## My Way of Writing Papers

Implication of a Japanese Proverb "When the Wind Blows, the Coopers Prosper" *(Kaze gafuke ba o keyagamōkaru)* with Respect to Academic Paper Writing

> Koji Fujimoto (Professor Emeritus, Takushoku University)

# **Introduction**

The author's first significant experience to write a formal academic paper occurred at the University of York, UK, when completing a MPhil. Dissertation in 1972. Since then, the writer had had limited opportunities to write academic papers as he engaged in working as a kind of practitioner for development of developing countries at ECFA (the Engineering Consulting Firms Association of Japan) and OECF (the Overseas Economic Cooperation of Japan, the Japanese government financial aid organization established in 1961, later merged with the Japan International Cooperation Agency in 2008).

The author became a professor of Takushoku University in 2004, and thus started not only to write academic papers, but also to supervise the theses/dissertations of graduate students earnestly. The author has not published many papers, 20 or so. However, he has been privileged to supervise more than 40 theses and dissertations over the last 18 years. Through those experiences, the author could learn quite a lot of lessons on how to write the academic paper. In this short article the author aims to highlight several of the most important lessons he learned by writing academic papers such as research papers, theses and dissertations.

During the first few years at Takushoku University, the author had been continuously searching for a clear, practical and compact way to explain how to write the academic paper. And one day an idea suddenly came to his mind. That is to say, the author realized that an old Japanese proverb, "When the Wind Blows, the Coopers Prosper," literally tells the fundamentals on how to write academic papers.

## 1. <u>The Proverb "When the Wind Blows, the Cooper Prosper" and the Structure</u> <u>of Academic Paper</u>

How is this reflective of a professional paper, you may ask? This proverb tells a story. In days gone by in Japan in some areas of a country, strong winds blow quite often, which raises the dust extensively. This dust gets into eyes of many people. Some people even suffer from eye diseases and go blind. In order to make a living, the blind are obliged to become masseurs or masseuses, in many cases. These professionals found work by strolling the alleyways and playing the Shamisen (guitar-like Japanese musical instrument). Accordingly, it is said that the demand for and thus production of

Shamisen increases. The population of stray cats decreases as their skin is used in the making of Shamisen. As the cat's population drops, the population of rat's increase. The rats look for food, which quite often remains at the bottom of wooden rice bowl that often results in rat's bite marks. Damaged bowls are brought to the cooper's shop for repair. The cooper receives more work orders and earns more money.

This proverb can be regarded as a hypothesis and, as the story suggests, in this case, there are 8 assumptions (or preconditions) to sustain the hypothesis as listed below.

- (i) Roads of this land at that time were not paved, mostly dirt roads/paths.
- (ii) Strong winds often blow and raise a lot of dust.
- (iii) Because of dust, quite a number of people suffer from eye diseases and some people go blind.
- (iv) The blind's occupation is usually the masseur/masseuse.
- (v) There are considerable number of cats and rats in the community.
- (vi) The masseur/masseuse strolls alleyways to find a piecework by playing the Shamisen.
- (vii) The people use wooden rice bowls as the necessities of life.
- (viii) In the community, there is at least one cooper per 500 households on an average it is said.

In order to prove this hypothesis, it is required to confirm, to begin with, that the assumptions are satisfied. Then, cause and effect relationship (causality) of the hypothesis is to be investigated with primary and secondary data and other information as evidence. To go through this process, field work is quite often indispensable. For instance, if you are doing research on the above hypothesis, you have to travel back to the middle of the Edo period, 300 years ago, and collect the necessary data and information at the time and place of the period. You can usually use the questionnaire survey or complete enumeration method. As for the period of survey, you may have to stay there for a few months or years. Primary data may consist of such data as: "season and a number of strongly reflective days," "the number of cooper shops per 500 households," "the number and percentage of the blind," "the number of orders received by the cooper shop," "revenue of the cooper shop" and so forth.

In the present case it is difficult to recognize the direct relationship between the cause "the wind blows" and "the cooper shop prospers." This is because there exists a series of events between the opening point and the conclusion. In other words, the following events have to be identified by the collection of data and information in-situ.

