

Management of the conservation of Ivrea's modern architectural Heritage: the role of the Guidelines

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1. Introduction

Objectives

In this paper, I will illustrate the history of the creation and decline of the Modern Architectural Heritage of Ivrea and the action the town has taken to prevent its decay, through a targeted administrative and cultural programme in which specific Conservation Guidelines have an essential role. My discussion will therefore focus on these Guidelines, describing their origin, inspiration and the way they can be applied to normal buildings and unusual cases, taking account of their fundamental role in guaranteeing the conservation and authenticity of Ivrea's buildings, which like the Tomioka Silk Mill, aspire to being recognised by Unesco with the prestigious title of "World Heritage Site".

1. The creation of Ivrea's architectural Heritage


Historical factors

Ivrea is a small town of 25,000 inhabitants situated between Turin and Milan, which are the largest industrial cities in Italy. Stuck on the margins of history for 20 centuries, the town became famous in the last century thanks to Olivetti, which transformed it into the capital of an "industrial empire" with commercial and production operations all over the world (including Japan), thereby giving it a role and degree of international notoriety that are extraordinary for a town of such modest dimensions.

Of course, the Modern Architectural Heritage of Ivrea is the result of the building activities of Olivetti and include buildings constructed between 1908 and the mid-1980s, which offer a significant split for Italian architecture of the 20th Century.

Perhaps not by chance, its creation relates to a period of time that coincides almost exactly with the one set by the English historian Eric Hosbawm to define the "real" duration of the 20th century, one of the "shortest" and most intense in human history.¹

A century in which history experienced an acceleration that brought about the substitution of archaic and static production systems for new and dynamic ones, a progressive increase in the demand for high-technology goods and a definitive end to the isolation of national markets.

	
<p><i>Fig. 1 Olivetti M20 - 1915</i> Olivetti's first portable typewriter machine (source Fondazione Archivio Storico Olivetti)</p>	<p><i>Fig. 2 The "Lettera 22" - 1957</i> by Marcello Nizzoli. One of the most famous product of Olivetti (source Fondazione Archivio Storico Olivetti)</p>

Product of its time, Olivetti skilfully navigated these changes, founding its success on the ability to quickly interpret signs of change and offer the international market products that were always innovative in terms of technology and

¹ Eric Hosbawm , *The Age of Extremes: The Short Twentieth Century, 1914–1991*, London, Michael Joseph, 1994

design. It was renowned for these products, which from the 1950s, presented "Italian style" to the world in the most prestigious way.



Fig.3 Interior of the " Divisumma" - 1947, The world's first electric printing calculator with the ability to perform the four operations

The "Olivetti vision" of industry's role in society

However, its great industrial and commercial success are not sufficient to explain Olivetti's special relationship with architecture, nor the attempt to transform Ivrea into a testing-ground in which to realise a utopian vision of a 20th century industrial town on a "human scale".

During the 1900s, other industries resorted to famous architects and others produced excellent objects in terms of design and technology content², but none of them left such an important and organic architectural heritage.

This heritage is in fact the result of a remarkable conception of the social responsibilities of industry that Adriano Olivetti started to develop during the 1930s³, and which focussed on the idea of "Political Community". This idea entails a small area in which industry and the local environment should be economically in harmony and pursue a shared interest in the economic, social and ethical progress of both sides.

Thus, for Olivetti the Community is the place in which a factory provides technology for the betterment of humanity;



Fig.4 Adriano Olivetti in the ICO a working day (at the end of 50's).
(foto by Fondazione Archivio Storico Olivetti – Ivrea)

² As a European reference, the German company Braun, currently the subject of an open exhibition at the Musabi Art UniversityTokyo, can be compared and contrasted with Olivetti.

³ Adriano Olivetti's question to himself and to his workers "Can industry pursue objectives? Are these objectives merely related to profits? Or isn't there something more interesting, an ideal plan, a destination, a vocation?" in: Adriano Olivetti, *Il mondo che nasce*, Roma, Edizioni di Comunità, 2013

the place in which it makes use of human resources and materials to produce wealth, but where it also guarantees a high quality of life and civil progress.

Quality and progress that according to Olivetti should influence every aspect of a citizen's life, both in the factory and in their personal lives.

On the one hand, this leads to the creation of ergonomical working environments, efficient and less stressful production methods, the development of democratic methods of managing industrial relations, and a standard of factory architecture that is the concrete expression of research on beauty and harmony⁴ that industrial operations should be aiming for. A beauty that is evident in the harmony, realised concretely by Olivetti at many times in its history, between the quality of production processes, the production sites and the products.

On the other hand it leads the company to redistribute a significant part of its wealth to feed a complex welfare system sustained by a dense network of high quality buildings destined for use as dwellings or to house high quality services (in the fields of health, sport, religion and culture) for its employees and the inhabitants of the area in which the company is based.

2. The architectural Heritage of Olivetti today

Ivrea, where Adriano Olivetti attempted to realise his urban vision with the help of some of the most important Italian architects of the 20th century⁵, is the site of most of this building activity that gave the town the gift of an architectural Heritage that in Europe is unique in its genre for its quality and ability to entirely represent the specific typological variety of the modern city.

The first attempt to explore the full extent of the Heritage was carried out between 1996 and 1999 by the Office set up by Ivrea's municipal authorities to create MAAM, whose management was entrusted to me.

