A Method Structured For Text Interpretation in a Qualitative Study by the Linguistic Structuralism and Semantics

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[Slide 0]

Thank you chair-person for your kind introducing me.

I am an epidemiologist and biostatistician originally.

But, this ten years, I have thought about scientific methods of qualitative researches.

Last year, at the Qualitative Health Research Conference, I suggested that the language system in the brain must be structured systematically from viewpoints of linguistic structuralism and semantics.

And therefore I also suggested that we may be able to use the recent results obtained by Linguistics and Semantics studies in order to make some manual for text interpretation.

At least, we may have some clues for the first step of text interpretation in a qualitative research.

I hope my work will be able to develop the method for qualitative researches.

It may just help.

[Slide 1]

Today, first, I would like to point the main issue of text interpretation in qualitative researches, and related issues.

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Second, I will consider the necessity of some systematic method or, at least, some thinking way in order to detect the meaning of a text obtained by the research.

Third, I would like to explain briefly how to use "Property and Dimension" in Grounded Theory Approach.

Forth, I will describe some results obtained by linguistics structuralism and semantics.

Fifth, I would like to introduce my idea in order to find "Property and Dimension" of the text, and to think about the meaning, and also to code the text more easier than the ordinary way.

Finally, I would like to discuss the proposed idea in order to develop it to the more convenient method for the text interpretation.

[Slide 2]

I think we have two main issues about the text interpretation as shown.

Absolutely, it is true that text interpretation is subjective.

Therefore, frequently subjective interpretation is criticized by the quantitative researchers as well known.

However, "Scientific evidence" depends on the definition; that is, I think it depends on what "Science" is.

Therefore, in the previous conferences, I have already introduced and explained the "structuralist philosophy of science" proposed by Prof. Ikeda.

And also, I argued against this criticism by the use of concepts derived mainly from Saussure's theory of general linguistics, Chomskian paradigms, and also natural semantic metalanguage.

Consequently, I concluded subjective text interpretation is not so subjective, and that it is scientific, However, for the quantitative studies, actually we have very strong tool such as "Statistics". Everybody can use very easily with computer.

We should have some systematic tool for text interpretation in qualitative researches.

[Slide 3]

First, whenever we study on anything of interest, we always need a common method for data analysis, such as statistical analysis in quantitative researches.

We should provide a manual for text interpretation for every researchers even in qualitative studies. I think it is a great convenience to have a manual for text interpretation.

If we have a guide for text interpretation, even a novice researcher may be able to detect some important categories of interest, and at least, to code the text is more easier than the usual way.

[Slide 4]

In Japan, most of qualitative researchers learn the method of Grounded Theory Approach for text interpretation by Strauss and Corbin's book, I think.

Because it is an only translated book that includes how to interpret the text concretely in detail, even though there are so many books about qualitative researches, we must select it.

And recently, professor Saiki, who was a graduate student of Strauss and Corbin, has been writing some books about GTA as shown.

Her books are very intelligible to us because we feel as if we are participants in her seminar.

The method of GTA seems to be systematic considerably, but not perfect, of course.

So, I would like to explain my idea by the use of GTA's example.

[Slide 5]

By the use of GTA, when we deal with text data for labeling some part of texts in open coding, axial coding and so on, we can use to detect the properties and dimensions of the part of texts.

We must try to detect them, for example, what is the theme, what is the subject, when it happens, where is the place, moving from which place and to which place?

And so on.

I think it is very useful and helpful for such coding procedures in order to detect the useful concepts of interest.

[Slide 6]

Briefly, I would like to describe the properties and dimensions of something.

What is it?

The shape is round.

The color is red, and/or green.

The size is about fist.

The weight is light, not so heavy.

It is tastable. It must be a kind of food.

And its taste is sweet-and-sour.

You can guess it.

What is it?

[Slide 7]

The correct answer is "Apple" as you think.

We can relatively easily detect the properties and dimensions about some substantial thing existed really which we can see.

We can guess what it is if the properties and dimensions are given vice versa.

[Slide 8]

However, it is not easy to detect the categories, conceptual ideas, and meanings of the text as shown.

This passage is taken from Strauss and Corbin's book, that is used in order to think of the text from various view points in the book as called "Micro-analysis".

