ETHNOGRAPHIC DELPHI FUTURES RESEARCH

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This paper is aimed at introducing the EDFR (Ethnographic Delphi Futures Research) as an alternative futures research technique to futures researchers. EDFR, a combination of EFR (Ethnographic Futures Research) and Delphi technique, was first developed by the author in Fall, 1979. It was designed to serve the following objectives:

- To help improve the efficiency of both EFR and Delphi.
- To make available another alternative futures research technique into the field.

To have a clearer concept of EDFR, it is appropriate to know and understand the other two techniques, the Delphi and EFR.

1. The Delphi Technique

The Delphi, a forecasting technique, was developed by Dalkey, Helmer, and Rescher at RAND Corporation over the last two decades. The Delphi, as described by Mitroff and Turoff, is

> a procedure for structuring a communication process amomg a large group of individuals. In assesing the potential development of a technical area, a large group (typical in tens or hundreds) are asked to "vote" on when they think certain events will occur. One of the major premises underlying the whole approach is the assumption that a large number of expert judgements is required in order to treat adequately any issue. As a result, a face-to-face exchange among the group members would be inefficient or impossible because of the cost and time that would be involved in bringing all the parties together. The procedure is about as pure and perfect a Lockean procedure as one could ever hope to find. For one, the "raw data inputs" are the opinions or judgements of the experts. For another, the validity of the resulting judgement of the entire group is typically measured in terms of explicit degree of consensus among the experts.

The thing that serves to distinguish the Delphi from an ordinary polling procedures is the feedback of the information from the group and the opportunity of the individuals to modify or refine their judgements based upon their reaction to the collective views of the group. Secondary characteristics are various degrees of anonymity imposed on the individual, and collectively responses to avoid undesirable psychological effects.[1]

The general procedures of the Delphi are best summarized by Dalkey:

This forecasting technique involves consulting groups of persons identified as experts in a given field. participants offer their judgements individually, receive statistical reports on the responses of the entire group, reconsider their own responses, and then respond again. This iterative process is usually continue for two or three rounds in order to refine the consensus of the group.[2]

The basic ideas involved in the Delphi procedures are:

anonymous questioning is used to eliminate psychological factors present in face–to–face interaction; iteration and controlled feedback are employed to help reevaluate earlier answers or to justify extreme opinions; finally; the probability estimates reduce the pressure toward conformity and (therefore) unanimity. Shared responsibility lessens inhibitions. The results are usually presented in terms of median and quartile responses which give a clear idea both of the central forecasts and of the "optimistic" or "pessimistic" extremes. --- Much of the criticism of Delphi seems to originate in misinterpretation of the technique and in unrealistic demands and exaggerated expectations. Delphi is just an exploratory tool: its simplicity and (frequently unavoidable) ambiguity ought to be readily admitted. Delphi output is only an opinion: the results are not predictions or definitive statements but simply forecasts, ie. probabilistic appraisal of future developments (needs, priorities, etc.) with different degrees of consensus. Above all, Delphi is an heuristic tool gaining insights into complex yet fuzzy futures.[3]

The Delphi technique, as suggested by Turoff, appears to have utility when one or more of the following conditions are met:

– the group cannot meet often enough in committee to give adequate timely consideration to the topic because of time or distance constrains.

- there is a specific reason to preserve anonymity of the conferees
(e g. referring of position papers or a free exchange among
different levels in an organizational structure).
- the group is too large for an effective conference telephone
call or committee exchange.
- the group is interdisciplinary to the extent that a structured
or referred communication mode as opposed to a committee or
panel approach is more desirable in promoting an efficient
exchange of information.
- telephone and letter communications, on a one-to-one basis
are insufficient or too cumbersome to augment the particular
committee activity.
- disagreements among members of the group are too severe
for a meaningful committee or face-to-face process for the
exchange of views and information.[4]

Concerning the critics of the Delphi technique, there are both
pros and cons. Among the critics is Ida. R. Hoos. In "Criteria
for Good Futures Research," Hoos writes:

