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OPEN – MINDEDNESS, EMPATHY AND GENDER ISSUES: GOING BEYOND NATIONAL AND CORPORATE CULTURES

Angela Minzoni-Deroche[1], Julie Stal-Le Cardinal[1]
(1) Laboratoire Génie Industriel – Ecole Centrale Paris – Grande voie des vignes – 92295 Châtenay Malabry Cedex, France

ABSTRACT
It has become commonplace to speak about national culture and corporate culture. In last ICED, a workshop ended up by a debate about the impact of deeply rooted national culture characteristics on designers' attitudes. We decided to focus in this paper on the evolution of the perception of the concept of culture. Does the difference made between national vs. corporate culture still make sense in today's working environments? Which are the new trends regarding the concept of culture when used by corporations in understanding knowledge sharing, diversity or design processes? We present here a gender oriented point of view of the perception of culture in design environment. This proposition is based on the analysis of cross-disciplinary research references about culture and on answers given to a survey by executive women engineers.

Keywords: Gender, culture, empathy, human behavior, design

1 INTRODUCTION
In an era of intellectual and geographical globalization, binary debates about the impact of national cultures or corporate cultures on corporate vision, strategy and human relations, seem outdated. Most of the referenced sources indicate that national cultures have a stronger effect on managerial attitudes than corporate culture does or that collected evidence show that individual differences can be much more prominent than cultural differences. But is there any widely shared idea of what corporate culture means, how it emerges and is transmitted, of how long a coherent corporate culture can last? Culture and pragmatic, short lasting business practices and attitudes are they not being mixed up? Do gender approaches, linked to quantitative or qualitative thought streams, can contribute to the rise and development of professional cultures and open mindedness?

In this paper, we focus on main shifts in the definition of culture and their impact in the understanding of factors influencing –even indirectly- design, and explore the way women consider culture within this framework.

2 METHODOLOGY
During ICED 2007 K12 workshop debates about cognitive and cultural dimensions of collaborative design showed particular interest in questions about the impact of deeply rooted national culture characteristics on designers' attitudes and ways of learning and sharing knowledge. A difference between multi-crossed disciplinary and multi-crossed cultural approaches also emerged during the debate, through participants inputs.
In the following of this workshop's debate, led by Margareta Norell, we found useful to give a chronological perspective of the origin and evolution of the concept of culture, including a specific gender approach.

We were guided by three main research questions:
First, is "corporate culture" the right concept for today's and tomorrows corporate organizations facing high design processes expectations? Our hypothesis is that "corporate culture", as it has been stated

during the last thirty years, predominantly decreed by CEO's and managers, is not. New emerging trends, targeted, user centred and gender sensitive seem promising.
Second, do women apprehend culture in a specific way allowing organizations to go past the binary debate on national culture and corporate culture impacts? Our hypothesis was that it was probable, given women's high empathic capabilities[1] and ease with soft, not to say purely qualitative and insightful, even if not measurable, approaches. This question seemed to us particularly important regarding design research as presented during ICED 2007 conference where almost 70% of authors were male and where some trends, discussed more over, can be identified within women and men design research orientations.
Third, to what extent can the recent, less wide covering and more targeted and in depth way to look at cultural issues lead to innovation in the organization of design teams, either virtual or collocated teams? Partly we expected this orientation to be promising because professional focused culture can be learned during initial training and practiced as such , under professional's own steam more than under corporate guidelines .Do women have a particular role to play in this context; are they more prone to explicit culture and to hand it down?

These questions were looked at through three kinds of data sources:

- Cross disciplinary documentary sources about culture: anthropology, management, design, learning
- Mutual informal sharing of personal observations about culture communication within the framework of working groups taking place in the laboratory of industrial engineering at the Ecole Centrale Paris
- Answers to a survey (27 questions) sent by email to a panel of executive women working for the most of them in companies where design is strategic. This questionnaire consisted of pre-coded questions (40%) and open questions (60%). The analysis of these data has been focused on the highest scores of similar answers as well as on discourse analysis.

The participants of this survey were executive women, having responsibilities for business units with supervisory or organizational strategy responsibilities within international corporations developing high standard design practices.

