

A dilemma resolved? Towards a revised philosophy of conservation education

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Abstract

The guidelines for conservation education agreed by the European Confederation of Conservator-restorers' Organisations' state that "The only reasonable way of training in conservation/restoration is full time at university level or at an equivalent level, including practical internships." Furthermore the September 1994 ECCO guidelines stipulated "Aptitude for the field of conservation/restoration should be determined by an entrance examination. The education should not take less than three years and preferably consist of four years". Yet, in early 2000, an authoritative article entitled the "Dilemma of Conservation Education" asked a number of fundamental questions, including one which may be summarized as "Are we expecting a conservator-restorer to learn more than is humanly possible?". This paper responds to some of these questions, tracing the development of conservation education from one which originated in a multi-disciplinary context to the concept of an interdisciplinary education which underlies the new courses being offered in Malta and a number of other countries. Specifically it will suggest that 1) the objective of conservation education is to create the conservator as an interdisciplinary member of a multi-disciplinary team and 2) rigorous training, a commitment to a shared vision, a deliberately formed and carefully cultivated interdisciplinarity, are the defining characteristics of a true conservator.

"Heritage conservation does not involve a single professional category, but a range of widely differing specialities at all levels. The debate on training must take account of this multidisciplinary and extreme diversity"

Daniel Therond

Ever since the 1930s, and especially since the late sixties, there has been a growing debate as to the precise form that conservation education should take. The more structured part of the debate may arguably be traced back to the reasoning – and the frustration - which led to the law¹ founding Mussolinian Italy's *Istituto Centrale per il Restauro* (ICR). To understand how a philosophy was born, and how it has evolved, it is useful to examine the historical background and its subsequent impact.

¹ This is a pre-print of a draft paper currently under development by the MCR team, an abridged version of which was eventually presented at the Jordan 2002 Conference on Science in Conservation organised by the Hashemite University in August 2002. This current full-length version paper is published separately and as part of the MCR 2000 Annual Report on www.mcr.edu.mt

Conservation in the 1930s & the Bottai initiatives in Italy

Any researcher trawling through the archives of churches, monasteries or some state institutions would doubtless come across dozens of records dating back to the seventeenth, eighteenth and nineteenth centuries indicating payments made for some 'restoration' work of one kind or another. This work was usually carried out by some painter or sculptor whose intervention was based on subjective criteria and, often enough, was an unresearched re-statement of an original work. (sometimes with a result radically different from the intention of the original artist). The artistic license that the restorer was permitted, often resulted in the use of irreversible techniques in an arbitrary manner. Save for some significant exceptions, this was the position still obtaining in Europe of the 1930s: the parish priest or abbot would look at a prized but decaying painting and then engage a local (or not so local) artisan to restore it to some form of glory. This attitude was anathema to the more purist of art historians and, as we shall see, led to some of the first efforts aimed at rectifying the situation.

The significant exceptions to this general rule may be traced to the museums-led conservation efforts that spanned the years 1888-1938: restoration laboratories were first set up by the Staatliche Museen of Berlin followed by the British Museum in London, the Archaeological Museum in Cairo, the Louvre in Paris and the Fogg Museum of Art at Harvard University. Other major museums who had set up some form of restoration laboratory before the outbreak of the Second World War included the Boston Museum of Fine Arts, the Metropolitan Museum in New York, the National Gallery in London and the Courtauld Institute (attached to the Courtauld Gallery and also to the University of London). Training in these museums for the in-house restorers varied from one institution to another but quickly led to the first formal courses being organized. The Courtauld Institute may be classified into the first type of training institution which we are categorizing for the purposes of this paper i.e. the Collection-driven approach.²

This then was the context in which circumstances thrust two young Italian art historians and critics, Giulio Carlo Argan and Cesare Brandi. Argan had gone to Rome in 1931 to follow a scholarship in History of Art and by the

² One should be quick to emphasise here that while the Courtauld's own collection understandably provided a major initial stimulus to training activities the scope of the research and training at the Courtauld swiftly extended far beyond the limits of the in-house collection.

age of 24 was already teaching as well as participating in the public debate on cultural matters that marked the epoch. Brandi, the older of the two by 3 years, had first graduated in law and then in Literature and Philosophy. He first came to prominence in 1930 at the age of 24, when he was given the responsibility for editing the catalogue of the Pinacoteca in his native Siena, and two years later published his first critique on the works of Rutilio Manetti. Both Argan and Brandi had been appointed inspectors of Antiques and Fine Arts in 1933: Argan was immediately assigned duties within the Directorate General responsible for Cultural Heritage in Rome, whereas Brandi had been assigned to the Superintendence of Bologna where he set out *inter alia* to organize a restoration laboratory. In 1934 Brandi was appointed lecturer in History of Art and in 1936 was assigned duties at the Directorate General in Rome.³ The background of both Argan and Brandi as art historians is being noted at this stage since, when attention is directed towards the notions of multi-disciplinarity and interdisciplinarity, it may be submitted that both Argan and Brandi contributed in no small way to the relative primacy that art historians have enjoyed within the Italian conservation scene since 1939.

The years 1936-1938 undoubtedly enabled Argan and Brandi to cement a personal friendship that was to be later publicly celebrated on a number of occasions. This is also the period when their concerns about conservation as art historians could be synergised with the tendencies of the Fascist regime to impose stricter controls on the protection of cultural heritage through centralization. The Directorate General where Argan and Brandi worked fell under the responsibility of Giuseppe Bottai, who had become Minister of Education in 1936. Bottai was a leading intellectual of the Fascist government with a vision that amounted to a comprehensive strategy for all of the cultural scene in Italy. This strategy included artistic patronage and public life and the role of the state in ensuring a certain quality of cultural life.

The origins of the *Istituto Centrale per il Restauro* (ICR) have been traced to the Conference of the Superintendents of Antiques and Fine Arts which was held in Rome between the 4th and 6th July 1938.⁴ During this conference, presided over personally by Bottai, a number of seminal papers were

³ This summary of the early careers of Argan and Brandi is abstracted from BUZZANCA G., & CINTI P. "L'Istituto Centrale del Restauro di Roma", *L'emozione e la regola*, (ed. Domenico de Masi), Editori Laterza, Roma 1991 pp.281-314

⁴ *ibid.*

presented, including a detailed proposal for the creation of a centralized *Gabinetto Centrale del Restauro* spelt out in a paper presented by Argan⁵. It is interesting to note that the creation of ICR was pivotal to the Minister's strategy and that it is probably no accident that Argan's speech was the first one following the Minister's introductory speech. Neither was it accidental⁶ that Bottai's introductory speech contained a summary of Argan's key proposals for ICR mentioning "*an academy which can ensure a rigorous and methodical education for future restorers*".⁷

Any scholar investigating the origins of the philosophy of conservation education would do well to assess the principles implicit in Argan's paper. These essentially give substance to a vision whereby cultural heritage would only be restored by trained professionals working within a multi-disciplinary environment. The vision undoubtedly shared by Argan and Brandi was one wherein the art historian and the scientist would work together under the same roof as the restorer and would play a leading role in the formation of new restorers.