The Office was created thanks to the innovative use of funds made available by legislation on "socially useful projects". These funds, which are normally used to finance temporary jobs maintaining the town for unemployed workers, were in this case used to hire around twenty young people⁶ who had either graduated or had almost graduated from courses in Architecture, History or Communications Science. They were offered the unique opportunity to establish the contents of the future Museum and lay down the foundation for its existence through the cataloguing of the Heritage, the preliminary planning of the visit route, the organisation of guided tours, the creation of a website and the setting up of a press office. The activities of the Office continued for three years and apart from facilitating the birth of the Museum, provided an excellent training opportunity for those young professionals, in particular the architects, some of whom stand out for the sensitivity with which they carry out their work.

The cataloguing carried out by the MAAM Office, identified 237 realised directly by Olivetti or by its technical offices and consultants.

The revision of the catalogue that I conducted in 2012 (as part of the MAAM Observatory's activities, which I will expand on subsequently)⁷ increased this number to 260 buildings, including 222 dwellings, 15 industrial buildings, 5 office buildings, 3 buildings for social services, 3 schools, 3 religious buildings, 1 residence, 1 multifunctional building,

The year 1996 marked the end of the construction of the architectural Heritage and the beginning of its conservation and restoration.

In fact, in 1996 Ivrea was a helpless witness to the rapid and definitive collapse of Olivetti, whose disappearance ended a prosperous economic period and left the city without the identity and role that had become indisputable.

However, in the same year, the local authorities took action to save the identity and economic role of the city by turning in practical and ideological terms to the very architecture inherited from Olivetti, the last concrete evidence of a glorious past, of which the town, now that it was an orphan, felt like a proud heir.

⁵ These include: Luigi Figini, Gino Pollini, Ignazio Gardella, Marcello Nizzoli, Ludovico Quaroni, Carlo Mollino, Franco Albini, Annibale Focchi, Gino Valle, Marcello Zanuso, Mario Oliveri, Ettore Sottsass, Eduardo Vittoria and many others.

⁶ The office was composed of E. Giacomelli (manager and co-ordinator), M. Angelico, M. Biazzeiti, M. Bracco, E. Calligaris, A. De Pasquale, L. Diotto, G. Fundarò, P. Maurri, A. Menaldo, T. Moore, D. Nespolo, E. Pacchioli, M. Pavan, A. Porpiglia, L. Schranz, C. Silmo.

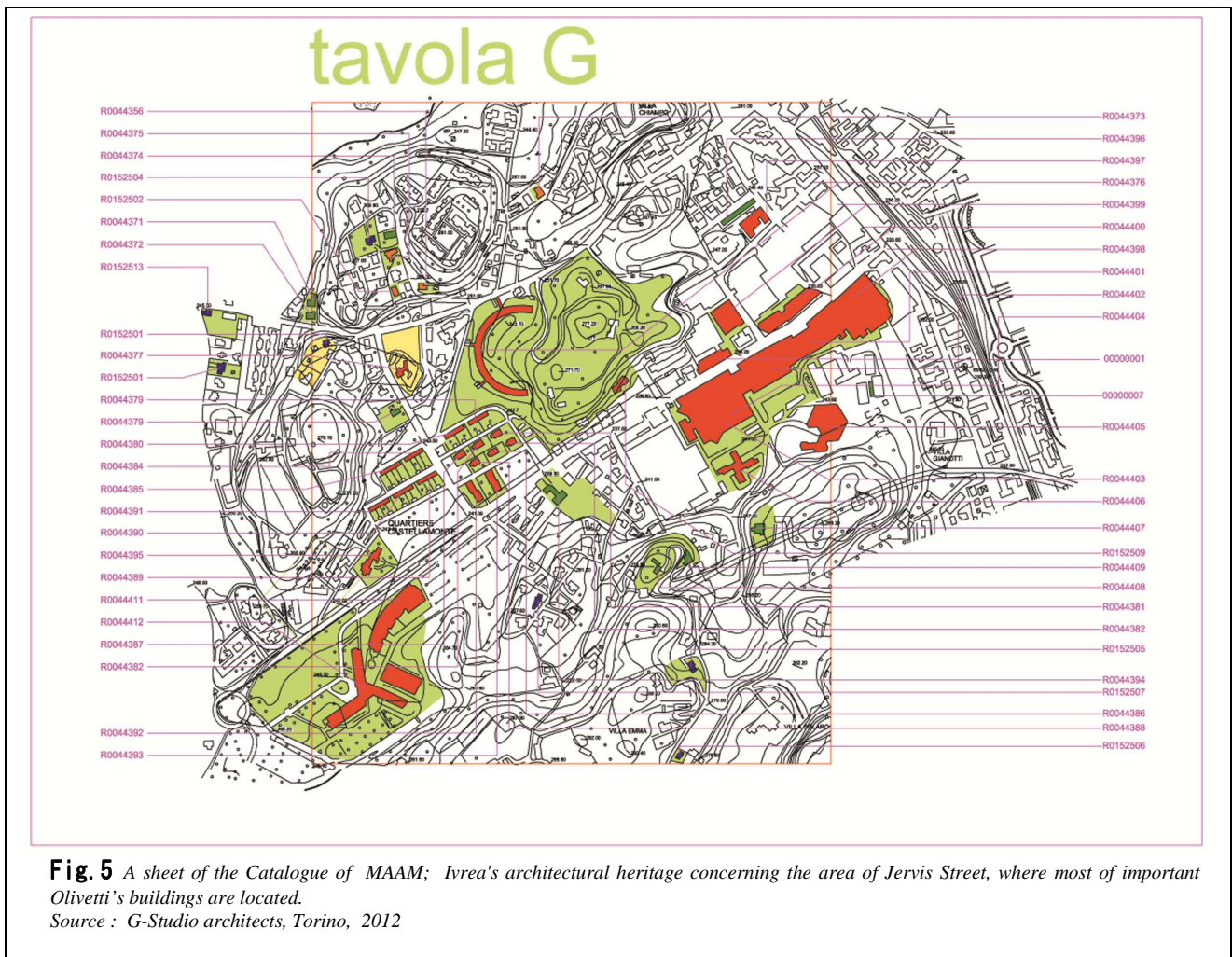
⁷ Amendment to the catalogue of 31.12.2012

