

Discovering Equations in relation to the Counseling process

YANAGISAWA HIDEAKI ¹

¹Konosu Public Health Center, 4-5-10 Higashi, Konosu, Saitama, Japan 365-0039. Email Corresponding Author: science2001007@ybb.ne.jp

Abstract: Each counselor understands counseling freely as all counseling theories are explained without equations. Therefore, there are two kinds of mistakes in counseling. One is counter-transference, the other is a mistake wherein the counselor forces his thought and induces certain thoughts in the client. The counselor assists in aiding the client's real intentions to be converted to the client's consciousness from their unconsciousness. It is equal to a process in which the methods rearrange and unify the thoughts from a chaotic state. For example, such methods include the KJ (Kawakida Jiro) method, the SEIQoL-DW (Schedule for the Evaluation of Individual Quality of Life-Direct Weighting) method, dialectics, the process discovering equation. In this report, the counseling process is compared with a process of discovering equations from observed values. In the process of discovering equations, it is important that the curve of equations smoothly continues. On the curve, the contact point and the gradient of the tangent line must not break off. Similarly, it is important that a counselor easily understands a client. Therefore, it is a necessary condition for counseling that the counselor's and client's original characters are smoothly patterned and that the communicating method of the counselor must be equal to that of the client.

It will be useful for preventing two kinds of mistakes in counseling if counseling can be represented using equations and graphs.

Keywords: Counseling, Equation, Cryptograms, Transference, Decoding, Chaos.

INTRODUCTION

Counseling is broadly used for the improvement of human relations. However, there are some failing cases with two kinds of mistakes in counseling. One is a mistake in which the counselor forces his thought and induces certain thoughts in the client and the other is counter-transference. Because all counseling theories are expressed only with words, it is difficult to understand the skill of counselor correctly. Therefore, counseling is vague and its procedures are various. The counselor does not treat the client's disease but rather his/her individual state. Because the client has lost himself through influence from his environment, his consciousness is in a confused chaotic state. There are methods for rearranging and unifying thought from this chaotic state, such as the KJ (Kawakida Jiro) method (Yanagisawa, 2010), the SEIQoL-DW (Schedule for the Evaluation of Individual Quality of Life-Direct Weighting) method (Yanagisawa, 2014), dialectics. In this report, the counseling process is compared with a process for discovering equations. In discovering equations, it is important that the curve of equations smoothly continues. On the curve, the contact point and the gradient of the tangent line must not break off. Similarly, it is important that a counselor effortlessly understand a client. Two kinds of counseling mistakes can be shown using equations and graphs.

METHODS

Explanation of chaos equation and definition of chaos theory were reported (Yanagisawa, 2014).

Relation of cryptogram to counseling

It was reported that the counseling process is the same as that of translating cryptograms (Yanagisawa, 2004). It is a purpose of a cryptogram that information is understood only by an authorized partner. A cryptogram

is not necessary if there is no non-authorized partner. It is termed as “translation” when the cryptogram is understood by an authorized partner (friend) and “decoding” when the cryptogram is understood by a non-authorized partner (enemy). Because the client is influenced from his environment with much information, he cannot understand his real intention. His consciousness is a chaotic state with various changes. There are two methods that the client can use to understand his real intention. One is a method that someone conveys to the client after sensing the client’s intention. Examples include medicine, natural science, fortune-telling. In the cryptogram, this is called “decoding.” The other is a method in which the client with the counselor’s assistance seeks his real intention by himself. In a cryptogram, this is called “translation.” The real intention exists in the client’s instinct or subconsciousness. In much information from social enemies, the client loses sight of his real intention and does not easily believe the “decoding” answer because of the information from an enemy. The revival of the “translation” route is the only method that the client believes. In a cryptogram, the “decoding” process is the same as the “translation” process. They are equal processes of rearranging and unifying thoughts. Therefore, the process to decode the cryptogram is equal to that of counseling, theoretically.