As these characteristics are restrictive, the population concerned by the study was small scale : 20 women working as business manager, production engineer, consultant, project leader, marketing director, R&D director…

Respondents' ages ranged from 27 to 55 years old, most of them having between 35/37 years old. They are French, working for international corporations and all of them held a high level engineering degree.
The main aim of the survey was to start an ongoing process to understand women perceptions about culture in their working environment in order to assess this population awareness about research debates on the subject and find out if there are meaningful new ways in which women could put at good use their sensitivity in this area.
The first part of the questionnaire concerns the way women perceive corporate culture in their working environment. The kind of questions here is: On which occasions cultural discourses on corporate culture are delivered and by whom? Does your company offer corporate culture trainings? If yes, please describe their contents.
It is then suggested to respondents to position themselves on definitions of corporate culture or national culture. For that purpose, we ask them, for instance, which aspects (hierarchical distance, definition of objectives, formal communication, gender issues, attitudes towards errors…) are the most impacted by a culture rather than the other one; either, for a given definition, to say to which culture it relates the most.

[1] Empathy involves both affective arousal and cognitive structuring; flexibility of ego boundaries is shaped by prevailing cultural mores. Having the same gender nurturing figure significantly influences the quality of empathy that develops in females essential to the process of empathy (Jordan [5] p.2). Generally females are more empathic than males because of socialization experiences, early childhood identification, and sex-role identification- all shaped by prevailing cultural mores.

The last part of the questionnaire concerns more the national culture, with questions such as: What are the elements of the national culture (where is located your company) which influence your work the most? What are the elements of the culture of your country of birth which slow down (and reinforce) the performance of the individual (and collective) work/team work?

Even if a small-fire war has been going for years among researchers discussing the pros and cons of qualitative or quantitative ways of looking at corporate culture, research on this field seems to lean mostly on quantitative data, collected via questionnaires (almost entirely pre coded), issued after a very variable amount of in depth interviews. Surveys are carried out either in a same organization having subsidiaries in different countries, either in different companies of a same industrial sector and in a same country (North American, Japanese, and Danish or Dutch corporations figure among those having shown interest in this kind of comparative research). Even if sometimes observations are carried out by management or management oriented researchers, theses are not recorded in detail, contrary to observations carried out by anthropologists when studying, for example, consumers, final users, operators or directory board's attitudes (Jordan [5]).
G. Hofstede et al.[1] (p.289) illustrates an interesting methodological point when reporting on the large scale (116,000 survey questionnaires, 20 different language versions, 72 different national subsidiaries…) IBM study "Paradoxically, the cross-national research in IBM did not reveal anything about IBM's corporate culture, except that it engaged in a survey project of this size". Other articles by Hofstede follow similar core methods and orientation (Hofstede [2], Hofstede & Hofstede, [3])

Another comment (Flamholtz [4] p.274) illustrates methodological pitfalls "However – replicating research- will require a research site comparable to the Banner Corporation. The research site does not require a whole industry, only the existence of a large number of relatively comparable divisions. Nevertheless, this is difficult to do in practice" Flamholtz, again, points another methodological issue: principles defining the desired culture at Banner Corporation (Flamholtz [4] Appendix A). They seem to be so universal that it becomes difficult to consider them as characteristic of Banner's corporation culture (ex: we will make business decisions with our customer's perspective in mind, open and timely communication on all issues (good and bad) is expected and encouraged, our people are Banner's most valuable assets…). A major risk hanging over understanding and reporting about corporate culture seems to be the degree to which it is really culture what is being spoken about and not only teamwork, accountability or standard business practices.

3 CULTURE, AN OVERLAPPED OVERLAPPING CONSTRUCT?

Culture, as an operational concept to describe and understand human learning organizations, symbols, religions, rituals, artefacts, settlements or methods of handling problems was first developed within the framework of anthropological research. Within the framework of this article, we can consider three main stages in the evolution of the concept's definition: the first one, starting around 1930[2], was quite diversified, including descriptive definitions (Benedict [6], Boas [7]), historical (Mead, Malinowski [8]) or normative (Kluckhohn & Kelly [9])[3] one's.

