

Wavelets Analysis for *Kokinwakashu*, a Collection of Poems, vs. *Les Fleurs du Mal*

- A Study of poetry word "world"-

Inami, M. *¹, Kataoka, I. *², Saito, Y. *³, Tsuchiya, H. *¹, and Horii, K. *¹

*1 Department of Literature, Shirayuri College,
1-25 Midorigaoka, Chofu, Tokyo 182-8525, Japan
Tel: +81-03-3326-7604 / FAX: +81-03-3326-7604
E-mail: mayumimi@interlink.or.jp

*2 Faculty of Engineering, Osaka University, Osaka, Japan

*3 Faculty of Engineering, Hose University, Tokyo, Japan

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1. Introduction

The motivation behind this work was to investigate the cultural differences between the East and the West through the poetic words in *Kokinwakashu* and *Les fleurs du mal*. In this paper, the roles the words in the poetry play are examined in the whole arrangement of the work. The word "Yo" in Japanese meaning World, and "monde" in French, are chosen as a target. Then the whole structures of the two works will be compared.

Kokinwakashu, is compiled early in the 10th century by Imperial command. With this as a turning point, the culture of our country was gradually detaching itself from Chinese influences and establishing its own cultural characteristics. Thereafter an extreme influence was exerted on many fields of the culture and as well as the Japanese mentality. *Kokinwakashu* is a standard for 21 anthologies, which followed after, and its tradition is kept until now. The split of refinement of *Genjimonogatari*, the oldest long novel in the world, is cultivated in the period of *Kokinwakashu*, lasts to Haiku of Edo and keeps living in the mental Japanese life as a tradition of the typical Japanese beauty. Nakamura (2000) points out that the 31-syllable Japanese poem is the best way to express the Japanese feelings. The characteristics of the song are based on the world unified with the nature and the human affairs. The joys and sorrows of life with all nature are changing by the time. As the volumes of the nature and the human affairs correspond to the poems of four seasons and those of love. Each poem shifts gradually responding delicately to the change in seasons. How can oneself be concerned there? In other words, the interest in the life behind the word can be expressed through the admiration for the poem. According to *The Words of Poems Dictionary* (1999), the meaning of "Yo" becomes "a generation" or "a world" from the viewpoint: it is just only one interpretation. In the case of "Yo" in the 31-syllable Japanese poem, mostly indicates "the world" of the poet. In many case, the world is as large as that involves the receiver of that poem and seemed to be mentioned the situation of poet. Thus, it can be seen the characteristics of the *Kokinwakashu* though the three meanings of keyword "Yo", which is "time", "space" and "human affairs",

French poet Baudelaire wrote *Les fleurs du mal* in the middle of 19th century. *Les fleurs du mal*, his only anthology, after undergoing several revisions, became strictly refined and

polished containing an essence of the poet's whole life: the wandering of his soul from the birth to the death, to develop the structure. It had the greatest influence on European countries as a representative of the symbolism literature, which esteemed nature maintaining the tradition of the French poetry.

Nevertheless the style structure has been considered of utmost importance; methodology and style have been neglected so far. Thus the style analysis will be focused on more attention in this research, to which a mathematical method is employed to make the style structure of the collections of poems more visible by increasing the objectivity of the otherwise subjective data. The multi-resolution analysis of wavelets has been applied to clarify the differences between Japanese and the Western cultures through the style analysis of both works.

2. Wavelets Analysis for *Kokinwakashu* & *Les Fleurs du Mal*

2.1 Selection of the Key Word and Plan

The objective of this analysis was to visualize the key word pattern in both *Kokinwakashu* and *Les fleurs du mal*. The Key word pattern was revealed through the analytical process; three key word selections, the Gram-Schmidt method and the multi-resolution analysis of wavelets. The wavelet analysis theory requires two steps; [1] The key words meaning "world" were selected and their frequencies in usage were counted. [2] The key word is further divided by meaning "Time" and "Space" as ambivalent, and other "Human affairs" as independent from the former key words, was selected and their frequencies in usage were counted. [3] These data were analyzed by this method for visualizing the dominant key words.