Relation of chaos theory to cryptogram

The relation of translation to the cryptogram is shown in Figure 1, being the chart of Feigenbaum’s point (Yanagisawa, 2014). Part A is a fixed

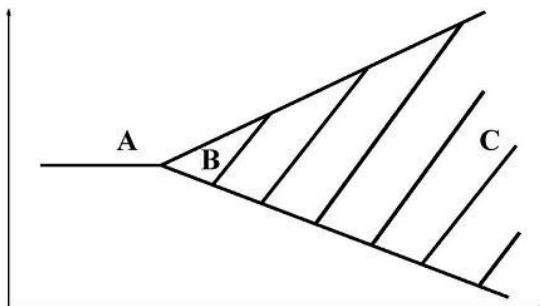


Figure 1: The relation of chaos state to fixed point

point. Part B is a non-fixed state with localized chaos. Part C is a non-fixed state with proliferated chaos. The decoded or translated information is equivalent to part A. The information of cryptograms is equivalent to parts B and C. A cryptogram of part C is more complicated than that of part B. Rearranging part B or C to part A is called “decoding” and “translation.”

Relation of cryptogram to natural science

The clearest “decoding” of cryptograms occurs in the field of natural science. A light curve of the Ia type supernova is shown in Figure 2 (Doi, 2006). In Figures 2–4, the vertical axis is “log [Luminosity (erg s⁻¹)]” and the horizontal axis is “days.” In Figure 3, a scientist guesses a curve from the observed triangle points 1–7 and discovers an equation. Because the non-observed values can be guessed by the discovered equation, they can be observed.

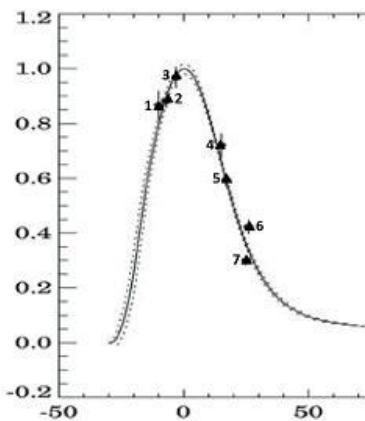


Figure 2: A light curve of type Ia supernova

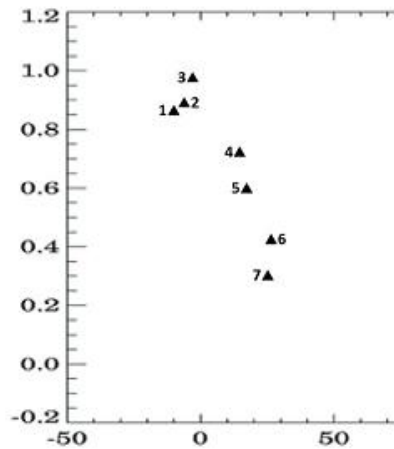


Figure 3: The observed point 1–7

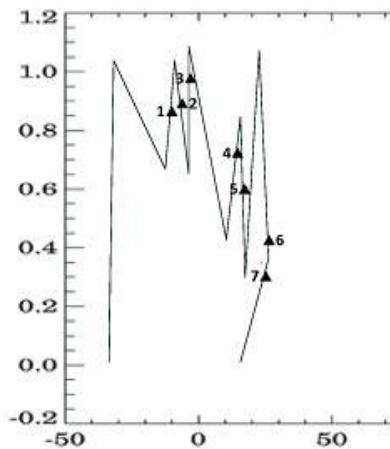


Figure 4: An impossible graph for considering an equation
 Eleven equations are necessary at least if all observed points of type Ia supernova are considered.

A curve such as Figure 4 can be guessed from the observed points. However, the scientist does not select a curve of equation that is very difficult. In Figure 4, at least eleven equations are necessary if all observed points are considered. And a direction of the straight line passing at the

observed triangle point 7 is reverse to those of the observed triangle points 1–6. This is a thought to permit time counter currently and it cannot unify the observed points.

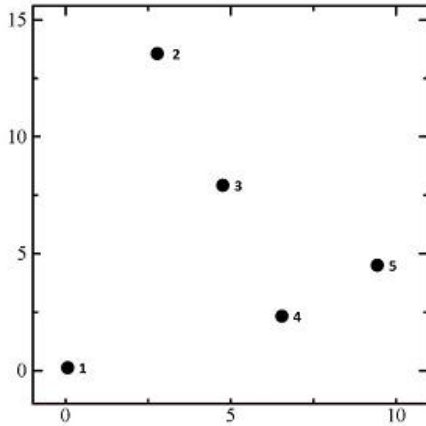


Figure 5: Observed values

A cycle exists in the observed round points 1 –5.