The immediate post-war: 1944-1954

The *Istituto Centrale per il Restauro (ICR)* was *ab initio* set up as an institute where restoration workshops and a photographic studio lived side by side with chemistry laboratories to provide the restorer and the student with the right environment which would enable a holistic approach to conservation. This holistic approach to conservation was given a theoretical basis in Brandi's *Teoria del Restauro*ⁱⁱ which has remained a standard work on the subject to this day. The ICR's premises in Rome were officially opened in 1940 and the tumult of the war years served to prevent the Institute from launching its courses until the Allied Italian campaign was over.

The first courses at ICR opened in 1944 and reflected the multi-disciplinary approach that permeates Argan's original blueprint. They gradually developed into a 50% theory/50% practicum diploma course spread over

⁵ ARGAN, G.C. etc.

⁶ It is difficult to avoid the impression that Bottai was conducting to a carefully orchestrated score with Argan doing much of the script-writing and the Minister simultaneously testing the waters and creating consensus.

⁷ BOTTAI G.,

three years. Students were taught applied chemistry, physics and biology as well as restoration techniques and they also received a strong schooling in theory of conservation and history of art (not surprisingly given the background of both Argan and Brandi). The small intake of students, the special sense of purpose and direction combined with the growing reputation for excellence to transform ICR into one of the most elitist schools in Italy and Europe. As will become clearer later, the ICR is the first example of that category of conservation education provided by an entity we shall call a 'specifically set-up non-university academy' reporting to the Ministry for Cultural Heritage (as opposed to a University reporting to the Ministry for Education or a specific 'Universities' Ministry). After the Collection-led approach identified earlier, this may be classified as the second main type of training model that emerged during the first half of the twentieth century.

The destruction wrought by the Second World War was to serve as an important stimulus for conservation education in other parts of Europe. Indeed, in Poland for example, even before the war, paralleling events in Italy, but this time in a university cadre, some teaching and research activity in conservation had been commenced at the Stefan Batory University at Wilnius. This activity was resumed at the Faculty of Fine Arts at the Copernicus University in Torun where Professor Jerzy Remer initiated the Department for Monument Science and Conservation. Thus the third distinct category, that of a university-based undergraduate-through-postgraduate training was introduced only shortly after the birth of the ICR model. Almost at the same time, at the Warsaw Academy of Fine Arts, the Art Conservation Department had been formed, today known as the Faculty of Conservation and Restoration of Works of Art. The latter will be considered as an early⁸ sustained example of the fourth category which is typical of courses which have evolved within the 'conservatoire' milieu. The Art Conservatory throughout Europe was very much a product of the 18th and 19th Centuries and provided the same kind of pedigree for the Art Conservation department of the Academy for Fine Arts in Krakow which was founded only three years later, i.e. in 1950.

Thus, barely three years after the ICR courses opened in 1944, the Polish centers at Warsaw and Torun opened courses influenced by their own historical backgrounds. Rather like the Courtauld Institute in London, these

⁸ There are various claims to earlier conservatoire-based training in 'restoration' including teaching carried out in Moscow and St. Petersburg.

Polish Centres were born out of a University/Academy of Art milieu and the focus depended on the historical background of the host institution. It should come as no surprise that while both institutions attempt to give the student a well-rounded education, one can to this day detect greater emphasis on the scientific aspect of conservation practices at the Torun centre and a greater emphasis on the artistic aspects at the Warsaw and Krakow centers. In the latter it would appear that the scientific aspects of conservation were gradually introduced incrementally rather than as part of some grand strategy or design as may be seen in the ICR approach. The principal difference with the evolution of the Polish courses was that they all evolved into 6-year long courses which eventually led to a masters degree in conservation. Significantly, like their Italian counterpart, Warsaw and Krakow reported to the Ministry responsible for Cultural Heritage and not Education or Universities. Similar developments were formalized at the Prague and Budapest Academies of Fine Arts during the 'fifties.

While the Polish models examined above were interesting developments at what would today be described as Level 4 and Level 5 vocational education and training (VET), elsewhere behind the Iron Curtain, a very interesting structured attempt was being made at introducing some logical order into a previously confusing situation. Those Russian centers with major collections such as Moscow and St. Petersburg had long witnessed the evolution of a theoretical and practical basis for training in conservation-restoration. "Unfortunately, the level and quality of work, professional skill and experience, as well as the criteria used for the assessment of restoration work were different all over the country"⁹ The concern for some kind of uniformity of standards in conservation was one of the interesting and possibly positive outcomes of communism: in 1954 another European attempt at up-grading conservation training was initiated by a Ministry of Culture when the "All-Union"¹⁰ Examination Board for Conservator-Restorers" was established in the USSR.

It should be noted at this stage that the four categories of training types identified previously in this paper were all intended to produce a higher form of conservator-restorer. The duration and breadth of the training given was intended to produce a professional capable of analysis, decision-making and

⁹ Anatoly B. ALYOSHIN, *The Russian Experience of grading conservator-restorers and its potential contribution to an international system of qualification*, Preprints Vol. I of the 12th Triennial Meeting Lyon 29th August-3 September 1999, James & James, London, UK, p.125.

¹⁰ Today styled the "All-Russian"

intervention on a work of art. They all represented a more elitist approach which was careful to make a distinction between their higher form of conservation activity (guided by science and a superior grounding in History of Art and artistic techniques) and the previously dominant regime i.e. the craftsman-level of artisan who “dabbled in restoration”. The Russian initiative of 1954 was innovative in the sense that it realistically acknowledged the need and existence of several levels of membership within the conservation team. Although the Russian tradition was also rooted in the conservatoire milieu (category 4 above – Academy of Fine Arts) it now set out a system of grading of conservation workers.

The Examination Board comes close to the notion of a Professional Board legally empowered to grant warrants or license to practise a profession. The Russian system was innovative in that it first divided conservation into 16 areas of specialisation¹¹ and then identified four levels of qualification for each specialty “*reflecting the increasing complexity of the work required of the restorer at each successive level, and the responsibility that goes with it:*

- *A restorer of the third category should be able to execute simple restoration work, using established methods on works of art of lesser museum and artistic value;*
- *The restorer of the second category should be able to perform work of intermediate complexity on works of art of the same value;*
- *The restorer of the first category should be able to perform work of considerable complexity on works of art of high museum and artistic value, direct the work of lower graded colleagues and share his/her experience with practicing students (in this case he/she takes a full responsibility for the execution of the work);*
- *The restorer of the highest category is authorized to perform independent conservation-restoration work of great complexity on unique works of art, develop new methods, compile training textbooks and aids, direct the work of other restorers and practicing students (while taking responsibility for the quality of the work performed), and lecture at schools of higher specialized education”¹²*

¹¹ 1) “monumental painting and mosaics on architectural monuments; 2) monumental decorative works of art in museum collections; 3) stone and stucco architectural sculpture; 4) easel paintings in oil; 5) easel paintings in tempera; 6) polychrome wooden sculpture and decorative wood-carving; 7) stone and gesso sculpture; 8) furniture; 9) gilding; 10) ceramics and glassware; 11) metalware; 12) leather; 13) textiles; 14) tusk and horn; 15) graphic art; 16) library material and bookbindings” *ibid. at p.127*

¹² *ibid.*

One of the interesting aspects of this system was that the license awarded was for five years at the end of which one had to apply for extension or promotion to the next grade. Thus it was theoretically possible to progress from the third grade to the highest within a span of fifteen years although the Board was empowered to grant up-grading of restorers on application from the person concerned before the five year license period expired. The classification system is interesting in that it allows for different levels of training to be reached with a corresponding role in the conservation team. More often than not, in Russia this training could be obtained in either a Collection-led environment (Category 1 above) or a conservatoire milieu (Category 4) but it allowed students and interns an apprenticeship-type approach to qualification in stages which differs greatly from the high-level omnibus approach typified by the Italian and Polish models described previously.