With that aim, two programmes were promoted: one that promoted the conversion of abandoned buildings (that would have become derelict before long) and one focussed on the appreciation of Adriano Olivetti's philosophy and the conservation of the monuments in the contemporary town that he promoted.

This is how in the same year the Ivrea Museum of Modern Architecture (Museo dell'Architettura Moderna di Ivrea, MAAM) project was born, its objective being to "research, promote and preserve" the modern architectural heritage of the town.

The opportunity to bring this cultural initiative to life was ensured between 1996 and 2000 by funds obtained from public programmes to support Ivrea and its surrounding areas after the closure of Olivetti. In particular, as we have seen, state funding permitted the employment and remuneration of the young researchers, those received from the Region of Piemonte covered the expenses of the Office's activities, while funding in the amount of approximately one million euros (60% from the EU and the rest from the Region) facilitated the construction of the tour route.

However, after the start-up phase, the Museum could count only on the modest financial resources of the town, destined mainly for maintaining the route and renting the Reception area, and on the voluntary contribution of individuals and associations, which although not continuative, brought its cultural promotion activities to life.



The project immediately produced three initiatives:⁸ the compilation of the Catalogue of Important Modern Buildings; the construction of an open air museum route that facilitates direct contact with the architecture and, the one that is of primary interest today, the publication of conservation Guidelines⁹ to be used in tackling the problem of conserving the Museum's "collection".

3. Formulation of the Conservation Guidelines

The general framework

In 1996 it was in fact clear that one of the most important issues to which the Museum needed to promptly direct its attention was the very subject of building conservation.

The closure of Olivetti was in fact causing a rapid alienation of the company's building heritage and that facilitated the potential division into lots of the large industrial buildings and the diffusion of inappropriate conversions by new owners who were either unaware of or indifferent to their value.

An authoritative instrument addressing scientific, legal and administrative issues was therefore needed to put an end to the behaviours that difficult circumstances made more easily tolerable, but which threatened to destroy a precious inheritance very quickly.

The Guidelines were consulted, even though in Italy they are an instrument not used to regulate the conversion of valued buildings such as the ones found in Ivrea.

Contrary to what occurs in other places,¹⁰ monuments with a high cultural value are never the subject of Guidelines in the sense that for them the strict application of restoration practices is prescribed under the supervision of officials from the Italian Ministry of Cultural Heritage.

The use of the Guidelines, usually accompanied by illustrations that explain the concepts in an explicit manner, is therefore designed for promoting (without obligation) virtuous initiatives in converting rural buildings¹¹, areas of industrial development or to safeguard special landscapes that are not subject to regulations.

To understand why in the case of Ivrea this instrument was used, one needs to consider seven specific conditions capable of influencing such a decision:

⁸ E. Giacomelli, "*The MaaM of Ivrea*", in: G. Peghin, A. Sanna (edited by), *Modern Urban Heritage*, Umberto Allemandi & C, Torino, 2012, pp. 100-114.

⁹ Initiatives associated with the construction of MAAM and the conservation of Ivrea's architectural heritage:

- 1996-2000 Cataloguing of the buildings that make up Ivrea's architectural heritage (Enrico Giacomelli and MAAM Project Office).
- 1997-2001 Creation of the open air museum route. (Enrico Giacomelli + F. De Berardinis, P.P. Vidari, P. Urbano, L. Fuso, P. Bonifazio, P. Scrivano)
- 1996-2000 Publication of the Guidelines on the conservation of Ivrea's Modern Architecture. (Riccardo Avanzi, Enrico Giacomelli).
- 2000-2002. Publication of the new Municipal Regulation Programme, which for the first time in Italy gave valued modern cities the same status as a historic town centre. (Giuseppe Campos Venuti, Federico Oliva, Adalberto Barbieri, Paolo Galuzzi)
- 2000-2002 Restoration of the Canton Vesco Quarter. (Riccardo Avanzi, Enrico Giacomelli)
- 2004-2006 Restoration of the ICO Centrale complex. (Enrico Giacomelli)
- 2009-2012 Candidature for inclusion in the "World Heritage Sites" catalogue, Unesco and inclusion in the "Tentative List". (Fondazione Adriano Olivetti – Comune di Ivrea – Dott. Patrizia Bonifazio)
- 2012 The establishment of the Observatory for monitoring interventions on the Olivetti architectural heritage. (Technical Office, town of Ivrea – G-Studio, architects) Enrico Giacomelli)
- 2013 Amendments to the Conservation Guidelines and the Catalogue's list of buildings. (G-Studio architects - Enrico Giacomelli)

¹⁰ See: [www.english-heritage.org.uk/professional/advice/hpg/has/listedbuildings/#\(3\)](http://www.english-heritage.org.uk/professional/advice/hpg/has/listedbuildings/#(3))