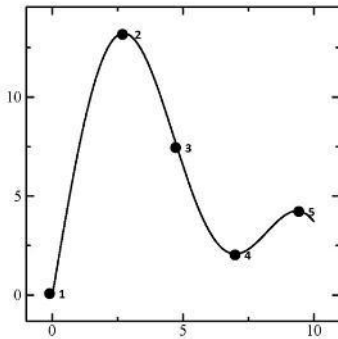


Figure 6: A related curve of each observed value

When each observed points are “smoothly” tied by freehand, the existence of a cycle becomes clear.

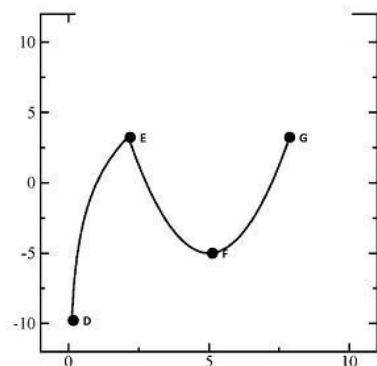


Figure 7: Two tangent lines at the round point E
The non-smooth curve has two equations at the round point E.

Next, a process for guessing a curve is explained in detail. It is assumed that the round points 1–5 was observed as in Figure 5. In Figures 5–16, the vertical axis is the variable value “y” and the horizontal axis is “x.” The scientist considers a relationship of the round points 1–5 by a simple curve with some errors. The curve is drawn freehand as in Figure 6. “Smooth continuation” is important as a condition of the curve. A “non-smooth” example is shown in Figure 7. The more extreme example is shown in Figure 4. At the round point E in Figure 7, the curve DE of equation $[y = 10 \log x]$ is “non-smooth” to the curve EFG of equation $[y = (x - 10)^2 - 5]$. Two tangential lines can be drawn at round point E, mathematically. And the gradients of two tangent lines are not continuous. It is a necessary condition of a “smooth” curve that the gradients and contact points of the tangent line are continuous. The scientist guesses a curve of Figure 6 to the observed points of Figure 5, and discovers an equation from the curve.

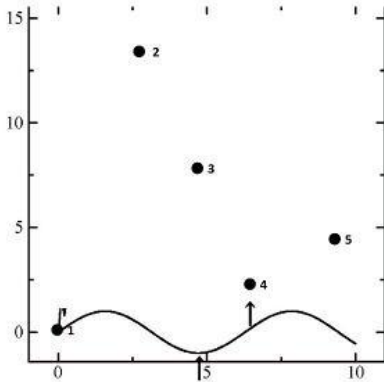


Figure 8: (1) Relation of the observed points to the equation
 - Relation of different cycles and different amplitudes -
 Two arrows show each different cycle. The round point 2 is very different from the curve.

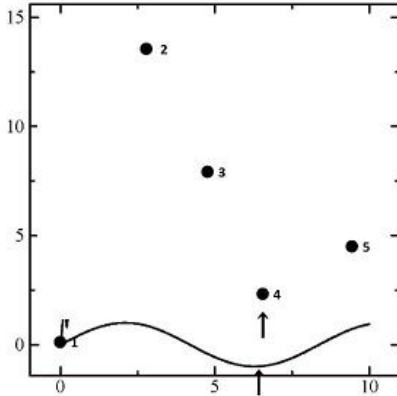


Figure 9: (2) Relation of the observed points and the equation
 - Corrected cycle -
 The two arrows show the cycles are almost in the same position.

The cycle of the curve may be understood in Figure 5. The value of the round point 2 is bigger than that of point 1, and a value of the round point 4 is smaller than that of point 2. The value of the round point 5 is bigger than that of point 4. A representative curve with a cycle is a

trigonometric function (for example: $[y = \sin x]$). The observed round points 1–5 are compared with the equation $[y = \sin x]$ in Figure 8. The two arrows show that each cycle is different. The cycle of the equation is changed. The observed round points 1–5 are compared with an equation $[y = \sin \frac{3x}{4}]$. The two arrows show that each cycle is almost equal in Figure 9.

