

Annexe H.2

Relationship matrices

Discussions within the Heritage Think Tank on the issues of “heritage” in contemporary society, the role of the profession and the complexities of teaching in schools of Architecture frequently found themselves cross-referring one set of considerations with another. It was observed that this was characteristic of “wicked problems”.

It was decided that the participants in the Tank Tank would prepare a spreadsheet, using agreed categories, that would chart relationships between factors from their own perspective – a Relationship Matrix.

Thus the matrices were seen as a way of capturing the complexity in which heritage related teaching and professional activity took place, and as a way of contextualizing the input of the different actors within the Think Tank. In the first instance, relationship matrices were drafted by participating interests in the Think Tank. The matrices plotted the issues identified in Section A, as they were elaborated in the Genoa seminar, against the institutions, agencies and stakeholders involved. The matrices prepared by schools worked from the perspective of the focus adopted in their case studies: the matrix prepared by the EAAE representative took a broader perspective. At the conclusion of season 3, the matrices were merged to provide a comprehensive mapping of the “wicked problem” of the teaching in the field of heritage.

The matrices plotted factors such as: needs, lacks, obstacles, opportunities, solutions measures, horizon times and resources against “actors” at different levels: EU, National and Regional authorities, Ministries, Academic Institutions (school, departmental, university levels (teachers, students, research including profession-based research); the Profession (professional chambers, other institutions) and Society (heritage agencies and interests, building owners, local communities). The resultant matrix is included below.

While it is recognised that the inputs were very limited, nevertheless the composite matrix demonstrates the wickedness of the heritage issue as it is faced by the architectural profession and by schools of architecture. In addition, it provides an indication of possible audiences for the findings of the work of the Think Tank. Thus apart from schools that can gain from the work directly, educational authorities and institutes/local chambers of architects can appreciate the interlocking factors in the field and acquire an appreciation of the inter-locking of factors that could prompt decisions more attuned to the changing realities.

Wicked issues in conservation of architectural heritage

Strategic concerns: Knowledge development and application as regards inherited environments: Protection; Reuse and appropriate creative adaptation; Sustainability; Interdisciplinarity; Understanding of transmission; Knowledge-based institutions (academies and professions)

Participating schools used their case studies as vehicles for exploring the relationships among the different levels of „actors“. With some exceptions, the higher levels displayed a degree of commonality: differences were most apparent at the levels of National Ministries, professional bodies and educational institutions.

(insert table)

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		needs	lacks	obstacles	opportunity	solution-measures	horizon/time	resource
AUTHORITIES	EU	Effective policy measures that reflect the fact that “new build“ is less critical, protection and adaptation essential and energy integration urgent. Appropriate policy towards internationally unprotected sites.	Inappropriate alignment of research funding; inappropriate cultural policy instruments to address changing nature of the issue of built environment inheritance; mainly of unprotected sites	Ineffective relationships with construction industry and profession. Insufficient supports for applied research and monitoring, both in historic building reuse and energy initiatives. Complicated, rigid and slow regulatory processes; no evidence of a long-term vision for „forgotten“ regions in Easter Europe.	Wide range of initiatives that could be monitored to inform policy and funding initiatives also through the support to new start-ups and spin-off in the field of cultural Heritage and life-long learning policy. Policies need to be developed in particular to support local communities / industry / agriculture.	Fact-finding research to collate and analyse member state engagement. Re-calibration and integration of the 11 points underlying the professional competences of architects with more emphasis on the characters and needs of Cultural Heritage. These is much to be learned from projects like international heritage routes, within abandoned, ordinary sites included, focused not only extraordinary, preserved examples, but mainly local culture and history (such as ERIH).	Five years	TICCIH; ICOMOS; ACE; EAAE; ERC (European Research Council)
	National and regional authorities	Rebalancing of planning frameworks to prioritise intra-urban and sustainable historic rural landscape settlement, with attention to strong and also weak sites-heritage and settlements or urban/rural areas.	Adequate information on built resources; adequate assessment of cultural value; appropriate administrative structures. Adequate sharing of informations through the internet and accessibility to	Current development culture; lack of integrated policies on inherited built environment; under-funded community-led regeneration; under-funded third-level education and humanities research (esp. inter-disciplinary research); self-referred	Local community activities (support organisation, training, knowledge development, finance); inter-disciplinary research initiatives. Universities' proactive role on the territory. Support for local communities	Integration of existing policies on heritage, cultural and sustainable development; coordination of the various economic measures funded in the field at different levels (European, national, regional, local).	Three years	Ministries of finance, culture, regional and rural development; local authorities; social policy; national parks; universities National Research Councils, etc

