

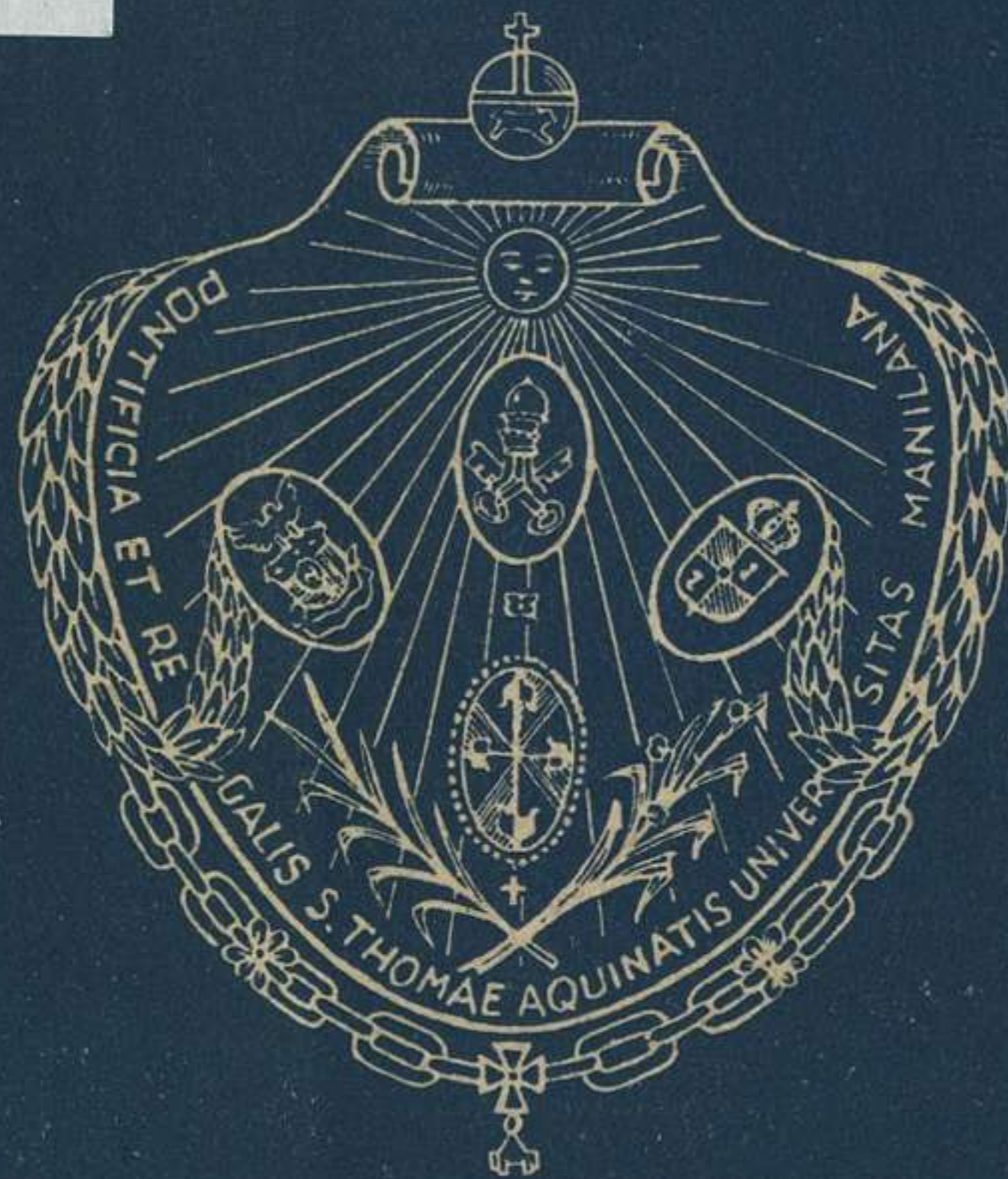
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# UNITAS

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**SU SANTIDAD PIO XII**



**UNITAS**  
ORGAN OF THE FACULTY  
UNIVERSITY OF SANTO TOMAS

*Entered as second class matter on September 15, 1922 at the Post-Office  
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Rev. E. Bazaco, O.P. . . . . Director General  
P. C. Hipoll . . . . . Editor Auxiliar

**QUESTION BOX**

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*(This section is open for the benefit of students who desire to be enlightened on questions pertinent to Science and Letters. We entertain good questions from our readers for which "Question Box" will act as their information department. Send in your questions, your name and college. Even a letter by a "nom-de plume" should be accompanied by the writer's real name and address.—EDITOR'S NOTE.)*

**QUESTIONS:**

Apreciado Editor:

Tengo entendido que no había escuelas en Mindanao. Así creo haber leído en la "Encyclopedia of the Philippines". Dígame lo que hay de verdad en ello, pues pienso escribir un trabajo sobre la Enseñanza antigua de Filipinas.—L. M. Sanchez.



## II

Can you show that Imagism has, like realism and symbolism, any right of its own as a literary constituent in so far as it stands for better and clearer imagery?—*Ramon V. Diaz, College of Philosophy and Letters.*

## III

I am the business secretary of an employer whose wife died recently and who thinks that I am the one to write people to thank them for flowers and other kindnesses. Is it proper for me to write these thank-you notes, as I think this is somewhat outside of my province, being in no way connected with the family? I would be glad to take care of these notes for him but I am afraid the people will think it curious for an outsider to thank them. I don't want him, or myself, to be criticized.—*Leandro.*

---

## ANSWERS:

### I

Estimado(a) Sr(a). Sanchez:—He andado buscando en la referida Enciclopedia, y la Enciclopedia no dice que no hubiese; sino que el encargado de las estadísticas sobre escuelas primarias en 1870, Sr. Montero y Viadad—dice el autor que escribió para dicha Enciclopedia—no dió datos sobre las escuelas de Mindanao, posiblemente porque no existía ninguna que mereciese el nombre de tal. He aquí las palabras textuales de la *Encyclopedia of the Philippines* (Vol. V, Manila, 1935, pg. 88):

*"In 1870, according to Montero's Archipiélago Filipino, there were 952 schools for boys and 726 for girls in Luzon and in the Visayan Islands, making a total of 1,678 schools of primary instruction. Montero gives no data of schools for Mindanao. It is probably, however, that there were none in existence there worthy to be mentioned." (La nota num. "3" corresponde a la llamada que hace el autor al pié de la página; se refiere a la edición de Madrid de 1886, y hace referencias a las páginas 325 y 359 de dicha edición.)*

De manera que, según la referida "Encyclopedia", Montero no menciona en su edición del 1886 las escuelas que había en Mindanao, y le falta ya tiempo al autor del artículo que escribió para dicha "Encyclopedia" para concluir que probablemente no había ni una siquiera que mereciera ser nombrada.

**Lo gracioso del caso es que Montero nos dá los datos sobre las escuelas que había en 1870 en Mindanao, y precisamente**



en su obra titulada el "Archipiélago Filipino", y exactamente en la misma edición en que la Encyclopedia tan rotundamente nos dice que no los dá, y sobretodo que Montero no se contenta con darlos en sólo una página de su libro sino que nos los repite en varios párrafos o capítulos.

Si Vd. quiere probarlo por Vd. mismo, vaya a la Biblioteca Nacional y pida la referida obra del Sr. Montero. En la página 325 encontrará Vd. un cuadro con las escuelas que había Luzon; en la página 359, las que había en Visayas; y en la página 435, las que existían en Mindanao.

O si Vd. no tiene tiempo para andar ojeando tantas páginas, abra Vd. el libro por la página 190, y al principio de la página encontrará Vd. un cuadro donde le dice que en Luzón había (en 1877) 599 escuelas para niños y 244 para niñas; en islas adyacentes, 49 de niños y 28 de niñas; en Visayas, 302 de niños y 24 284 de niñas; y en Mindanao, 66 de niños y 36 de niñas. Y SIGUEN en la misma página los datos sobre Luzon (en the realm of cold reality. The Imagist lives midway between the two. The 1870) y Visayas y continua en la página 191, donde en la tercera línea se nos dan los de Mindanao. Y SIGUE en la página 191 la instrucción, i.e. el número de "literatos" e "iliteratos" que había en Luzon (hacia la mitad de la página), en Visayas (en la segunda mitad de dicha página), y en Mindanao (en la final de la misma página 191), donde nos dice entre otras curiosidades, que hablan el Castellano en la región de Mindanao 76,436 varones y (página 192) 68,391 mujeres.