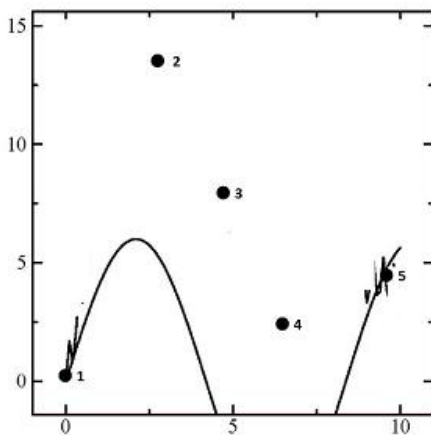


Figure 10: (3) Relation of the observed points to the equation
- Corrected amplitude -

The curve of the equation $[y = 6 \sin \frac{3x}{4}]$ approached a value of the round point 2; however, it is smaller than the value of round point 2.

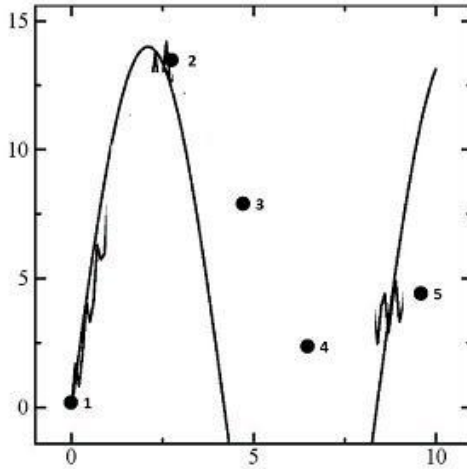


Figure 11: (4) Relation of the observed points to the equation

- Too large amplitude -

The curve is set with the same position of round point 2, but the difference of round points 4 and 5 are spread.

The equation is changed to a bigger amplitude. The observed round points 1–5 are compared with an equation $[y = 6\sin\frac{3x}{4}]$ in Figure 10. The top value of the equation is smaller than that of point 2. However, the value of the equation is almost equal in point 5. The top value of an equation $[y = 14\sin\frac{3x}{4}]$ is almost equal to point 2 in Figure 11. However, the value of the equation is bigger than that of point 5. Therefore, each difference between the observed round points 1–5 and the values of an equation $[y = 6\sin\frac{3x}{4}]$ is shown in Figure 12.

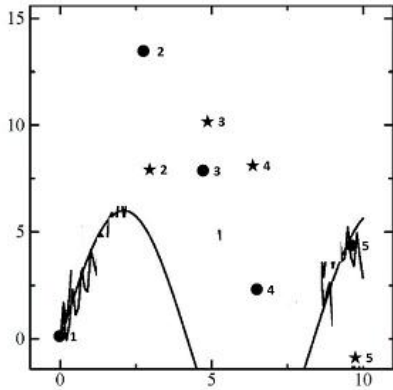


Figure 12: (5) Relation of the observed points to the equation
 - Relation of the curve to the observed amplitudes -
 The different parts (the other element) are suggested.

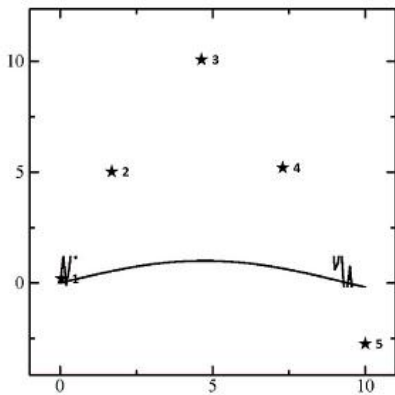


Figure 13: (6) Relation of the observed points to the equation
 - Corrected cycle to the different part (the other element) -

The star points 1–5 are differences with calculated points. Figure 13 demonstrates that star points 1–5 can be compared with the equation $[y = \sin \frac{x}{3}]$. Both cycles are equal. Because the amplitude of the equation

$[y = \sin \frac{x}{3}]$ is small, the equation $[y = 10 \sin \frac{x}{3}]$ is compared with points 1–5 in Figure 14. It is concordant with star points 1–5. It is demonstrated in Figure 15 that round points 1–5 are compared with equations $[y = 6 \sin \frac{3x}{4}]$ and $y = 10 \sin \frac{x}{3}$. The difference between round points 1–5 and the equation $[y = 6 \sin \frac{3x}{4}]$ is the equation $[y = 10 \sin \frac{x}{3}]$. The equation of round points 1–5 is equal to the equation $[y = 6 \sin \frac{3x}{4}]$ added to the equation $[y = 10 \sin \frac{x}{3}]$. Therefore, it is equivalent to the equation $[y = 6 \sin \frac{3x}{4} + 10 \sin \frac{x}{3}]$. The curve of this equation is shown in Figure 6.