- (i) In this area, the strong winds blow in a particular season every year: The season and the number of days of strong winds is compiled as data and information.
- (ii) The wind raises a lot of dust. As a result, the number of the blind increases: The level of dust, the number of cases of eye diseases and the number of the blind as data and information.
- (iii) The blind's occupation is generally the masseur or masseuse business: The number of masseurs and masseuses in relation to the increase in the blind and social conditions for the blind as data and information.
- (iv) The demand for and production of Shamisen increases: The number of Shamisen newly produced as data and information.

- (v) The population of cats decreases as Shamisen instrument uses cat's skin: The cat's population and the number of cats caught and killed for Shamisen making as data and information.
- (vi) The population of rats increases as the cat population decreases: The rat's population as data and information.
- (vii) The rats' bite marks on wooden rice bowls increase more than before: The number of damaged rice bowls as data and information.
- (viii) The damaged rice bowls are brought to the cooper shop for repair: The increased repair works of the cooper shops as data and information.
- (ix) The cooper shops' revenues increase owing to the increased in bowls made: The amount of increased revenues of the cooper shops as data and information.

Through the series of events described above, the cause (the wind) eventually results in the effect (the revenue, more bowls made and sold). Thus, cause and effect relationship or the causality is proved out. This means that the academic paper is completed.

As could be insinuated from the above discussion, almost all of research today is undertaken by analyzing collected data and information available in-situ, regardless of quantitative or qualitative, through observation and experience. This is what we call "the empirical study" which is becoming part and parcel of academic paper writing today.

## 2. How to Create A Hypothesis

As discussed above, academic research is undertaken by first formulating a hypothesis under certain assumptions and then proving cause and effect relationship in the hypothesis empirically. When the hypothesis is finally established after intensive and extensive preparatory work, the research framework or research structure is likely clarified to a considerable degree. In this very sense, the formulation of hypothesis plays a decisive role in writing academic papers. In this section, the author, therefore, tries to introduce several hints based on his own experience to create a hypothesis.

2.1. <u>The Hypothesis "When the wind blows, ..." Borne from Careful and Continuous</u> <u>Observation</u>

Needless to say, this hypothesis was framed a long time ago. A wise man, a social scientist or scholar in contemporary term, lived in a local town of Japan and had the scientific eye to observe the economic and social phenomena in the community. Apparently, this keenly observant person had been observing people's lives for many years and came to understand the phenomenon that "when the strong wind blows in a particular year, the cooper shop makes a lot of money in a following year." Then this keenly observation person investigated in his own way why and how this happened and came to understand the events described as written in the first paragraph of Section 1 above was actual situation of his time. In other words, the hypothesis was proved empirically. He started to explain the hypothesis to people in the community and the people nodded in agreement. As time passed, the hypothesis spread all over the country and eventually became a proverb.

This author is not sure whether the hypothesis was created in the manner described above. However, this episode suggests that a hypothesis can be borne out of careful and continuous observation with a scientific eye.

## 2.2. <u>Intensive and Extensive Preparatory Work is Indispensable to Create a</u> <u>Hypothesis</u>

When the author writes an academic paper on a particular topic, he makes it a rule to read a lot of academic papers and journals, and books related to the topic. This process is indispensable not only to formulate a hypothesis of the paper, but also to learn a variety of research methodologies and methods.

Until such time when the author could draw an outline of the paper, he often felt that he was in the darkness of a long tunnel trying to find the direction towards exit. Such helpless feeling gradually disappeared as the hypothesis became clearer and clearer. It was as if he found a ray of light at the far end of the tunnel. This metaphor tells the importance of pre-reading for writing papers and, as a matter of fact, the sufficient preparatory work helps considerably to write the quality academic papers efficiently and effectively.

2.3. <u>A Current Issue in the Academic World Could Be Selected as a Hypothesis</u> It is quite possible that one can choose a current theme that has been widely and inconclusively researched among academics. When the author specialized in public finance at the University of York in the early 1970s, the issue of "Tax Shifting", namely the question of tax incidence on product price when a corporate tax was raised, was researched internationally. Many papers were published, yet their discussions were inconclusive. Thus, it would be a good idea to choose one of current issues in the international academic world as the hypothesis. As a matter of fact, the author incorporated this theme into his M. Phil. dissertation.

