INTRODUCTION

Since the late nineties, the theme of ‘Culture’ was seen to become more important within the international CIB-community. The existing W092 ‘Procurement Systems’ established a special Task Group ‘TG23 Culture in Construction’ to explore and investigate in more detail, several aspects related to this theme. Dr.Richard Fellows from University of Hong Kong in HKG and Dr. David Seymour from the University of Birmingham in UK, were the ‘driving forces’ within the CIB-community for this theme. They are both specialists in international procurement and business-cultural issues. Within the W092 (as ‘the’ working commission where experiences and theories about contractual relationships and strategies within procurement-issues are investigated, developed and exchanged), the culture-issue was found to be increasingly recognized as one of the important reasons for specific difficulties within ongoing construction processes (as was also experienced by for example members of CIB W065, ‘Construction Management’). Dr.Richard Fellows and Dr. David Seymour became the first joint-coordinators of this TG23. It also lead to one of the first TG23-publications, defining perspectives on culture in construction [Fellows & Seymour, 2002].

DEFINING ORGANIZATIONAL CULTURE

Within daily operations of industry, the influence of ‘culture-related’ topics is quite actual, although for several academics and practitioners it is still often considered as a kind of ‘black box’. And not only in the case of construction industry, but also in other segments of the industry these approaches are still actual. Nevertheless, since early 1980’s, Hofstede, as one of the ‘founders’ of the further research into ‘business-culture’ or ‘organization-culture’ (in the following also noted as ‘culture’) has given serious attention to it, especially because of the ongoing globalization and international and resulting inter-cultural collaboration. Within this respect, Hofstede defined ‘culture’ especially as follows [Hofstede, 1980]:
“Culture is the collective programming of the human mind that distinguishes the members of one human group from those of another. Culture in this sense is a system of collectively held values.”

Also other scientists considered ‘culture’ as an increasingly important topic for understanding human interactions within business-environments. One of them, Schein, gave the following comparable definition about culture [Schein, 1992]

“Culture is the deeper level of basic assumptions and beliefs that are shared by members of an organization, that operate unconsciously and define in a basic ‘taken for granted’ fashion an organization's view of its self and its environment.”

Altogether they more or less indicate that the individual human being has collective values and behaviour, which can be recognized when analyzing the (members of) social groups to whom they belong. And in the case of construction industry, a social group may be considered as the industry-segment as a whole (e.g. leading towards a professional culture), the companies within this industry-segment (e.g. leading towards a business-culture) and the geographical region of activities (e.g. leading towards a national or regional culture), as well as the individuals within it (e.g. leading towards a family-culture). And although there can be many other levels of attention distinguished, these all together give the impression of the complex playing-field in which culture-issues are emerging and influencing behavioural interactions within daily life.

CULTURE IN CONSTRUCTION: WHY IS IT AN IMPORTANT TOPIC?

Within the daily business of construction industry, the business is about money and projects. However, all these issues cannot be organized without having the right people on the right positions. And because people do interact via (behavioural) communication processes, they are mutually influencing daily business-life. Especially, because obviously differences between the cultures of groups in general do lead to differences in behaviour of the people involved, this indicates that it is an important topic for construction industry; not in the least, because construction industry in general is considered as a people’s business, thus being influenced heavily by human interactions (as is also the case in other businesses…). And such behavioural differences as a result of cultural differences do result in practice to misunderstandings between people, between businesses, etc.; thus incorporating a certain risk for conflicts during construction processes, probably causing serious trouble for (construction) projects. And this also results into dissatisfaction for the several parties involved…

Therefore the attention to culture as an influencing topic within daily (construction) business-environments has become an increasingly serious topic, because the nowadays world is increasingly globalizing, resulting in a continuous growth of multi-cultural human interactions. So from this point of view, the capability of handling the culture-issue within (construction) processes can in fact be seen as a kind of risk-management tool: Using it can reduce the risk for dissatisfaction of all parties involved, by reducing the risk of behavioural miscommunication.
THE START: TASK GROUP 23 ‘CULTURE IN CONSTRUCTION’