No nos metemos ahora sobre si los datos son feacientes o no lo son; sino solamente sobre si Montero nos dá datos o nos dá datos sobre Mindanao. Aún cuando no les diera—porque no se le habían remitido—no sería muy prudente interpretarlo a estilo del autor que escribió para la "Encyclopedia of the Philippines" diciendo que no existían datos porque probablemente no había una sola escuela que mereciera el nombre de tal. En ocasiones no se dan datos en el pasado sobre la población de la Montañosa, y no por eso vamos a concluir que seguramente no se existían datos por que no había población. Juzgamos que sería debido a la falta de medios o a la negligencia de los colaboradores al censo. Pero en fin, esta tendencia moderna de interpretar el pasado en sentido pesimista no es cosa que nos coja de sorpresa.

\* \* \*

## II

Symbolism, to use William Blake's own words, is

*To see a world in a grain of sand  
And a heaven in a wild flower.  
To hold infinity in the palm of the hand  
And eternity in an hour.*

It is an attitude of the mind, in conformity with ideals. It is the concrete



distilled into the abstract. It is transcendental. It is intuitive. It is spiritual.

Realism, on the other hand, is representation of the factual, the commonplace, the plain truth of life. It is life recognized and apprehended as such. It is a matter of actual experience. It is, in Sandburg's own phrase, set in a contemporary background, the poetry that

*Stammers at the slang of this...*

*In the rolling mills and sheet mills*

*In the boom of blast fires...*

.....  
*In the blood of men and ink of chimneys*

.....  
*In the subways, plugs, and drums.*

The symbolist lives in the dream-world of visions; the realist belongs to the realm of cold reality. The Imagist lives midway between the two. The realist seeks realities even in symbolical things. The symbolist pursues symbols even in raw realities. The former is concerned with the present. The latter dips into the future and sees visions. The Imagist, on the other hand, is both realist and symbolist combined. For she presents actuality through her picture-painting and creates symbolism through her associative imagery. She is the link of the present with the future. She softens the over-etherealism of symbolism or tones down the austerity and severity of raw realism.

Symbolism is founded on a soul experience. Soul experience is the awakening of the faculties of the soul through contact with the transcendental. It is the ability to see into the heart of things through a vision made clearer by a keener sensitiveness of the mind. The sentiment of soul experience lies in the desire for things that one has hungered for and has not won. It includes with its fold the pursuit of the unattainable, of the marvelous, of the mysterious, of the unknown.

Imagism, on the other hand, is founded on sense experience,—the essence of which is the keenness of perception, cognition and sensation. Sense perception acquires meaning only in so far as there has been sense experience. It is a matter of supplementation. We add memories and associations to supply what we do not actually see and feel. Thus, for example, the tripping and lightly fantastic movement of the hoop in "Roxbury Garden" would not be vividly felt by the reader if he has not known or seen what a hoop is.

Now, taking all things as they are, which can produce more lasting and artistic beauty—symbolism or imagism? Wilkinson provides the answer:

*Verily, beauty can be made by use of images. But a more subtle skill is required of the poet who would make us perceive through his imagery something greater and more important than the images presented. And the beauty of symbolism leads the human spirit farther than the beauty of imagery.*



But Amy Lowell says: "Symbolism is over. The younger men are more preoccupied with **life**. They need new tools to express new thoughts." And this, incidentally, brings us to realism.

Whether the Imagist admits it or not, at the bottom of imagism lies a hunger for actuality, for class contact to life and things. Hence their "language of the common speech", or "their poetry that is hard and clear," and their "freedom of choice of subject", and "poetry rendering particulars." Amy Lowell half-admits this:

*Life is the material of art. But raw life is not art; to become art, it must be fused and transmuted. Also, the professed realists are apt to forget that idealism, a perception of beauty, and aspiration after fineness and nobleness, are also real. Mankind would have perished long ago, self-killed from despair, if it had not been for these glimpses of the poetry of existence.\**

In another place she elaborates this when she speaks about her theory of **Exteriority**—notable because it established organic relationship between life and art:

*By this extremely awkward word "exteriority" I mean an interest in the world apart from oneself, a contemplation of nature unencumbered by the "pathetic fallacy." It is the reason of the picture-making of the modern poet. Picture-making, these other men gave us, but the Modern gives us picture-making without comment. A somewhat old-fashioned editor once said to me that poetry was losing its nobility, its power of inspiration, because the young poets were only concerned with making pictures. I longed to ask him whether he would find a portrait by Van Dyck or Romney more appealing, if there were a little cloud issuing from the mouth of the sitter upon which, somewhere in an upper corner, his or her sentiment might be read after the manner of our comic papers.... The "Modern" dares to be happy and says so. Still another side of "modernity" is the feeling of unity—the knowledge that the world is all interrelated, that each part of it is dependent upon every other. That the butcher, the baker, and the candle-stick maker are performing important functions of which he, the poet, is merely performing another; and that love is hardly more necessary in making the world go round than a host of other little shoves given by trade, and science, and art, collectively... I do not wish to imply that "Moderns" never write about themselves, nor that the older poets never wrote purely descriptive poems. It is general temper which makes a type, not sporadic departures from it. Any poet may feel sad and write sad verses, it is only when he writes no others that we are justified in calling it a mode.\*\**

---

\* *Tendencies of Modern American Poetry*, page 175.

\*\* *Six French Poets*, page 215.



But the truth of poetry does not consist in the minute accuracy of details nor in the justification of one's expression but in conveying the right impression. Realism, symbolism, or imagism may be right in its own way when occasion demands it. Neither one or the other is the best for all time, for all places. Indeed there are vague ways of speaking that are truer and more real than strict facts would be. The realist may see things with the physical eye; the imagist with the eye of imagination. And when truth is indeed stranger than fiction, it is where symbolism is invited in.

### III

Most people are very lenient at such a time and no one will be likely to criticize your employer if you write his notes. It is quite customary for some one very near to the person in deep mourning to take care of this detail, and after all, a man's personal secretary is certainly closely associated with his concerns. You of course explain that Mr. Employer is ill but wants you to tell them how deeply he appreciated (or how much he was comforted by) their kindness (or their sympathy). I mean: the note must take a personal message sent by him and not be a note of thanks from *you*. Do you see?



# PHILOSOPHY AND LETTERS

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## *The Church and The Arts*

To POINT an accusing finger at the Church as an enemy of the arts has been a tireless commonplace of all ages. That the Church has always been cold, prudish, puritanic, indifferent, and even intolerant in relation to the arts has been the burden of the accusation heaped upon the portals of Catholic institutions on the face of the earth. But never has the world been more articulate than in this, our day and age, the so-called highly enlightened twentieth century.

This thoroughly materialistic and extremely scientific age, which has adopted for its gods socialism, paganism, and imperialism, has been loud in its protest against Catholic disapproval of romanticism, realism, and syncopated music. Furthermore, we who belong to an increasingly proud and sensitive race, debunkers of tradition, rugged intellectual sensualists hand-picked by the Machine and protected by Mammon, we who have found the essence of happiness in the present independence of judgment that fears neither the past nor the future; we, the iconoclasts; we, the free and the brave; we, "the masters of our fate"—we have found the Church conclusively and arrogantly intolerant to such beautifully streamlined devices of an extremely streamlined age, as companionate, and novitiate, and electrical marriages, eugenics, birth-control, divorce, adultery, prostitution, and the scientific prevention of



syphillis as the the theme and subject of literature and other possible arts. Finally, the twentieth century, like the nineteenth, wonders in hopeless despair why the Church should express any opposition to the time-honored dictum of "art for art's sake."

Has not the Church heard, we ask, has her existence been so lethargic that she has not heard that in all the years art, to be great, has never been obsessed with an ideal; that Boccaccio, Cellini, and Byron never bothered with such trivial, childish, and inconsequential attributes as God, the soul, and immortality; and that finally "beauty is its own excuse for being?"