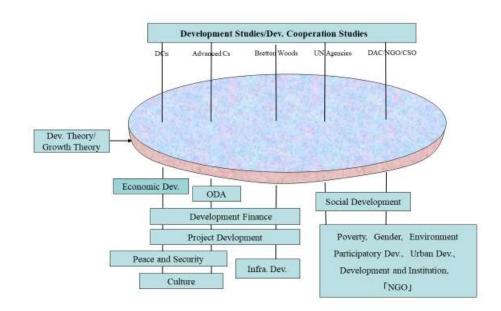
This is an easy way of setting up a hypothesis. However, as the current issue is usually studied by many front runner scholars and researchers, the research experience and academic knowledge one can gain can be enormous. If you are fortunate enough, your supervising professor may provide you with a current issue hypothesis together with crucial references. The author, of course, does not necessarily recommend such an easy way.

## 2.4. <u>Comprehension of Wide Range of Post-graduate Course Subjects is Strongly</u> <u>Recommended</u>

Knowledge of many subjects taught at the graduate level in a specialized field helps to set up a hypothesis from a comprehensive and analytical viewpoint, which results in higher quality academic papers. Fig. 1 below shows a relationship between the stakeholders of development cooperation, economic theories which support development cooperation and issues of development cooperation. Development cooperation is carried out by such stakeholders as developing countries, advanced countries, Bretton Woods institutions, UN specialized agencies and DAC/NGOs/CSOs. The policies and guidelines of development cooperation are formulated based on the prevailing general economic theories such as Keynes economics and/or neo-classical economics. As their experiences on many issues of development cooperation are accumulated, those issues become independent study subjects for more efficient and effective development cooperation. Some of the subjects may start their theorization process. This is when many tertiary educational institutions introduce the development course which consists of various course subjects such as "ODA," "Development Finance," "Social Development," "Infrastructure Development," "Poverty," "Gender," "Project Development" and so forth as shown in Fig. 1.

For instance, if a researcher plans to do research on a hypothesis related to "Project Development," he/she is expected to comprehend the role of the World Bank as the stakeholder, the neoclassical economic growth theory as the theoretical background, and related subjects such as "ODA," "Economic Development," "Infrastructure Development," "Environment," "Participatory Development," "Poverty," and so on. In order to carry out the research successfully, a wide range of knowledge is literally indispensable.

#### Figure 1 Grand Design of Development Cooperation Studies



#### 3. <u>Lessons Learnt through Academic Paper Writing and Thesis/Dissertation</u> <u>Supervision for Graduate Students</u>

The author leaned several important lessons on how to write academic papers through his own research and research supervision of his students. The above hints on hypothesis creation are, of course, one of those important lessons. As there are several more lessons which could be useful for academic researchers at large, the author introduces them hereafter one by one as concretely as possible.

#### 3.1. <u>A Theory Can be Developed by Changing Its Assumptions</u>

A theory is a principle which explains an economic or social phenomenon and is widely accepted by many social scientists in the academic world, while a hypothesis is a proposed principle of an economic or social phenomenon which a researcher tries to explain by undertaking research on a particular subject. Thus, the theory is the proven principle, and the hypothesis is the proposed and unproven principle. Therefore, both theory and hypothesis have the same structure in that they are established on the ground of various assumptions which are the preconditions to sustain the theory and the hypothesis.

Take the demand theory; an economic principle relating to the relationship between consumer demand for goods and their prices in the market, for example. The demand curve is downwards shaped. This means that when prices are high, people buy less or when prices are low, people buy more. As a matter of fact, this is one of the assumptions of the demand theory, a rational behavior of people. In trying to develop the demand theory, if this assumption is changed, the shape of the demand curve will be different, for instance, upwards-shaped.

Not to change the subject, the author would argue that some hypotheses that are proved by initiator researchers turn out to be theories after they are accepted by many academics.

One of the most effective ways to develop an existing theory is to change old assumptions for new ones and/or reduce the number. As a matter of fact, Robert Solow developed the traditional economic growth theory into the neo-classical growth theory by introducing new production factors of technology and labor in addition to capital. Ranis and Fei developed the Lewis Model, a two-sector economic development, by adding and replacing some assumptions as the Ranis-Fei Model. These are good examples that theories can be newly developed by changing assumptions.