"that complex whole which includes all the habits acquired by man as a member of a society" (Benedict [6])

"culture embraces all the manifestations of social habits of a community, the reactions of the individual as affected by the habits of the group in which he lives, and the products of human activities as determined by these habits (Boas [7])

"culture comprises inherited artefacts, goods, technical processes, ideas, habits and values... culture is a reality sui generis and must be studied as such". (Malinowski [8])

[2] Some early descriptions of culture can be found at the end of the XIX century (Taylor, 1871 *"The Science of Culture"*. Primitive Culture, pp. 1-9. Reprinted in Herbert Applebaum (ed.), Perspectives in Cultural Anthropology, pp. 47-59 (SUNY Press, 1987). They can be classified as belonging to the « descriptive » type.
[3] More than 200 definitions of culture are described and analyzed by A.L. Kroeber and C. Kluckhohn [19]

“by culture we mean all those historically created designs for living explicit and implicit, rational, irrational and non rational, which exist at any given time as potential guides for behaviour of men” (Kluckhohn & Kelly [9])

The second significant stage, starting at the beginning of the 70’, attempted to apply the concept of culture to corporate organizations and management, developed a variety of typologies, questionnaires, indicators and measures, embedding the concept of culture in management vocabulary and introducing the debate, on a binary basis, about national and corporate cultures: which of the one or the other would influence the most people at work, their motivation and their willingness and capacity to change. Authors like Pettigrew [10], Hofstede [1,2,3], Schein [11], Pizam & Reichel [12], Terprstra & David [13], Deal & Kennedy [14] belong to this thought stream.

“culture is the collective programming of the human mind that distinguishes the members of one human group from those of another » (Hofstede [2])

"a pattern of basic assumptions - invented, discovered, or developed by a given group as it learns to cope with its problems of external adaptation and internal integration - that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems" (Schein [11])

Besides personal definitions, authors of this second stage have created multiple typologies, contributing to enlarge vision but also to make culture commonplace. For example, can be cited Hofstede’s [2] initially four and then five dimensions (power distance, collectivism versus individualism, femininity versus masculinity, uncertainty avoidance, long-term versus short-term orientation), Deal & Kennedy’s [14] four cultural types according to the degree of risk and the feedback speed :work hard play hard culture, tough-guy macho culture, process culture, bet-your-company culture, Rousseau’s [15] five rings : artefacts, patterns of behaviour, behavioural norms, values, fundamental assumptions, Harrison’s (see Hampden-Turner, [16]) quadrant model based on the twin axis of Formulation (high-low) and Centralisation (high-low) to give the four cultures of Role, Task, Atomistic (Person) and Power, Kono’s [17] 5 culture types: Vitalised, Follow the leader and vitalised, Bureaucratic, Stagnant, Follow the leader and stagnant, O’Reilly et al.’s [18] seven dimensions: innovation and risk taking, attention to detail, outcome orientation, people orientation, individual vs team orientation, aggressiveness, stability…

According to Wilkins & Ouchi [20], using the term “culture” for both national and organizational cultures is misleading, both being different phenomena. Despite this insightful statement, both are still called cultures and be compared as if their nature was the same.

It shall be noticed that research about factors influencing virtual teams concentrates on four factors: social, technology, business and government[4], focalising more on behavior than on culture but, when culture is concerned, despite its youthfulness, research seems to follow the second stage trend, with binary understanding of corporate and national cultures[5]. Main subjects of interest being how to built trust and how to manage temporal virtual coordination and conflicts. In addition, there seems to be an implicit hope that technology (software constraints) will help virtual teams to “erase” what is perceived to be the negative impacts of intercultural communications[6], not to say physical differences or pronunciation singularities, while keeping “identity” differences supposed to be a source of creativity. However, this field is very recent one and more research initiatives will be needed before cultural virtual patterns can be designed.

[4] http://www.seanet.com/~daveg/articles.htm
[5] http://www.leadingvirtually.com
[6] More radically, the 1995 OECD report of the study group on connections among scientists, agencies and governments in decision making for regional and/or global mega projects, suggests that national cultures are a problem in international collaborative projects.

The third stage, starting in the mid 90's, focuses on more targeted and "situated" aspects like project management, financial performance, design processes, consumer attitudes, gender…. Authors like Kotter & Haskett [21], Anastasopoulos [22], Bierema [23], Petermann [24], Gautam [25] or Strickfaden & Heylighen [26], belong to this trend[7].