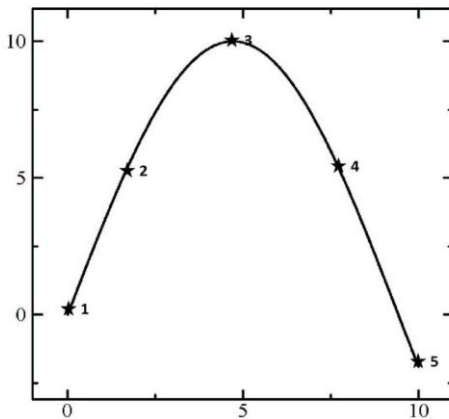


Figure 14: (7) Relation of the observed points to the equation
 - Corrected amplitude of the difference part (the other element) -

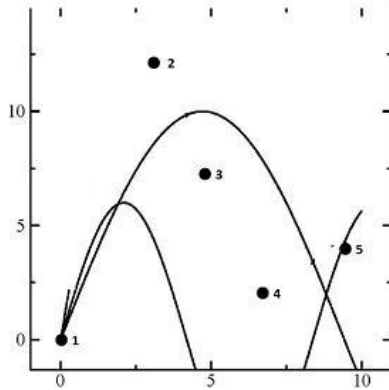


Figure 15: (8) Relation of the observed points to the equation
- Comparison of a difference part and a former part -

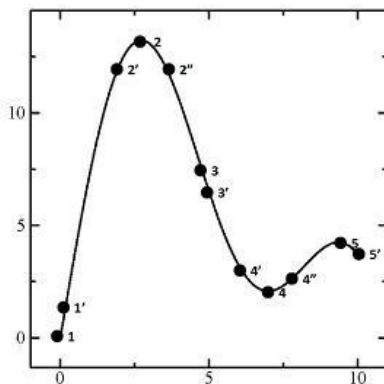


Figure 16: (9) Relation of the observed points to the equation
- Composition of the difference part and the former part, and affirmation of the guessed part - It is confirmed that the observed points 1–5 are explained by composing a different part and a previous part. It is confirmed that the guessed round points 1', 2', 2'', 3', 4', 4'', and 5' exist.

The scientist observes the guessed values and confirms their concordances. The guessed values are shown as the round points 1', 2', 2'', 3', 4', 4'', and 5' in Figure 16. The guessed values are concordant with the observations. Therefore, the scientist believes the discovered equation. This

is the same as a process to translate cryptograms to provide information.

Relation of counseling to natural science

Subsequently, a process of counseling is compared with that of discovering new equations. A counselor understands a part of the much information provided by the client. They are shown as the observed round points 1–5 in Figure 5. For example, it is assumed that the client expresses them, such as in the upper side of Figure 17. The expression methods are pictures, words, music, actions and so on. A Japanese Google site with “Mojibake” is shown in the upper part of Figure 17. Only round points 6–11 can be understood. The lower side of Figure 17 is a normal site of the USA Google with no “Mojibake.” Because many readers may misunderstand Japanese “Mojibake” without using the Japanese Google site with “Mojibake,” the normal Japanese Google site cannot be compared with the upper part of Figure 17. Because the client thinks the upper side is normal, he cannot recognize his abnormality.

