

International collaboration in Construction History: A gambit towards the debate

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Techniques, like ideas know no boundaries; they are, what Tom Peters so aptly called, «serial border crossers». In his book, *Building the Nineteenth Century* (1996), Peters draws a distinction between the related concepts of «transformation» and «translation» of information, defining the former as the remolding or alteration of the same object while remaining within the borders of a field, and the latter as the transference of the same «train of developmental thought» onto another object across a field border in a process that he calls, «associative or matrix thinking» (Peters 1996: 106). While accepting these as useful polar positions for conceptualizing technological development in the abstract, it could be argued that there is another conditioning factor which comes into play whenever technological concepts are put into practice, and that this is the essential criterion determining whether «border crossing» succeeds or not. This necessary process of cultural diffusion conceptually falls in between translation and transformation, assumes the characteristics of both modes and happens when novel concepts cross cultural or social boundaries. It is, in effect, the final phase of Abbott Payson Usher's «genetic sequence» for mechanical invention, namely «critical revision»: «Newly perceived relations must be thoroughly mastered, and effectively worked into the entire context of which they are a part. The solution must, therefore, be studied critically, understood in its fullness, and learned as a technique of thought or action» (Usher [1929]1954: 65).

This particularity in the uptake of new concepts is well understood in the arts. In architectural history, for example, the point is illustrated by the way in which the classical idiom, out of necessity acquired local accents as it spread across Europe in the wake of the Italian Renaissance; it could not have been assimilated otherwise. Technological ideas may be one step further removed from the socio-cultural sphere of influence than stylistic ones, but they cannot escape it altogether. The craftsman adapts either his technique or the tool he uses (or both) in order to produce work in accordance with the demands of a new cultural situation. In this respect the much heralded differences between the handicraft and mechanized systems seems to be a question of scale and pace rather than any intrinsic dissimilarity; machinery too is applied in ways that suit a particular society or cultural group, and in the process the organizing principles that govern the mechanism as well as its compositional structure get adapted. As with the handicraft systems there is potential for both positive and negative application.

Construction, in essence, is a process of assembly: the putting together of separate components, according to a specific pattern, so as to make one entity at a given point in time. This may or may not be a single thing; it may or may not be a permanent structure. Because the building process is inherently dependent on technique, something that requires continual renewal in order to retain its contextual relevance, it is susceptible to social and cultural

influences. Constructional events therefore cannot be studied in isolation from their human context, they must be seen as part of a continuum of societal development. The historian studying this phenomenon has to allow for different perspectives on the relative position that technology occupies in the general scheme of things: the conception of what constitutes «technique» at various points in history is inevitably different and it becomes one of the defining attributes of an era.¹ It is generally accepted, for example, that there are profound shifts, in attitudes to as well as application of technology between the pre-industrial and industrial societies, and it is beginning to look like we are entering another phase through the introduction of digital technology. These movements occur over long periods of time and, within particular influence spheres that are circumscribed by prevailing networks of communication. Ideas and practices are adopted according to local circumstance, but their intrinsic character is shaped by external influences as well as internal conditions.

It follows that, in order to get a balanced and «multi-dimensional» understanding of the development of building technology during a historical period —say for instance post-Renaissance/pre-Industrial Europe— in addition to gaining a thorough grasp of the instrumental nature of the field within its local contexts, one has to familiarize oneself with the full range of relevant external contacts to which people from this era were exposed to, understand how these relations worked in practice and what place they occupied in the minds of contemporaries, as well as establish the chronological sequence of events. Given the complexity of this revolutionary phase in European history and the interactive nature of social relations, the paucity and the wide geographical distribution of the source material on technical subjects, the range of languages and sub-cultures involved, this task seems beyond the reach of most individual scholars other than for narrowly drawn specialist topic areas. These complications helps to explain why there are as yet no comprehensive overviews of major developmental themes in construction history across cultural and language boundaries for the period in question.² This may be due to the relative novelty of the field of study; in time, it can be argued, such works will emerge naturally from the slow incremental build-up

of a knowledge base by scholars working independently. However, the recruitment of sufficient scholarly talent and skill is likely to remain a problem for a subject as obscure and technical as this one and, considering the apparent reluctance of technological historians to engage with the narrative tradition of humanities research, the prospects of such overarching themes being addressed in the immediately foreseeable future are not good, that is, if it were left solely to the vagaries of ad-hoc individual enterprise.