Such have been, by and large, the charges against the Church by a world that has taken pride in being daringly, frankly, and even, it is sad to say, stupidly artistic.

To refute these accusations and to present the Church as the greatest patron of the arts and as the munificent entity that has inspired, encouraged, and developed architecture, painting, sculpture, music and literature make up the purpose of this paper.

The traveler, in Europe, pauses by the ruins of ancient civilizations and muses on "the glory that was Greece and the grandeur that was Rome". He pauses in contemplation of the last transitory vestiges of Nineveh and Tyre, of Baalbek and Egypt—and of the irretrievable marble and monumental alabaster fragments bleached blindingly white and spread as far as the eye can reach upon the undulating stretches of an ever shifting desert. How pathetic indeed has been the fate of the ancient arts! Designed to conquer time, Art has bowed and succumbed to time. Relentless, merciless, passionless, Time has reaped the harvest of the centuries and has laughed at the unconquerable presumptuousness of humanity that has dared to write its epitaph on seemingly indestructible marble in some such guise as follows:

*"My name is Ozymandias, king of kings;  
Look on my works, ye Mighty, and despair."*

How tragic in its irony is the implication of the last line! Written in all the pride, and pomp and circumstance of kingly magnificence, it merely serves now to remind the mighty that



even *they*, enshrined in bronze or stone must vanish like all perishable clay from the face of the earth. And so the poet concludes,

*"Nothing beside remains. Round the decay  
Of that colossal wreck, boundless and bare,  
The lone and level sands stretch far away."*

And so the traveler turns away from this decay of ages, from this fossilized magnificence of yester-years, this vast miscellany of unrecognizable fragments from

*"The hand that mocked them and the heart that fed,"*

this, the last will and testament of pagan art, this, the "everlasting" legacy to a pagan world—and moves into the living cities of Europe to seek the lowly sanctuary of the Church.

He sees the stained glass windows, the murals, the domes and the arches, the pillars and the flying buttresses, and is awed by the great symbol of the Cross.

Art that was mistrusted by Plato, art that degenerated into lifeless formalism in the Alexandrian period passed through the crucible of Christian morality became a bond among men and was brought again "into connection with human life."

We see the evolution of Christian architecture through the Byzantine, the Gothic, and the Renaissance. We see the marvelous growth of its wonderful parts from St. Sophia through Notre Dame and Rouen to the Italian churches of the Revival of learning. We see the Byzantine pictures of emaciated saints—pale, wasted, and decrepit because the early Christians, kicked about and persecuted, hounded, tortured, and jeered even in the very depths of the catacombs believed in the mortification of the body for the sublimation of the soul. Even our Lord was represented not as the Good Shepherd but as the Awful Judge.

Sculpture went hand in hand with architecture and painting for the glorification of God and the saints through the encouragement of the Popes first, then of the monasteries later. Even the great pragmatic philosopher, John Dewey, cannot help relating:



*"The Church, even more than the Roman Empire, served as the focus of unity amid the disintegration that followed the fall of Rome. The historian of intellectual life will emphasize the dogmas of the Church; the historian of political institutions, the development of law and authority by means of the ecclesiastic institution. But the influence that counted in the daily life of the mass of the people and that gave them a sense of unity was constituted, it is safe to surmise, by sacraments, by song and pictures, by rite and ceremony, all having an esthetic strand, more than by any other one thing. Sculpture, painting, music, letters were found in the place where worship was performed."*

This from the American philosopher who has emphasized only "the bread-and-butter" aim of education.

And so, we who bow our heads in reverence in the temple while a shaft of sunlight is filtered through a many-colored window and falls upon the tessellated floor, see the glory of the Mass unfolded before our earthly eyes, bear the slow, solemn, reverberating, soul-affecting music of the choir singing Gregorian chants. As the organ peals rise higher and higher and higher, we lift our eyes and hearts in silent prayer, and see the Gothic arches vanishing into a point toward the sky—a true symbol of spiritual aspiration.

The Mass itself is an embodiment of one of the arts. It is drama, it is poetry. It is not a mere short story minted in moments of excitement for an extremely excited age. It is no mere verbal surplussage for recitation upon a table while the author beats upon the table "with the handle of a broom." It is not an ordinary box-office attraction for which the tired businessman and his cronies pay fabulous sums and at which society arrives late to go home early. No, the Mass is a great story, a beautiful poem, and a peerless drama, because it is the story of noble death and resurrection, it is a poem of ennobling sublimation, it is the drama of Christ dying once again as he died about two thousand years ago upon a crude cross like a common malefactor, but truly more greatly than any epic hero—Beowulf, Siegfried, or Roland for the spiritual redemption of erring humanity. Father Gillis says,









*Photo: Anderson, Rome.*

**"THE MAGNIFICAT," BY BOTTICELLI (1444-1510)**

*In the Uffizi Gallery, Florence*

Of all the fourteenth-century Italian painters whose names are famous in history, none surpassed Alessandro Botticelli in the creation of works of sheer beauty. "The Madonna of the Magnificat" is generally regarded as the supreme masterpiece amongst his many paintings of the Madonna, both for its decorative charm and its intense spirituality of expression.



*"But the Mass is a poem, a play, a drama in an infinitely higher sense, and, indeed, on another plane of being than Dante's poem or the drama of the Tyrolese peasants. The Mass is not a Passion Play; it is the Passion.... The Mass is indeed a piece of literature and it is a noble drama, but it is more than a poem or a drama. The poem or the drama depicts action; the Mass is action."*

It is apparent then that the worshipper in the ancient cathedrals of Europe literally finds himself surrounded by all the arts—architecture, sculpture, painting, music, and literature. He realizes that whereas in the past Religion came to the aid of the arts, now the arts have come to the aid of religion. To him, if he is sincere, Ruskin says,

*"Therefore, to every spirit which Christianity summons to her service, her exhortation is: Do what you can, and confess frankly what you are unable to do; neither let your effort be shortened for fear of failure, nor your confession silenced for fear of shame."*

GOING into more detail about the relation of the Church to painting we discover that in this, the most economically graphic of the arts, the church has been of great influence. When modern painting was born with Giotto, that lonely shepherd boy discovered by Cimabue drawing sheep upon a slate, Christianity had already come to its own. No longer did it lurk in the shadows of the catacombs, no longer was it mocked on the bloody arena, no longer did it draw saintly figures "sickl'ed o'er with the pale cast of thought." No, the Christian artist was at last free to model from life, to capture the evanescent light of dawn, the fleeting hue of leaf and blossom, the passing of a golden cloud.

Hence, Giotto not only painted scenes from the life of St. Francis of Assisi, but also frescoes in Florence, and Padua all revealing a greater faithfulness to nature and a more genuine human feeling than what we find in his master, Cimabue. Giotto was followed by more Christian painters—Fra Angelico who painted "The Annunciation" at St. Mark's in Florence; Fra Filippo Lippi, and Botticelli whose "The Mourning for Christ" still is one of the marvels of the fifteenth century.



The religious influence was felt even in the Flemish paintings of the century although gradually Flanders became the home of secular art just as Florence remained the home of religious paintings.

But the crowning achievement of art as influenced by the Church was accomplished in the period of the Renaissance by Leonardo da Vinci, Michael Angelo, and Raphael. To speak about these masters in order to do them justice would require a good-sized volume. Therefore, we can only mention the most outstanding paintings of these men of the Italian Renaissance to show how far the Church had influenced the world through their works. Leonardo painted "The Last Supper"; Michael Angelo who was a sculptor as well as a painter lay four years on his back in order to paint a series of panels on the ceiling of the Sistine Chapel depicting "The Creation of the World," "The Fall of Man" and three other panels—"The Sacrifice of Noah," "The Deluge," and "The Transfiguration,"—"The Sistine Madonna" and other famous madonnas.

From Florence interest shifted to Venice which was made famous by such great painters of Christian subjects and themes as Corregio, Bellini, and Giorgione, Titian, Tintoretto and Paul Veronese. All of these produced scenes from the lives of the saints and from the Biblical accounts of our Lord, our Lady and of the Magdalene.