From post-graduate to craftsman – the ‘Nordic’ route

From the point of view of the development of the philosophy of conservation education, the most interesting aspect of the Russian system was that it parallels (and in certain instances pre-dates) the carefully stratified systems of vocational training that may be today seen in countries such as Germany and the UK. This ‘Nordic’ system of training may, for our purposes here, be classified as the fifth category of conservation education which for convenience’s sake we shall refer to as the “phased vocational route”. The German system is perhaps typical of this approach to conservation education and is best-exemplified by the route taken to qualify in stone heritage conservation.

The first element of this fifth main type of approach is that much of the training does not take place in a formal manner within an educational institution but rather in the form of an apprenticeship where learning takes place through on-the-job training. The apprentice then is released for 4-6 weeks every year to attend training courses at centers maintained by the craft industry independently of companies working in the field. Here master craftsmen give the apprentices theoretical and practical training in specially equipped workshops and classrooms. “After three years of intensive training, apprentices may take their final craft apprenticeship examinations

set by the local chamber of crafts, which alone is authorized to issue that certificate”¹³

The apprentice may then opt to move on to a second stage, once again finding a company working in the field of architectural heritage conservation during which he or she will attend 320 hours of seminar teaching at the end of which success at an examination leads to the equivalent of a journeyman certificate. This entitles the craftsman to use the title of ‘stone-cutter and stone-carver specializing in architectural heritage conservation’¹⁴ Should the apprentice then wish to move on further the next stage is that of a master craftsman. “Before they are able to sit the master’s examination, stone-cutters/carvers must therefore serve a three-year apprenticeship, three years as a journeyman and at least one year of preparation for this examination, which means a minimum of seven years in all. They are then entitled to manage and carry out all the work which, within their craft, relates to the artisanal conservation of the architectural heritage”¹⁵

The fourth and final stage in the German system is the Diploma of craftsman-restorer¹⁶ where 720 hours of teaching will permit a master craftsman to sit for further examinations set by the local craft chamber of *Handwerkskammer*. The Diploma of craftsman-restorer was introduced in 1985 to meet a demand for a more highly qualified restorer but it is symptomatic of the German approach that the wording of the diploma’s title¹⁷ must “always be accompanied by the designation of the particular corporation. This is as a reminder that the specialist is qualified in the conservation of the architectural heritage, but he is first and foremost a craftsman”¹⁸

The German centers for training in craftwork at the highest levels are to be found in Fulda, Raesfeld, Gorlitz and Trebsen while Vocational Colleges for Higher Education such as the Fachhochschule at Koln provide other courses for those students wishing to qualify in the field. The German approach

¹³ Dieter HORCHLER, *Initial training and specialization in heritage skills*, in *Strategies for vocational training in architectural heritage skills*, Symposium organized by the Council of Europe, International Heritage fair, Le Carousel du Louvre, Paris, 13 April 1996, Council of Europe Publishing, Strasbourg, 1998 at page 94

¹⁴ *Steinmetz und Steinbildhauer in der Denkmalpflege*

¹⁵ *ibid* at p. 96

¹⁶ *Restaurator im Handwerk*

¹⁷ In the case of stone *Restaurator in Steinmetz und Steinbildhauerhandwerk*

¹⁸ Dieter HORCHLER *op.cit* at p. 96

however remains almost rigidly non-University. Restoration is all about practical applications and that is an applied technology as opposed to a more-theory oriented university approach.

The British system has developed into a most interesting collection of training approaches. There is no evidence of a grand plan in the British approach to conservation training – rather various initiatives driven by local circumstances and of late, clearly motivated to fit into different funding schemes. A quick tour of Britain would give us the following results:

a) the Courtauld Institute, the Victoria and Albert and the Textile Conservation Centre are all born out of the Collections-driven approach (Category 1 above). Interestingly enough – but perhaps not surprisingly¹⁹ – unlike the ICR and Polish courses described previously, they now offer training to which only university graduates are admitted, and for this reason they shall be identified as Category 6 institutions i.e. those offering courses which are nominally²⁰ post-graduate

- I. The Courtauld Institute of Art has been offering training for over 60 years and has teamed up with the University of London in order to be able to confer degrees. It limits its training to two main areas – easel paintings and wall paintings and it offers only post-graduate diplomas or a taught three-year long Masters course in Painting Conservation.
- II. The Hamilton Kerr Institute at the University of Cambridge focuses on training at Certificate/Diploma level in the conservation of Easel Paintings. The Institute is a department of the Fitzwilliam Museum and was established in 1976 in response to recommendations made in 1972 by the Calouste Gulbenkian Foundation Report on training in the conservation of paintings. It compares best with some offerings with North American museums rather than the European schemes described elsewhere in this paper.
- III. The Textile Conservation Centre is today based at the Winchester School of Art campus of the University of Southampton but has only been resident there since 1999 when it moved from Hampton Court Palace in Surrey where it had been established in 1975. It started off

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All three institutions have prestigious reputations and have rarely been short of candidates seeking entry. Moreover their courses were not part of the ‘core business’ of the parent institution but rather an add-on originally aimed at capacity-building primarily for in-house collection care.

²⁰ Because of the varied background of candidates accepted, it appears that the level of teaching in certain areas is often at first degree level rather than post-graduate level.

(like the Courtauld) by offering a highly regarded postgraduate diploma which it has recently dropped in favour of an MA

- IV. the Victoria and Albert Conservation Programme is far more recent, established in 1989 and is interesting in that it attempts to forge a partnership between the collection-driven approach (V&A), the conservatoire milieu (the Royal College of Art) and the University centers (Imperial College of Science, Technology and Medicine). “The Programme aims to respond by providing, as far as possible, tailor-made studentships which serve the needs of both the individual and the profession” Indeed, the options offered vary from year to year and, like a number of other UK institutions the V & A has no qualms about describing a Master of Arts course as “comprehensive vocational education in a specialist field of practical conservation”. The Masters course is two to three years long depending on the student’s background.²¹
- b) The main University-bred (category 3) courses in the UK are to be found in two of the UK’s oldest Universities and were both originally primarily concerned with Archaeological artifacts:
- I. University College London – Institute of Archaeology This could originally have laid claim to founding the UK’s first under-graduate degree in conservation with its B.Sc programme in conservation which will for our purposes here be categorized as Category 7 – University under-graduate B.Sc but, possibly for marketing reasons²², has now shifted to a Category 6 approach, (see above) replacing its B.Sc programme with a one year MA in Principles of Conservation²³ as a necessary pre-requisite to a two year M.Sc in Conservation for Archaeology and Museums²⁴
 - II. Durham²⁵ Prior to 1990 the MA in The Conservation of Historic Objects was a three year course leading to a Postgraduate Diploma in Archaeological Conservation. The University of Durham is not

²¹ An interesting innovation recently introduced by the V&A is an Msci in Chemistry with Conservation Science wherein students are registered with the Chemistry Department of Imperial College London. For the first two years they do mainly Chemistry. In the third year they join RCA/V&A Conservation’s academic programme and undertake a literature review and essay on conservation science related subjects. This new course is closely paralleled with the new M.Sc Conservation Science course proposed by the MCR except for the fact that the latter is shorter since it expects that the undergraduates entering the course would have majored in Chemistry or Biology.