The term "design anthropology" can be included into this stage. "Design anthropology seeks to answer the question how do the processes and artefacts of design help come define what it means to human. It explores a wide range of interests related to design practice: how interfaces can be developed based on values of shared learning versus individual study; how the adoption of technologies can lead to greater social equality and inequalities over time; and how not just the words but the meanings behind words change as you design for one culture versus another. These are all issues of the human context that has grown more complex. Design anthropology is the field to help you feel confident in your design decisions by showing you the global ramifications of past, current, and potential communications, artefacts, and experiences as they affect the human context". (Quotation from: www.adobe.com/designcenter/thinktank/tt_tunstall.html). Design anthropology fights preconceptions, using anthropologist's ability to step back and look at the issues being addressed in a larger and deeper cultural context[8].

Authors like Leonard & Rayport [27] (p.113), base their research on observation, in depth practices and view empathic design as a culture shift: "empathic design pushes innovation beyond producing the same thing only better. So for example, computer company managers who have been exposed to a deep cultural understanding of mobility no longer think only of making lighter, faster and more durable laptops. Instead, they are challenged to consider other communication needs as a portable computer might meet." On their side, Strickfaden & Heylighen [27] (p.265), also call for orienting further work about cultural capital to targeted approaches : "Subsequently, we will zoom in on specialized areas of design, such as design for sustainability or design for all, to investigate how the cultural capital of designers and/or design educators relates to their design processes and artefacts". Bierema [24], too, opens a new field of research investigating how the learning processes of corporate cultures occur as well as male's and female's roles in this learning process.

The most striking differences between the three stages mentioned above can be resumed as follows:

First researches about culture were more oriented towards a holistic understanding of small, quite homogeneous, slow changing human groups in which all features were interrelated, without the ambition of making people change and without any value judgment of rightness or wrongness or usefulness. On the business side, this period was characterized by business policies including government regulation, patriotism, World War II.

During the second stage, culture went besides the field of anthropology, gave up holism and became an operational corporate tool among others to lead to change, expressing value judgments and attempting to measure, even if artificially, the non measurable. Quantitative, more superficial and wide covering approaches, took the upper hand over in depth qualitative studies, questionnaires replaced much of the observation practices, subjectivity changed hands: from the observer's subjectivity to the subjectivity of the people answering questionnaires as well as that of people analyzing them. This period coincided with the deregulation of industries, a growing focus on customers, statistical process control for quality, managerial grids and human potential development. In this business environment, corporate culture took place as a mean to strengthen leadership and increase employee commitment.

The third and actual stage coincides with a quite different international policy and business environment where internet, virtual organization, international mergers, flexible organizations, sustainable development, supply chain management and knowledge capital measures are key features making the debate about national or corporate culture less meaningful. On the other hand, there is an

[7] Alongside with this new, more focused trend, the pre existing binary orientation is still developed.
[8] The field of design anthropology is extensively explored by women (Marietta Baba, Rita Denny, Elizabeth Tunstall, Christina Wasson, Lucy Suchman, Susan Squires…)

increasing awareness that firms' changing pace has become too quick for cultural traits to emerge and be transmitted. This stage opens the way to the study and understanding of professional cultures, less wide covering than attempts to define core universal values and practices within an organization are but more in depth and long lasting. As an hypothesis, we can state that more the corporate life rhythm is high and without boundaries, the less there is appropriate time and structure to share thoughts, ideals or attitudes in order to create and preserve corporate "culture". On their side, anthropologists have also changed their thinking about culture to accommodate to new economically and culturally linked areas that cross cut old cultural boundaries and contribute to understand how cultural groupings interface.

Literature about culture gives the impression to make no link with open mindedness. However, this topic is sometimes presented in training oriented literature as the key to advancement in new ideas and critical to teach future generations (Blount [28]). Hare [29], defines open-mindedness as follows: "an intellectual virtue that involves a willingness to take relevant evidence and argument into account in forming or revising our beliefs and values, especially when there is some reason why we might resist such evidence and argument, with a view to arriving at true and defensible conclusions". Even if this description incorporates cultural issues, no mention is explicitly made to culture. We put forward the hypothesis that open-mindedness is a fundamental cultural point to take into account in nowadays business, political and intellectual context. 13 panel participants on 20 put forward open mindedness as a key factor influenced by corporate culture (vs. national culture).