Construction history needs its grander narratives and general surveys if it is to be accepted as an academic subject of the first rank, written by people with an insider's grasp of relevant internal detail and its relation to the whole, but who can also relate the topic to broader external themes. Others do not seem to shy away from taking such wider perspectives in areas of research closely related to ours, a recent example being, James A Farr's *Artisans in Europe, 1300–1914* (Farr 2000). If they want academic recognition construction historians too have to become bolder in their approach to the subject-area in order to gain a higher profile, and participate as full-blown «construction historians» in academic debates, not as exponents of other disciplines who happens to study historic building construction, amongst other things. Ultimately, however, this subject status will not be achieved simply through the action of individual scholars working on their own. An «umbrella organization» of some sort is required that could act as a champion for the subject and provide a platform for cooperation and debate - one that rests on a sound knowledge-base which, as befits the nature of its subject material, transcends national/ cultural/ linguistic boundaries, as well the tendency towards insular specialization prevalent within the building world.

The, *Call for Papers* for this conference quite rightly draws attention to the fact that much of the groundwork for creating this knowledge-base has already been done by specialists from a variety of disciplines and nationalities. However, this information has to be collated, tested for veracity and disseminated. Remaining areas of ignorance need to be identified and researched so as to establish a comprehensive reference base. It is not feasible to rely on individual enterprise for this task; only an organized group of people operating according to an agreed code and with agreed objectives can manage

such a long-term undertaking. An over-arching framework for communication and action, once set up, could channel resources more effectively and thus ensure continuing collaboration in the future. Not only does an association of like-minded scholars, working together to further a cause significantly improve the chances of a subject-area being taken seriously by the international academic community at large, it also increases the scope for more ambitious undertakings. For example, one of the most intractable problems that the construction historian, studying a particular historical event in one locality, faces is how to gain access and insight into parallel developments that took place elsewhere, so as to determine cause and effect relationships across borders. Very few scholars individually have all the resources required to work freely across relevant geographical, linguistic and subject boundaries and, consequently, the progress of research into the subject-area has often been curtailed in the past. An international grouping of scholars could facilitate such cross-border comparative research projects relatively easily, thereby producing a more complete picture of historic developments as well as enhancing our capacity for understanding the nature of building as a universal human activity.

So far I have concentrated on the intellectual argument for establishing a permanent framework for international cooperation in the promotion of construction history as a field of study, because it seems to be the decisive factor. The point I wanted to make is that it is not only more interesting to explore the subject from this angle, its very nature also seems to demand a broader perspective in order to be properly understood. There are, of course, other social and cultural reasons for supporting such a move, but these are too obvious to require elaboration. As for the manner in which a «supra-organization» or international framework like this might be created, the two main alternative routes appear to be: a «fast-track» solution involving the immediate establishment of a centralized body with a home-base or headquarters, a clear set of goals and the appropriate mechanisms to implement the agreed objectives; or, an incremental or staged solution, starting with an initial «contract» amongst the various interested parties that provides a framework for building up an over-arching organizational structure

over a period of time. Of the two the former is obviously the more dynamic solution, but it is resource-intensive and demands a secure constituency as well as a clear vision at the outset of what the aims and objectives of the movement are. The latter option has the advantage that it can start small, build on a range of existing facilities thus allowing an interactive and shared support network to grow «organically» according to the evolving needs and aspirations of the academic community. While these two development patterns will probably produce differences in the character of the prospective organization, their ultimate goal is the same. They are also equally dependent for their successful conclusion on the long-term commitment of participants to cross-border collaboration and the sharing of resources. If the congress decides in favour of this motion it might find the second route to be the more sensible one to take in view of the resources question, and allowing for the need to respect the identity of already existing national interest groups that have emerged in response to local demand. Whichever is the case, such issues need to be addressed at this meeting so as not to miss a golden opportunity for setting in motion an important new phase in the development of construction history as an academic subject.

Exactly how this is to be executed is the business of the congress and its organizers. The most useful thing that could be done in advance of public debate of the issue is to outline a possible scenario for such a development, identifying the principal factors that need to be taken into account. With this in mind I would like to suggest that the domain of any society or association aiming to promote the cause of construction history nationally or internationally should have the following range of activities as a standard agenda (no particular order):

- The raising of awareness of the field/ discipline within the building industry and related educational programmes.
- The identification and definition of subject boundaries and objectives.
- The representation of the field/ discipline as a significant cultural activity within the wider community.
- The coordination of an information exchange network on the topic.

- The promotion of academic research and the dissemination of its findings.
- The collation of archival material on the subject and the securing of its preservation.
- The establishment of a platform for public debate on issues related to the topic.
- The creation of a framework for social discourse amongst members and other interested parties.
- The formation of links with other organizations and bodies concerned with the historic built environment and its conservation.