²² Including issues such as making courses more attractive to prospective students e.g. the newly restructured course MA in Principles of Conservation is expected to enable candidates to apply for studentships from the UK’s Arts and Humanities Research Board AHRB

²³ <http://www.ucl.ac.uk/archaeology/prospect/pgtaught/MAPrinciples.htm>

²⁴ <http://www.ucl.ac.uk/archaeology/prospect/pgtaught/MScCons.htm>

²⁵ http://www.dur.ac.uk/archaeology.conservation/MA_cons.htm

overly strict as to whether the candidate's first degree is in the sciences or in the arts but require that s/he possesses an advanced level (Baccalaureate) standard in Chemistry. Thus degree level knowledge of the material sciences is not a pre-requisite, inviting speculation that the teaching carried out in science-related subjects is at first-line level as opposed to post-graduate.

c) The UK's vocational training routes in conservation education may be divided into the more recent structured approaches and the more evolutionary courses. It will be suggested that those degree courses which have evolved from the phased vocational training route will be classified as Category 8:

I. The MA Conservation Fine Art course of University of Northumbria at Newcastle is a two year programme developed from a polytechnic-based course first offered in 1968. It is similar in its entrance requirements and admissions approach to the UCL and Durham courses described above and is here being categorized differently principally on account of the origins and development of the course in a vocational training as opposed to a university environment.²⁶

II. Buckinghamshire Chilterns University College made the transition from a College of Further Education to an autonomous University College in 1999²⁷ and runs an almost unique- BA (Hons)²⁸ programme in Furniture Conservation and Restoration. Interestingly enough for a BA programme but not in the least unusual given its VET pedigree, the course admission requirements explicitly envisage a progression from a BTEC or GNVQ vocational education qualification rather than conventional 'A' levels as would be more common in the UK for University courses. BCUC also runs an MA²⁹ in Furniture Restoration which is a one calendar year offering marketed as being "fundamentally a studio based course, with supporting studies of material science, furniture history and construction". Unlike the Masters courses in conservation offered by most older Universities the Masters degree at BCUC "builds upon first degree level skills through the acquisition of technical understanding and theoretical research to lead toward negotiated final projects covering a wide range of substances and materials".

²⁶ <http://online.unn.ac.uk/faculties/art/humanities/conservation/MACons.htm>

²⁷ <http://www.bcuc.ac.uk/home.asp?DisplayType=1&Email=Unregistered>

²⁸ <http://www.bcuc.ac.uk/design/rest.htm>

²⁹ <http://www.bcuc.ac.uk/design/ma.html#marest>

Thus the Masters course clearly expects that candidates will have concrete prior knowledge in the field acquired through a first degree or several years of professional practice and in no way can it be classified as a “change-over degree” which would seem to be a characteristic of so many UK Category 6 qualifications.

- III. Manchester College of Art & Technology is the other UK institution which runs a VET-bred course in furniture restoration and conservation³⁰. Its approach, course nomenclature and admissions market is quasi-identical to the BA (Hons) course run by BCUC described above. Like the BCU course this is a three year offering with a heavy bias on practical and hands-on aspects of training.
- IV. Camberwell College of Art³¹ has established itself as the premier UK centre for training in paper conservation and has both BA and Masters offerings in this field. Camberwell’s origins in the 19th Century as a hands-on Art College offers strong parallels in course development and admission philosophies to the courses run (albeit in different fields) by BCUC, Manchester, London Guildhall University³² and City of Guilds London Institute.
- V. The more traditional vocational route in the UK is perhaps epitomized by the City and Guilds of London Institute and its various examinations. Industry and crafts-led rather than collection-led, the City and Guilds of London Art School was established by the Institute in Kennington in 1879 as an extension of the Lambeth School of Art. Originally it provided training, mainly in carving, modeling and architectural decoration for those engaged in the art industries of the locality. In this respect, this school may be more readily classified into a fifth category institution such as the guilds supported training-centers like Fulda and Raesfeld in Germany. As part of the general move in the UK to up-rate many vocational courses to university-style qualifications, the School has recently begun offering a three year full-time BA (Hons) course in Conservation Studies validated by the University of Central England³³. This Bachelor of Arts course, which is a prime example of 8th Category courses, is interesting in that it includes many elements carried over from the Institution’s craft-driven past: for

³⁰ <http://www.mancat.ac.uk/courses/K/414.pdf>

³¹ <http://www.camb.linst.ac.uk/>

³² <http://www.lgu.ac.uk/lgu/history.html>

³³ Previously a Polytechnic in Birmingham, 120 miles to the north. It is not clear why a more local University or ex-Polytechnic was not chosen as a partner, especially since students attend science lectures together with the Joint Conservation Programme organized by the V&A and Imperial College.

example elements of the first year of the course are common to the Architectural Stone Carving and to the Ornamental Wood Carving courses offered separately by the School. These elements are strongly reminiscent of training in Germany at craft level and include wood carving, study of ornament forms and letter forms, gilding, stone carving, letter carving and casting. There are two main distinctions between the British and the German approaches, possibly promoted by differences in legislation and funding schemes. The first is that British courses are primarily based in a teaching institution with a short placement in industry while the German system is primarily based in industry with 'release' for training in an educational centre. As a result of this difference British vocational routes tend to be shorter since more time is devoted to study. The second major difference is that the City & Guilds School has sought University validation while many German centers do not seem to have perceived a need to obtain external validation.

- d) Rycotewood College is a small specialist college that offers solely VET level education in furniture conservation leading to the Edexcel HND³⁴ qualification at the end of a two year full-time course.³⁵ In this, the Rycotewood offering does not lead immediately to a degree course and is more correctly classified with Category 5 type of conservation education

British institutions predominate amongst European examples of this eighth category but there are other countries where conservation education evolved from the same roots. In Denmark, the Technician's Diploma which had been offered since 1972 was converted to a degree offering by 1999. In Italy for example one of the oldest-established institutions with a long tradition in conservation started off by taking apprentices into restoration workshops early in the 19th century. The Opificio delle Pietre Dure (OPD) of Florence gradually developed the teaching and scientific part of its activities to support a primary role which was originally focused on the delivery of restoration services. As such however, OPD remains a state institution reporting to the Ministry responsible for Cultural Heritage and, although increasingly autonomous, awards a diploma for a 3 year course of studies defined by a legal decree dating to 1997. This places OPD's current status

³⁴ Higher National Diploma

³⁵ <http://www.rycote.ac.uk/>

as a Category 2 Institution although its origins are quite different. The reasons why the OPD (like ICR) awards a diploma and not a degree is because of a legal peculiarity of the Italian system wherein only Universities can award degrees and where, despite the excellence of the training and research carried out, there still exists a tendency to look down on the “Istituto Statale Diploma” as being something more akin to a Technician’s Diploma in Vocational Education than something which is a “University-level” qualification. There are moves afoot to do away with such distinctions, whether real or perceived, but the culture change will probably take a long time to achieve.

