the greater part of the monuments, if not all, are quite familiar to our readers.

The Maltese Language.

"Scientia" promised its readers "to add to its programme an article upon the Maltese Language", and invited "all the scholars of Maltese to collaborate in such a patriotic and useful scope by sending to the Direction their philological notes and articles for publication" (Scientia, VII, 1941, p. 158). "Scientia's" aim is not merely literary, that is to say, we do not intend to publish novels or poetical compositions written in good Maltese, but we would like real philological discussions, which could be of some help for a better scientific knowledge of Maltese. Even so restricted "Scientia's" aim remains very vast: any note upon the vocabulary, phonetics and orthography, grammar and syntax, or even upon the relation of Maltese to the other classical Semitic Languages, especially Arabic and the other Arabic dialects, may even upon Maltese and its relation to the European Languages, will be very welcome.

The article upon Maltese Language, *In search of a method*, published in the last issue of "Scientia" (pp. 90-93), although written quite independently, may easily be considered as an introduction to an excellent article, which has been sent to us by the learned Professor J. Aquilina, the first part of which is being published in this number. Prof. Aquilina, following into the footsteps of the late N. Tagliaferro, aims at reducing the foreign element in Maltese to a scientific unit. As he writes to the Editor: "The article deals with 'linguistic laws' and linguistic laws are not purists' fabrications but the groundwork of objective scientific research."

ARCHITECTURE IN MALTA

by the Hon. Prof. R. V. Galea, O.B.E., A. & C.E.
Rector of the Royal University of Malta

Mr. Chairman, Ladies and Gentlemen,

Although the greater part of this lecture was prepared during air-raids and with the red flag fluttering before my eyes, little did I expect that by the time I would deliver it many of the buildings I was writing about with pardonable pride would in whole or in part be in ruins or in shambles, no longer specimens of Art and Grace and the mouthpiece of history, but a symbol of what the world would be like if it yielded to the new order wanted by the dictators and their peoples, to whose sordid shame the sacrilege of the unnecessary destruction of our unique national artistic patrimony shall up to the consummation of centuries stand accusing. As a consequence of recent heart-breaking events my lecture may today appear an anachronism or sound perhaps as a funeral oration rather than a celebration of the Glory of Architecture in our midst, but so long as the spirit of Malta remains unconquered we look with confidence to the future, and if today for a brief hour we pause to admire what up to yesterday formed our pride we do so with a determination of emulating the past and of making the Island of sunshine glitter in Art, in Literature and in History, even more than it has done so before.

Let us therefore, for the moment shut our eyes to the horrors of the present and with a record flight of imagination conduct our review from the days of the dawn of civilisation, in which Malta had already started showing its prowess in the Mother of Arts, to the present times.

Prehistoric Architecture

In the History of Architecture of any country seldom a
reference is made to those times which were not illumined by the light both of written history and of architectural monuments. Prehistoric remains of archaeological interest are, where they exist, considered of no architectural value and are dismissed as “fragmentary evidences of the rude building attempts in an unknown past”. Whereas, however, in other countries, with few exceptions, the chapter on Prehistoric Architecture begins and ends with fragmentary evidences, in Malta we possess Megalithic Temples the architectural value of which is only equalled by their archaeological interest. They have been erected with no mean skill in places commanding vast panoramas by a hardy and adventurous race, possibly the first that had ventured upon the seas and doubtless the same that laid the foundations of civilization along the shores of the Mediterranean.

The chief among such buildings are “HAGAR KIM” and “MNAIDRA” at Qrendi; the temples at MGAR, TARXIEN and KORDIN, in Malta and the GGANTJA at Ghawdex. Nearly in everyone of these places the temples are found in groups of two or more, sometimes overlapping one another in part as if contesting pride of place within a limited sacred precinct. A glance at the plan of a cluster of such buildings is consequently often confusing to understand and apt to distract the observer from the realization of the true form of a unitary temple which seldom varies from the rest in its main features.

An examination of the reconstructed plan of a single temple reveals that it consists in the inside of two unequal oval spaces bounded by megalithic walls of wedge shaped blocks and having their major axes parallel and approximately in the proportion of six to five, and their minor axes in one straight line along which a central passage leads to an innermost apse facing the entrance. Externally the structure is enclosed in a horseshoe retaining wall resting against a curved front wall with the entrance at its centre and its convexity towards the temple. The internal outline of plan of any of such temples and the silhouette of anyone of what are believed to be Kabiri statuettes discovered at Tarxien present a striking similarity to one another. Can it be that the second has served as an inspiration to the first? (1).

The description of the plan of a unitary temple may have appeared superfluous, without it however it would be difficult to understand the true shape and form of the finished building as it may be reconstructed not from surmise or imagination but from evidences furnished by extant remains as well as by fragments of models of a megalithic temple discovered among the ruins at Tarxien. A meticulous analysis of such evidences coupled with technical qualifications of no mean order enabled Carlo Cresci to make with considerable success the first attempt at a design of both the external and the internal views of one of the Temples at Tarxien as it must have appeared when in the full vigour of its existence.