4 WOMEN AT THE CUTTING EDGE

Survey's panel women, not particularly involved in research results concerning culture, intuitively consider national culture as an influent life lasting basis where management and working human relations and behaviours are embedded, whatever these are called "corporate culture" or not.

According to them[9] (see figure 1), gender issues (Q8a), success perceptions (Q8f), attitudes towards errors (Q8j) figure among the key, in depth, structural issues stemming from national culture and having an important impact on professional issues.

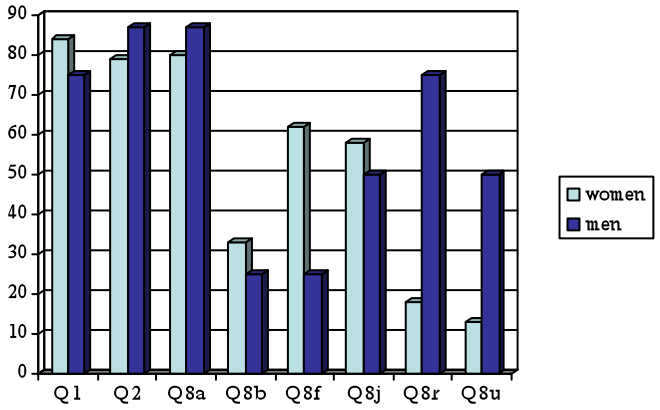

Figure 1. Men and women main features

Hierarchical distance (Q8b), formal communication (Q8r), and organisational features (Q8u) are perceived as more contextual, circumstantial elements upon which corporations can have an influence –as is the case, according to verbal qualitative responses- with open mindedness, objectives definition and decision making processes. Preliminary insights coming from a men population (9 people with similar profile to the women panel) answering to the questions reported in figure 1, show that men and women do both consider gender issues to be deeply embedded in national culture but men consider success representations (Q8f) to be less influenced by national inherited culture than women do. Men also seem to differ from women in regard to formal communication (Q8r) and organizational features

[9] Only answers scoring between 13 and 20 out of 20 are taken into account here.

(Q8u), thinking that these are culturally embedded vs. contextual, circumstantial, corporate driven characteristics.

Q1 and Q2 show similarities between men and women answers: both think that it is mainly chairmen and CEO's (vs, for example, stakeholders or project managers) who carry responsibility about corporate culture. Chairmen and CEO's being men in the majority of cases, we can induce that corporate culture's official arguments and statements have been until now mainly the fact of men.

As for Q2 (occasions on which cultural discourses on corporate culture are delivered), again, men and women think that it is mainly when corporate objectives are announced, the most often by Chairmen or CEO's - mostly men- that cultural issues are explicitly put forward (vs, for example, reorganisation processes, evaluation or project objectives, where culture is no or little put forward).

On the purely discursive, qualitative side, the survey results showed women give particular attention to participating in official and non official situations related with culture re-definition and transmission, they report being often involved in training, hiring policies and practices as well as new collaborators integration monitoring, knowledge management, cross-sector teams management and client relations. Cultural transmission and learning is also related by the women panel to every day attitude, more than to official statements. They report feeling quite free to speak about cultural issues formally as well as informally. Striking sensitivity towards discrepancies is mentioned by the women panel while referring to gaps between the publicly stated "corporate culture" and the day to day, task oriented attitudes and arguments. This fact nurtures the initial hypothesis concerning the concept of culture for corporate practices and values: an inconsistent, short lasting, opportunistic and problem driven system does not appear to fit in with a more in depth, holistic and structuring perception of culture.

Cultural environments where panel's women appreciate to work in are characterized by collaborative practices, confidence and independence, where the chance to keep attentive towards common good and diversity do exist. Women also report perceiving themselves as having a particular capacity in terms of cultural transmission, through their commitment in training as well as the importance they declare giving to functional aspects, to final users, to empathy and emotion, to iterative processes. On their side, men do not seem to perceive this capacity.

