CULTURAL MAPPING: WHAT IS IT, AND HOW DOES IT RELATE TO PREVIOUS RESEARCH?

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ABSTRACT
Making the most of cultural diversity in the increasingly international marketplace has become a key issue for most companies. Cultural mapping allows organisations to look at how cultural diversity is impacting on their international effectiveness. There are difficult questions to be addressed. Does the one-off map have any validity without longitudinal benchmarks? Do you get different 'cultural response if you ask specific or general questions about employees preferred or actual environment? Which one is the 'valid' cultural response, and are the results comparable? This paper looks at these issues.

INTRODUCTION
'Cultural Mapping' is a concept that has become important to organisations as a result of the two much discussed trends: the globalization of the market place and in Europe, the impending date of 1992. As a result of these trends, intercultural effectiveness, internally and externally, is now an urgent issue at the top of strategic agendas. It is also increasingly recognised that being internationally effective is not only about training people to do things differently, but also about changing core parochial attitudes and increasing levels of cultural sensitivity.

Cultural mapping comes from the realization that before you can decide what how you are going to achieve an 'international' workforce, you need to ask the question, 'where do we stand now?'. Are there are fundamentally different attitudes across an organisation that are impacting on the organisational effectiveness? This paper looks at some of the tools that have already been used, and at some of the caveats and implications they present. It is intended to provoke discussion on how to ask the 'cultural' question, and will focus on whether the question asked is general or specific, and if the participant is asked to respond according to their actual or preferred culture.

REASONS FOR CULTURAL MAPPING
Culture has long proved to be a difficult term to define, and how you define it seems to depend mostly on what you want to use it for.1 Things are further complicated by the fact that within the sub-systems of an organisation you can now ascribe the word culture to national or ethnic culture, corporate culture, departmental culture, job culture and even gender culture. This paper looks at mapping national cultures within organisational cultures.

The term 'mapping' is one that has grown up among the intercultural fraternity in Europe. It is probably a result of Hofstede's original

work in IBM where he plotted his four dimensions against each other and circled the clusters.

There are two main reasons that create the need for an organisation to carry out a cultural survey. The first is caused by differing attitudes creating an urgent problem in the functioning of an organisation. The second reason arises in mature organisations which may want to develop a central feedback mechanism to discover what is happening in the different and ever diversifying parts of the organisation, or wanting to decide on what kind of cultural sensitivity training is needed.

**Different strategies of internationalisation**

A review of the published company examples of international management education programmes shows that there is no standard approach. The attitude a company has towards managing intercultural differences seems to depend very much on its historical evolution and current field of operations. Companies with an embedded multinationalism seem to take managing cultural diversity and sensitivity training as a given. Others have developed a conscious process of selecting transnationally so that handling cultural diversity 'becomes a reflex'. Companies starting from a strong homogeneous cultural base seem to be adopting a much more explicit response. Fiat's programme, for instance, has meant changes throughout their whole education and training programmes and the development of new programmes such as the country briefings. As a result of their internal surveying, they came to the conclusion that 'international' posts were all those local or transnational posts that function in a multicultural context.

Whatever the reason a company has for choosing to carry out a survey, two concerns in choosing the method are the questions of validation and benchmarking. There is also issue of what use is the mapping to be put to? If cross-national differences are highlighted for their own sake, they may only cement the very norms and stereotypes that are creating the difficulties. However, if outlining the differences is integrated into a management listening process, the same differences can act as strong catalysts in constructive debate about how to use cultural diversity to the greatest advantage.

Two types of mapping can be usefully distinguished, 'one-off' and 'ongoing'. Both have advantages and disadvantages. In general this paper supports the advantages of on-going mapping and highlights the disadvantages of the 'one-off'. 'On going' mapping can create a double-learning loop in the organisation, as well as a means of identifying and developing the 'requisite variety' needed to be an adaptive organisation in today's ever changing complex marketplace. It can then serve as a tool for deciding strategy and training needs.

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THE ONE-OFF MAP

A 'one-off' map tends to be done in response to a crisis which is not attributable to only external factors. One example is the research done by Margoulies and Anders in L.M.Ericsson, another is the author's work in the UK subsidiary of a Scandinavian oil company. In both cases the evidence was drawn from interviews and a questionnaire survey on small samples, and mostly lacked statistical significance.

Certain results were more attributable to the fact of the organisation was a subsidiary than to overall national preferences. but questions which indicated possible culturally determined differences related to authority, appraisal, the extent to which formal decisions are affected by informal chats and communication styles. Whatever the shortcomings of this survey, the important outcome was that it convinced the otherwise sceptical Scandinavian managers that there were differences which could be called 'cultural' differences, which were having an impact on the motivation and the satisfaction of the predominantly UK employees.