¹¹ See: (www.regione.piemonte.it/montagna/dwd/manuale.pdf)
(www.regione.piemonte.it/territorio/dwd/documentazione/paesaggio/BuonePratichePianificazioneLocale.pdf)

1. All the buildings that make up the Heritage, apart from two, are privately owned, which excluded a priori a direct intervention by the government authorities to restore them, and anyway, such an intervention would have had disproportionate effects on the town's practical and economic resources.
It was therefore essential to adopt an instrument capable of activating private intervention and directing it towards the common interest.
2. No building was (or is) included in the lists of historic cultural heritage sites subject to state imposed restrictions, which left the local government entirely responsible for defining, publicising and enforcing conservation methods for buildings.
3. Practically all the buildings, although to differing degrees, were still in use, often with the same functions for which they had been constructed. This could have been an advantage, in the sense that there was someone who had a direct interest in the buildings' conservation, but it was also a limiting factor, since it would have been impossible to relocate the buildings' inhabitants during the restoration process.
4. In 1996 (like today) the buildings no longer belonged to one wealthy and cultured individual, but to a variety of owners with very different interests in terms of culture and economic potential. The dwellings had been purchased from their inhabitants and Olivetti, before its collapse, had abandoned part of its property assets. Evidently this constituted an obstacle to the idea of consistently imposing a thorough and expensive standard of restoration for all the buildings (and on all their owners).
5. The 260 buildings made up a heterogeneous heritage of buildings. The architectural quality, the dimensions, the construction details, the use, the decay and the future prospects of buildings dispersed across the town were all different.
This heterogeneity eliminated the possibility of using the methods that are applied to national monuments, which are linked to complex bureaucratic procedures and furthermore do not take into account the diverse cultural value, the dimensions and the material characteristics of the buildings. They tend to limit the interventions and freeze their uses.
6. The salvage of a heritage as vast as the one in Ivrea would certainly have required a lengthily and uncertain time frame due to the number of interventions necessary and the diversity of objectives, expectations, available funds and the level of attention given to the buildings by the numerous owners involved. This made the adoption of Salvage Programmes or punctual Architectonic Projects unlikely due to the cost and the complexity of formulating control instruments of that type and their tendency to generate interventions and preservation objectives that are too rigid, fixed and incompatible with the long time scales of the programme.
7. Finally, to complicate the situation even further, there was the difficulty of proposing restoration projects for buildings that in 1996 were certainly not considered "monuments" by the citizens of Ivrea, who, being used to the familiar presence in the urban landscape of such exceptional architecture, had always appreciated it mainly for its practical value, ignoring the historic-monumental aspect, which citizens at most went along with out of conformity, out of respect for the status that Ivrea's architecture enjoyed around the world and in history books.



Fig.6 The Hotel La Serra next to the Historic Centre of the Town. (photo by Paolo Mazzo, 2011)

The objectives of the regulations

Using the Guidelines therefore seemed to offer certain advantages in dealing with such a complex situation.

Guidelines are a relatively simple and cost-effective instrument to formulate and publicise and can be quickly amended if it becomes apparent that their contents are no longer effective and current (as was the case in 2013). This makes them particularly suitable to the long time frames of conservation programmes for vast architectural heritages.

In this particular case, they were perfectly suited to the need to translate into operational terms the MAAM principles, which are based on four essential aims:

- To assert the cultural and symbolic value of the buildings, including the smaller ones, that are associated with the history of Olivetti;
- To assert the principle that with regard to any building included in the Catalogue, the conservation and restoration criteria must be strictly observed;
- To promote "active conservation" that facilitates the salvage of the buildings' original image without obstructing the natural process of change and paying attention to the purposes for which they are used, their ownership and cultural significance;
- To assist citizens in becoming active and avid supporters of the conservation of their buildings.

Since there were no local examples to which we could refer, while we were formulating the Guidelines we were interested to consult the salvage programme of Le Corbusier's Cité Frugés in Pessac (which began in 1985). We were particularly interested in the attention paid to involving the inhabitants and the pragmatic and progressive approach of the restoration.¹²

Of course the Guidelines for Ivrea cannot be as detailed and specific as those defined for Pessac, where the task of establishing restoration principles on a case by case basis was facilitated by the small number of buildings (less than 30) and by their similarity.

Despite this, even though we could not examine all the possible changes in detail, these are able to provide instructions that define the principles that must be followed in every aspect of the restoration of the buildings that make up the Heritage.

Furthermore, they aim to provide the information in a manner that is clear, unambiguous and easily understood above all by the citizens who need to apply them.

In contrast to the homogeneous nature of Pessac, since we had to deal with many different situations, the Guidelines incorporate a degree of flexibility, which among other things, is useful in the case of interventions directed at adapting buildings to new norms or correcting errors in planning or execution.

In anticipation of a change in Italian legislation on items of cultural heritage in that many are hoping for¹³, they in fact introduce the concept of "levels of cultural value" in buildings,¹⁴ dividing the Heritage into four classes and attributing an intervention procedure to each one, which at the lowest level provides the simple preservation of the original formal characteristics (simple buildings in Category C/C) and at the most restrictive level, the complete restoration and conservation of the appearance and design of the building (monumental buildings in Category A)¹⁵.

¹² M. Ferrand, J-P. Feugas, B. Le Roy, J-L. Veyret, *Le Corbusier : The Quartiers Modernes Frugès*, Basel, Birkäuser, 1998

¹³ The need to amend Italian legislation on interventions on items of cultural heritage, introducing levels for classifying the importance of monuments and the changes permitted on each one, has been recently expressed in a firm manner and discussed by Ugo Chiarughi in a text that analyses international legislation regarding the conservation of modern architecture (Ugo Chiarughi, *Maledetti vincoli. La tutela dell'architettura contemporanea*, 2012, Torino).