One of the first workshops within this TG23, organized in 2001 in Enschede in The Netherlands by Dr.ir. Wilco Tijhuis from the University of Twente in NL, was entitled: ‘Culture in Construction: Part of the Deal?’ [Tijhuis et al., 2001]. This was not only seen as a fact, but merely as a challenge to get culture on the agendas for further research. Co-organized by Dr. Richard Fellows with assistance from Dr. Anita Liu from University of Hong Kong, this two-day workshop was an exciting experience. It brought together academics as well as practitioners from several disciplines: Construction, Sociology, Economics and Business sciences. In the end it lead to the conclusion that ‘culture is indeed part of the deal’ but it needs a sound structure within which it can be categorized more into detail, leading to the development of some form of tool for handling culture within the actual business-environment. This lead to existing tools such as those developed from Hofstede [Hofstede, 1980] and Cameron & Quinn [Cameron & Quinn, 2006] etc. were seen as a good basis, but it needed more ‘ongoing translation’ and application to construction-related themes. TG23 started to dive into this adventure, together with the positive help of Dr. Anita Liu, who became also one of the lead-authors of a joint publication about power disposition in project procurement [Liu, Fellows & Tijhuis, 2002].

An interesting example of analyzing the ‘culture-issue’ within a specific construction environment, is the publication of the 3C-model™, developed by Tijhuis which used a partly-participative action research-approach [Tijhuis, 1996; 2001]. During this research-project it was established that the role of ‘culture’ (represented as ‘contact’) influenced not only the project-organization (represented as ‘contract’) but also the technology/deliverables (represented as ‘conflict’). See also figure 1.

![Diagram](image-url)

**Figure 1:** The 3C-model™, representing the interconnected relationship between culture (contact), project-organization (contract) and technology (conflict) [Tijhuis, 1996; 2001].
This interconnected relationship was derived from several international case-studies, and it helped to place the issue of ‘culture’ as a key concern in the international construction-industry. This 3C-model™ is one of the tools being used in structuring and analyzing culture-related topics within W112’s work. It may help to describe the several impacts of culture within the practical process and project environments. Other examples of basic structuring and analyzing tools, used within W112’s investigative analyses, is the so called OCAI-list™ (Organizational Culture Assessment Instrument) from Cameron & Quinn [Cameron & Quinn, 2006]. It is being used to collect data and structure it within an international comparison-approach. After Hofstede’s research on cultural dimensions [Hofstede, 1980], which has internationally set ‘the’ standard, such tools altogether form the ‘toolbox’ for W112.

However, using these kind of research-tools does not mean that W112 has reached a state of ‘completeness’. On the contrary, all such tools are only a means of helping to reach a step-by-step improvement in the understanding of culture’s influences in construction. As one of W112’s aims, the need for developing improved research models is therefore still an important goal to be achieved. By analyzing daily practices within the construction industry across the world, and structuring the results according these kind of tools, will give the chance of getting to know better the role of culture and to ‘predict’ the outcome of future multi-cultural construction processes. It will not only lead to a better understanding and insight for academics about culture-related topics, but also lead to the better management and coordination for construction-professionals.

**NEXT STEP: WORKING COMMISSION 112 ‘CULTURE IN CONSTRUCTION’**

Over time, the organization of the coordinator-team changed because of the retirement of Dr. David Seymour, a new joint-coordinator was appointed: Dr.ir. Wilco Tijhuis who had been actively involved in the international construction industry and developments. His Ph.D-thesis from 1996 [Tijhuis, 1996], about international construction processes and strategies, investigating and analysing the influence of business-culture’s within daily construction-practices, was seen as a sound basis for further input regarding this topic.

As the culture-theme was seen to become increasingly more influential in construction, members of other CIB-groups also discovered TG23. Gradually the TG23 coordinators, together with W92 coordinators, came to the conclusion that the TG23 had fulfilled its task correctly and had there was strong justification for it to be established as a specific working commission. In one of the CIB-board’s meetings in 2005 therefore it was decided that TG23 should became a Working Commission. W112 ‘Culture in Construction’ was born.
Recent Events: Conferences and Workshops

Within W112, there is an existing community of enthusiastic researchers and practitioners, all focusing on one thing:

- To learn, to exchange, to investigate and to experience developments and improved insights about business-cultures and its influences within the wide range of construction-related themes.