Some of Margoulies and Edstrom's results seem to directly contradict those of Andre Laurent's5 work which includes a Swedish and American sample. This begins to illustrate the need to look at the methodology and at the context in which results are gained. With this kind of small survey there is also the problem of the lack of validation.

The advantages of one-off tailor-made questionnaires are that you have the freedom to target the specific concerns of the organisation at the time, and even with small samples you can create some significant findings. However it is difficult to determine the extent to which your results are affected by different departments and the degree of company ownership, and the age of the individuals.

6 (Habershon and Mouttou Unpub.) Above all there is the lack of validation and any comparable benchmarks. These two problems can to some extent be overcome by using 'ready-made' tools.

'Ready made' tools

There are some 'ready made' tools available for a one-off type survey. One may, for instance, use Laurent's full 56 question questionnaire. However you are limited to the using only 13 of the questions to draw out the four different organisational metaphors, as a benchmark, and by the fact that his sample was a certain class of managers who went through INSEAD courses, and predominantly male.

Harrison's 15 question questionnaire asks the respondent to give two sets of comparable answers; how you perceive the existing culture and your preferred culture against four cultural metaphors. While helping with the issues of validation, and possibly creating a supporting comparable benchmark, each tool will have its own in-built cultural bias and limitations.


Harrison's questionnaire highlights the need to define the difference between whether you are asking respondents to relate the questions or statements to an actual or preferred culture. This is a source of confusion in some cultural questionnaires. Underlying the differentiation is a deeper question of whether somebody's real value is what they espouse and perhaps feel, or if it expressed only in how they finally act?

Suppose someone feels resentment towards their manager but consistently does everything he/she is asked to do for fear of losing their job. Is their 'real' value resentment towards authority or is it acceptance of authority? Which is the best value from which to judge 'real' cultural differences? The answer to this question has enormous implications on the validity of how the cultural question is currently being asked.

Before looking in detail at this issue, it is important to give an example of the third kind of mapping, an on-going survey. There are many advantages to using an on-going mapping, the most important being the cultural norms that are built up over a longitudinal study.

**ON-GOING MAPPING**

On going mapping or surveying is a very different kind of commitment by the organisation than a 'one-off' map. In this case, it is part of an overall management strategy in which the survey is a tool for the management to listen and act on what the staff are saying through the survey. It is a statement of an on-going commitment of the organisation to the employees point of view. It is also building up the organisation's own benchmarks and allows for the questionnaire to be validated. Some of the findings of this kind of on-going mapping do highlight the likely inadequacies of the one-off map.

IBM is one organisation which has long been committed to an on-going survey over the last 20 years, surveying the whole company every eighteen months to two years. In this case, it is best to describe the mapping as an 'organisational effectiveness survey'. The core of the survey is comparable to that used by the Mayflower organisations in the States, where the companies participating can use each others results for benchmarking. As the questionnaire is a proactive tool, each question is owned by a member of the management team. That manager is then committed to developing and carrying out an action plan in response to the results of that question. This ensures that the survey really is a double learning loop and not just a way of gathering statistics.

Unlike the one-off questionnaire, the ongoing survey has to be modelled and built up on general management theories, covering a broad range of issues and able to measure the satisfaction level of all the staff, spot changes and provide an early warning of possible problem areas. To a sophisticated academic, the questionnaire is likely to look very general and simplistic. It's context however is to be relevant to every member of a large international company over a long period of time in order to create internal benchmarks, and it's purpose is to open a discussion between management and employees on everyday work issues.
In practice, the large numbers and demographic differences allow you to hone down to significant differences on each specific questions. From a cultural point of view you can make quite precise statements based on the different sites around the world and nationalities. Again the large numbers allow you to plot the countries against an average mean and the continuity allows you to set 'control' limits for that particular country.

The IBM Tool

In IBM's case the model is based on the well-known management theories of Adair, Maslow's hierarchy of needs and Hertzberg's motivational factors. The questions are mostly designed to show degree of satisfaction with all aspects of each employee's current job. A series of six indices is set up based on where these needs are met within the organisation and what the corporate response is.