Interesting differences between men and women perceptions of culture impacts are mainly shown through verbal answers to the survey's open questions. For example, in women words we can find expressions like "indépendance", "respect", "confiance dans les jeunes", exigence", "éthique", "qualité", "innovation", "collaboration avec les clients", diversité des profiles", "partage des savoirs" as cultural elements favouring individual and collective work where, in men words we find: "bilan performances annuelles", "primes individuelles", "délégation de responsabilités", "outils technologiques de travail collaboratif", "respect", "contrôle"…

Data presented in this paper constitute a non representative -from a quantitative point of view- preliminary exploration and intend to encourage further research on this new topic at an international level. Nevertheless, in regard to the initial hypothesis stated in this paper, we think women's perceptions about culture are not binary, going beyond traditional debate about national or corporate culture, looking at culture as a mix of national cultures, individual perceptions and corporate practices, in line with nowadays intellectual and geographical globalization. It also seems that women will be particularly inclined to choose research topics considering, for example, ethics, learning of culture or empathy's role in design and innovation. Inclined as well, in their professional practice to be acute observers of subjectivity and consider explicitly differences as well as similarities among team members trying to create value out of it in design processes and being aware that culture goes beyond the official top down chairman's yearly strategic speech to nest in every day attitudes and ways to foster cultural momentum.

5 CONCLUSIONS

We have presented until here a mainly feminine point of view that should be challenged and enriched by men's perceptions in regard of culture. These perceptions will be explored through focus groups and surveys in a near future.

If the concept of "corporate culture" originally comes out from anthropology, our point of view is that little by little, key aspects of culture like heritage (and the necessary span of time to give sense to it) and apprenticeship, have been left apart to the profit of a "hard", rapid changing normative approach focusing on values, rules and whatever measurable best practices having been successful - even if just for a few weeks- in an organization. New trends looking at culture more as the soft, interwoven whole set of practices and beliefs in targeted professional situations represent, on our point of view, a promising way to take advantage of the concept of culture. We feel that binary debates on national culture or "corporate culture", the first supposed to stem from values and the second stemming mostly from practices will not yield reliable results in expanded, open and global business contexts. In women's view, culture is more a matter of understanding diversity, contexts, situations and introducing new ideas than a matter of indexes, scores, winners and losers.

It is generally admitted that corporate ways of looking at finance and profit, of organizing work or deciding about planning or evaluation grids are mostly the fact of upper management, functions occupied in a large part by men. As far as design activities are concerned, they also seem to be male driven. A look at 2007 ICED articles, allows setting out that some subjects like training, ethics, networking, cultural capital and cultural influences, intuitive use, participative innovation, collaboration, are mainly developed by women whereas men would rather focus on aspects like concept mapping, quantitative representation, automatization, modelling, competition, optimization, decision support… It can also be noticed that the 14 authors signing more than 5 articles (up to14 for some) are men, within only one woman exception.

These considerations coincide with referenced research and survey's results on women's role in culture where they have shown to be empathic, astute observers, active learners through other people and networking, valuing experiential and informal learning, the latter being essential to transmit culture through time.

We suggest that women's gender sensibility towards culture be explicitly taken into account in design researches and practices given the important changes in demographics, the flexible and more and more diverse but nevertheless integrated world we live in and the stressing need for design ethics. This is directly illustrated in this international congress by the fact that for the first time in ICED history a topic called *Culture & Empathy* is proposed, where our paper subscribes, with a focus on *Gender*. As for the theme, we feel that *Human Behaviour in Design* is the most appropriate one.

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Contact: Angela Minzoni
Angela.minzoni@ecp.fr
Ecole Centrale Paris
Laboratoire Génie Industriel
Grande voie des vignes
92295 Châtenay Malabry Cedex
(33) 6 81 25 09 17
(33) 1 41 13 12 72

Julie Stal-Le Cardinal
Ecole Centrale Paris
Laboratoire Génie Industriel
Grande voie des vignes
92295 Châtenay Malabry Cedex
France
(33) 1 41 13 15 69 –julie.le-cardinal@ecp.fr

Dr. Angela Minzoni-Deroche is a business anthropologist and part-time professor at Ecole Centrale

Paris, mainly involved in cultural impacts on training.

Dr. Julie Stal-Le Cardinal is a researcher and assistant professor at Ecole Centrale Paris. Her field concerns mechanical engineering. She works on team diversity and project management. She coaches project managers in companies concerning the management of their project and the choice of actors in teams.