This leads for example to joint publications, being part of larger (book) publications or also stand-alone reports etc. See also for example a CIB-report on ‘Enabling Project Team Culture’, as part the CIB Priority Theme ‘Revaluing Construction’ [Fellows, Grisham & Tijhuis, 2007]. These activities are assisted by the organisation of conferences and workshops, often part of (larger) CIB-conferences. The aim has been to organize a W112 conference and/or workshop at least once a year and within different geographical regions of the world. For example;

- In 2003 in Rome, a paper was presented on an international conference about structural and construction engineering, where still the opportunity was used to pay stronger attention to the culture-issue [Tijhuis & Fellows, 2003]. The theme was defined as: ‘System based vision for strategic and creative design. The role of culture as a key influencing ‘driver’ within construction processes was addressed. This was not just seen from the viewpoint of ‘being a problem’ but from the viewpoint of ‘being an opportunity for better managing and coordinating multi-cultural (i.e. multi-‘national’ but also multi-‘regional’) construction teams.

- In 2006, the W112 organized its own first conference, in conjunction with other working commissions, in Dubai. Hosted by Dr. Mohammed Dulaimi, this conference was a great success. One of the keynote-speakers, Dr. Geert Hofstede was invited. As one of the early developers and adapters of business-cultural issues, he can still be considered as the ‘father’ of this theme. The theme was defined as: ‘Sustainable Development through Culture and Innovation’. A considerable part of his input focused on his experiences with investigating culture-related topics within business-environments. He also described the need and challenge of collecting practice-data, leading to a better understanding of culture-related circumstances. This is especially important given there is a continuous need for updating the existing theories and models, by using improved behavioral data. Not least because e.g. (groups of) people seem to change themselves continuously because of e.g. the dynamic environment, extended globalization/contacts, etc.

- The next large event was the conference in Shanghai, which took place in 2008. It was hosted by Tongji University. This International Conference on Multi-National Construction Projects was organised by W112, together with the conference host, Tongji University, Shanghai, China PR [Tongji University, 2008]. The Theme of the conference was “Securing High Performance through Cultural Awareness and Dispute Avoidance”. The conference was supported by CIB groups W113 – Law and Dispute Resolution, TG59 – People in Construction, TG64 – Leadership in Construction, TG67 – Statutory Adjudication in Construction, TG68 – Construction Mediation as well as the ‘China Network’ of leading universities. It was good to see that the Chinese
and Asian participants at this conference where committed to learn and exchange more from the culture-topic. It was a successful conference with a lively discussion. Another special fact during this conference was the official retirement of Dr. Richard Fellows as joint-coordinator. The main conclusions from this conference where the need for a further structuring of data-acquisition, for example by using existing models. A workable format is for example the OCAI-list from Cameron & Quinn, which is well known internationally amongst business-sociologists, etc. Parallel with this, it was decided to set up and expand relationships with other CIB-working commissions and task-groups, especially those who are focusing on ‘human-related’ topics.

- More recently, W112 at the tri-ennial CIB-conference in Salford/Manchester in 2010. Hosted by Prof.Dr.Peter Barrett, this conference was a strong example of a multi-discipline approach within CIB, where several of the involved working commissions and task-groups were presenting their ongoing activities and results. The overall-theme of this congress was: ‘Building a Better World’. The theme of the W112 workshop was chosen as: ‘Understanding business-culture as a ‘driver’ for building a better world?!’. It was concluded from this workshop, regarding the official goals of the group, that it is useful to add ‘diversity’ as one of the issues with which W112 is considered. Additionally it was analyzed that, during the congress, there are just a few papers regarding corporate social responsibility etc. From this viewpoint, the ‘context’ against which the W112’s topics are researched and analyzed plays a significant role. It was decided that the recent work regarding the OCAI-analyses will be kept on-going. Parallel to this, the role of the R&D within W112 is much more focused on structuring a framework, investigating experiences, leading towards lessons learnt, etc. Especially, culture-issues have much influence in other research-topics, where ‘human interaction’ plays an important role.