Lower down the line, the Italians have sprouted numerous vocational level courses lasting anything from 3 months to 3 years. These have often been born as a result of the response of regional authorities to the perceived needs of the local conservation market while it has also been suggested that political moves towards decentralization have been just as strong motivators in getting these regional courses going. Together with some private academies they have produced what may be classified as this ninth category i.e. vocational-level courses which are not structured within a framework which is as well defined or as rigidly controlled as the German model and which are generally not recognized as having university-level status.³⁶

Italy’s large neighbour to the West, France, has taken a different approach to conservation education. In launching a system of Maitrise de Sciences Techniques, France was acknowledging the need to create applied-side technical degrees to permit new graduates to move more easily into the real world of work. Thus the Maitrise de Sciences Techniques course in conservation introduced by Sorbonne in 1973³⁷ was an Education Ministry-led approach which resulted in a four-year long masters degree course for which a diploma level education was a pre-requisite entry requirement. This tenth category differs from the sixth-category courses (post-graduate as in Courtauld, V&A) only in that the entry-level diploma is only two years long

³⁶ Courses for conservators in Greece may possibly also be classified under this ninth category with two-year courses offered by both state and private VET institutions and a four year diploma course offered by the Athens Technical Educational Institution a Polytechnic type College with a VET orientation.

³⁷ It would appear that this course has become highly elitist almost entirely due to the incredible motivation that a prospective student must have to actually get a place on the course. With an average of 20 vacancies a year for all of France and with only a comparable number of places at IFROA as competition; it is unusual for a student to get a place without spending at least one or two years after graduation from the pre-requisite diplome on the waiting list before being even considered for entry. It has been informally argued by Sorbonne graduates that the very determination and motivation of the students ensures a high quality output almost irrespective of the quality of course content and teaching facilities.

as opposed to the 3 or 4 year undergraduate courses which would be more typical of entrants into category six courses. To a certain extent, the French model comes closest to the Polish models (Categories 3 & 4 above) insofar as it is a standard 6 year route to becoming a conservator. Unlike the Sorbonne course, the IFROA courses introduced in 1976 may be properly categorized into the Category 2 courses typified by Italy's ICR since IFROA is an academy set up by the French Culture Ministry. Although originally intended to provide vocational level training (i.e. without formal academic qualifications as an entrance pre-requisite) they appear to have acquired almost as elitist an élan as that of ICR and the Sorbonne.

The eleventh category of conservation courses is being included here as a curiosity since they are the only category out of twelve proposed by this paper where conservation is taught without a substantial part of the course (i.e. 33-50%) being devoted to practicum. There are three Italian Universities which offer an undergraduate degree in 'Beni culturali': Lecce, Ravenna and Viterbo. Perhaps the practical side of life is not so highly developed because of the very strong offering traditionally provided by ICR and OPD and because in Italy the conservator-restorer appears to have been regarded as being something more akin to a technician than to a professional. Whatever the reason, it will be interesting to witness the extent to which these University course acquire a higher degree of practical training over the next ten years as Italy too attempts to reform its various systems of higher education as part of grander European efforts at harmonization.

Travelling southwards from Italy leads us to Malta and the twelfth category of conservation education identified by this paper. The Malta Centre for Restoration (MCR) was established as a partnership between the University of Malta and the Ministry of Education ³⁸ in 1999. It has since been entrenched by the Cultural Heritage Act 2002³⁹ as Malta's national agency in the field of conservation and restoration. The four-hundred year-old University had long offered degrees in History, Archaeology, History of Art, Architecture and the classics but none of these had offered hands-on training in conservation. The creation of MCR in 1999 together with one of its sub-divisions, the Institute for Conservation and Restoration Studies, was part of a comprehensive nation-wide reform of cultural heritage strategy where the need for University-trained conservators was sorely felt. Coming relatively

³⁸ As the ministry responsible for Cultural Heritage

³⁹ Chapter 445 Laws of Malta available at <http://justice.magnet.mt/dir2-laws/toppage.asp>

late to the field enabled a detailed analysis of existing systems and led to a University-bred undergraduate degree with an interdisciplinary approach so deeply ingrained that it extends even to its nomenclature. Thus, in Malta, the choice is neither between a B.Sc nor a B.A. Rather the marriage between sciences and arts is epitomized in a B.Cons. (Hons)⁴⁰ degree that was designed to be an 11 month a year offering with 30% conservation science content and strong grounding in documentation, theory of conservation, history of art and architecture organized in modules in full compliance with the European Transferable Credit System. Nearly 50% of the four-year course is devoted to practical training which is spread evenly throughout the year with the MCR's laboratories and two full months per year of fieldwork. These characteristics of the Maltese course may be ascribed to it being a relatively recent offering designed in the late 'nineties. It would appear to be the first undergraduate course to be purpose-conceived and designed as a fully-interdisciplinary course in conservation leading to a University degree of Bachelor in Conservation and Restoration Studies while retaining the full element of practicum required by ECCO and ENCORE standards.

From pattern recognition to defining new standards

The introductory part of this paper should be considered to be more of an exercise in pattern recognition rather than an attempt at a comprehensive survey of conservation education in Europe. In identifying twelve categories of different types of conservation education we have focused mainly on the differences in the way these systems have evolved rather than in differences of course content or philosophical approaches.

To the newcomer, the types of educational possibilities in conservation and restoration can be quite confusing. Largely for historical reasons, different types of courses of varying levels and quality have sprung up over the years in different countries⁴¹. A look at some of the models will illustrate the variety of choice available to a potential student but does the variety of courses imply a variety of different philosophies of conservation?

⁴⁰ Bachelor in Conservation and Restoration Studies

⁴¹ Vide ICCROM-GCI Training Directory (<http://www.iccrom.org/eng/index.html>) which has over 300 courses listed, ranging from one day to six years.

This paper focuses mainly on professional level courses and not on training at craftsman level. This should not be construed to imply that there exists a consensus as to whether the moulding of conservators falls fairly and squarely into the realm of professional education as opposed to vocational training. Students of the process that lead to the Pavia document of 1997⁴² will easily recognize at least two main schools of thought: the “Latin” model which holds that a conservator is a professional with the same requirement for in-depth education as other professionals; the “Nordic” approach which holds that a conservator is primarily a craftsman whose dexterity is honed through a vocational training type of preparation and who can then go on to more specialized training if he or she wishes.

As will be seen later, the Maltese approach to training in conservation takes the view that the conservation of cultural heritage is too serious a matter to be left to craftsmen whose level of education may prevent them from putting their undoubted dexterity to the most correct use. This does not mean that the craftsman has no place in the conservation world. Far be that from the truth. As will be seen later, the craftsman is deemed to have an important role in the conservation team, but our primary concern here is with the decision-makers in the conservation process. There exists a growing trend within Europe that the decision-makers in conservation are educated to university first degree level as a minimum standard. This trend towards university degrees does not however change the fact that conservation education is very much competence-based training. Just what are the competences that a well-rounded conservation education should aim to develop?

