You may have seen slogans all over Taiwan carrying these advices. They really contribute to the state of mind and the presence of mind of the people on the I sland. The people are not, at all, disturbed by Nixon's mischieves.

Between 1970-1971 I was doing some study & reseach in the States, Among other subjects directly related to my professional area. I audited several courses like (1) Economics, (2) Public Investment-Theory and Technique and (3) Planning of Water Resources system, etc. I have become extremely interested in the planning and decision making. On my return last August, I was greatly surprised by President Chiang's third advice. Ah!This advice has got scientific basis. Only man like him can give us such nicety. Whereas the 1st. & 2nd advices have got philosophical and psychological basis, I am not qualified to elaborate them.

What is Planning?

I believe all of you know what is planning and familiar with planning. My interpretation of planning is that planning an organized task for the purposes of achieving certain objectives by means of numerous systematically arranged actions or procedures. Ever since the Harvard University developed the renowned Harvard Water Program between 1960-1965, the new mothod of approaching decision making has been adopted and adapted throughout all areas of development, be it in politics, in national defence, in economic development, in engineering scheme, in commercial undertaking or in social movement. Planning contains several basic steps:-

Planning and Decision Making

by Y. M. Liu Jan. 1972 (劉永楙)

Introduction

Mr. Chairman & Gentlemen, thank you for asking me to give a little talk here to-day. I feel very much honored.

Last October, after my return from abroad, my mother school, the National Chiao Tung University, through Prof. Lu Yung-Ping, approached me for delivering a lecture at Hsin-Chu. I promised that I might be able to do it sometime in the Spring. Since then I have been thinking of a subject and a content that may be interesting to the facaulty as well as the students there. Up to now I have not quite completed the preparation. However, on the insistence of Mr. C. M. Wong and Mr. S. Y. Lu, I am releasing a portion of my immature contents in the hope of obtaining your valuable comments for improving my work. We Chinese call it "PO TSUN YING YU," that means "throwing a brick out in the hope of bringing back jades. It is a good deal. Isn't it?

Actually, my contemplated ambitious subject is "The theorectical basis of careful planning and capable decision-making". As you all know, on June 1, 1971, President Chiang Ka-Shek put out his three famous advices to the Nation. They are:-

- 1. Be respectful with self-reliance,
- 2. Don't be panicked by the changes,

and 3. Careful planning and capable of making decisions.

and decision makers. They are hungry for making progress, expecially capital investment. They are hungry for home cookings and, the last not the least, for Chinese food. This is my observation in my 14 years working with U.N. What a bunch of poor experts!

Why Planning

As I have mentioned already that planning is to acliieve certain objectives. Not only that. Planning is to furnish successive group actions so that no duplication or confusion may be created. Planning will mininize the use of resources and maximize the effect of the results. It is also for the purpose of time saving.

A catastrophe may be avoidable if there are real good plans. Every body knows a confusion will only cause delay of action and a duplication will only cost money serving no useful purpose, A war may be lost just because of no planning but impulsive actions. The recent battle between India and Pakistan demonstrated very well the careful plan drawn by India to achieve her objectives while Pakistan was bereaved by practically no plan but Yahva Khan's impulsive decision. On the other hand the withdraw of R.O.C. from U.N. shows President's Chiang's SMND, which has not only opened up a new road for R.O.C. but also boosted her prestige.

Who and How?

I must turn now to who should be involved in the planning and how planning should be carried out. Theor-

- 1. Statement of objective or objectives as explicit and specific as possible.
- 2. Estimating resource possibilities for achieving objective or objectives as sure as possible.
- 3. Propose actions and alternatives as exhaustive as possible.
 - 4. Formulation of alternative plans to at least several.
- 5. Identification of impact and analysis of magnitude and importance of impact besides the sheer benefit and cost study.
 - 6. Assessment of impact as objective as possible.

The first four steps are conventional planning, while the last two are additionals helping to reach to decision making.

With the modern technologies available, such as the use of computer, system analysis, optimization technique, probability statistics, etc. It is possible to propose good plans and eventually reach to a wise decision. In the planning, there is one thing fundamentally important. That is the data and information. I think it is not necessary for me to elaborate more on this. With your permission, I like to deviate slightly to the HUNGRY UN EXPERTS as I call them—a light remark.

There are about 10,000 UN experts working in many nations throughout the world. In the eyes of developing nations, most of them are ugly. They are ugly because of their hunger. They are hungry for date and information. They are hungry for friendship from the nationals. They are hungry for the attentions from the higher authorities

None of them is easy to apply. Too often a decision is reached by politicians, which is usually dangerous.