¹⁴ This relates to a concept already present in the national legislation of many countries: for example, two levels of value are provided for in France, the Canton of Geneva (Switzerland), in Vallonia (Belgium) and Denmark; three levels in England, Japan and Slovenia; and a more detailed classification in other countries, such as Ireland, Portugal and Romania (Ugo Chiarughi, op. cit., p.188)

¹⁵ CATEGORY A: buildings of great monumental value, designed by famous architects, with recognised significance for Italian architecture of the 20th century for which the complete preservation and conservation of their external appearance and the general design of the building is stipulated, including when the permitted use of the buildings

In fact, even with a varied heritage such as Ivrea's, it is possible to identify "families" of buildings that are similar in terms of their cultural importance and certain specific aspects such as the period in which they were built, the construction method and the type of degeneration, to which similar criteria for intervention can be applied. Furthermore, with an operative programme such as the one in Ivrea, such simplification, which in purely academic terms might cause some people to turn up their noses, is not only legitimate, but also indispensable and above all useful.

Obviously for the simpler and less important buildings, as well as the more numerous ones, the Guidelines prescribe the operations to be carried out in a more detailed manner, while for the more important buildings such provisions are considered appropriate only in the case of minor interventions, conservative restoration being the recommended intervention method for major changes.

The underlying spirit of the Ivrea Guidelines is therefore pragmatic and unbureaucratic.

Pragmatic to the point that I like to say that the best feature of the Guidelines is their ability to promote "common sense" initiatives, a trait that I greatly appreciate and that is particularly suitable for situations in which, even without giving up on the pursuit of ambitious conservation objectives, it is necessary in each case to reach a compromise between what one wants and what can be concretely achieved.

However, common sense can only be applied on condition that extensive knowledge of the item to be managed is held; mishandling the margins of discretion permitted in the Guidelines could in fact betray their spirit by accepting "less worthy" compromises.

The Guidelines are also influenced by an anti-bureaucratic spirit.

In this regard they provide for the partial substitution of the normal authorisation procedures by consultation on the planning choices carried out "on location" during site inspections in which the town's technical advisers meet with designers, owners and builders, in the spirit of the "shared government" example for urban transformations promoted by the French organisation C.A.U.E.¹⁶ and certain Italian examples such as those of Giancarlo De Carlo¹⁷ that are well known by the authors of the rules.

Unfortunately, the absence of rules from the mechanical application and a non-traditional application procedure, paradoxically constitute an element of weakness in the Ivrea Guidelines.

They are poorly suited to use by the Technical Office employees who are used to (at least in Ivrea) dealing with rules that do not concede much margin for personal interpretation. For this reason, the positive effects of the Guidelines are evident mainly where its application has been removed from the bureaucratic vision and the modest remit of that office, as we will see in the following examples that illustrate three different levels of intervention carried out through the Guidelines.

4. Application of the Guidelines - three cases.

1997 – 2000. Trials with the Guidelines.

Between 1997 and 2000 the Guidelines, which were still being formulated, were tested in the field at a selection of restoration sites in Canton Vesco, the quarter constructed between 1948 and 1953 by Olivetti for its workers. After 50 years of use, almost all the buildings in the quarter had lost all technological efficiency and were suffering from a significant level of decay to the structure and electrical and hydraulic installations, which required modernisation

changes.

CATEGORY B: smaller buildings designed by important architects, for which preservation of the original structure, the formal and chromatic features are provided for as well as attention to the crowning areas, while having regard for the real needs of the owners and users.

CATEGORY C/D: residential buildings of less importance designed by the Olivetti Employee Housing Advice Office, for which simple preservation of the original formal elements is stipulated.

¹⁶ Conseils d'Architecture, d'Urbanisme et de l'Environnement (<http://fncaue.fr/>)

¹⁷ Giancarlo De Carlo, 'An Architecture of Participation', *Perspecta*, 17 (1980), 74-79.

The causes of this situation were a series of factors connected to the particular characteristics of the construction and of the interventions which they had undergone over the years.

Among the main causes were primarily the obsolescence of materials and fixtures, and the use of outdated construction materials; secondly were errors in design and execution of the construction details, poor maintenance choices and inadequate interventions to improve technology and "beautify" the buildings.

Working on the buildings of Canton Vesco was an excellent opportunity to refine one's knowledge of construction methods, the technology behind the materials used and the causes of decay.

It also permitted the testing of the Guidelines' efficiency in regulating restoration projects where the owners were mainly pensioners and low-income workers, and the chance to trial the new model of relationship between the municipal authorities and the citizens, which they wanted to promote.



Fig.7 *Canton Vesco neighbourhood during the 60's. (photo by Fondazione Archivio Storico Olivetti – Ivrea)*

This type of relationship entailed intervention in the field by consultants whose initial remit was mainly to convince the residents of the cultural importance of the buildings in which they lived, of the need to carry out interventions of a different sort from the ones they were used to and of their relative cost-effectiveness and simplicity. Once the natural suspicions arising from the new approach had been overcome and consent had been obtained from the residents to trial the application of the Guidelines on their houses, their job was to then deliberate with the residents, other professionals and builders to agree on every aspect of the restoration, with the knowledge that there are many ways of obtaining the same result and that every agreed outcome is always preferable in the sense that it is the fruit of a compromise between different points of view.

