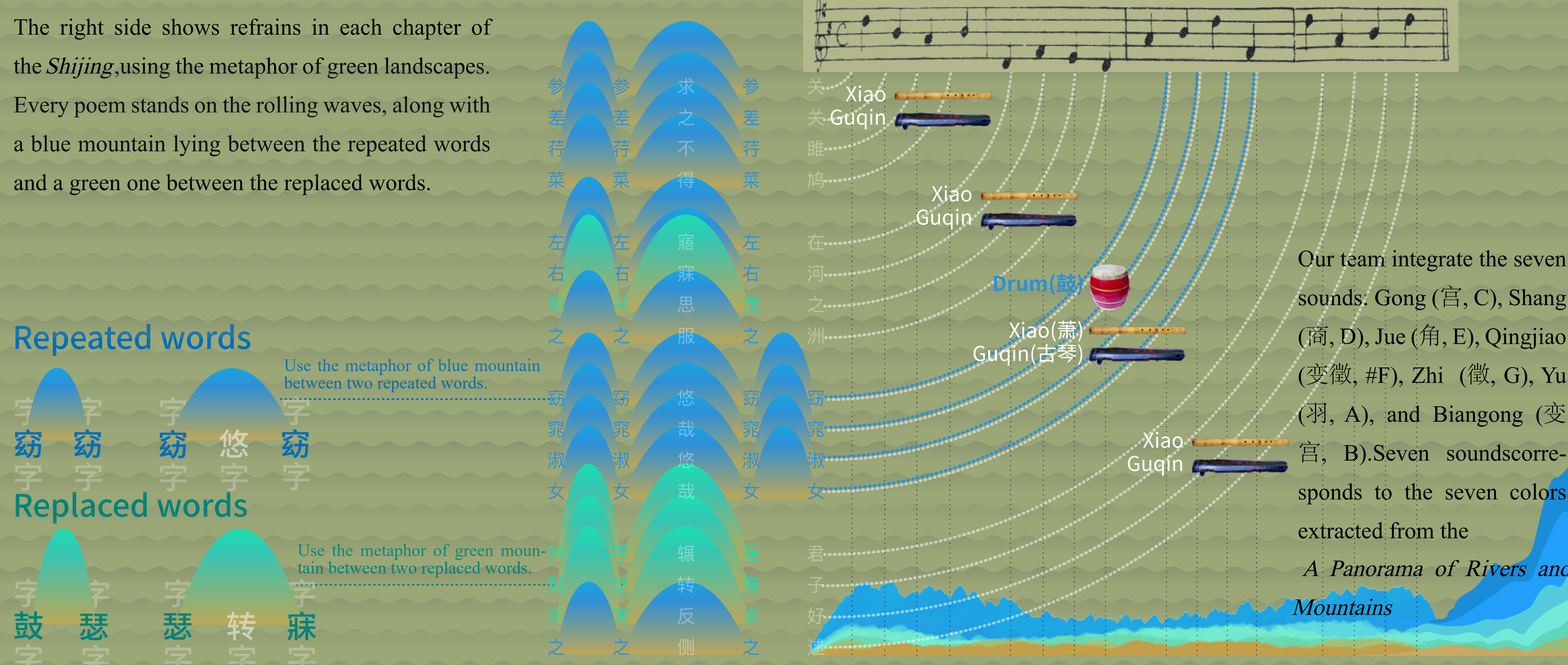
2 MUSIC VISUALIZATION

The right side shows refrains in each chapter of the *Shijing*, using the metaphor of green landscapes. Every poem stands on the rolling waves, along with a blue mountain lying between the repeated words and a green one between the replaced words.