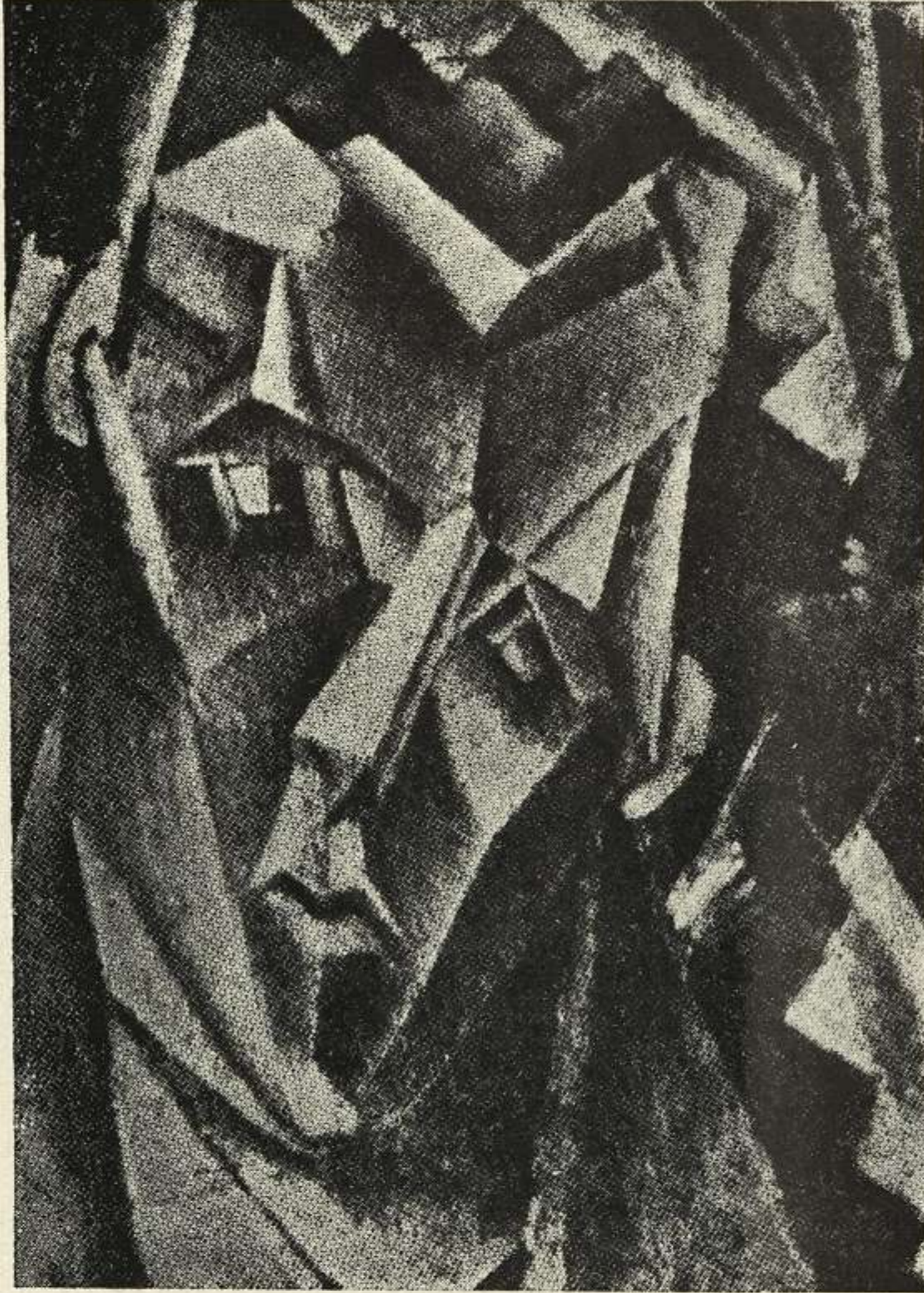
In all the great centers of culture the influence of the Church was felt through the paintings of Velasquez, El Greco, and Murillo in Spain, Rubens of Antwerp and Rembrandt of Holland, in spite of the rapid rise of secular art and the effects of the Reformation.

THE FULL TRIUMPH of common, every-day subjects over the traditional Christian characters and scenes came with the French Revolution. A new spirit permeated the domain of art for, for the first time the common man, the man of the streets, the man of the soil, the man forgotten in the councils of the great became the subject of artistic study and production. Together with the uncouth, the unwashed, and the unpolished man of the garden variety, however, the daring, the distasteful, the *risqué*, and even the vulgar were introduced with a new technique which naturally smashed the cut-and-dried rules of









*Photo: E. Druet.*

**"HEAD OF A LADY IN A MANTILLA,"  
BY PABLO PICASSO**

An example of the first phase of Cubism in which all curved lines are eliminated in order to give greater "strength" to a picture, and human features are consequently cut up into geometrical forms. Executed at a period when primitive and savage art was idolised by advanced artists, this head looks less like a painting than a wood figure carved by a savage with a blunt instrument.



the French Academy. The paintings of Ingres, Gros, and Goya show rather conclusively the revolutionary effects of the French Revolution. Nevertheless, it can safely be said that in the beginning even when all forms of encouragement had been given the bourgeoisie artists of France, the paintings were still classical.

The far-reaching effects of the French Revolution can be better studied in the works of the moderns such as Cezanne, Van Gogh, Picasso, and Gauguin and in the murals of Diego Rivera. No longer are the subjects high in the social scale; no longer are they kings, knights, emperors; no longer are the maidens merely pretty, dainty, and delicate like fragile flowers; no longer are the strokes fine, soft, and polished; no longer is the human form shaped into photographic faithfulness. No, the painter is neither classical nor realistic. He aims to present an individual point of view influenced only by the seething ferment of present-day politics and economics. The modern painter has a new type of strength, even though it is the strength of a savage; he has a new voice, resonant, vibrant, and lusty, unmindful of traditions, conventions, inhibitions, and taboos. It is true that in his desire to be different, in his effort to be rugged and individual he succeeds only in being rugged and fantastic. Look, for example, at the "Head of a Lady in a Mantilla" by Picasso, the high-priest of cubism in this our highly cubistic world of cubbyholes, and at "A Lady and Her Dog" by Giacomo Balla. In Picasso's work you do not see the mantilla, you only see a geometric face shaded and lighted in accordance with the theory of relativity; the nose is a tunnel leading from a forehead made of two plates of tin to the angular mouth which is a frustrated aqueduct. At all events it is not the face of a lady. If it is, the make-up business will be very much in the red.

Giacomo Balla's painting is even worse—but we need not detain ourselves with impressionistic caricatures. But have the modern painters fought shy of all manner or form of influence by the Church? A close study of their paintings will reward us with the edifying revelation that in this thoroughly materialistic age Gauguin has painted a Tahitian Madonna; Ocampo, a Philippine Madonna; Edades has illustrated the spiritual signi-



ficance of "Give us this day our daily bread"; and Lorenzo has painted portraits of the University of Santo Tomas rectors.

It is almost a futile platitude to assert that the Church has moved the world to pity, sympathy, and to tears by the architectonic, sculptured, and painted masterpieces that have stood the wear and tear of time. If you seek proofs for this, go to the Campo Santo at Pisa, go to the incomparable Escorial of Spain, go to the cathedrals of Rheims, Rouen, Bruges, Cologne, and Notre Dame, go to the Louvre of France, go to Italy where art and religion have marched hand in hand and see for yourself what grandeur, what magnificence of color, light, and sublimity, what symbolism have been carved into the hardest Carrara marble, splashed on the most imposing walls of castle, temple, and cathedral, and formed into the fluted arches, columns, domes, pillars, and heaven-kissing spires—all to the glory of the faith and to the triumph of peace in the hearts of men. These are the living monuments that have stilled the frightened will of a world far gone into the gross and material, into the wild and pragmatic, into the "remorseless, treacherous, lecherous, kindless" villainy.