The difficulties stem from two main, interrelated problems: (1)
the easy assumption but lack of a scientifically verifiable techn-
ique for studying that which has not happened, and (2) the dearth
of reliable data, the "sine qua non" for "good" research.[5]

In *pursuing* the critics of the Delphi technique, the readers are referred
to the work of Roy C. Amara,[6] Kim Quaile Hill and Jib Fowles,[7] Peter G.
Goldschmidt,[8] Joseph F. Coates,[9] D. Sam Scheele,[10] Ida Hoos,[11] and Olaf Hel-
mer.[12]

2. THE EFR

In "Cultural Futures for Thailand: An Ethnographic Enquiry", Robert
B. Textor, the developer of this technique, writes:

Ethnographic futures research refers to the method in the
cultural approach. Just as the anthropologist uses (but is not
limited to) ethnography in studying an extant (or even an exti-
nct) culture, so he or she can use (but need not be limited to)
a form of ethnography to study hypothetical future cultures.
The emphasis are upon holism, context, and process; and the
key approaches are participative observation, interviewing, and

a flexible, adaptable, interactive mode of inquiry. It needs hardly be added that the data are interpreted in the light of what the ethnographer knows about the culture-and the more he knows about this culture, the better.[13]

In "A Guide to Ethnographic Futures Research", Textor describes EFR as:

an approach to the elicitation of images of, and values about, alternative futures that stems and adapts from the general or "conventional" methodological tradition of ethnography. It involves optimistic realistic scenarios, pessimistic-realistic scenarios, most probable scenarios and an efforts to get at the informant's essential assumptions or ideas as to how cultures change. It involves the use of a cummulative summarization technique. It produces insights that are of value in understanding not just what are seen to be alternative future cultures, but, perhaps equally important, the nature and functioning of the present culture. and especially its value system; plus on-going change processes.[14]

In "Possible Contributions of EFR to Ethnographic Technique", Textor describes and discusses intensively the EFR interviewing technique.

- The ethnographer is keenly aware that he (or she) must soon feed back a summary of what the interviewee has said, which must meet the latter's approval; the ethnographer is hence inclined to be highly attentive to what he is hearing, and to its relationship to context.

- The reliability of the dictated summary is likely to be higher because the interviewee has a virtually instant opportunity to correct errors of fact or balance. This feature seems to be somewhat effective against "acquiescence set".

- When the interviewee corrects a summary dictated by the ethnographer, the ethnographer learns promptly what his biases (from the intervewee's perspective) are, and is thus enable to deal effectively with these biases from that point in the interview forward (rather than unhappily learning of these biases only later in the interview or after the interview is finished.) Emicization of etic grids is thus facilitated somewhat.

— The interviewee, noting the extreme care used by the ethno-
grapher to produce clear, accurate, balanced, and context relevant
summaries, experiences an increase in his or her own moti-
vation to be accurate, complete and balanced. This does not
occur in those conventional ethnographic situation where, once
the ethnographer has jotted down rough field notes, the
informant has no further idea as to what the notes say, or
what will be done with them.

— Later, the interviewee checks the transcribed protocol in
private, away from the presence of the ethnographer — — an
arrangement designed further to reduce "acquiescence set".

— Furthermore, the interviewee is asked to judge the accuracy
and suitability of the protocol as a whole (rather than, as
before, attending just to the dictation of one segment at a
time). The interviewee is thus enabled to offer corrections
both at the level of the isolated fact, and at the level of
holistic balance and appropriateness. Assuming that the
interviewee is reasonably literate (and does not require that
a third person read the protocol aloud to him) this feature
has the added advantage that the interviewee can respond
once to an auditory stimulus, and once to a visual one.