In the on-going survey, as it is a management listening tool, the principles and process are as important as the results. The essential principles are:

* Confidentiality/anonymity of respondents input
* Open and positive framework
* Complete and honest feedback
* The primary focus is the interchange between direct line management and their individual teams

While I do not want to concentrate on the 'how' in great detail, some of the key attributes are of this process are:

* Involvement of the whole organisation from the top management down throughout the organisation. The process obviously will not work without the commitment of senior management
* Involving all the management in developing and finalising the questionnaire
* Training the managers how to interpret the results, run effective feedback sessions, focus on key issues and establish action plans.
* Establishing a tight time frame so that the results are fed back as soon as is possible
* The action plans are reviewed by each successive level of management, and the improvement or lack of improvement carefully analysed in the following survey cycle

As far as the results are concerned, the replies to the multiple choice questions are collected and collated with a minimum of demographic data permitting analysis by such factors as age, sex, job, level of management, nationality etc. They are then analysed on a 'bottom up' or roll-up basis starting with groups,( so long as they number at least 8 employees to guard complete anonymity.) reporting to the first line manager. These results are then rolled up to middle management, to the level of whole functions, sites, plants and finally to the level of a complete country organization, until finally a world-wide picture is obtained.

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In reality such a commitment is probably restricted to either mature or highly successful companies who are confident that they will get good results, or have the means to constructively deal with any problem areas. The commitment to the feedback session puts the management in the spotlight if there are major problems. The worst message the company can send out to its workforce is to do such a survey and bin a set of bad results. However only this kind of open on-going mapping can develop the true benchmarks that you need to analyse and compare cross-country data.

**Implications for companies and researchers**

In IBM, there are clearly discernible national norms of satisfaction. Table 1 shows the variations in the country norms on the question concerning workload against personal time. The results seemingly reflect the European stereotypes of the Mediterranean leisure cultures and the northern protestant work ethic cultures.

Distinguishable national norms are found across all the questions with the outer limits of the spread being consistently outside even two standard deviations from the overall mean. Some countries such as Portugal and Finland score consistently and significantly lower than Germany and Austria for example. As these national samples are spread over 16 years of results, it is unlikely that one set of unsuccessful management would be affecting an individual country's result for that length of time.

**External and Internal Factors**

IBM also looked at the external and internal factors that affect the employee morale. Measurements of the internal factors showed that on average there was a consistent 10% gap between managers and non managers. Some of the external indications were that inflation and tax rates have a significant impact on satisfaction with levels of pay, as does the rate of advancement. Unemployment had little influence on the results. This fits in with IBM's philosophy of providing secure employment.

An immediate caveat for a first transnational survey in an organisation is that these external and internal factors differ greatly from one country to another. Furthermore, how they then impact on an organisation may well be culturally specific. These findings mean you cannot compare one country's unmodified internal results against another's, and so you cannot act on an overall company league table. Each country has to be looked at in its own right, and each question benchmarked against previous years results.

Table 2 shows how IBM established control limits for each country on each core question, within which there is a 90% probability that any new results will fall. In order to allow a quick assessment you can say that above the upper control limit the results are exceptionally good, above the historic mean they are normal, below the historic mean is a cause for concern and below the lower control limit they are exceptionally poor. The country by country analysis is saying that it might be far more significant that there is a 2% drop in Norway than a 5% drop in Sweden. Clearly each country has to be judged according to what is probable, based in its own past record, as well as its current cultural environment.
An important fact for the intercultural researcher is that the types of questions being asked here are specific ones about the respondents existing culture, and that on a longitudinal study over sixteen years with the spread of the demographic and national data some persistently different cultural norms have emerged. The increased impact of external and internal environmental factors also had to taken into account. If you are asking about preferred environments, there is no real impact of any environmental factors.

Cultural Determinism in how you ask the question.

In looking at the different examples of types of mapping, are cultural differences generated by asking specific or general questions about actual or preferred environments?

This is significant because a review of some of the cross-cultural research over the last twenty years throws up some interesting observations. Some research has generated definite country clusters, and some has not. In general the types of questions asked in those that have generated differences were general questions which in some cases did not specify that you had to answer according to your actual environment. Examples are the questionnaires of Laurent 8 and Haire et Al 9. Studies that generated no country clusters have tended to ask very specific questions about respondents actual work environment. Examples of this kind of question are in the work of Heller and Wilpert 10, Hickson et Al 11 and Bass and Eldridge 12.

This type of observation led Heller to suggest that cultural responses are at least 'a function of the format used for the stimulus question. Fairly broad questions, not relating to specific current behaviour have tended to predominate in research studies that have found fairly clear cultural differences. 13'  

According to Drucker, what managers do is the same the world over, how they do it, and I would add, why they do it (or not as the case may be) is embedded in their tradition and culture. It seems to make sense that fewer cultural variables will become apparent if you ask managers what they do, rather than how they would like to do it or

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8 see footnote 5


12 Bass B. and Eldridge L. (1973) Accelerated Manager's objectives in twelve countries. Industrial Relations.12 158-171

what the reasons for doing it should be. In other words, the more abstract the question, the more likely it is that differing individual value orientations will emerge.