- The latest CIB W112 event was held in September 2011 during the recent international conference ‘1st International Construction Business and Management Symposium - ICBMS’, organized by the UTM Razak School of Engineering and Advance Technology, located at the Universiti Teknologi Malaysia (UTM) in Kuala Lumpur [ICBMS, 2011]. This conference was organized and hosted by Prof.Dr. Christopher Preece and Dr. Mohamad Syazli Fathi. Participants came from all over the world, with especially those participating from the Asian and Pacific region. Interesting exchange of views, theories and practices in the field of business-cultures took place, leading to a better understanding of multi-cultural and cross-border activities and practices within international construction industry.
ACTUAL ISSUES: CULTURE AS PART OF THE DEAL

After Dr. Richard Fellows’ retirement of his function as joint-coordination of this commission in 2008 during the conference in Shanghai, and after a period of searching and pre-selection, the new joint-coordinator was officially appointed by the CIB-board and started her official function: Prof. Dr. Anita Liu from Loughborough University in the UK and University of Hong Kong in PRC. During the recent meeting in Salford/Manchester in 2010, a new strategy for W112 was discussed with the participants. Especially because of the growing awareness about influences of (differences between) culture in construction (also influenced by the growing importance of the business-culture’s influence in a growing multi-national and globalizing business-environment) the W112 has decided to structure its focus as follows:

• “The scope of this Commission reflects the array of important business concerns deriving directly from underpinning culture – organizational climate, ethics, corporate social responsibility (CSR) and organizational citizenship behavior (OCB). The construction industry, as field of interest, is considered on international, national and local scales, focusing on the processes, (project-experiences, and the parties involved. Given the dynamism, the scope is maintained under constant review” [CIB, 2010-2011].

The future steps within this focus are defined as follows:

• Understanding business-culture as a ‘driver’ for building a better world;
• Maintain and extend practice-data (‘inventory’);
• Better understanding theoretical backgrounds;
• Integration practice/research internally/externally;
• Strengthen W112’s relations with other (CIB)-groups;
• Publications & Public Relations.

This approach makes the awareness of culture’s influences still stronger in becoming ‘part of the deal’ within construction related topics and environments. The culture-issue influences several parts of the (human) environment: In fact that there are human interactions in for example business-relationships etc. Within the construction industry, with its strong impact on the (human) environment, cultural influences can be found before, during and after the whole construction process, and between all stakeholders and shareholders involved, directly and indirectly. Focus for W112 is the construction-industry’s business-environment, as being ‘the’ core-business of CIB.

Remarks:
• One of the latest examples with published tools for a better understanding of culture’s influences on the construction industry can be seen in the recently internationally published book [Tijhuis & Fellows, 2011]: ‘Culture in International Construction’
• This book focuses not only on academics and students, but especially also on practitioners of industry within the managerial, strategic and operational context. It focuses on multi-cultural and multi-national construction business-environments, and makes it therefore a valuable source of
insights and experiences in these fields of business. It describes and analyzes actual theories for business-culture related topics, illustrated with clarifying examples from daily construction industry within an international scope. Several lessons learnt are presented, based on the thorough descriptions and analyses of business-cases within construction and development related situations.

- The book has been published by Routledge / Taylor & Francis / Spon Press, from United Kingdom and USA, in July 2011.

RESUME

The topic of ‘culture in construction’ is an endless source of challenges and opportunities, being the basis for a better understanding of all the parties involved within construction industry. This is also fed by the growing influences of for example social media, internet etc. as these wireless/internet-driven tools are directly influencing people’s opinions and behaviour. Recent movements in for example the Arabic world show the power of such social media, whereas on the other hand it is also hard to prove their direct influence themselves. Nevertheless, as long as people are using this kind of media, they will be getting influenced by it. Communication within its (differences of) business-cultural context therefore influences and interferes immediately with human interactions in academic and business-environments. For academics and practitioners to become more aware of the influence of business-culture in daily construction environments, W112 ‘Culture in Construction’ aims to continue to help through sharing the insights and information between academics and industry. Activities of W112’s members, such as developing and optimizing tools for further analyzing and categorizing culture-related issues within daily construction-processes and environments, will help academics and practitioners mutually to better understand the human interactions within the construction business. Thus altogether leading to a serious possibility for a reduction of risks and accompanying (failure) costs, with higher profitability. And finally therefore leading towards a better satisfaction for all parties involved, really creating ‘value for money’.

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