— Since many ethnographers spend two or more hours typing
up their raw notes for every one hour of field interviewing,
the cummulative summarization technique might, in appro-
priate cases, result in a substantial reduction in the net time
that the ethnographer must expend in order to produce orga-
nized field notes.[15]

3. The EDFR

EDFR, a developing futures research technique, combines the strengths of both EFR and Delphi. The strengths of both techniques help correct methodological weaknesses of each other. The procedural steps of EDFR, generally, are similar to those of the Delphi technique. The major characteristic that serves to distinguish EDFR from an ordinary Delphi is the use of EFR in the first round of the Delphi. Giving the opportunity for panel experts to consider all systematized and analyzed data gathered from the first round of the EDFR and respond again and again in the way they are asked to, as is commonly done in Delphi, distinguishes EDFR from the typical EFR technique. In EFR, during the interviewing, the ethnographer, at appropriate times, feeds back a summary of what the interviewee has said, and then asks the interviewee to correct errors and/or refine his/her own responses. In EDFR, each panel expert not only receives and refines his/her own responses, as in EFR, but also receives the entire group's responses (usually presented in a form of a statistical report); considers responses of the entire group; and then reconsiders his/her responses. Each panel expert is also asked to respond and/or evaluate other panelists' responses, which in the first round of the EDFR (EFR interviewing) he/she has not mentioned. This iterative proccess might continue for two or three rounds in order to refine the consensus of the group.

An example of detailed EDFR procedures is described in my research paper—Ethnographic Delphi Futures Research : Thai university pilot project.[*] The EDFR procedures used in this study consisted of five steps. They were Preparing Subjects, Interviewing (EFR), Synthesizing Data, Developing Survey Form (Questionnaire), and Delphi Probing.

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[*] Chumpol Poolpatarachewin, "Ethnographic Delphi Futures Research: Thai University Pilot Project", *Cultural and Educational Futures* Vol. 2, No. 4, 1982.

EDFR VS. Delphi

In Delphi, a set of questions developed (and controlled) by the researcher, is commonly used in the first round of probing. This technique, to me, underestimates the expert's expertise in terms that it limits not only information within the studied issues or questions, but also other information (issues, problems feedbacks=) uncarefully and/or ignorantly left by the researcher. For example, in Delphi study, if the rescareher wanted to study alternative futures of A, he/she would develop questions or topic issues he/she believed important and relevant to the studied issues A, say, A_1, A_2, A_3, A_4, and send them to all panel experts. It is quite common that if the researcher sent a questionnaire of four questions, he/she would be likely to receive answers within the scope of those four questions. The point is that, the researcher might unknowingly leave out A_5, A_6,---which are considered by the panel experts as very important and relevant to the studied issue A.

In EDFR, all information (issues, problems, feedbacks, ---) given by the panel expert during the first, second, and third rounds of probing are fully recognized. In the first round of EDFR, the panel expert is asked to project and talk about alternative futures of studied issue A. The panel expert is free to talk and discuss any subissue he/she thinks it is important and relevant. By this way, the panel expert might come out with A_5, A_6,---which could be incorporated into the study right away. In case that the panel expert does not mention any one of A_1, A_2, A_3, A_4, which the researcher has had in mind, the researcher can ask the panel expert to do that.

EDFR VS. EFR

In EDFR, scenarios are written up based on data gathered from the interviews, as done in EFR, and statistical data gathered from the second and/or

third rounds of EDFR. as done in Delphi. This procedure has some advantages over EFR in terms that it allows researchers to collect more issues and trends which are omitted in EFR. This will be clarified later.

The interviewing technique used in EFR is described by Textor as nondirective technique. As a result, even though some structural probing questions are provided during the interviewing, each interviewee might not talk about studied issue (s) in the same sense or details. For example, one interviewee might mention one specific trend or some other trends which have not been mentioned by other interviewees and even by the interviewer. In this case, those trends would be ignored or deleted because there was no consensus. In EDFR, every single issue and trend will be presented to all panel experts to consider in the second and third rounds. By this iterative process, trend mentioned in the first round might receive high consensus both as optimistic or pessimistic and most probable trends. In EFR, the most probable scenario is hard to get. In EDFR, the most probable scenario can be obtained through the use of Delphi technique and simple statistics.

In conclusion, EDFR combines the strengths of both Delphi and EFR techniques. The strengths of each technique help solve problems and help correct weaknesses of each other. EDFR, therefore, is a potentially powerful research technique for not only Futures Research field, but also other social sciences. EDFR, as a technique, can be used in investigating problems of political conflicts, cross cultural and comparative studies, and international relations. However, EDFR is a very time consuming technique.

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