PASSING on to music, the last of the fine arts to be developed, we realize that even the earliest composers had been influenced by the teachings of the Church. Listen to the *Stabat Mater* of Palestrina; listen to the solemn movement of the Gregorian chants that can easily be traced to the year 384 A.D. when St. Ambrose gathered a large number of the plain-songs of the Church which had consoled the Christian martyrs in the catacombs of pagan Rome; listen to Josquin's *Miserere*; listen to the oratorios of the 17th and the 18th centuries; listen to the music of Bach and Handel, of Beethoven and Mozart, of Scarlatti and Abt Vogler; finally, listen to the strains of Gounod's *Ave Maria* and Schubert's composition of the same title and you will have to admit that even music which is the kith and kin of poetry has borne the impress of the teachings of the Church. Even grand opera has been influenced by Catholic precept and history. Look at *Faust* by Gounod and *Girolamo Savonarola* by Leoncavallo, to mention only two of the many, and you will be convinced that even to this department of music so entertaining





*Photo: Lummett.*

**"A LADY AND HER DOG," BY GIACOMO BALLA**

An example of a Futurist painting in which an endeavour is made to represent movement by showing in various positions the moving paws and tail of a dog, the swing of his chain, and the step of his owner's feet. Here painting attempts to rival and surpass the achievements of the rapid-motion camera.







to the really cultured although it is "caviar to the general" the Church has extended a helping hand.

Now, it may be asked, what is the attitude of the Church toward modern music?

Shelley has so beautifully expressed a dictum on music which every good Catholic has whole-heartedly accepted and approved. He says, "Our sweetest songs are those that tell of saddest thought." But modern music, by and large, is not sad; naturally it is not sweet, and logically it is not a song. It is only a *hit*.

Synocopated music—produced, engendered, and multiplied, by such exclusively modern efficient instruments of torture as the saxophone and the trombone slide—has originated, according to its apologists from a new principle—the principle of the savage tomtom. So it has passed through the stages of rag-time, jazz, and swing. It has been ornamented by such nervous movements as the *dip*, the *shimmie*, *trucking*, the *Suzie-Q*, and lately the *Lambeth walk*. This, indeed, has been wonderful progress, even though it is progress from civilization to savagery; it is the progress from the *minuet* to the acrobatic swing, from the ballet to the *Big Apple*.

Of course, it is no longer the music of one, "still quiring to the young-eyed cherubins," but it is still "Music, Maestro, Please." It is the music that appeals to

"... a wild and wanton herd,  
Or race of youthful and unhandled colts,  
Fetching mad bounds, bellowing and neighing loud,  
Which is the hot condition of their blood."

But in the twentieth century they do not "make a mutual stand," nor are their eyes "turned to a modest gaze," no, they turn somersaults in mid air and swing themselves to pieces—the more pieces the better. This is the most eloquent sign of the strength and abounding virility of our modern age. The knights of old were sissies, now we have *Suzie-Q's*.

No, there is no softness, no weakness, no "touches of sweet harmony" in this new, manly, naturalistic music of the wilds. If it appeals only to the senses, it must be because the people of this age in trying to be sensitive have ceased to be sensible.



Even the love song, one of the most precious legacies of the past to the present, has been so dismembered and disfigured that it is hardly distinguishable from the contrapuntal bravura of an over inspired nanny goat. And the words have kept pace with the general disintegration of melody. No longer do we sigh "Drink to me only with thine eyes," or sing "I arise from dreams of thee;" in fact we do not sing at all, we *croon* such happy songs as, "Hold that tiger! Hold that tiger!" or the "Dipsy-Doodle" or such an infantilistic masterpiece as "A Red and Yellow Basket." Indeed, you may call it madness but *we* call it love!

And for the sake of love we have exhibited our melodiously abbreviated intelligence quotient in the brazen use of foul and indecent words in our songs. Frankly, literature has been prostituted in our desire to be modern.

And thus we come to the most influential of the arts:  
*Literature.*

When Plato decided that there should be no poets in his republic he felt that he was protecting his people from the immoral influence of liars. To him poets were all insincere, immoral, deceitful. Their presence in any community was a menace to the peace and happiness of the citizenry. Plato was fortunate. If he had lived long enough to see and hear our present-day song-writers, violating all laws and conventions of rhetoric, grammar, orthography spelling, versification, and even music he would have been blasted on the spot.

But the poetry of the world had not always been like this. Poetry as the hand maiden of religion may be found in the *Songs of Solomon* and the *Psalms of David*. Literature of a higher order technically and in subject matter abounds in the pages of the Bible. We meet here the patient Job, the faithful Magdalene, the Prodigal Son, Moses, Ruth and Naomi, and the Lady, Stella Maris whose name is Seven Sorrows and the Cause of all our joy. We see before us the pure and simple Joseph spurning the adulterous advances of Potiphar's wife, we see the head of the martyred John on a silver platter, we hear the crumbling of the pillars as the mighty but deluded Samson dashes against them with his shoulders, and we see the little David destroying the pride and the arrogance of the Titanic Goliath.



Yes, these, and many more—perfect models of narrative and characterization—the envy of the world and the despair of all pushers of the pen.

If we seek the voice of the Church in later times we hear its echoes in Boethius' *Consolations of Philosophy*, in the *Ecclesiastical History* of the Venerable Bede, in the songs of the untutored Caedmon, in the spontaneous conversations of St. Theresa, in the verses of San Juan de la Cruz, in the mystic splendor of *The Pearl*, in the dramas of Lope de Vega, in the *autos sacramentales* of Calderon, in the labyrinthine passages of the *Hound of Heaven* and amidst the thundering reverberations of *Lepanto*.

But perhaps the most enchanting, the most lyrical, the most limpid message of the Church may be found in the three great writers of the World: Dante, Chaucer, Shakespeare.

Dante was the symbol of the Italian Renaissance in full flower. He was the expression of the many-sidedness and proficiency of the man of the Renaissance. But by general consent his greatest contribution to the world as well as to literature was not *Il Convito*, not the *Vita Nuova* in spite of its tender record of Beatrice Portinari, not the *De Vulgari Eloquentia*, not the *De Monarchia*, but the *Divina Comedia*.

"Dante called it a comedy because of its fortunate ending; the world has called it divine because of its spiritual theme."

The purpose of this monumental work as Dante himself states is to remove men from a state of woe and to lead them to a state of spiritual joy. In fulfilling this purpose he despises the depraved and the weak in spirit and praises the brave, the undaunted and the pure. As an ethical treatise it is more effective than many a modern book on social science which speak of "morality as a matter of geography," as an epic of art it is greater than any written before or since Dante without excepting Milton's *Paradise Lost*. In being universal it has proved the Catholic Church catholic.

Of Dante it has been rightly said, "The central man of all the world, as representing in perfect balance the imaginative, moral, and intellectual faculties, all at their highest, is Dante."

In Chaucer is in Cervantes the medieval world is spread out before us—Chaucer's England and the Spain of Cervantes.



If we find in the *Canterbury Tales* the Boccaccioesque vulgarity and bawdiness of the Reeve, the Cook, and the Wife of Bath we also see the unerring simplicity of Constance, the pure faith of the Christian child in the Prioress' Tale, and the incomparable piety of the Parson. It is also in Chaucer that we read the justly celebrated *A.B.C.* which Chaucer had borrowed from a French poet and made into an entrancingly beautiful praise of the Virgin. And it is in this poem that we see the inimitable lines:

"Glorious virgine, of alle floures fluor,  
To thee I flee, confounded in errour!"

In Chaucer's canvas, broad and detailed like a cross-section of English medievalism, full of the colorful hues of Springtime and alive with the seas, and the streams, and the marguerites of England falls as upon a garden the sunlight of Dante, of Boethius, of Virgil, and of Petrarch. Besides, Chaucer's life, his little poem *Truth*, and his retraction at the end of the *Canterbury Tales* show the undisputable catholicity of the Father of English poetry. Unquestionably, Chaucer's position in English letters is beyond the reach of modern versifiers and his influence has been incalculable. Unfortunately, as a Catholic poet he is a neglected chapter in our curricula for to the present-day makers of courses Chaucer is a difficult, useless, and uninteresting study except in the immorality of the Reeve.

The last of the three great figures in literature in whom the stream of Catholic teaching has been distilled and crytalized is Shakespeare. In him was epitomized the Renaissance in England; but artist that he was he did not accept *in toto* the classical unities of Greek and Roman literature. Inveterate and incorrigible romantic that he aimed to be he rejected the melodramatic exaggerations of the Elizabethan stage and the tragedies of blood and violence of his time. He elevated the drama to its highest possible perfection and gave English lyric poetry the lilt and the magic flexibility that are hopelessly irreducible to any mathematical or metrical formula.