A glance at the perspective reconstruction of the front elevation, shows that the concave facade had for its decorative base a stylobate or step surmounted by a studded course intercepted at the centre by the entrance which consisted of a projecting trilithon or two huge upright stones supporting a horizontal one of similar dimensions. To the height of this lintel the wall was made up of a row of very few but large blocks the corner ones serving as buttresses. The rest of the wall consisted of moderately large slightly bulging stones. On top the wall terminated in a simple but robust cornice surmounted by an Attic itself finished with an exactly similar cornice of minor dimensions.

The internal architectural keynote of these temples consists in the huge recessed trilithons which are met with not only in the main entrance but also in every passage between one

(1) One of the Tarxien Temples has three oval spaces and not two.
A close study of the plan of the cluster of temples of which it forms part indicates however that the third and largest oval space must have been a later addition intended to combine two of the temples together. This happened very probably at a time when the original religious This happened very probably at a time when the original religious
chamber and another. The apses were domed to a certain height by a number of horizontal courses, projecting one beyond the other, the reduced opening being finally covered by large flat slabs as were also covered the passages. Screen walls or simple niches often elaborately decorated subdivided every oval space into a central quadrangle in the main passage and two partially domed apses facing one another. From evidences I have witnessed during the excavation of one of the minor temples it is not unlikely that the whole structure of some at least of the temples with exception of the façade was covered over by a mound of loose material.

If such was the case the fact would account for the convexity of the façade towards the temple, that is towards the side from which the thrust due to the loose material would be coming.

The floor of the Temples is made up of as huge blocks of stone as those making up the walls, and such slabs are so laid as if they spanned a subway under the main passage (2).

For obvious reasons I refrain from entering into constructive details which would prove the extraordinary technical ability of the builders of these temples, nor will I describe and compare the highly artistic reliefs which adorn the auxiliary structures within the same, but as a last effort to stimulate in my distinguished audience the sense of contemplating such prehistoric buildings with an appreciation of their original charm and meaning I make a reference to the imposing architectural display met with in more than one chamber of the rock-cut Hypogæum of Hal Saflieni, a composition which is by everyone accepted as the hewn reproduction of the style of the megalithic

(2) Nothing is known of the burial methods of the people of those remote days for no tombs have been discovered which can be associated with the megalithic buildings. Would it be altogether wishful thinking to surmise that one or perhaps, more, of such huge slabs shelters and leader of the time? What a valuable contribution to science it would be if such a discovery could be attempted by the excavation of galleries in

buildings above ground obtaining in those remote days. In it one will observe the double convexity of the front that is both in a horizontal and in a vertical direction, as if with outstretched arms and a modest how it were inviting the faithful to more intense devotions in sacred chambers; beyond in it also one will detect the transversely convex surface and the longitudinal inward bond of every pilaster, as if such pilasters were endeavouring to resist the superincumbent weight. By such observations one feels the sensation not of being in the presence of an immovable object but of facing something susceptible of emotions and capable of change and elasticity.

I make no apology for having somewhat dilated on the Prehistoric Architecture in these Islands; I have done so because it is necessary that more be known about it by the general public as Malta has reason to be proud of its Megalithic and Rock-cut Temples, the like of which is not found in any other country, and which may safely be regarded as the only prehistoric cathedrals in the World.

ANCIENT AND MEDIAEVAL ARCHITECTURE

As in all other places, a mysterious hiatus divides the Prehistoric from the Historic Ages in Malta, as the oldest historic remains here are the product of an advanced and altogether different civilization though the prehistoric period must have lasted on relatively late in these Islands. The next discoverable civilization was in fact introduced by the Phoenicians somewhere about 1030 B.C., and this developed especially when in the Fifth Century before Christ Malta came under the dominion of the Phoenician Colony of Carthage. The traces belonging to this period consist of a number of rock-cut tombs and, according to Albert Mayr, of some remarkable round towers. The Carthaginian rule came definitely to an end when towards the close of the Third Century B.C. Senecavus Longus seized these Islands when on his way to Africa.

Both from history and from archaeological remains it is reasonable to deduce that about this time a Greek element
The remains of an ancient building at Zurrieq first described by Howel in 1785 in his work *Voyage Pittoresque de Sicile, Malte et Lipari*, and lately examined and surveyed by the Museum Authorities appear from the method of construction used to corroborate such theory. (3)

Little is known from writings of the history of these Islands during the Roman Period; Cicero speaks of an ancient and famous temple of Juno which stood on a promontory and which was plundered by Verres. The site of the Temple was in all probability the top of the hill round which Port St. Angelo is now built; it is reasonable to presume that it was not unlike the Doric Temple of Juno and of other deities built in Agrigentum in Sicily. An inscription recording the restoration by the Imperial Procurator Chreston of another temple dedicated to Prosperine was brought to light in 1618 at Mtarfa, Malta. Two Corinthian Capitals and a number of architectural fragments which are now at the Roman Villa Museum at Rabat are ascribed by Abela and Caruana to this temple. Judging from the architectural Order used and from the elaborate decoration of a portion of the architrave, the temple must have been one which vied in importance and in beauty with the best examples of the kind elsewhere.