		Strengthen knowledge and research, find arguments, courage to do unpopular or economically disadvantageous solutions.	dedicated repositories and data-bank at national and local level.; unevenness or lack of building stock inventories, research and evaluation; absence of long term strategy.	and non coordinated and fragmented structures operating in the field. In Czech case: Post-socialist fragmented ownership; rigid legislation; support only for (turistically or economically) attractive sites.	(protect and strengthen national or regional identity, „small“ and local economy).	National heritage routes, further education on heritage		
	Ministries	Support for built fabric-based disciplines and environmental studies. Support for humanistic disciplines (research and teaching; not only applied research and studies to increase industry and productivity). Guidelines for the analytical-diagnostic studies on built heritage and for the interventions. Coordination between scholars, professional experts and restorers.	Inadequate support for interdisciplinary studies; inadequate focus on cultural heritage and building technologies and practices; inadequate liaison with building industry training; insufficient link with profession and long life learning activities; conflicting relationships with specialist competencies and workers (i.e. restorers).	Structure of financial supports for third-level education and research; uncritical prioritisation in supports of educational innovation; inflexible administration; low priority for design-based disciplines; fragmentation of competencies within the professional field (structural, technological, artistic...).	Supporting cooperation between third-level institutions and between these and local communities and authorities. Support for dissemination of built heritage studies.	Support for interdisciplinary study programmes focused on inherited built environment. Support for research and teaching programmes focused on recording, analysis and adaptation of historic built environments. Support for the specialized third level formation (especially the Schools of Specialization and the Masters-post-masters programmes in the field). Promote broader appreciation of the inherited environment including industrial, modern and post-war architecture.	Five years	Ministries of finance or education In Italy: Universities and research institutions in cooperation with Ministry for Cultural Heritage and Activities and Tourism (MiBACT) and research (MIUR)
ACADEMICS	Schools Departments Universities	Promote and support studies and projects that connect design and heritage transmission. Support teaching	Promote and support interdisciplinary cooperation in context of studio projects and theoretical and	Inadequate resources; rigid silos within institutions, schools and profession; inadequate criteria for academic selection, appointment and	Social and student awareness of contemporary challenges. Desire of local communities and administrations for linkages with	New study programmes involving analogue as well as digital media. Inheritance-focused research, studio-based and traditional	Two years	Ministries of education, culture, regional or rural development; competent regional authorities; professional

		and research in architectural history and theory; share good-practices in the field; coordinate and connect data sources and repositories in the field of heritage protection and restoration. Establish new study programmes; cooperation with local communities and external professionals or institutions.	operational-technical studies. Appropriate sustained and respectful liaison with profession and life-long-learning processes.	advancement; caesura in architecture schools between design studio and projects designed to address strategic challenges in relation to inherited environments; lack of specific competences in the field within the generic preparation of an architect. Over rigid legislation; policy support for new build over existing; human resources, long-term support lacking for research of historic/industrial/postwar architecture.	third-level institutions (new profile of research and school, active role in public space, connection with „reality“). Enlargement of the cultural and social awareness of the significance of heritage and of its potential good contribution also to the economy of the country and of the local communities. Strengthen local communities, economy, experiences and identity through cooperation with universities.	(in all study levels). Reinforcement of the existing curricula of third level education and of their integration with real interventions and professional life.		institutions In Italy: Ministry for education, Universities and research (MIUR) in coordination with Ministry for Cultural Heritage and Activities and Tourism (MiBACT)
	Teachers	Tight cooperation between theory teaching and design studios; support students as active researchers; enhance specific scientific, technical and theoretical competences within the field; research background.	Acceptance within dominant school culture; financial support/grants focused on basic (not applied, industrial) and long-term research; clear awareness of the international context. Broad humanistic knowledge: recognise industrial architecture as a specific building type requiring knowledge of industrial technologies and social history of 19th and 20th century;	Inflexible employments structures; institutional difficulty in integrating teaching and practice; curriculum structures on the first two levels and especially in the third one (more professionalizing).	Availability of wide range of relevant expertise and experience; availability of information on good practice internationally. General social and academic acceptance of need for inter-disciplinarity.	New integrated study programmes; focused research opportunities; experimentation on the field.	Two years	Ministry of education, culture, regional or rural development; academic institutions; professional institutions; national and provincial boards of architects'