But the remarkable achievement of Shakespeare is that he never encouraged evil nor let man's bestial nature triumph over his divine. Consequently, the end of every play of the Bard



of Avon is never incest, adultery, murder, suicide, or villainy triumphant but goodness and morality quintessentialized. It is true that there are many reprehensible characters in Shakespeare — disgruntled Iago, over ambitious Lady Macbeth, unreasonable Edmund and perverse Richard II, but these do not triumph at the end. On the other hand, if the good crumble with the evil at the end of the fifth act, as Hamlet does, it is not that Shakespeare would show the futility of virtue and innocence but that in this mundane existence justice is often thwarted by evil purpose. How often indeed, has the house of the innocent crushed the dark destroyer that has pulled it down as well as its virtuous tenants? Here we see the essence of Christian morality and faith which Shakespeare used as the triumphant spirit over "this muddy vesture of decay."

It is disappointing, therefore, to notice modern drama encouraged, revolutionized, and abetted by George Bernard Shaw and Ibsen, swing toward the presentation of the sordid, the erotic, the morbid. The Church has fought this menace which can briefly be described as the *nightmare of realism* because it has presented the unpresentable, it has encouraged divorce, adultery, prostitution, lawlessness, and free love, and has defended behaviorism and psychoanalysis by Freud, birth control by Margaret Sanger, and pragmatism by John Dewey—all very questionable ideas as ideas and certainly uncommendable as philosophy of conduct, for they are against God as well as against nature. Therefore, the Church has condemned the stark, photographic, naturalistic realism of Zola, Flaubert, Shaw, Sandburg, and O'Neill.

The Church has disapproved of plain realism not only because it has dwindled into mere exhibition of the ugly but because extreme realism is not art but photography. Art, by definition, is nature made human. Realism has ceased to be human; therefore, it cannot be great art.

Likewise, the Church has spurned the exaggerated theatricality of romanticism because it has degenerated into gross exaggerations of emotion and of social states. Exaggerations have always been false and melodrama has never been regarded as great art. Besides, to the youth the merely romantic overdraws the picture of life and when youth sees life in its true, garish



colors, he becomes thoroughly disappointed, disenchanted, disillusioned and at the end he becomes morally bankrupt.

And thus even in these peaceful islands of the Pacific, far from the cross-currents of European and American thought the Church has fought the enemies of good and truly artistic literature. She has fought American naked realism and French romanticism, she has fought neo-paganism and pornographic impressionism brought to these shores by magazines, books, and the movies.

But the real fight has just begun. If the Church is to live up to her tradition and her ideals, she must fight through literature the literature that pollutes morality, that annihilates incentive, that destroys peace and despoils worship—the literature of communism.

She must fight literature that exploits, crushes, kills nations and peoples for the glory, the pomp, and the grandeur of one man who would revive the tradition and ambition of pro-consuls and infallible emperors, one man like Hitler or Mussolini who would rule by fear and intimidation, whose only claim to govern is the insolence of might. This is the literature of totalitarianism.

Lastly the Church must fight the literature that misunderstands the laws of art—the literature of uncouth words, uncouth tendencies, and uncouth themes.

From this it may be inferred that the Church is an enemy of ART, because she refuses to grow with the ARTS. But the church is not an enemy of ART or of SCIENCE. It is only an enemy of pseudo-Art and pseudo-Science. Besides, it has been proved by centuries that through the beneficence and munificence of the Church her influence through ART has been toward:

- 1) a saner manhood
- 2) a purer morality
- 3) a more beautiful religion, and
- 4) a happier appreciation of the beautiful.

If she has been impatient with mediocrity and stupidity, if she has been unkind to vulgarity and obscenity, if she has



condemned evil in thought as well as in expression, it is because to the CHURCH art has a higher function than a mere glorification of the senses, a loftier motive than mere photography, a greater eloquence than mere slapstick, streamlined, uncouth, uncultured verbiage. To her ART has the function of ennobling, purifying, and elevating the human being beyond the sordid and the ugly confines of the brute. Art is not Caliban grovelling in a drunken rabble in the wilderness; Art is ARIEL singing on hill and dale, on stream and over diaphanous and opalescent seas. It is not mere cacophony. It is sweet, limpid, plaintive music. It is a thing of TRUTH like the *Christ of the Andes*. It is a thing of BEAUTY like a "little flower in the crannied wall." Yes, it is a thing of BEAUTY which is at best an inadequate reflection of that higher beauty which is *God*. And because it is a thing of beauty it is "a joy forever."

—DR. JOSE M. HERNANDEZ



# LOTUS

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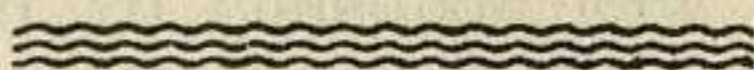
*I prayed to God to give me fortitude,  
A manly strength and firm forgetfulness,  
So my remaining hours of solitude  
May wake to the touching tenderness  
Of new love; dreams return recurringly  
Each day and night reminding me of you;  
Flames of remembrance will eternally  
Repeat same testament my whole life through.*

*So I wished God would make a lotus bloom  
And flower for me; but in the broken vase  
Of memory no lotus blooms. My room  
Is full of fragments yet, your quiet face  
Is memoried in ev'ry little thing;  
I hear your voice in all the bells that ring!*

—GUILLERMO V. SISON



# HISTORY



## *Lasting Gifts of Spain to Philippine Culture*

ON THE WINGS of a tropic dawn, 418 years ago, Magellan crashed through the gates of the Philippines and laid the cornerstone of Spanish rule and Occidental civilization. His advent was epoch-making in the annals of the Filipino people, for he made possible the colonization of the Islands by Spain under whose tutelage, the Filipinos rose to the heights of Christianity and European civilization.

### *Christianity Beneath Asian Skies*

The torch of Christianity that Magellan implanted at Limasawa and Cebu was kept ablaze by subsequent Spanish missionaries. The rapid conversion of the Filipinos by these intrepid soldiers of Christ, wrote Dr. F. C. Laubach, American Protestant writer, constitutes "the most wonderful missionary fact in all the history of the Far East."

At the end of Spanish rule in 1898, there were about 6,000,000 Christian Filipinos. Thanks to the magnificent work of the post-Magellanic missionaries, Christianity has taken firm rootage in the soul of the Filipino nation, inter-weaving itself into the warp and woof of Philippine life and culture. No won-



der, the Philippines now looms over Asian horizons as the "only Christian country in the Orient."

### *Sublimation of Filipino Bushido*

Under the shadow of the Cross, the fierce and fiery character of the early Filipinos was sublimated, and their hitherto paganistic ethics were ennobled. Tribal feuds and wars were suppressed. Slavery was abolished by King Philip II on August 9, 1589 and by Pope Gregory XIV on April 18, 1591. Usury was banned, swearing and drunkenness were mitigated, and women were elevated to a higher social plane. "It is perfectly safe to say," wrote the anti-friar writer James A. LeRoy, "that in no part of the Orient have women relatively so much freedom or do they play so large a part in the control of the family or in the social and even industrial affairs... There seems every reason for ascribing their relative improvement in the Philippines as compared with surrounding countries in the Orient to the influence of the Christian religion."

The redeeming philosophy of Christianity has left its imprint on the psychological nature of the Filipinos and made them less warlike and less pugnacious. Given such Christian code of ethics, it is natural to expect them to be more pacifistic and more humane than their Japanese neighbors, whose Bushido and religious credo basically rest on the logic of the Samurai's sword.

### *Latin Alphabet and Spanish Language*

Through the route blazed by Magellan across the Pacific came the Latin alphabet and the Spanish language which the Filipinos, by nature born polyglots, readily assimilated. They discarded their ancient writing and adopted the Latin alphabet in their dialects. With this alphabet and their knowledge of Spanish, they were able to scan the distant skyline of Occidental wisdom, delve deep into the treasure lore of European philosophy, literature, arts, and sciences, and learn the teachings of the immortal sages and thinkers of the West.