In fact, what matters is that the compromise is found at the highest level possible, as was certainly the case in the choice of colours to which I would like to direct your attention, because they are a good example of the spirit of the collective work carried out on the buildings of Canton Vesco.

Work on colours is known to be a typical part of restoration interventions on modern architecture. However, in Canton Vesco, by choice, there is no trace of the excessive philological rigour that is sometimes used to approach

the subject¹⁸ and the approach to colour was founded on dialogue and a healthy pragmatism, as was every other aspect of the restoration project.

It is well known that choice of colour is a cultural phenomenon; the result of trends that are inherently unstable. The choice, when applied to a building, can be a way of valuing the architecture or, on the contrary, it can be a way to impose one's taste on that of the designer. It was this second scenario that seemed to be the most common in Canton Vesco in the preceding decades and had somewhat mediocre results.

Since the objective of the Guidelines was to restore the original chromatic layout that had been completely distorted by the residents' inappropriate decoration work, it was first necessary to make them see that errors had been made and convince them that a new use of colour that aimed to restore the buildings' original appearance would be more suitable.

The process was not easy, as is always the case when dealing with people's habits and personal preferences. It was therefore necessary to proceed in steps, without making impositions that might have produced a crisis of rejection on the part of those who deep down had politely agreed to be guinea pigs in this experiment.

The compromise in this case was arrived at in deciding to restore the original white colour of the façades without imposing a return to the original colours, which were revealed through stratigraphy, for the painting in contrasting colours of the balconies' rear and interior facing walls. In some cases the new colours of the balconies walls were chosen by the residents from a palette selected by the architects, in other cases, on the basis of their own taste (not always shared, but nonetheless respectable) and in yet other cases the choice was determined by the need to identify colours that were capable of blending in with the colours already present on the exterior, which for various reasons (mostly cost related) could not be changed at that time.

The result of the work at Canton Vesco gives an idea of the work carried out and the gap between the state of the buildings in 1997 and their original condition. The quality of the final results, in terms of aesthetics and method, confirmed the usefulness of the Guidelines and was one of the main contributing factors to them being accepted by the residents of the Quarter (and subsequently by the whole town), who had initially viewed the experiment on their houses with understandable suspicion.

2004-2006. The Guidelines put to the test in restoring a monument: the ICO buildings

The ICO was the architectural icon of Olivetti for fifty years and its restoration represented one of the most important examples of applying the restoration methodologies to a modern building with a view to its reuse¹⁹.

The scope of this report does not extend to a detailed description of the work that restored the building to its original condition and safeguarded the conservation of its famous glass façade at a cost of several million Euros. Instead, what matters is understanding the role of the Guidelines in this case, because it was significant. Since the ICO is not a listed building, without the Guidelines its restoration would not in fact have been compulsory and it is likely that its historic façade would have been lost and substituted by a modern one that would have been highly functional, but unsuited to the building and its history.

In other words, it would have suffered the worst negative consequences, which had already happened in the final years of the Olivetti company, when due to the lack of resources and the weakening of its original ideology, the building had been the subject of several inappropriate and inorganic interventions for modernisation.

Fortunately, the rules for Category A buildings, to which the ICO belongs, stipulates the application of intervention criteria used for historic monuments of great cultural value, which guarantees the complete safeguarding of the subject and the conservation of its original materiality.

However, the effect of the Guidelines reverberated in another sense also, in that the method of decision-making was adopted by the project team (made up of architects and engineers who were not all used to working with monumental buildings) as an operative way of aligning the planning and technical ideas of the parties by

¹⁸ As in the restoration of the Le Corbusier villa of Weissenhof - Stuttgart, the Mies villa Brno - Dessau and Gropius Bauhaus building - Dessau

(<http://www.stuttgart.de/weissenhof/>)

(<http://www.tugendhat.eu/en/sdc/thicom.html>)

(http://www.icomos.org/risk/2007/pdf/Soviet_Heritage_26_IV-2_Markgraf.pdf)

¹⁹ E. Giacomelli, "Olivetti and the Myth of transparency. Reflexions in the restoration of ICO Centrale," in: F. Graf, F. Albani (edited by) *Il vetro nell'architettura del XX secolo: conservazione e restauro*, Mendrisio Accademy Press, Mendrisio (CH), 2011, 276-288

continuously searching for acceptable compromises between the needs of preservation and the very real need for modernisation of a building that was going to be used to accommodate the high-technology offices of Vodafone Italia.



Fig.8 *The ICO during the sixties with another symbol of the "Italian style" : the Piaggio Vespa.*
(photo by Fondazione Archivio Storico Olivetti – Ivrea)

As the person in charge of the restoration project, I therefore constructed, very quickly and with rather primitive graphics tools, some specific Guidelines for the ICO, which were shared with the other members of the team from the time of the first meetings to establish some principles. The first one being that every operation of the project should be aimed at restoring the main feature of the building: its original transparency.

Through these few simple rules, a restoration project that should have concerned only the glass façades, little by little extended to the whole building envelope and subsequently also to many internal changes (thereby extending the usual scope of the Guidelines) in virtue of the impact that those changes would have on the external appearance of the building given its completely transparent façade. Internal partitions, ceiling based illumination systems, the position of furniture, the positioning of equipment and a new fire escape stairway, were thereby approached using the modular principles of the building and reabsorbed by the general geometric logic stipulated by the original designers (Luigi Figini and Gino Pollini). In this way, the new interventions carried out on the open spaces do not alter the appearance of the historic façade that is strongly based on the 80x80 cm square model, and the powerful electrical and hydraulic infrastructure installed in the roof that is invisible from the road, do not change the skyline of the ICO, which is defined by the long horizontal line of its cornice.