The Maltese approach implicit in the developments since the creation of the Malta Centre for Restoration in 1999 assumes that the conservator-restorer is a professional who requires the type of training at a professional level which will enable the conservator-restorer to analyse a problem, identify the options available to tackle the problem, determine the consequences of any intervention and be physically capable of undertaking such an intervention. This assumption however does not resolve the issue as to how best such a professional is trained. Nor is it universally accepted that it is desirable or indeed possible that such a wide set of skills can ever be brought together to

⁴² The leading providers of conservation education in Europe meeting in Pavia in 1997 hammered out a set of common principles which should serve as guidelines in the objectives of conservation education.

a reasonable level of competence within one individual. In the article⁴³ which inspired the title of this paper, Sharon Cather poses a number of significant questions. When examining the lengthy “Standards of a Competent Conservator for United Kingdom Institute of Conservation Accreditation”, Cather rightly asks “Is all of this possible? Can it be taught? Can it be *learned* by one person? Or perhaps this list of competencies is unrealistic. Perhaps less is expected out there in the “real world”. A certain amount of skepticism can perhaps be detected in Cather’s comment “Expectations verge on the impossible: from demonstrating how to remove, reduce or neutralize potential and active” deterioration, to “cost-benefit analysis” to keeping up to date with the content and scope of new legislation,” to regularly assessing the content and effectiveness of training provision.”⁴⁴

At this point, Cather homed in on the fundamental questions that underlie the whole discussion of conservation education: What is the administrative structure that requires such universal competence? A vacuum? ... Is there such a thing as a career structure in conservation? In museums perhaps. But a vast amount of conservation takes place in other contexts, where the administrative structure that define the conservation process are less developed, more ephemeral and more likely to be project-based than long-term.”⁴⁵ Regrettably Cather does not pursue the answers to these questions in greater depth and instead veers back to the issue of accreditation.

Realities of conservation practice & competences imposed by economic models

If our answers to the questions outlined above are to better define the competences required of the conservator-restorer⁴⁶, then we would do well to examine how conservation happens in practice and how it is likely to

⁴³ CATHER Sharon, *The Dilemma of Conservation Education* in “Conservation, The GCI Newsletter”, Volume 15, Number 1 2000 pp. 9-12

⁴⁴ *ibid.* at p.10

⁴⁵ *ibid.*

⁴⁶ What is the distinction between conservation and restoration? After more than 3 years of deliberation, the Krakow Charter 2000 provides us with the following definitions:

Conservation: Conservation is the complex of attitudes of a community contributing to make heritage and its monuments endure. Conservation is achieved in reference to the significance of the monument, associated with values already recognized or yet to be identified in the future. Conservation is also performed as prevention connected with ecosystem preservation programs.

Restoration. Restoration is the operation directed on a heritage property, aiming at the conservation of its authenticity and its attainment by the community.

continue to happen in the foreseeable future. It is impossible to examine the philosophy of conservation education without first taking into account the economic models within which conservation activities may take place.

The economic models depend mainly on the amount of money available to be spent on the conservation and restoration of cultural heritage in a given country at a given time. Cultural Heritage is notoriously one of the Cinderellas of public spending: it very rarely exceeds 3% of GDP in the most generous of countries and in many countries 1% of GDP is considered to be an ambitious target. Thus, in many countries, a small number of conservator-restorers are employed in state-financed institutions where, although the volume of potential work is very large, the rate of project completion is notoriously slow. Conservator-restorers in public or private collections are increasingly having to cope with very restricted financial resources. The majority of conservator-restorers work as sole practitioners or in small-group practice in the private sector where they have to deal with the vagaries of conservation in both the public and private sectors. In private practice maximizing income or just as often simply surviving financially means that the conservator-restorer is forever marking the fine distinctions between rushing jobs, cutting corners and professional integrity.

These then are the realities of conservation practice: in theory the conservator should be part of or at least have ready access to a multi-disciplinary team including art historians, conservation scientists, documentation specialists, subject area specialists, project managers etc. This rarely happens except for that small percentage of conservator-restorers who work in large state-financed institutions. In practice the conservator has to make do with the best that circumstances, project finances and available resources allow. Put another way, in many situations resource-constraints will force the conservator-restorer to increasingly rely on his or her own knowledge and experience. Thus, in summary, the economic model imposed by sole practitioner or small-group private practice would suggest that unless a conservator-restorer has a very good interdisciplinary training the quality of conservation work will suffer. So, however much Cather may lament that the conservator has an impossible amount of things to learn, the economic models currently prevailing suggest that there is very little option if the quality of conservation work is not to suffer drastically.

Which educational model responds best to the economical model?

The considerations on economic realities bring us back to the main theme of this paper: which model of conservation education offers the most cost-effective approach to respecting the fundamental values of conservation practice? Even if granted that many of the twelve models outlined above may constitute different but valid approaches to conservation education, one must ask which model comes closest to maximizing value-for-money when considering dimensions such as time required for training, cost of training and volume of work available.?

The multi-disciplinary undergraduate diploma model in Italy

The introductory part of this paper distinguished ICR training as Category 2 and OPD as Category 9. The main distinction between OPD and ICR is not that of their legally-defined teaching objectives (they are now identical), nor in their philosophy of conservation theory (where there are many more similarities than there are differences) but rather in how they were born.

ICR is one of the few centers in the world which was conceived *ab initio* as a multi-disciplinary centre for conservation. In effect, ICR was born to fulfil a vision that multi-disciplinary team-work is essential if conservation is to be undertaken properly. This is not to say that other institutes do not undertake a multi-disciplinary and indeed inter-disciplinary approach to conservation theory and practice. Only that ICR was born out of a vision rather than growing into a vision. In this ICR resembles those rare examples of 16th century fortified towns which, rather than growing in concentric circles around a nucleus, instead came into being as part of a holistic plan where the different components were brought together as part of the initial design rather than as an afterthought.

The interesting thing however is that ICR's tough entrance criteria make it a very elitist institution selecting less than 20 students every year from anything up to 900 applicants. (OPD too attracts hundreds - 200-300 - of applicants for an average of 16 student places). The reality of the Italian student marketplace is that ICR and OPD are regarded as being the top Italian schools in the field and in many, (though not all) cases, conservation students go to other institutions in Italy out of second choice, having failed to get into ICR or OPD. It is interesting to note that, increasingly, a number of students get into ICR/OPD when they have completed or are about to complete a University degree though it is not formally a pre-requisite.

For the purposes of this paper what is important to note is that ICR and OPD, like other respected institutions which take their approach (ICN and IFROA are close examples), train students straight from high school in an intensive 3-4 year course. These are clearly not post-graduate courses (and some critics have alleged that they do not properly qualify as university-level undergraduate courses).

The undergraduate admission to Masters graduation approach in Poland

The Polish-type courses identified as Category 3 University-bred or Category 4 (conservatoire-bred) are similar to the ICR and OPD approach in that they admit students straight from high school but then differ in that the course is nearly twice as long wherein training takes place over an average of 6 years leading to a Masters degree without the intermediate first-degree level. While this 6-year Masters degree programme is similar to that applicable in many other areas of study in Central and Eastern Europe, the underlying philosophy that may be inferred from this approach is that it takes six years to even begin to think that you have may made the grade as a conservator.