At the time of Magellan's arrival in 1521, no Filipino knew Spanish. Today, after four centuries of Spanish tutelage, over a million Filipinos read and speak Spanish, one of the two offi-



cial languages of the Philippine Commonwealth. Though English is more widely used in the Islands, Spanish has remained the language of the intelligentsia, the voice of polished, refined, cultured society. The American English is a practical language, but it lacks the beauty and elegance of Spanish.

### *Complete Legal System*

The Roman Law, otherwise called Civil Law, was Spain's juridical contribution to the Filipinos. Throughout her long regime, she extended her codes and special laws to the Islands, notably the Penal Code (1887), the Code of Commerce (1888), the Code of Procedure (1888), the Civil Code (1889), the Mortgage Law (1893), the Railway Laws (1875 and 1877), the Laws of Waters (1866), and other old laws, such as the *Siete Partidas* (Seven Parts), the *Leyes de Toro* (Laws of Toro), the *Leyes de Indias* (Laws of the Indies), the *Ley de Propiedad Intelectual* (Copyright Law), and the *Ley de Minas* (Mining Law).

"A study of the Philippine legal system under Spain," wrote former Justice George A. Malcolm, "will show that it was complete, providing rules of action in almost every conceivable field of activity. These laws, moreover, theoretically guarded the three vital rights of personal liberty, personal security, and personal property." Invariably, Spain, heir to the Civil Law of the Romans, had transmitted to the Filipinos the benefits of said juridical system.

### *Printing and Libraries*

The first printing press using movable types was established in Manila by Fr. Francisco Blancas de San Jose in 1602. Other presses were founded in subsequent times by the Franciscan, Augustinian, and Jesuit fathers. Prior to 1800, over 500 titles of work were printed in the Islands, ranging on all subjects from catechism to philosophy, grammar to literature, art to science, history to economics.

The first libraries were convent libraries which the missionaries founded as early as the 16th century. Later the colleges and universities began to acquire their own libraries for research purposes. In 1883 the *Compañia Tabacalera de Filipinas* inaugurated its policy of building up a vast Filipiniana Library



which soon became famous and was subsequently purchased by the Philippine government in 1913.

The first public library in the Philippines was opened in Manila, October 24, 1891, in accordance with the decree of the Spanish Minister of the Colonies. It was called the *Museo-Biblioteca de Filipinas*; it was the forerunner of the present National Museum and Library of the Philippines.

### *Journalism*

Notwithstanding the severity of Spanish censorship, Philippine journalism flourished. The first regular newspaper in the Philippines was *Del Superior Gobierno*, a weekly published by Governor Aguilar in 1811. The first daily was *La Esperanza*, 1846; the first illustrated paper was *La Ilustracion Filipina*, 1859; the first religious paper was *El Catolico Filipino*, 1862; the first paper to be printed partly in vernacular was *El Pasig*, 1862; the first genuinely native paper—wholly printed in vernacular and staffed by Filipinos—was *El Ilocano*, 1889; the most popular Manila daily during Spanish times was the *Diario de Manila*, 1849; and the forerunner of all feminine papers was *El Hogar*, founded by Doña Amparo Gomez de la Serna in 1893.

Two newspapers of Spanish vintage still exist in Manila, *El Comercio* (Commerce), founded in 1858 and is the oldest Philippine periodical, and *La Opinion* (Opinion), founded in 1887 and is the first genuinely political newspaper in the Islands.

### *Literature*

At the outset of her rule, Spain introduced the Christian literature which included the novenas, passions, lives of saints, prayers, and other theological works. She also popularized the *awits* and *corridos*, which were fantastic metrical romances, such as "The Life and Deeds of the Twelve Peers of France," "The Life of Don Juan Teñoso," and "The Famous History of Bernaldo Carpio."

In later times Spanish classical and romantic literature were assimilated and welcomed by the Filipino literature, who patterned their literary art after the styles of Duque de Rivas, Espronceda, Zorilla, Nuñez de Arce, the Machado brothers, and Gregorio Martinez Sierra.



The Filipino drama was further developed by the rise of new forms of plays, such as the blood-and-thunder *moro-moro*, the religious *cenaculos*, the *zarzuelas* (operettas), and the operas. A unique genre of theatrical art took the masses by storm—the so-called *carrillo* (shadow-play) which consisted of shadows of human figures from cardboard cuttings flashed on a white screen.

The first literary titans of the Filipino race arose during Spanish times, such as Tomas Pinpin, “prince of Filipino printers” and first Filipino author; Pedro Bukaneg, “father of Iloko literature”; Balagtas, “prince of Tagalog poets”; Leona Florentina, “Sappho of the Philippines”; Juan Crisostomo Soto, “father of Pampango literature”; Mariano Perfecto, “father of Visayan literature”; Marcelo H. del Pilar, famous editor of *La Solidaridad* and mighty polemist; Graciano Lopez Jaena, pungent satirist and gifted orator; Dr. Jose Rizal, greatest Filipino novelist; Jose Palma, Fernando Ma. Guerrero, and Cecilio Apostol, three exquisite poets of the Revolution; Felipe G. Calderon, crusading social scientist; Dr. T. H. Pardo de Tavera, eminent scholar-scientist; Rafael Palma, Rizalist; and the living old guards of Spanish culture—Teodoro M. Kalaw, historian and essayist; Jaime C. de Veyra, academic prosier; and others.

### *Education*

Long before the English settlers colonized the Atlantic seaboard of North America, the Spanish missionaries had already opened up colleges and schools in the Philippines. The oldest existing university in the Orient is the University of Santo Tomas, founded by the Dominican Order at Manila in 1611, antedating Harvard University by 25 years. The other universities during the Spanish times were the University of San Ignacio, founded in 1589 by the Jesuits, and the University of San Felipe, founded in 1781 in accordance with the King’s decree dated 1707. Numerous boys’ colleges were established one after another, as follows; College of San Ildefonso (1599), College of San Jose (1601), College of San Juan de Letran (1630), Royal College of San Felipe (1640), Ateneo de Manila (1859), and others.

Education for women was stressed as manifested by the



establishment of many women's colleges, such as the College of Santa Potenciana (1594), first college exclusively for women in the Philippines, the College of Santa Isabel (1596), the Beaterio de la Compañia (1694), the College of Santa Catalina (1696), the College of Santa Rosa (1750), the College of La Concordia (1869), and others.

Vocational training was given in several vocational schools, especially the Nautical Academy (1820), the School of Commerce (1840), the Academy of Fine Arts (1849), the Agricultural School (1889), and the Trade School (1890).

The present public school system in the Philippines may be said to have its foundation in the public educational set-up established by Spain in 1863. At the close of the Spanish regime in 1898, there were 2,160 public elementary schools in the Archipelago with a total enrollment of 200,000. At the same time there were one complete university (University of Santo Tomas) and over 100 colleges. Public instruction under Spain was certainly slow and in some points defective, but it had its redeeming features, thereby contributing largely to the intellectual development of Filipino people; in the words of Dr. Camilo Osias, it fairly succeeded in realizing "the aspirations of all true lovers of Christian and Spanish civilization."

### *Music*

European music followed the Spanish flag and the Christian Cross to the Philippines. The music-loving Filipinos did not only learn how to play Occidental musical instruments, such as the piano, violin, flute, harp, and others, but they also adopted the European dances, notably the *curacha*, the *jarabe*, the *fundango*, the *rigodon*, and the *tango*. Their old native folk songs and dances, such as the *kundiman*, the *kumintang*, and the *balitao*, were modified by the rhythm and swing of Sunny Spain.

The Spaniards deserve the eternal gratitude of the Filipino nation for their contribution to Philippine music. Prominent among them were Archbishop Angel de Rodriguez, founder of the famous Cathedral College of Boys' Choir; Fr. Juan Bolivar, music teacher of the Filipinos; Fr. Lorenzo Castello, "Augustinian Orpheus" and versatile composer; Fr. Diego Cerra del Carmen, builder of the world-famous Bamboo Organ of Las Pi-



ñas; Fr. Toribio Varas, organizer of the first famous orchestra in Manila; and Manuel Garrido, gifted *maestro* who trained many Filipino virtuosos.