Fortunately, because construction history and its practitioners have a wide reference base, there is no shortage of experience of good precedents for creating such an organization. An excellent general model in terms of presentational style, range of activities, and the high academic standards it sets would be the Society for the History of Technology (SHOT). Other international bodies like Icomos and Docomomo offer interesting alternative organizational models with different, but related objectives. Although smaller than these the Construction History Society (CHS), founded as a charity in the UK in 1982, but with an increasingly international outlook has the advantage of having a similar operational brief to that which is outlined above, with many of the vehicles to implement such an agenda already in operation. Experience gained from running the latter and other organizations and interest groups that have been formed to promote the cause of construction history nationally, notably the Sociedad Espanola de Historia de la Construccion (SEHC) in Spain, and the Associazione Eduarda(?) Benvenuto (AEB) in Italy, should provide a firm foundation upon which to build a new international network. It is already clear that whatever emerges on the wider front, there will be a need for national branches to look after the particular needs of local constituencies, so some sort of composite, decentralized structure seems to be the likely outcome for the projected international body.

If that is the case then the congress should turn its mind to starting the process of constructing the framework for collaboration amongst scholars from different countries. It could perhaps begin by concentrating its initial efforts on a selection from the different channels by which it would seek to put its various objectives into effect, those for which there

are either already a working prototype, or good models to draw upon. Four such vehicles immediately spring to mind: 1) An academic journal, 2) a web page/newsletter, 3) an annual series of symposia and, 4) a bi-annual summer school.

1. In *Construction History*, the annual journal of the Construction History Society, currently running to Volume no. 17, the international group already has one of its keystones in place. It is the only *international academic refereed journal* in existence devoted to construction history and has a solid reputation. It could easily be expanded to become the mouthpiece of an international community of scholars in the field.
2. A *web page with an electronic newsletter*, run by one of the national associations with good computing facilities is essential right from the beginning. It would focus on polemic and the diffusion of useful topical information (bibliographical updates, relevant exhibitions & events, research in progress, grants etc.). Again an existing facility of one of the national groups could be expanded which, over time, might develop into an international databank for the subject.
3. Likewise, it should neither be too difficult nor too expensive to set up an *annual series* of short, focused *week-end seminars or «colloques»* for between 50 and 100 people, on selected specific themes with invited speakers. Ideally they should concentrate on the comparative analysis of themes common to different societies and aim for the highest possible level of academic debate, with the edited results published and distributed. The venues for these could rotate and sponsorship should be sought for individual events so as to keep the costs down in and facilitate wide attendance. Already existing construction history groups or educational institutes could act as hosts, or one might base them at international conference centres like the famous «Monte Verita» complex, near Lugano on the Italian-Swiss border. These events could become a sort of flexible «think tank» mapping out the territory for the subject. An impressive model exists in the annual «colloques» organized by the Centre D'Etudes Superieures

de la Renaissance at Tours University, including one of particular relevance to construction historians: «Les Chantiers de la Renaissance» (1983/4). The proceedings were published in 1991 (Guillaume 1991). A notable series of annual colloquiums on the theme, Architecture & Behaviour, is run by the Federal Institute of Technology, Lausanne, Switzerland, published as, *Comportements*.

4. A regular series of *bi-annual summer schools* could be organised on much the same lines as the seminars, and would be complementary to them. One could envisage these to last for about a week and be built round visits and expert analysis of interesting historic structural developments or themes, e.g. railway architecture, dockyards, cathedrals etc.

This incremental process of building the network would not only be reasonably economical to implement; it would also provide the widest possible participation at different levels, from the individual to the institution. In my experience the success of this kind of organization depends very much on the enthusiastic participation of high calibre individuals (supported by their home institutions), and everything possible should be done to ensure that there is maximum opportunity for individual scholars and others with a subject interest to participate creatively. Periodic congresses like the one in Madrid are useful for taking stock and to determine general future policy. Again this could eventually become part of a set pattern to complement the other events, once these have been put on a firm footing. Regarding overall

management: an open self-regulating network like the above requires minimum central bureaucracy —a «kitchen-table-style cabinet» plus a postal address, with an international advisory board like the one created for this congress, meeting once a year will probably suffice. The important thing is to keep the collegiate spirit of the academic community alive.

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NOTES

1. Merritt Roe Smith (Smith and Marx 1994: 1-30), for example, discusses this issue in relation to post-Republican American culture.
2. Bertrand Gille's classic, *The Renaissance Engineer* (Gille [1964] 1966) is a rare attempt at exploring a broader technological theme for the era.

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