The multi-disciplinary post-graduate degree model in the UK

“Conservation is such a serious business that only students with the required maturity at post-graduate level should be allowed to undertake conservation studies”. In line with this philosophy, the Courtauld Institute of Art at the University of London only admits graduates to its 3-year Masters course in Conservation. Thus a graduate in Art or Chemistry would then move on to have 3 years of training in conservation – in many cases however the student is starting from scratch since no previous knowledge of, say conservation chemistry or history of art can be assumed. The ratio of hours is roughly 50% theory and 50% practice as with the courses carried out at OPD or ICR and the level of practical abilities achieved is largely comparable but at the end the student ends up with a prestigious Masters degree conferred by the University of London.

Malta – a Mediterranean economic reality

Malta has seven thousand years of history with, for example, its unique temple culture preceding the Egyptian pyramids and Minoan civilization by over a thousand years. Its position at the very heart of the Mediterranean has meant that nearly every single maritime power in the cradle of civilization

has been through Malta at some time or another. The result is that Malta comes second only to Rome in terms of amount of historical remains per square metre.

Yet Malta has come relatively late to the field of conservation education. This is a disadvantage in some areas and an advantage in others, where its late-coming can hopefully serve to help it leapfrog over the problems identified and solved by other institutions. The reason for its late-coming is common with that of many other Mediterranean countries: the more south you go, the poorer the country becomes with the result that there is less money to be spent on conservation and restoration. The net result of this economic reality is that the Mediterranean, the traditional cradle of civilization, is suffering from chronic financial deficiencies in the field of conservation. Indeed a good deal of conservation work carried out in the Mediterranean is done by and/or paid for by conservators or funding agencies which are not Mediterranean-based. Up till now, focusing on the priorities of changing its economic base from a fortress-based economy to a services and tourism-based economy, Malta has had little funds available to commit to conservation. Indeed, it was only with the assistance of the Italian Government, that Malta finally launched its first serious effort in conservation education.

University education vs. vocational training

Faced with a reality which can be distilled to a case of nowhere near enough trained conservators in an area (the Mediterranean) which is one of the richest cultural heritage areas in the world, Malta was compelled to take a critical look at the way it should approach conservation education. It is worth noting too that this examination of the *raison d'être* of conservation education took place in the context of a national re-appraisal of the values and differences between traditional university education and vocational training. This debate was especially important in the Maltese context where the University of Malta is a prestigious institution with close to 10,000 students and a 400-year old tradition whereas vocational training in Malta is still very much the Cinderella of the local educational scene. In this context it was not immediately clear where one should put conservation education, in a university context or a vocational training context.

It should be pointed out that the distinction between the objectives of university education and vocational training is not always clear-cut. The University of Malta has, for example, been training lawyers or doctors for

centuries – and the training is clearly aimed at the production of professional practitioners (whether law and medicine are ‘vocations’ is a subject which will be left to semanticists and philosophers). Yet why should these lawyers and doctors not equally be trained in a Polytechnic as opposed to a University? (In some countries they are). Why should the training of teachers or Art and Design be “relegated” to Vocational Colleges? Is it true that if a course contains a large amount of hands-on practical content then its proper place is in a vocational college and not in a university (which is supposed to be more properly concerned with the theoretical side of life as opposed to the practical applications of any art or science).

Defining the objectives of conservation education as outcomes

“There are more parallels between medicine and heritage conservation than is generally thought; old monuments also require more care and maintenance than new ones. Doctors the world over consider the need to carry out specialist training after one’s general studies as self-evident, and it is only after sitting a great many examinations and performing professional duties for several years that they regard themselves authorized to set up on their own”

Dieter Horchler

In order to arrive at as objective an answer as was possible under the circumstances, it was decided that we should first answer the question: what is the objective of conservation education? The answer seems to be that, even when outcome-based, conservation education may have more than one objective:

- i) the production of professional practitioners in the field of conservation (in a way which is analogous to the role of the surgeon in medicine)
- ii) the formation of various other members of the conservation team, without whom the professional practitioner cannot operate (analogous to the role of anaesthetists, nurses, internists, and medical laboratory technicians and researchers whose complementary role is vital to the surgeon)

Thus the approach to conservation education in Malta has been unashamedly outcome-based which is an approach more normally associated with vocational training rather than university education. Yet, when we came to see what it took to achieve the outcome it became clear that, if we were to produce professionals, conservation education must exceed the standards of either university education or conventional vocational training. In other words the professional conservator must have a theoretical basis which is as sound and as deep as that of a university-trained person but must have the manual dexterity of someone who has had the same level of hours of practice as somebody who undergoes vocational training.

The analogy with the surgeon made previously is better understood if one examines the definition of Art. 3 of the Italian legal regulations governing both OPD and ICR “*E restauratore dei beni culturali un operatore professionalmente qualificato capace di una a) analisi e interpretazione dei dati obiettivi sullo stato di conservazione b) abilita’ manuale di intervento, coerente con gli insegnamenti impartiti, adeguata ad una valutazione critica degli effetti dell’intervento stesso.*”⁴⁷ Like the surgeon therefore, the conservator-restorer must be capable of both diagnosis and intervention. Like the surgeon, without the other members of the team, the conservator-restorer would be very limited in his scope of action and, in a number of cases, would be completely unable to operate (with any degree of conscientiousness that its).

At a practical level, Malta – and the Mediterranean – needs to produce a quantity of surgeons as well as all the other members of the team that the surgeon needs around him or her. The nurses, anaesthetists, internists, researchers and laboratory scientists of the Mediterranean world of conservation also need to be trained somehow. But how should one do it? What model should one adopt: diploma, undergrad, post-grad or what?

⁴⁷ *N translation*

The MCR model: From vocational through undergraduate to post-graduate

“I firmly believe that conservation education should predominantly be a post-graduate affair” said a good friend of ours whose opinions we very often defer to. Yet this was one of those cases where we felt that practical experience in other countries should compel us to disagree. Post-grad education in anything is always a good thing – the more mature the students the better. Yet, for example, the Courtauld, V&A or Northumbria post-graduate models do not preclude a conservation education which can presume little at the outset and which only has three years in which to mould the conservator. Post-graduate maturity is always preferable but does it really need to be a pre-requisite?

The Maltese answer to this last question has been a careful ‘No’. The University of Malta’s experience in training traditional professionals, such as doctors and lawyers, pointed to enormous value of an in-depth all-round preparation in sector-specific issues at undergraduate level for the practice of the profession. The main problem we perceived with post-graduate education is precisely the level of preparation of the students: a conservator-restorer requires an optimal mix of sciences and arts in his/her training programme. It would be better if he/she would benefit of such a balanced science/arts approach already at undergraduate level rather than arrive at a 3-year post-graduate course with an exclusively science or exclusively arts background.

Moreover, in our analogy with the surgeon, in our experience the latter qualifies after first having obtained a first degree in medicine and surgery. Qualification as a surgeon in many jurisdictions is a post-graduate affair which is built on a first degree which is intended to give the young houseman as well-rounded and comprehensive a medical training as possible. Thus, even, if for the sake of argument, one were to concede that to work as a conservator you must have attained post-graduate level, this does not mean that the first degree should be any old degree in preference to an undergraduate degree which is totally dedicated to conservation arts and sciences. This wish to have an in-depth and comprehensive undergraduate degree in conservation therefore led the MCR to adopt an undergraduate programme of studies which to a considerable extent incorporates much of the same material covered by ICR and OPD in their 3-4 year diplomas, in much the same ratio as science (35%) vs. arts subjects. This 4-year

programme is designated as *B.Cons. (Hons.)* or the Bachelor degree in Conservation and Restoration Studies.