The pragmatic spirit of the rules, their ability to accommodate the addition of new elements necessary for adapting the building to modern needs without compromising the ethos of conservation, lead to the decision to substitute the old internal skin of the double façade with a new skin.

This sacrifice, without compromising the appearance of a building that has been a symbol of Ivrea's urban landscape for decades and is one of the most significant examples of the Modern Movement in Italy, ensured the possibility of reusing it and passing it on to future generations, not as a ruin, but as a still efficient and dignified building. This would have been impossible if conservation of the inefficient old façade in its entirety had been prescribed at all costs.

2012-2013. The daily management of conservation: the MAAM Observatory

After the Guidelines entered into force, Italian building regulations changed. In 2001 and 2010 two Italian laws²⁰ simplified the administrative process that governs building changes of minor importance, introducing the opportunity for citizens to notify commencement without waiting for authorisation from the local authorities. Given that the interventions governed by this procedure make up a significant portion of building activity in Italy, the regulations removed the majority of building works from a detailed evaluation and decision by the authorities, limiting the judgement of the Municipal Building Commissions (Commissioni Edilizie Comunali) to only interventions of great importance. For national monuments there are obviously limitations to the application of the simplified procedures. However, unfortunately on MAAM buildings, which are not protected by Italian legislation on

²⁰ Italian Consolidated Law on Building Works, Presidential Decree (D.P.R.) no. 380 of 6 June 2001 and Italian Law no. 73 of 22 May 2010.

cultural heritage, many interventions can be carried out without authorisation or with simplified authorisation. At most, checks by means of samples can be carried out to "statistically" verify the appropriateness of the interventions. However, evidently "statistical verification" is not a method suited to the preservation programme in Ivrea, which requires detailed supervision of the changes in order to prevent an excess of liberty from encouraging some people to stray from the ethos of the Guidelines without being stopped or from forgetting them altogether. Unfortunately, for many years the municipal Technical Office has monitored changes to the buildings included in the Heritage purely by "statistical" means, thereby allowing many inappropriate interventions to slip through the nets.

In 2012 to make up for the damage caused by these actions and in view of the work taken on for the Unesco application, the administration felt it was necessary to conduct a "review" of the Guidelines and of their application procedures.

This task was assigned to a new service in its trial phase, called the " Observatory ", which assisted the Technical Office with its job of updating the Guidelines (the new version entered into force in January 2013) and intervening in conversions on buildings that are part of the Heritage, restoring the shared method that had been abandoned after the Canton Vesco experiment.

The year of the trial phase was dedicated to finding a way to integrate the on-site consultation method with the official administrative procedures and to getting the future remit of the Observatory established, using around twenty intervention cases for the trial's activities. To speed up the trial and make it more effective, the organisational structure of the Observatory was deliberately reduced to one person, the author of this paper, with broad authority for action and interpretation of the regulations and working in direct contact with the town planning official (the political authority) and the head of the Technical Office (the future technical manager of the Observatory). Only at the end of the trial, when the procedures had been established, tested and made public, was the Technical office's architect involved. This architect is now engaged in the activities of the Observatory.



The staircase covered in an inappropriate layer of pink granite after an incorrect intervention in 2011 by the Technical Office of Telecom in an attempt to make it less slippery after rainfall.



The staircase after a correct restoration job that dealt with not only the incorrect covering, but the restoration of all the building's external stairways, the stonework on the sides of the stairs and the terraces, the weather-proofing and tiling of around 1,500 mq of terraces and included the restoration of the original materials (tiles of square grés and "biancone" marble) set according to the methods used in the original project. The intervention was carried out by the same Technical Office of Telecom in 2012 with the consultancy of the "MAAM Observatory".

The safety of the stairs and the terraces is now better than it was when granite was in place, thanks to the use of grés tiles (produced by an Italian firm for the north European market) of the same shape and colour as the original ones, but with certified anti-slip properties, which demonstrates that having to adapt to more restrictive regulations does not always mean sacrificing the original characteristics of buildings.

Fig.9 *The open staircase of Gardella's Mensa.
Photos by the Author.*

The initiative had a degree of success. This is largely thanks to the fact that the consultations on changes provided by the Observatory through my work were offered free of charge and guaranteed the authorisation of projects

(when requested) and the correct application of the law, which protected against any future objections should checks be carried out by the Technical Office. However, in exchange, the residents had to agree that they would submit to periodic checks on the works and to a final check by the Observatory; a procedure that was inserted for the first time in the new Guidelines, and which is not provided for in national legislation for any type of building intervention, even those on a large scale. The promise of free technical advice and a publicity campaign in local newspapers therefore convinced the town's citizens of the advantage of consulting the Observatory about all interventions, even minor ones, on MAAM buildings. In fact, the most surprising thing was to see how easy it was to convince residents to consult the Observatory in advance and how after a short while the advice was mainly regarding works that would not be carried out because the residents understood that they would not be permitted or because they convinced themselves that they were unnecessary or inadequate for the building concerned. The Guidelines, which were established to direct the carrying out of changes, thereby also became an effective dialectic instrument for discouraging inappropriate building works.

Thus, at least in 2012, many erroneous alteration projects were avoided, which if they had not been weeded out by the Observatory, would have been carried out by the inhabitants who would have been genuinely unaware of their inappropriateness. However, we are not sure how things will proceed in future, since the trial has come to an end and the remit of the Observatory has been assigned, perhaps too hastily, to the municipal Technical Office.