#### 3.2. <u>A Dissertation Consists of Two Academic Papers</u>

The author learned that a post-graduate degree dissertation actually consists of two academic papers rolled into one, when he was writing his dissertation at the University of York. The first paper is a theoretical paper which deals with the theoretical development as a hypothesis. The theoretical development is generally undertaken in the manner discussed above. The second paper is an empirical paper which proves the theoretical hypothesis by analyzing primary data, secondary data and so forth. When the second paper is completed, the dissertation is fully completed.

The author often came across a thesis which used the existing model as it was and analyzed it with a sector, region or product that had not been employed before. Thus, the originality of the thesis is partly secured. For example, take the thesis of the Cobb-Douglas production function,  $Y = AK^{\alpha}L^{1-\alpha}$ . This function could be used to analyze the characteristics of rice production in East Java, Indonesia. And if the rice of East Java is applied to the Cobb-Douglas function for the first time, the author would argue that the thesis contains sufficient originality worth qualifying as a master's degree.

## 3.3. An Academic Paper Goes through Fermentation

Even when a hypothesis is successfully set up, the academic paper cannot be completed within a limited period of time. When writing a paper, one confronts various problems one after another that require to be resolved. Some of the problems may be solved relatively easily by referring to the cited literature. But many issues often require a much longer process, sometimes over a few months. In such a case, the researcher needs to read related reference materials first, extract hints to solve those problems, and then create original solutions. This process resembles that of fermentation which produces higher-valued fermented products such as cheese, miso and wine. The author's recollection of the proverb "when the wind blows..." is exactly the case in point. The quality academic paper too is created through the fermentation process over a significant period of time.

## 3.4. Frequent Editing Is a Must

An academic paper consists of Introduction, Chapter 1, Chapter 2, Chapter 3, etc. and Conclusion/recommendation. In the norm, no one can write a paper at one sitting. For instance, when Chapter 1 is completed, one is obliged to return to the Introduction to make any edits before proceeding to Chapter 2. This process has to be repeated as the paper progresses. This kind of editing should be undertaken within each chapter, too. Frequent editing is indispensable in writing a paper. There would be also the possibility to even reshape the hypothesis.

The author recalls that a Greek doctorate candidate at the University of York faced an almost impossible problem to finish up his dissertation at the last moment. The result of his empirical analysis denied the hypothesis. The author did not have a chance to learn how the Greek student solved this problem as he had to leave York to return to Japan. The author guessed that the student must have reshaped the hypothesis to handle the problem. Interestingly, it was later learned that the Greek doctorate candidate successfully completed his dissertation and has long taught at the University of York.

## 3.5. The Subject of Personal Pronoun "I" Should Be Prohibited to Use

It is generally understood that the subject "I" should not be used in an academic paper. This may be a tacit knowledge accepted in the academic world as the author has never seen this kind of rule stipulated anywhere. The author's understanding is that any research topic or theme has usually been discussed and analyzed somewhere by many researchers and scholars in the world. May it be suggested that "I" is too presumptuous to use in an academic paper.

What then would the subject be used in the paper? It should be either "We," "One," "They" or "You". More importantly, however, it is recommended to employ the passive voice rather than to use the personal pronoun as the subject.

#### 3.6. Technical Terms Have to Be Strictly Articulated

Technical terms have to be defined articulately. Without articulate terms, an academic paper often becomes illogical and analytically weak. Further, as the paper progresses, the logical and analytical ambiguity of the paper emerges more vividly. The articulate technical terms, therefore, lay the foundations for the logics and analysis of the paper.

One of the papers the author wrote dealt with a scenario of Mongolian development in which development policies and strategies were discussed. As the term "policy" had to be distinguished from the term "strategy", the author made reference to many reports and documents of the World Bank and the Asian Development Bank and found that they used those terms without making a clear distinction between the two. Consequently, the author had to endeavor to sort out the mixed use of the terms. It was rather regrettable that the international development organizations could not define the technical terms articulately.

Another paper the author wrote dealt with the integrated development project of the Brantas River basin in Indonesia, in which special attention was given to "institution" as a driving force of basin development. There, the term "institution" is defined as systems, measures, methods, policies, rules/regulations and procedures that can reduce transaction costs in the North's terminology (Douglass C. North Nobel Prize Laureate). In that paper, thinkable institutions were all extracted, and their roles and development contribution were identified. Thus, the term "institution" was articulately defined and used differently from its common use, "organization".