2.2. Analysis

The analysis has been carried out as follows;

To choose the key words for analysis from the works, then keep them in order in every chapter.

To transform into three dimensions space coordinate. (The Gram-Schmidt method)

To calculate percentage to arrange size in each chapter.

$$D_i = \frac{F_i}{\sum_{i=1}^m F_i} \times 100 \quad (1)$$

To remove the inclination of extraction from above by regularization.

$$D^g = \text{Normalized}[G[D]] \quad (2)$$

To reduce scattering by the multi-resolution analysis of wavelets.

$$S = W \cdot D^g$$

$$D^g = W^T \cdot S = D_0 + D_1 + D_2 + \dots + D_n \quad (3)$$

3. Results and Discussion

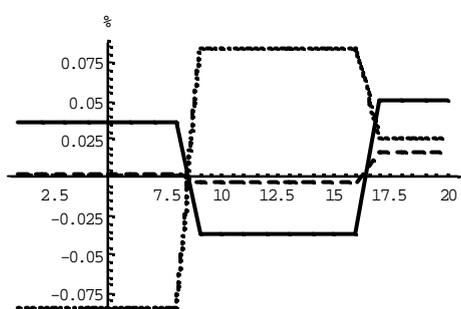
3.1 Results of Style Analysis

The results show that the passage of time takes the initiative and with which human beings are working together with in *Kokinwakashu*, while inner world is expanded in *Les fleurs du mal* since it is based more on the space than the Japanese collected poems.

The analytical results of the three meanings of key word appearances in *Kokinwakashu* and *Les fleurs du mal* are in Figs. 1 and 2. The level 3 by multi-resolution analysis of wavelets,

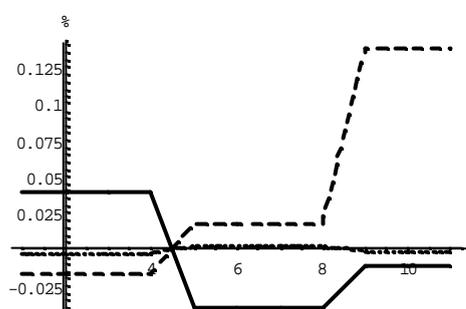
which is divided equally between the whole two pieces of literature by 4, is chosen.

In *Kokinwakashu*, the first range shows the own surrounding natural environment, the second shows the man and woman relations and the third shows the whole human relations that they had and they look back upon in his life. Thus "Yo" is changing the frequency as well as the meanings. "Time" is in the upper first range, which corresponding to the part of songs of four seasons, is in concert with the change in the nature. In the second range, many love poems requests' are "human affairs", because the poet use an indirect expression of "the world" without pointing at the person to whom he sent his poem directly. The deep emotion to the life is shown in the third range. "Time" rises again, and the difference of three key words are reduced. The end of the life approached and uncertainty and pain are written. It seems that the life is interwoven with the change in the nature. And, this fact proves that nature and a human being are in unity. Generally "space" hardly changes. The reason why Japanese have a small broad space consciousness would be related as follows. Japanese love little things and have a tendency to respect the delicate, and poems have been written in often public places of ceremony.



—— Time key word
 - - - - Space key word
 - · - · - Human affairs key word

Fig. 1. *Kokinwakashu*



—— Time key word
 - - - - Space key word
 - · - · - Human affairs key word

Fig. 2. *Les fleurs du mal*

In *Les fleurs du mal*, "time" is higher in the first range and "space" and "personnel affairs" are lower. The "space" is higher and converges on the highest in the third range and "human affairs" and "time" are hardly changing. Even the last death is depicted as an act of a departure to the next world. Generally "time" and "human affairs" are hardly changed, and the change in "time" is small, too. "Monde" is often caught spatially, and isn't taken seriously enough as for "time" and "human affairs".

A poet is born in this world in the first volume, which is a *work of the art*, and ends in departure to the death in the last poem of the last volume, a *work of death* in *Les fleurs du mal*. The last poem *Trip* begins from the reminiscence of the childhood and ends in the death. It was drawn the path of the inside of poet from the birth to the death and it seems that the whole work was constructed intentionally.