The activities of 2012 were in any case important, because they highlighted that the most common type of intervention on Catalogue buildings is small changes, almost trivial and apparently easily overlooked. And yet it is these minor interventions that, if carried out badly dozens or hundreds of times, can ruin a vast building heritage, like little "woodworms", that by the time one notices their presence, they have already chewed through the furniture.

The work of the Observatory therefore confirmed that it is on these interventions that attention must be focussed, since large projects cannot be hidden given that they are still subject to authorisation.

It also demonstrated the importance of pedagogic action through the intelligent and patient application of the Guidelines. Finally, it showed how such work has a broad sphere of application, being relevant when explaining to a resident where the pipe for the new boiler should be positioned in order not to damage the appearance of his house, when convincing the pensioner not to waste his money building a pointless verandah just like his neighbour's (unauthorised) one that would provide no advantages and would ruin the façade, when convincing Telecom Italia to change its approach to the buildings it inherited from Olivetti, such as "Mensa di Gardella", convincing its managers that when one is the custodian of such a valuable building, one should be proud of it, look after it daily, and so forth.

Work that is this continuous, detailed and apparently modest, is sometimes more effective than announcements and grand strategies in guaranteeing the survival of monuments and in a simple, cost-effective and direct way it facilitates the spread among citizens of an awareness about the importance of their buildings.

Even though this type of work can be very satisfying for all the parties involved in the consultation process, it is not however easy to convince the Technical Office employees to practise it, asking them to abandon bureaucratic procedures in favour of the more "adventurous" ethos tried by the Observatory or by the services that inspired it, such as the French organisation C.A.U.E.

And yet there is no way to hold back the decay and inappropriate changes, if not by daily action, patient and enthusiastic, as demonstrated by the Canton Vesco example, the case of the ICO and the brief experience of the Observatory.

Now that the town has decided, understandably, but maybe too soon, to entrust its technical staff once again with the management of the Guidelines, we can only hope that, perhaps thanks to the enthusiasm surrounding the Unesco candidature, we will not have to wait another ten years before the spirit of the Guidelines, as revived by the Observatory, will be definitively adopted.

In fact, another ten years may be too late: the little "woodworms" may have completely chewed through the old piece of furniture built by Olivetti.

5. Conclusion

Of course, I am sure that this will not happen and that the Heritage of Ivrea will not be eroded by the actions of lethal micro-changes. There is no longer any doubt in fact that after years of work on this matter, the cultural importance of the town's modern architecture for the inhabitants of Ivrea has been firmly established and their interest in its conservation, despite everything, is increasing each day, as the ease with which the Observatory's procedures were accepted appears to demonstrate.

One could certainly conclude that this represents a local expression of a vast movement to reassess the cultural importance and monumental value of modern and contemporary architectural experiences throughout Europe.

However, the case of Ivrea certainly has some small specific merits that have established the firm conviction in its inhabitants, more than anywhere else, that a building heritage left by the previous generation, sometimes holds a cultural value that is not inferior to that of monuments from past centuries and is able to represent the strong and vibrant spirit of a local community even better. Among these merits is that of having given the modern historic town the same status as the old historic town ahead of its time and of having sanctioned this principle for the first time in Italy in the town's Regulation Programme. However, even more important was the fact that this revaluation was conducted without thinking that the only possible destiny for a modern town was to become a museum of itself.

This position is derived both from the conviction that towns and their individual buildings are organisms that have a life of their own and are destined to evolve and change, and from acknowledging that it is unrealistic to want to save every significant piece of architecture from the past. There would not be sufficient resources to do that and in reality it would be contrary to the nature of the buildings and would perhaps constitute an excessive interference in the lives of their residents.

Better instead, in my opinion, to set different conservation objectives, firstly to establish agreement on the value of the building to be preserved and secondly, to concentrate not only on the restoration of the material details, but also on the fundamental characteristics of the architecture that withstand changes in use, the passing of generations and the wearing effect of time, ensuring that they are passed on to future generations.

In reality, even the ancient monuments of Europe (and especially in Italy) have reached us with their uses having been changed and having undergone substantial alterations to their form in comparison to when they were first built; but this hardly causes us to think they are any less beautiful or less able to strongly evoke the values and the atmosphere of the time that inspired their creation.

Therefore, the task of those who set conservation objectives is not to sterilise each change in order to preserve, unaltered by time, the "original" appearance (or worse, even the use, as some would like!) of a building or area. Their job is to find a compromise between the natural tendency towards formal stratification of buildings and towns (well illustrated by the historic centres of European towns) and the need (sometimes rather abstract) to conserve buildings at all costs and pass them on unharmed to future generations.

I do not know whether in Ivrea a convincing method has been found to manage this contradiction; but the fact that within certain limits, the inhabitants were encouraged to be involved in the changes, provides the experiment with some legitimacy. Of course, allowing the participation of residents carries the danger of errors, losses, sometimes irreparable, and of conformist choices. This is what happened in Ivrea.

However, a community that behaves in a more responsible manner towards choices regarding the quality of its environment, will produce better results overall than one that is obliged to submit to abstract rules, which it will inevitably try to evade.

Even now, despite a few discouraging results, I am therefore convinced that grounding the conservation of Ivrea's architectural heritage on the development of a widespread cultural sensitivity was the best method available, and that this complex process has not yet been fully explored and inevitably in specific cases, may turn out to be suitable for many other similar situations across the globe.