There is also the emerging fact that the more abstract the statement that the researcher creates, the more likely it is that his/her own cultural conditioning is proscribing the in-built cultural bias of the question. For instance, the statement 'Today there seems to be an authority crisis in organisations', (Laurent) can be seen as presuming that organisations were initially set up as structures to express authority rather than to express functions or levels of expertise and knowledge.

When Hofstede and Bond 14 looked for Hofstede's four dimensions in South-east Asia, one dimension, uncertainty avoidance was missing. It was only after a group of Chinese social scientists developed a check-list, that they found a fifth dimension which they called 'Confucian dynamism'. It replaced the need for an 'absolute' structure of right and wrong which lies behind uncertainty avoidance. Laurent 15 also found that his tool did not give meaningful results in South-East Asia, and questioned the 'etic' approach of using a Western tool to look into an Eastern organisation.

However keeping the possible extent of cultural determinism in mind, even in the IBM work what are you looking at in the cultural norms over time? Are the differences measuring real value differences that impact on people's work or are they a statement about each country's response to the same American based questionnaire being used across different countries? Is it saying that Portuguese are actually less motivated, or is it saying that Portuguese people have a particular attitude towards how they respond to surveys. Even if it is carefully translated, the culturally determined values of the creators of the questionnaire will remain built into it. If you were able to ask the question within the value system of that country, you may find that in fact there were no differing levels of satisfaction, but that means prescribing what the value system of the Portuguese people is before you can look for it! One has to assume a certain commonality of purpose and environment before one can say what you are measuring are real differences.

So where does cultural determinism end and meaningful comparisons begin? This question needs a lot more research and careful evaluation of previous research. It may however only be worth pursuing to the end if you are interested in absolute answers. In the context of cultural mapping, while it is worth raising the question, there is perhaps no need to answer it fully. So long as the map is within the framework of what it is designed to look for, the absolute rightness of the result is not the most important consideration. The main purpose is to sow the seeds of a successful management/employee dialogue. That said, the more accurate the result, the more meaningful and fruitful that dialogue will be.


Comparable Data

Three distinguishable approaches to cultural mapping have been broadly outlined. The highly targeted questions on preferred cultures generating large variations in the description of values; a mixture of general type questions on both preferred and actual such as Hofstede and Harrison use, and the IBM effectiveness survey generating cultural norms on a longitudinal study of an individual's satisfaction with specific aspects of his/her current work environment.

Do these three approaches generate any comparable data? If they don't, then does this mean that none of the data being generated across the intercultural field is creating any comparable benchmarks?. Is each study only useful unto itself in its own precise context?. A cursory comparison of the two sets of results from Hofstede's work and the IBM survey results that at least have the same organisation in common finds no comparability or consistency between randomly selected countries. Other researchers have found that the general nature of Hofstede's dimensions, particularly power distance and its relation to hierarchy, has enabled them to benchmark and validate their results against his.

Perhaps more important is the implications of each type of mapping for the organisations involved.. Imagine a joint venture between German and Portuguese automobile companies, who decide to do an effectiveness survey to find out if the cultures have intermeshed. A one-off approach may show large differences in satisfaction, which the existence of benchmarks from an on-going survey and control limits would say are not necessarily significant, and therefore would not demand some drastic action indicated by the first one-off survey.

What are the lessons to be learnt and the possible routes from here? Any mapping whether one off or on going, is giving some framework within which to begin a discussion about attitudinal and behavioural issues that may have previously be deemed too personal and emotive to tackle. The pitfalls lie in how you ask the question; whether you use general or specific questions about actual or preferred environments. If you choose the relevance of asking specific questions about someone's actual environment, it is not possible to benchmark or perhaps even detect any differences until about the third on-going survey. However those differences then become the safeguard against making hasty moves The only safeguard you have in a one-off survey is to go back to the respondents and question thoroughly the possible reasons for any great variations. If more companies implemented an IBM style survey that could be compared as in a Mayflower organisation, the more meaningful such surveying would become.

Sometime the question will arise as to whether cultural mapping can become sufficiently detailed and sophisticated to analyse which companies in which sectors, in which part of the world are most suited for mergers, joint ventures or acquisitions. Given the present lack of comparability of intercultural research to date, any such diagnostic power can only become a reality through genuine cooperation between intercultural researchers and the cooperation of
participating organisations to create comparable benchmarks against which they can compare and measure differences and change.

**EMEA Morale Index Analysis**
**Historical Means 1968-1984**

**Factor: Personal Time**

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Table 1

**PREDICTION CONTROL LIMITS (90% probability)**

- Historic mean 68-84
- Weighted trend
- 86 - actual results