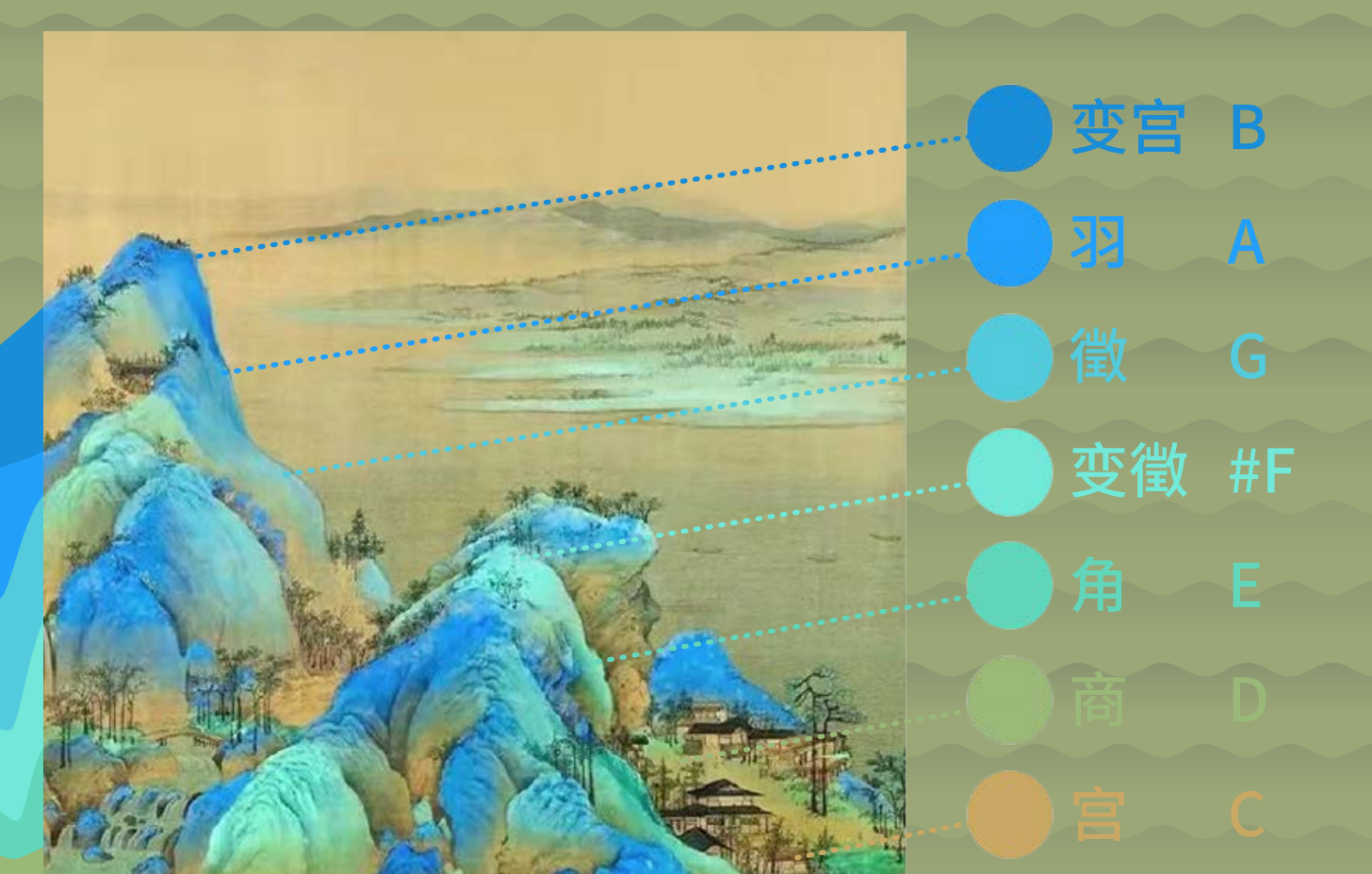
Repeated words

Replaced words

Use the metaphor of green mountain between two replaced words.



At the same time, we use three types of instruments including Guqin(古琴), Xiao(箫), and drum(鼓) to compose the music. Guqin and Xiao perform when the music comes to the normal words, and the drum plays on the refrain words. It is worth mentioning that every piece of music originates from its corresponding chapter in the *Songs of Shijing* (《诗经·古谱》).

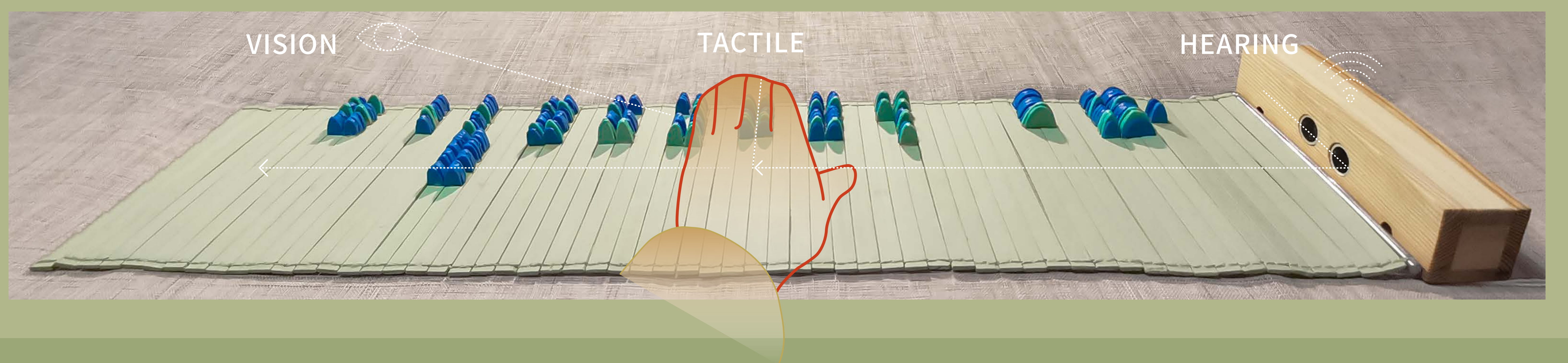


3 PHYSICAL VISUALIZATION

We use Arduino to develop a physical visualization device to express the refrain method of the *Shijing*. The visual design also takes the old bamboo scroll as a reference to provide tactile interactions.

With your fingertips, slowly stroke the blue and green mountain from right to left. The sensor locates the position of the blue and green mountain peak where the hand is and emits a corresponding sound.

This work puts emphasis on combining synthetic techniques with visual representation, hoping to result in rich, deep, and concrete visual effects.



REFERENCES

This work mainly refers to "The New Edition of the Language and Art of the Book of Poetry"(诗经语言艺术新编), "Research on the Art of Guofeng"(国风艺术研究), and "Research on the Artistic Characteristics of Fengshi"(风诗艺术特质研究).