From B.Cons (Hons) to warrant to practise as a conservator

The Maltese legislator was mindful however of the Polish and Courtauld approaches as a result of which conservators are not let loose before a minimum of 6 years of post-baccalaureate education. For this reason the new Maltese Cultural Heritage Act 2002 legislates the profession of conservator-restorer into being at par with other professions and requires that, as in other professions, new graduates in conservation and restoration studies would have to spend some time in full-time practice before they can work without supervision or direction of more experienced conservators. This interlude before receipt of the professional warrant to practise as a conservator, would therefore follow the four year B.Cons. undergraduate course, 50% of which would be spent in practical sessions.

“surgeon-type” Post-graduate degree

As an alternative to two or more years of working under supervision before they qualify for the conservator’s warrant, graduates from MCR’s B.Cons programme may acquire more experience as part of a post-graduate course (M.Cons.) which MCR plans to develop in order to enable trained conservators to continue specialization in a chosen field.

Post-graduate Change-over degree

The “surgeon-oriented” post-graduate course described above would be in addition to a different type of conservation post-graduate degree which would be designed as a change-over degree for graduates in other disciplines who would like to become members of a conservation team without necessarily wishing to go into the role of surgeon. This would, for example, enable graduates in chemistry or history of art to learn the basics of conservation techniques, arts and sciences and thus insert themselves more easily into the conservation work milieu. Thus, very much on the model of the *Curric* project, MCR is preparing an M.Sc course in Conservation Scientists primarily targeted at graduates in the material sciences who would like to change-over to conservation science as a career decision.

Conservation as an emerging discipline – parallels with cognitive science

From multi-disciplinarity to inter-disciplinarity

It is easy to recognize that conservation education is an emerging discipline in academic circles yet it is not so easy to determine which direction it should take and where emphasis should be placed. The debate has been further confused by some arguing that conservation is craft-based and that it should remain firmly relegated to craft status.

Furthermore it has been argued above that the competences required from the average conservator in average circumstances leave the professional little choice but to have a sound inter-disciplinary approach capable of communicating with, and often operating without the benefit of, a proper multi-disciplinary team. In summary the economic model dictates that rigorous training, a commitment to a shared vision, and a deliberately formed and carefully cultivated interdisciplinarity, are the defining characteristics of a true conservator.

The notion of interdisciplinarity is not peculiar to conservation. At least one other emerging discipline, Cognitive science, has had to tread a similar path. Howard Gardner put it thus:

“cognitive scientists harbor the faith that much is to be gained from interdisciplinary studies. At present most cognitive scientists are drawn from the ranks of specific disciplines - in particular philosophy, psychology, artificial intelligence, linguistics, anthropology and neuroscience...The hope is that some day the boundaries between these disciplines may become attenuated or perhaps disappear altogether, yielding a single, unified cognitive science.”

Likewise most conservator-restorers could possibly be drawn from the ranks of specific disciplines – in particular history of art, archaeology, material sciences, project-based management etc. The hope is that by blending the required knowledge and expertise from each discipline the boundaries may disappear and the conservator would be the walking embodiment of a an interdisciplinary member of a multidisciplinary team. Will the more conservative of say, art historians, accept this approach? Once again a comparison with cognitive science may be useful:

“That there are sciences that study cognition is undeniable. That there is a single, unified discipline of cognitive science is debatable. Its critics argue that it does not exist; that it should not exist. New sciences are often invented, they say, as a ruse to gain research funds, and cognitive science is nothing more than six disciplines in search of a grant-giving agency. Intellectual disciplines, however exist when administrators, recognising reality, baptise them for administrative convenience. Universities in the United States and Britain contain a growing number of Centres of Cognitive Science”ⁱⁱⁱ

At this moment in time it is likewise debatable that internationally there could be said to exist a single, unified discipline of conservation nor as to whether its practice should be placed at par with that of other established professions. Malta has responded to this challenge by instituting a *sui generis* undergraduate degree in conservation and by legislating the profession of conservator into being. Once having obtained his or her warrant to practise, the conservator-restorer will face the dilemma posed by Sharon Cather “is it possible for one human being to learn all that there is to know in a lifetime”. In truth economic circumstances mean that if he does not continue studying through a process of life-long education where every new project is valuable added experience then the conservator-restorer will not be a very useful asset. To answer Cather’s remarks in a more direct manner: the most cost-effective way to resolve the dilemma of conservation education is a 4-year course which produces a well-rounded student trained to study further on his own and able to make up for his own lacunae. To expect otherwise would be to run counter against financial constraints imposed by economic models. Better resigned to a life -long learning process than permanently fly in the face of constraints imposed by economic realities. Realisation of the life-long nature of the learning process and proper interdisciplinarity are the keys to beginning to resolve the dilemma of conservation education.

Comparative analysis of Categories of Conservation Education

Classification No.	Category descriptor	Country	Institutions & Qualification Awarded
1	Collection-driven training (often originating in major museums) starting as diploma but today nearly always validated by a University	UK UK	Courtauld (Post-graduate diploma or MA) Victoria & Albert PG diploma or MA
2.	Non-university academy reporting to Ministry for Cultural Heritage	Italy Italy Netherlands France	Istituto Centrale per il Restauro (3 yr Diploma) Opificio delle Pietre Dure (Diploma) Institut Collectie Nederlands (3 year Diploma) IFROA (3 year Diploma)
3.	University-bred degree in conservation	Poland	University of Torun (Masters degree)
4.	Conservatoire-bred degree in conservation	Poland	Warsaw Academy of Art; (Masters); Krakow Academy of Art (Masters)
5.	Phased-vocational (including Crafts-based approach based on release from industry) (Nordic)	Germany UK	Fulda, Rycotewood
6.	Post-graduate degrees which do not require	UK	Courtauld; Victoria & Albert

	conservation at first degree level		Cambridge UCL
7.	Undergraduate Bachelor of Science degree – University-bred	UK Jordan	Institute of Archaeology, University College, London (B.Sc) now discontinued; Institute of Archaeology, Yarmouk University (B.Sc)
8	Undergraduate and post-graduate degree courses which have evolved from the phased vocational training route – (College of Further Education/Polytechnic – bred courses)	UK	University of Northumbria (MA); Buckinghamshire Chilterns University College (BA/MA) Camberwell College of Art (BA/MA) City & Guilds of London Institute;
9.	Non-phased Vocational Education Courses in private or State institutions ranging from 3 month courses to 4 year courses	Italy Greece	Firenze Piacenza 2 year diploma) Spinelli (3 year diploma) Lombardia Thessaloniki (2 year Diploma) Athens TEI 4 year diploma)
10.	University-bred applied Masters degree following two-year diploma	France	Sorbonne (Maitrise Science et Techniques de la Conservation)

11.	University degrees in conservation with no (or insubstantial) hands-on practical element	Italy	Ravenna Viterbo Lecce
12.	Purpose-designed University-bred undergraduate degrees which are interdisciplinary in design and approach	Malta	MCR/University of Malta (4 year B.Cons (Hons) degree;

ⁱ Legge /39

ⁱⁱ BRANDI Cesare,

ⁱⁱⁱ JOHNSON-LAIRD Philip, *The Computer and the Mind*, Fontana Press, London, U.K., 1993 at p.8