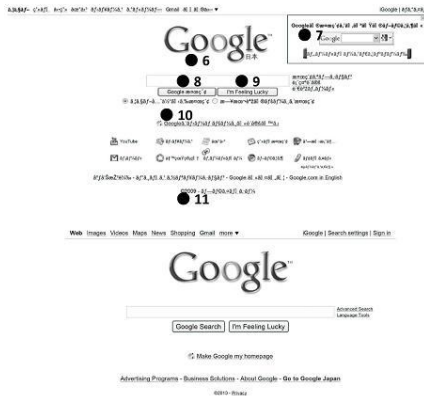


Figure 17: Difference of true and hope expressions by client

The methods to express the image are a picture, word, music, action and so on. Because the true expression of client is “Mojibake” such as the upper side, they almost cannot be understood. Only round points 6–11 can be understood.

The lower side is a normal USA Google site with no “Mojibake.” The client thinks that the lower side was expressed from oneself. However, the true expression is the upper side.

He will make much trouble in society. As a result, he cannot understand himself. He may want to understand his real intention. In the client's consciousness, he considers sending information with normal content to other people. However, the sent contents are abnormal such as the upper side of Figure 17. Only the client's subconsciousness or instinct may know of his normal contents. The upper side of Figure 17 to be sent from the client is termed as abnormal in society. And “abnormal” is sent to the client.

However, a counselor does not term these communications as abnormal (as all wrong). Because the round points 6–11 in the upper side are key points, the counselor will try understanding a total image of the client. It is necessary that the counselor believe the client. The counselor tries for a “smooth” understanding of the relationship among the round points 6–11. The patterns of multiple personality disorder and schizophrenia are shown in Figures 4 and 7. It is the major premise of counseling that the original client's character is “smooth”. Therefore, it is impossible that

multiple personality disorder and schizophrenia be treated only with counseling. Each personal remark or action has some relation with smooth character. Scientific “smooth” is equivalent to psychological “calm”. It is a reason that the counselor’s character is calm.

The counselor tries “smooth” understanding to the upper side of Figure 17. However, it is very difficult that he understands a relationship among each part because he only has six parts he can readily understand. The counselor sets aside own prejudice and preconception, and considers a total image of the client. Its process is equal to the scientific process of discovering an equation via Figures 5–16. The cycle may be regarded as a cycle of feeling. Amplitude may be regarded as the ups and downs of feeling.

Equation is equivalent to thinking patterns. The counselor confirms the cycle of Figure 5 and tries understanding it by his cycle. Because the client’s cycle is different from that of the counselor, the counselor will confirm it to the client. In Figure 8, the counselor can ask, “Is it the round point 4 (for example: anger)?” The counselor confirms the contents of the round point 4 to the client, and he tries to adapt itself to the client’s cycle such as in Figure 9. The cycle of the counselor is concordant to that of the client, but a difference of amplitude is big. In this time, the counselor can induce the client to the other cycle with the counselor’s consciousness. However, perhaps happens to be a mistake. The counselor will confirm the contents of the round point 2 to the client. In the state such as Figure 9, it might be asked, “Is the round point (for example: sorrow) severe?” The counselor tries understanding round point 2 of the client. However, the counselor perhaps cannot understand the value of it, completely. Therefore, he reconfirms it to the client. In the state such as that in Figure 10, “Is the round point 2 very severe?” The counselor might understand the value of the round point 2. However, he cannot understand the values of the round points 4 and 5, this time. Therefore, the counselor tries understanding the values of the round points 4 and 5 with the decreased understanding of the round point 2. The counselor will say to the client, “Please tell me about the relationship between round point 2 and round points 4 and 5.” The client may have erased them from his consciousness. It is the question to which the client may normally refuse an answer. However, the client may try to refresh his memory, if he trusts the counselor. The other element may be included in the client’s answer with no counselor’s expectation (such as Figure 12). The client’s consciousness is occupied by dissatisfactions. But the other element may be something excepting them. For example, it may be

a trauma from childhood. The counselor compares his understanding with the client's contents of the round points 2, 4, and 5 in the counselor's mind. This process is performed in the client's mind, too. The client notices the other element as being the same as that of the counselor (such as in Figure 13). The counselor understands the other element in the state such as in Figure 14. The counselor tries to understand the client by the other element and the content of the round point 2 in a state such as that of Figure 15. The counselor who understood the contents of the round points 1–5 will express their understanding to the client. Before the client is told, he can understand his subconsciousness at the same time as that of the counselor's understanding. It is a moment in which both understand a total image in a state such as that of Figure 6. This is a synesthesia of the counselor and the client. The client can understand the other contents except the round points 1–5 from a total image. Thus, the counselor wonderfully located a total image of the client.