If the conceptual definition discussed above is a necessary condition for term articulation, there is another important aspect of this term as a sufficient condition, namely, all technical terms need to be substantiated by real events. Take the term "governance," for instance. Conceptually it is understood easily as the World Bank defined its components as capacity and efficiency in public sector management, accountability, legal framework for development, and information and transparency which could be understood conceptually. However, what about real examples to substantiate those components? An example of "the capacity and efficiency in public sector management" should be presented in such a way that a project implementation unit of the government can fully grasped the development performance of aid projects and engaged in problem solving activities by documenting the post-evaluation report. The sufficient conditions are quite often satisfied only through careful observation of and experience in aid projects.

#### 3.7. The Internationally Standardized Style Applies to the Academic Paper

The presentation style of the academic paper has long been established internationally in the academic world. One of the most popular and authoritative style guides is the Chicago University Manual (*A Manual for Writers of Research Papers, Theses, and Dissertations,* first published in 1955).

When the author wrote his MPhil. dissertation while at the University of York, he did not have any idea about the Chicago manual, nor did he refer to it. The

author rather referred to Ph. D. dissertations available at the university library as the guiding example. It is rather surprising to learn even today that the style employed in the MPhil. dissertation was strictly in line with the international standard.

By the way, one of the authoritative style manuals available in Japanese is *How* to Write Academic Papers, first published in 1977 by Prof. Akio Sawada. The content of his manual is quite similar to those of the Chicago manual. Nevertheless, most Japanese universities today have their own style guides in line with the international standard.

# 3.8. <u>Dissertation Supervision Is a Treasure Land of Learning on the Part of Supervisor</u>

The supervisor can expand and deepen his field by being deeply engaged with the students during their dissertation writing. The dissertation supervision is an opportunity for the supervisor to experience the entire process of dissertation writing by the student from formulation of a hypothesis under certain assumptions through to empirical proof of cause and effect in the hypothesis. The student does not necessarily choose a hypothesis that the supervisor is familiar with. This implies that the supervisor has to study, on his or her own, issues and problems the student faces in order to provide appropriate and creative comments and advises. In this way, the supervisor can accumulate a wide range of knowledge and enlarge his field of specialty. In a way, the supervisor could experience equal learning to the Ph. D. student, as if the supervisor wrote the dissertation on his own.

## **Conclusion**

This short paper is written on the basis of the author's experiences. Therefore, all those lessons sorted out above are quite personal in nature. However, most of the above points would be generally agreed by researchers and scholars at large.

The sequential construction of the academic paper that the proverb "When the wind blows, ..." suggests, namely, "formulation of a hypothesis whose essence is a causality or cause and effect relationship statement," "confirmation of various assumptions that lay the foundation for the hypothesis" and "empirical proof of the hypothesis or the causality," has to be held fast. Furthermore, special attention should be paid to the importance of the hypothesis; if the hypothesis is prepared meticulously, the paper writing could proceed relatively smoothly.

The lessons discussed in 2. and 3. above are the necessary conditions. In order to complete a quality paper, needless to say, the sufficient condition has to be satisfied, which is the original creativity of the research.

When the author wrote his MPhil. dissertation at the University of York, he never came across these lessons to his great regret. If the author had learned them, he would have been able to write the dissertation more efficiently, effectively and comfortably. This reminds him of the golf lesson book called *Ben Hogan's Five Lessons* (published in

1957) which is well-known as the golf bible even today. In the book, all those crucial secrets Ben Hogan learned are explained as clearly and practically as possible. Owing to this book, therefore, millions of golf students in the world could begin golfing without hesitation and improved their golfing skills thereby.

In academic paper writing, to learn those lessons is one thing and to practice them is quite another. In order to master any lesson, one has to practice them by going through, say, Ph.D. dissertation writing. Then one cannot only understand the value of those lessons, but also master the art of academic writing. In other words, one can only improve one's golf handicap by practicing repeatedly the five lessons in the golf bible until one can translate them into an involuntary golf swing. And importantly, academic paper writing is not so simple as "Any event can bring about an effect in an unexpected way" – cause and effect, rather is it a multiple of "finding" and their relationships to what came before and what comes next with the "When the wind blows, the coopers prosper", there must be at least a few assumptions (or preconditions) to sustain the hypothesis of a cooper prospering. Simply, the theme of the proverb, there is an interrelationship among all things.