3.2 Discussion about Poetic Word of two collections of poems on Culture

Kokinwakashu has 20 volumes in which from the first to 6th allotted four seasons part and from the 11th to 15 allotted songs of love part. Two parts are developed instinctively adapting to materials of Japanese poem in the latter half of the 9th century in Kyoto without being influenced by China. Kubota(1965) pointed out that the songs of love are essential of 31-syllable Japanese poem and *Kokinwakashu* have the two parts, which are close and harmonize. How to watch the object isn't just to see the impression of the moment but also to see floating on the time. This way of seeing is the tendency of this period of in *Kokinwakashu* and it is pointed out that it comes from the view of life and that of world of the Buddhism, which is filtered into the author.

The size of "space" of "Yo" is flexible depending on the conditions to which the poem complains about the actual situation to the partner. Moreover, "Yo" indicates also this life and is limited from the outside rather than by oneself. The poets use sometimes "Yo" as the meaning of the man and woman's relations. This fact would be related to their living in the small Imperial Court and could express their self-assertion only through the poems in the limited realm of love.

The reason why the small change of "Time" and "human affairs" occurred depends on the deference in view of the nature idea in *Les fleurs du mal*. Shined, Kouichiro(1981) pointed out that Baudelaire hates so-called nature in the outside and the nature of inside of the human being is brought out to the outside. His nature is abstract and he described it as the world of imagination and as a metaphor. Therefore, the change of the time and the human affairs are not in question in his poems. "Human affairs" are concerning about, the movement of the human body and the heart, the personal ornament, and the crowd of the city etc., which have not so much relations with "time". But, therefore it doesn't mean "time" is ignored in it. Baudelaire wrote a letter so that his friend Vigny recognized his poem. He said that *Les fleurs du mal* is not mere album but there is the beginning and the end, he tried to meet to adapt his poems in surrounding of his own frame well and the intention of order of arrangement is intentional. It is conspicuous that the movement verb often uses and you might as well say that time expresses itself by moving through space.

3. Conclusion

In *Kokinwakashu*, the meaning of "Yo" operating together with the human affairs and the nature, which is operating with "human affairs" and moves with the change of times. It is rare to move through "the space". Moreover, the "space" means an environment surrounded by a human being, the place where the human relations are made, and the place where the deep emotion in life is mentioned. It is quite different from the "space" in "*Les fleurs du mal*".

In *Les fleurs du mal*, "world" shows the poet's internal abstraction world. Therefore, even if it sometimes looks back on his life in the old age, it can't be grasped with a time shaft like Japan. Conversely, the world as an artist would be in the tendency of the expansion gradually. In the last poetry "trip", the point, where a traveler advances, is moving and expanding as well as the world, which a projector begins to light on. The departure to the death is considered as the departure of soul forward to the boundless huge ocean.

A natural environment is accepted as it is and there is a sense of unity with the nature in the case of *Kokinwakashu*. The nature is interested but its change is unconcerned and how to seize the time is not passing but expanding of the internal ideal world in *Les fleurs du mal*. It has turned out that the way to catch the outer world is different; the former in the time shift, the latter spatially.

The Chinese word "seken", equals to the Japanese original word "yo", came from the word of Buddhism and expressed the combine the matter of the nature with of the human being. In Christianity, God created monde and the nature is considered rational, regularly, expectable. Besides the nature is look on to be destroyed and altered to become an object as a useful thing for the human being. Thus the differences in such a view of nature appears as the differences of recognition even though the two collections of poems like the nature as ideal and a symbol. It has enabled us to get a glimpse of cultural characteristics between Japan and the West in this area.

A study of the meanings of key words shows that the *Kokinwakashu* seems to grasp the world by "time" and "human affairs" while *Les fleurs du mal* values the world "space", since nature is a static object, which shows the order of God but not the changing aspects of it. It was clarified that these cultural differences reflect the way we tackle with the problems of our respective ambience.

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