			similarly postwar architecture linked to social sciences and building structures)					
	Students	Interest in historic evolution of (not only contemporary) architecture and wider built environment. Developing of practical tools for effective social and professional roles; mind openness and capacity to assign priorities and hierarchies to the different problems/aspects of the faced topics and commitments; balance between creativity and rigour.	Knowledge: cultural and social history; skill; ability to understand the inherited world and tools to sustain and adapt. Attitudinal: design as respectful service. Capacity to foresee the fate of the built environment as a chance and not only as a limitation to creativity	Financial constraints. Poor early formation in terms of cultural history. Expectations regarding lifestyle Within academies, limited time available for thinking, evaluation and maturation of students ideas and concepts. Consumer and short-term based society, poor (modern history or cultural) education on grammar schools.	Demand for skills in building survey and analysis and diagnosis as well as design in architecture practice. Demand for good communication and concertation (or negotiation) skills. Demand for problem-solving skills; for „practical“ confrontation with the several issues open in the field.	Wide cultural, humanistic education through foundation schooling. Capacity to go behind the first and trivial „technical available solution“ of a problem/issue; capacity to motivate and argue students' cultural choices.	Five years	Professional institutions; ministry of education; teacher-training institutions; life-long-learning opportunities; sharing with professionals involved in the field (i.e. restorers, planners, technicians, experts of building physics, plants etc.)
	Academic research	Multi-annual, funded research programmes that address the spectrum of inheritance-related issues (theoretical and applied). Compulsory integrated programmes between different involved disciplines with clear restraints about the usable outcomes.	Foundation training in methodologies; mentoring; research infrastructure in professional bodies.	Conflict with demands of teaching and administration. Lack of critical mass in many schools. Intermittent funding with little continuity; close and self-referential mentality of many researchers and, even more, of several administrators and managers.	Emerging international networks. Growing industry awareness of knowledge deficits; empowering of the individual and collective awareness of the good impact these works could have on the whole social, cultural and economic life of the country and of the local communities. Influence on new generation, changing of social values.	Basic research support, connected with taught specialist study programmes (Masters and PhD). Strengthening the educational structures operating in the field, committing them in the regular spreading off of their works results according to clear guide-lines in the field.	Two years	Ministry of education; research institutes; building companies
	Professional research	Research awareness and infrastructure; promotion of	Sufficient connection with teaching and	Insufficient connection with motivations within academia (staff	Potential for performance and user feedback as	Practice-based research , both in-house and in	Two years	Ministry of culture; academic institutions; building

		practice-based research. Steady confrontation between different design-planning proposals by specialists (academics) and professionals engaged in the field.	academic; steady connections between designers and scholars (academic and professional), with the national and local authorities responsible for Heritage.	and students); insufficient interest in developing knowledge base; insufficient engagement with public policy agendas.	contributions to policy formation and procurement regulation.	collaboration with academia; availability and usability of real case-studies and of didactic-experimental construction sites also in connection with workers training schools in the field.		companies
PROFESSION	Professional chambers	Issue-based cooperation with universities; especially with their third-level curricula, by finding common case-studies and operational occasions.	Awareness of academic agendas and constraints; appropriate, sustained liaison with academia; common will to respect inheritance; reassertion of ethical basis and public interest remit as opposed to client-driven values or minimal conformity with legislation.	High pressure to re-use historic buildings (and respect existing built environment); funding opportunities in specific areas of professional activities; pressure of the so called tendency towards the “valorization“ of single monuments/sites or towards the simple „re-use“ of existing buildings regardless for their values, significance, consistency.	Establishing robust channels for communication and joint projects with academia (also to find common language). Direct participation in teaching initiatives regarding professional formation. Steady exchanges and common formative-work experiences between students of architectural schools and other workers involved in the field.	Participation with universities in continuing professional development programmes. Creation of shared occasions and formative/operational experiences involving different protagonists like, architectural students, restorers, masons etc. Medialisation.	Three years	Ministries of planning, regional or rural development; building companies
	Other institutions	Interdisciplinary cooperation, medialisation.	Protection status often based on national level, gaps in cooperation with local authorities.	Deficiencies in human resources.	Professional specialisation, appropriately deployed.	interdisciplinary cooperation, medialisation and information sharing.	Five years	Ministry of social affairs, regional or rural development
SOCIETY	Heritage agencies; interest groups	Connection with relevant ministries; connection with academia; involvement of local communities and enthusiasts, groups or specific stakeholders.	Long-term, comprehensive strategies; targeted action plans; professional and academic support.	Complex organisational environments. Lack of professional support and cooperation.	Improving comprehension of inter-connected issues (connection between professionals or authorities and society, strengthened project success).	Interdisciplinary project-based cooperation; medialisation and information sharing.	Three years	Ministry of culture, social affairs, regional or rural development; design or building companies; academic institutions; private support
	Building owners	Appropriate and broadly-based (building and	Funding; inspirational examples;	Access to professional skills and expert knowledge. Long-term	Special support programmes from official bodies.	Formal cooperation with universities and professional	Three years	EU programmes; Ministries of finance, culture; local and

		history) knowledge; shared informations on concepts of possible future use; programming skills and resources.	accessible advice.	strategies.	Academic research interest. Strengthen social and material sustainability of the whole building stock.	institutes.		national institutions or private supporters (eg. succesfull companies)
	local communities	Opportunities for direct experience or engagement; open sources of Information.	Long-term strategy, based on professional projects.	Ownership and access issues. Sustainable organisational structure/membership.	Increasing social and official awareness of potentials of heritage investment.	Projects involving interdisciplinary cooperation; medialisation and information sharing.	Three years	NGO heritage bodies; private support; developers; local authorities