Roman remains are scattered over many parts of Malta and in some places in Ghawdex. The most notable among them are the Roman Houses at Rabat and at Birżebbuġa. Each occupied a commanding position and was surrounded by beautiful scenery. From what came to light during excavations, these buildings in plan, disposition and style approached more to the Greek dwellings than did the houses discovered at Pompeii. The main feature in each of the two buildings was an impluvium with its peristyleum, that is an open court, surrounded by columns of the Doric Order that supported a roof over a passage known as the ambulatory. The rooms were grouped round this court and received light where possible from relatively small doors and windows opening towards the same. The houses were one-storey high and their façades were plain, but the street door had a porch supported by two columns. Internally, especially the house at Rabat now used as a Museum, the decoration must have been particularly lavish. The floors were of patterned mosaic with panels showing groups of figures, the walls were painted either in fresco or in imitation of marble, while the ceilings must have had painted and gilded timbers.

A notable event during the Roman occupation took place in the year 60 A.D. when St. Paul who was shipwrecked upon these Islands converted the Maltese to Christianity. During the first two centuries of the New Era the believers of the new faith excavated at Mdina many catacombs bearing the same architectural construction and arrangement of detail of the earliest Christian Cemeteries in Rome. These catacombs had their entrance exposed to the public view, a fact which indicates that the Pagan rulers of the time adhered to the Roman Law which protected all sorts of sepulchres and tolerated them to become loca religiosa.

In 313 A.D. the Emperor Constantine accorded to Christianity equal rights with other religions, and ten years later he made it the State religion, in consequence of which towards the second half of the Fourth Century public memorials or little chapels began to be erected or excavated over or near the catacombs. The crypts adjacent to the catacombs of St. Cataldus, St. Agatha, Santa Venera, tal-Virtu', and Santa Marija tal-Grott, and tal-Dwejn are referred to this epoch. Some of the crypts were adorned with pictures of their respective saints in Greco-Byzantine style, as the Island of Malta after the division of the Roman Empire between the two sons of Theodosius the Great had become a dependency of the Eastern Empire.

In 870 Malta fell into the hands of the Arabs under whose rule religious practice it is presumed was restricted and some
churches built by the Maltese were left to fall into ruins. The
Arabs built a castle in the place where Fort St. Angelo now is
and strengthened the fortifications at Mdina. Under them our
labourers became skilled in arabesque decorations which
influenced later styles.

Roger I of Normandy captured these Islands from the
Saracens in 1090 but the conquest was only completed in 1127
by his son Roger II. At Mdina the Cathedral was rebuilt in the
Arabo-Norman style with a later Gothic steeple; it was
destroyed in 1693 by an earthquake.

Many other Churches must have been raised in the same
period during which full liberty must again have been enjoyed
by the Church as is evinced by the many discovered Romanesque
capitals which are now preserved in the Valletta Museum.

To this epoch belong also beautiful medieval edifices found
at Mdina, Birgu and other places. The Norman House at Mdina
now the property of Chevalier Ollf Gollcher, O.B.E., is typical
of the kind. Such edifices are sometimes in two storeys the
lower of which, possibly of a more remote date, had an imposing
pointed doorway with recessed jambs, and originally very few
if any other openings towards the exterior; the storey is
crowned by a cornice supported by a double row of triangular
shaped corbels from the apex of each of which hangs a small
sphere. The upper storey had generally very artistic windows
in double lights with semicircular heads, divided by a slender
shaft, the whole being surmounted by a pointed frame supported
at the springings by finely carved consoles. This storey was also
crowned by a cornice with triangular corbels in one or more
overlapping rows. Very often each of such corbels had a circle
with geometrical tracery carved in it, the tracery differing
almost with every corbel.

Another category of structures which must have originated
about the same period and which are deserving of considera-
tion and of record before modern exigencies cause them to
disappear altogether consist of small one-storied dwellings
with characteristic features in the façade. The entrance to the
same is surrounded by a roughly semicircular arch made up of
an even number of radiating blocks differing in width. On either
side of the arch at a distance of about one foot from its extrados
somewhat above the level of its springing line a corbel
projects from the façade evidently with the object of supporting
flowerpots. Symmetrically with the axis of the doorway and a
few feet above the arch there exist a number of niches with
chamfered edges in two unequal rows. At the eaves of the roof
were placed a pair of gargoyles long and tapering and polygonal
in cross section. It is probable that originally no windows
were opened towards the street.

Other buildings of more or less the same period are orna-
ted in the façade by two or more pinnacles or projecting
circular ornaments of about 2' in diameter, placed in Julipious
positions and carved in geometrical patterns identical in
designs to the carvings on the triangular consoles of the
Norman fringed cornice. In one of these buildings at Tarxien
the arched doorway is peculiar in having one of the said
circular carvings on each of the fourteen radiating blocks
of which it is composed, and a projecting large pediment on one of
the two keystones with a vertical joint. No further develop-
ment of Mediaeval Architecture must have taken place in these
Islands, but the pointed window frames continued to
influence our buildings till late in the sixteenth century.

(To be continued)