If sufficient planning is done, a decision may come out automatically. This is only in theory. In practice, there is no perfect plan. Because there are so much information not available or unobtainable. There is only limited degree of reliability of the information or assumptions. Not only information and assumptions are subject to change, the objectives may change from time to time. Inspite of continous planning, when it comes to decision making, the public interest may not be there. Because legislators are not necessarily represent so called public interest. There may be so many conflicts of interest, which make it very hard for policy makers to come to a decision. In such instance, science alone usually does not work. Art usually, takes over. Only great man and genius are gifted with such big but good decisions. Because of uncertainties involved, it takes risks to make a decision. To demonstrate, the following game of two suspects will show:-

Years of Imprisonment

		Suspect A	
		Confess	Does not Confess
Suspect	Confess	A 15 Years B 15 Years	A 20 Years B 0 Year
B :	Does not Confess	A 0 Year B 20 Years	A 5 Years B 5 Years

etically, all the people should be involved in the planning process. Any action in a society or a country is exerting some influence to any bodyelse. It is a matter of degree that really concerns. Therefore, a planner must grasp the public interest. Here, the planner is called Field Level Planner as denoted by Arthur Maass, etc. Given with a specific objective or objectives, the field level planners must sample public interest and feed back to the system together with the other physical data. The next level men are administrators who may either modify, reject, or endorse the proposal and pass on to the decision makers, who are on the third level, and, sometimes, assuming important decisions. The third level men, however, usually contact top level policy makers and legislators to make top-level decisions. Therefore, one can see that there are everal levels of people who are responsible for the planning. The technicians are playing only an appropriately small part in the whole business. The playing consists of incessant up and down consultations and back and forth sidewise discussions. A modern artist's view of planning process will be something like the following:-

The Art of Decision Making

Conventionally or academically, there are four types of policy decision models:-

- 1. Pure rational model,
- 2. Sequencial model,
- 3. Increasement model,
- 4. Satisfying model,

病

客,

年

我煎服了之後 並且準備了一碗菉豆湯以備萬一。先慈把幾味中藥給 會放過好機會,爲我連講古時幾位儒醫怎樣仁心濟世 校長。他時常借機會教導家人和學生。這次他自然不 祖父是前清廩生,畢生從事地方教育,擔任高等小學 是他老人家第一次也是最後一次替他的孫兒看病 問我病狀,再看我的舌苔,然後翻藥書, 有大夫而遠水難救近火,先祖父無奈 ,急人之急,施醫救貧的故事 破例替我看了一次病。他不會把脈 (,睡了 一晚,第二天病竟霍然而愈 勉勵我師法古人 鄉間少郎中,城裡雖 但是幼時看到 ,乃憑線裝的中 愼重處方 , 先細心: 。先 。這

被籠」抬着病人走五六十里路去求醫, 病人鑒於醫藥困難, 有名氣的中醫,像樣一點的藥店 少。城裡如此, 時醫藥衞生不發達, 鄉下尤其可憐。不要說西醫,就是稍 只有硬挺硬拖,等到用轎子或「 醫院普遍不足,醫師 也寥寥可數。鄉裡 或接醫生出診

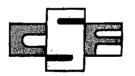
利。 鄉間普設衞生所 來看病時,病況多已到了嚴重的階段了 實際上並不如此。不講病人本身所受的痛苦怎樣 種專科醫師多如過江之鯽, 人去看病的親友折磨得半死。 照理,今日的病人,要比以前幸福得多了。可是 公路又四通八達, 現在臺灣的情形完全不同了 ,西藥房、兼賣西藥的中藥舖到處皆 要到城市裡去看病, 也極便 而且生意與隆。各縣市在 下面是今年七月十 **:公私醫院林立** ,也會把病人和陪病

If the two suspects are separately detained without mutual communication but given with above options, try to guess how each will decide.

This is so called game theory, one of the popular theories of reaching to decision. Basically, we are involved in the field level planning. Our duty is to present alternative plans, state all the costs, benefits, impact magnitudes & importances involved, explain them in detail and leave to the decision makers to choose.

To conclude, I like to say that careful planning is important as it will facilitate decision making. It, can influence the decision making but not to replace it. Planning can be improved and expedited by seminar discussions. And decision making should be done timely.

本文係本年元月十七日劉永楙學長在臺北美軍俱樂部,應工兵學會午餐會 之邀所作之演講詞,特錄此以供諸學長參閱



國鋼模工程股份有限公司 CHINA STEEL-FROM & ENGINEERING CO., LTD.

司:台北市伊通街一〇四之十一號 TEL: 5 4 9 5 5 8

— 35 **—**