Counselor's recovery

Because the client can now understand his total image, counseling should be finished. However, the problems between the client and the counselor are not yet over. The counselor is changing his own equation. The counselor may understand it at his own pace. The counselor has to return to his own equation. It is very important that the counselor with synesthesia separates from the client. It is best that the counselor returns to the counselor's equation and that the client stays with the counseling total image. However, this separation is not easy. There are two mistakes. One is a mistake that the client thinks the counselor's equation (for example: $[y = \sin x]$ in Figure 8) represents himself. In this case, the client does not stay in the counseling total image. The client continues chasing synesthesia with the counselor. This is transference. The other is the mistake that the counselor cannot escape from the counseling total image. This is counter-transference. Mathematically, the counselor cannot return to his own equation (for example: $[y = \sin x]$ in Figure 8) from the client's equation (for example: $[y = 6\sin \frac{3x}{4} + 10\sin \frac{x}{3}]$ in Figure 6).

RESULTS

Counseling, the cryptogram, and natural science were compared using chaos theory. They involve rearranging and unifying thought from a chaotic state to a fixed state. The process of counseling is equal to that of discovering a light curve of type Ia supernova. The counselor's inducement to the client is a mistake. And there are two kinds of mistakes that occur in the process of the counselor's recovery. One is transference. The other is counter-transference.

DISCUSSION

Counseling is a method for rearranging and unifying a client's thought. It is a necessary condition of counseling that a communicating method of the counselor is equal to that of the client. When a counselor's or client's original character is not "smooth", counseling fails. In the former, client is confused. In the latter, multiple personality disorder and schizophrenia fail to be treatable merely with counseling. And in addition, counseling fails with two kinds of counselor's mistakes. One is a mistake in which the counselor forces his thought on the client. In this pattern, the client is led to force the counselor's pattern as his own pattern. It is equivalent to forcing the equation $[y = \sin x]$ as the client's pattern in Figure 8. The equation is equivalent to the thinking pattern. It is equal to a role played by medicine, natural science, fortune-telling and so on. The other is a mistake that the counselor has a special feeling in relation to the client. For example, the counselor forgets the counselor's true pattern and believes the equation $[y = 6\sin \frac{3x}{4} + 10\sin \frac{x}{3}]$ of Figure 6 as their own pattern. The cause is the counselor's misunderstanding in relation to counseling. In this report, counseling was explained by equations as offering the clearest communication method. Therefore, counselors will be able to understand the counseling process more clearly. It may be useful for evading some mistakes caused by counselors.

CONCLUSIONS

Each counselor understands counseling freely, as all counseling

theories are explained with no equations. Therefore, there are two kinds of counselor's mistakes.

One is counter-transference. The other is the counselor's inducement to the client. The process of counseling is equal to that of discovering an equation. Making counseling clearer through the use of equations is very useful for evading mistakes counselors make.

References

Doi, M. (2006). Distant Supernova Surveys for cosmological expansion measurements using Subaru, Indian Institute of Astrophysics. Retried December 17, 2014, from http://www.iiap.res.in/PostDocuments/doi_0607.pdf (pp.10)

Yanagisawa, H. (2004). Relation of Counseling to cryptogram - Analysis of corrected chaos theory to co-relation -. *Jananese Journal of Nursing Science*, 26(8), 45-49.

Yanagisawa, H. (2010). Comparison of Public Health Nurse's Action to Chaos Equation (Community Diagnosis = Using the KJ Method to Community), *Japanese Journal of Community Health Care*, 42(11), 56-63.

Yanagisawa, H. (2014). Relation of Chaos Equation to the Schedule for the Evaluation of Individual Quality of Life-Direct Weighting method, *MJCP*, 2(2), 1-10

Paper presented Jan 2015; published online: May, 2015.

© 2015 by the Author(s); licensee *Mediterranean Journal of Clinical Psychology*, Messina, Italy. This article is an open access article, licensed under a Creative Commons Attribution 3.0 Unported License. *Mediterranean Journal of Clinical Psychology*, Vol. III, No. 1, Doi: 10.6092/2282-1619/2015.3.1044