We can use the method for the interpretation by Grounded Theory Approach, for example.

But it may easy for someone to interpret it, and find important categories intuitively at glance, even though some must be very hard to detect it.

Actually, It is not easy for me to find the properties and dimensions, and detect some categories, because I am a Japanese statistician originally, and not native English speaker and also not genuine qualitative researcher.

Therefore, I think I need some clues for text interpretation at the first step, even for Japanese text.

[Slide 9]

At the first step of the text interpretation, for example, when we try to do the open coding in Grounded Theory Approach or Microanalysis, we must use our experiences and sensitivities in order to detect properties and dimensions of some concept.

This step seems to depend on Researcher's ability.

Therefore, actually we need some training for doing it.

On the other hand, for our convenience, we need clues for making easier and more systematic way.

I should introduce and explain briefly some ideas from linguistic structuralism and semantics.

[Slide 10]

I would like to describe two distinctive concepts as shown.

Professor Machida proposed the unique language structure in his book.

And, Dr. Wierzbicka also proposed the revolutionary idea of conceptual primitives as called "Natural Semantic Metalanguage".

[Slide 11]

As we know, our languages have very different structures.

But, from the view point of semantic linguistics, they have almost the same elements or components.

This slide shows some components of a sentence that Prof. Machida indicated in his book.

Some text has "Time interval" such as origin/current, past, or future, "Closeness" such as whole or part, "Degree of Truth" which includes "Space" such as true/real or imaginary/near or distant, and "Probability" such as probable/necessary or accident/ or not p, "Polarity" such as affirmation or negation.

And also "Relation" includes "Definiteness" such as definite or indefinite, "Numberness" such as singular or plural, uncertain, Theme, Subjective Group, Objective Group, Movement, Place, and Appendix.

Some sentence has all components as shown in this slide, but others have only a few components frequently.

In this concept, it seems that we can use the first step of text interpretation.

[Slide 12]

How can we use this concepts about language structure?

I should only check the items as described below.

Theme: (should be detected, or frequently presumed)

Subjective Group: Who (did what)?

Objective Group: Whom (be done by whom/what)? Movement: Change of the situation (from, to)

Place: Where (and/or from, to)?

Time: When?

Closeness: whole or part

Degree of Truth:

Space: true/real or imaginary/near or distant

Probability: probable/necessary or accident/ or not p

Polarity: affirmation or negation

Appendix: additional/optional information

[Slide 13]

I would like to describe another idea to explain innate language grammar

Dr. Anna Wierzbicka proposed the Natural Semantic Metalanguage.

In the Natural Semantic Metalanguage theory of language, two fundamental hypotheses are assumed.

First, every language has an irreducible core in terms of which the speakers can understand all complex thoughts and utterances.

Second, the irreducible cores of all natural languages match each others, so that we can speak, effectively, of the irreducible core of all languages, reflecting the irreducible core of human thought.

[Slide 14]

As shown here, cross-linguistic works have already found about 60 elements called conceptual primitives.

In all languages, conceptual primitives can enter into the same combinations.

Therefore, we can express the same meaning by the use of the same combination of the same conceptual primitives in any language.

For example, it can be expected not only that in any language, lexical exponents for the basic notions, people, thing, this, two, all, big, bad, do, see, move, happen, and can, that can be found, but also that in any language, these elements can be put together to create meaningful combinations.

Of course, the word order may differ from language to language.

But the elements, their combinations, and the meaning will be the same.

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I think it is a good way to use conceptual primitives in order to describe properties and dimensions if possible, because they cannot be reducible.

That means, if we use conceptual primitives to indicate the condition of some property as its dimension, we cannot change other words instead of it.

It is a very strong limitation for the expression of the dimension.

[Slide 16]

I should try to interpret this text, and also try to detect something useful for thinking about important concepts or categories, if this text includes them.

[Slide 17]

In this report, I proposed the use of linguistics and semantics findings combined together in order to detect the important concepts derived from obtained text.

Introducing the current knowledge of linguistics seems to be useful and reasonable to devise a new method in qualitative researches, especially in order to interpret the text obtained by research for detecting concepts of an interesting phenomena,

My idea is still primitive.

Therefore I hope many revolutionary ideas for this area will be proposed and developed.

[Slide 18]

Thank you very much for your attention.