### *Graphic-Plastic Arts*

Spain's 300-year footprints could be seen clearly in Philippine arts. The churches in Manila and in the provinces still stand, symbolic of the architectural legacies of the Old World which the Spanish colonizers brought to the Philippines. The residences to the present day bear the indelible impress of Spanish architectural influence in their *azoteas* and Andalusian courtyard.

The Church as patron of art and the missionaries as art instructors contributed to the development of Philippine painting. The old Filipino masters of the brush obtained their artistic education from Spanish painters. Among them were Damian Domingo, "Father of Filipino painting"; Juan Luna and Felix R. Hidalgo, two painting colossuses of international reputation; and Simeon Flores, Miguel Zaragoza, Lorenzo Rocha, and Antonio Malantic.

The first sculptural schools in the Islands were established by missionaries in their convents. Under their competent tutorship, the Filipinos developed their inborn talents in the sculptural art. The masterpieces of the early Filipino sculptors are preserved to the present day; these are beautiful images of Christian saints and delicate carvings in altar and columns now embellishing Manila churches.

### *Sciences*

The first botanists, zoologists, physicians, chemists, mathematicians, physicists, pharmacists, geographers, astronomers, and engineers in the Philippines were the Spanish missionaries. They imparted their scientific knowledge to the Filipinos, and in the course of time many Filipinos themselves rose to the pinnacles of science. Notable examples were those graduates of the University of Santo Tomas, such as Dr. Leon Ma. Guerrero, "Father of Philippine botany"; Anacleto del Rosario, greatest Filipino chemist; Dr. Gregorio Singian, foremost Filipino sur-



geon; Dr. Eliodoro Mercado, recognized authority on leprosy treatment.

The first sundials in the Philippines were those in Tagudin, Ilocos Sur, built by Fr. Juan Sorolla in 1841. The first artesian wells dug in Sexmoan and Betis, Pampanga, by Father Camañes and Moros, missionary-engineers. Many of the early missionaries, in the course of their evangelical labors, discovered various mines of gold, copper, and iron in Luzon. The first complete map of the Philippines was made by Fr. Murillo Velarde, Jesuit savant, and engraved by Nicolas de la Cruz Bagay, Filipino printer. The geologic conditions of the Islands were first observed and studied by Fathers Francisco de Barajas, Tuvinio, and Oyanguren and by Don Jose Centeno and Don Enrique Abella.

#### *Other Spanish Contributions*

Spanish influences reached almost every facet of Philippine life and culture. In public health and welfare, attempts were made to counteract the ravages of cholera, leprosy, and small-pox, although with slight success; hospitals were established, including the Hospital of San Juan de Dios and San Lazaro Hospital, the oldest existing hospitals in the Far East, being the outcrops of Brother Juan Clemente's little hospital in 1578; and asylums for homeless children and unfortunate women were opened, such as the real Hospicio de San Juan (1810), the Asylum of Mandaluyong (1882), the Asylum of Tambobong (1883), and the Asylum of San Vicente de Paul (1885).

Superficial historical writers censure Spain for retarding the material progress of the Philippines. This assertion is far from historical truth. For there was material progress, although not phenomenal as it is under the free-trade regime of Uncle Sam. New plants and animals were introduced by Spain from Mexico, Europe, and Asia; the cultivation of tobacco, sugar, coconuts, indigo, wheat, mulberry, and hemp were encouraged; irrigation canals and farm stations were established to promote agriculture; and commerce was on the upswing, averaging ₱70,000,000 during the decade 1888-98. When America came to take over Philippine affairs, there were 990 miles of



roads and 2,600 cars in the Archipelago. In 1873 the first telegraph line was laid; out in 1880 Luzon and Spain were linked by cable; in 1883 the horse-drawn street cars began to operate in Manila; in 1890 the first telephone system was established in Manila; and in 1891 the Manila-Dagupan railroad was opened to traffic.

When Magellan landed at Homonhon in 1521, Philippine population aggregated only 500,000. Under Spain the population increased to 1,502,574 in 1799; 2,593,287 in 1829; 4,712,006 in 1870; 5,839,383 in 1885; and to more than 6,000,000 in 1898.

Lastly, Spain awakened the spirit of Filipino nationalism by giving the Filipinos a common religion (Christianity), a common government (under the King), a common language (Spanish), a common civilization (Latin), a common education (with compulsory religious instruction), and a common set of grievances. All these things threw the people closer together, brought greater understanding among them, and made them conscious of their common aspiration and their common destiny.

—GREGORIO F. ZAIDE, Ph. D.



# PSICOLOGIA

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## *El Proceso Cognoscitivo en el Sentimiento Estético*

El sentimiento estético es universal. Afírmese o no, la existencia extramental de la belleza, es evidente que todos los pueblos e individuos han sentido y sentirán ese agrado íntimo y tranquilo, tan característico, que proporcionan los objetos que llamamos bellos.

Sentimiento sutil y delicado, que cuanto más se trata de analizar más se esconde y esfuma, dejando muchas veces extraviado en el laberinto de la afectividad al psicólogo que intenta ir en su búsqueda.

Se puede, no obstante, dados los progresos relativos de los estudios psicológicos, investigar separadamente cada uno de los procesos psíquicos que intervienen en el sentimiento estético. Y ese es nuestro propósito al preparar estas cuartillas para UNITAS: analizar los elementos que juegan el papel más importante en la afectividad estética, comenzando por el proceso cognoscitivo estético, clave y origen del placer de lo bello.

\* \* \*

Todo deleite, lo aseguraba ya Aristóteles (cfr. *Ethicorum*, lc. VII, c, 12.13) proviene de una operación connatural, perfecta y fácilmente desarrollada. Si un objeto nos agrada es porque suscita en nosotros un proceso consciente armónico y connatural.



Operación connatural que a veces es un simple conocimiento, como el contemplar lo bello o investigar las causas de los fenómenos naturales, por ejemplo. Otras veces es un conocimiento acompañado de la posesión real de un bien, como cuando el millonario se complace en sus riquezas o el truhán de tener el ingenio suficientemente mañoso para ir pasando la gran vida. A veces el único bien suficiente para poder excitar la complacencia no es precisamente algo externo al sujeto, sino la misma acción psíquica, fácil y plenamente desenvuelta; pues no se puede negar que es un bien intrínseco para el hombre el desenvolver sus inclinaciones naturales; y, siendo una de ellas el funcionamiento expedito y natural de todas sus facultades, al sentirlo, no puede menos de complacerse (cfr. Sto. Tomás, Suma Teológica, I-II, q.31, art.5, q.32, a.1, ad lm.)

Sin embargo no toda acción es motivo de deleite: una operación incompleta lo único que llega a suscitar es el deseo; una operación excesiva engendra fastidio. Se requiere además que la acción *subjetiva* y *objetivamente* sea perfecta, completa.

Una acción es *subjetivamente, psíquicamente*, perfecta, completa, natural, intensa, cuando la facultad de donde procede está bien dispuesta y obra con toda su plenitud natural

*Objetivamente*, cuando el objeto sobre el cual recae la acción es proporcionado y colma la tendencia natural de la energía humana puesta en movimiento. "Quaelibet operatio est maxime delectabilis quando et sensus est potentissimus, i.e. optime vigens in sua virtute et quando operatur respectu objecti maxime convenientis", Sto. Tomás, Comm. in Ethic, Aristot. X, (cfr. lc. 6.)

El agrado que nos causa la belleza tiene que depender de estos dos factores, objetivo y psíquico: de una parte las propiedades del objeto bello tienen que estar proporcionadas a la facultad perceptiva del sujeto que lo contempla; de otra, todas las energías que intervienen en el sentimiento estético deben desenvolverse plena y armónicamente.

Desde luego que la ecuación entre el acto del sujeto admirador de la belleza y la aptitud del objeto estético quedaría demostrada por la experiencia vulgarísima de todos los días: la universalidad del placer estético. Lo cual supone que lo bello hace reaccionar al hombre con una operación connatural, puesto que la belleza no suscitaría placer si no moviese fácil y armónicamente la actividad psíquica del hombre.

Vamos a ceñirnos en este artículo a estudiar el elemento subjetivo del placer estético, tratando de analizar principalmente el proceso cognoscitivo que se desarrolla al contemplar los objetos bellos viendo de paso las modalidades o derivaciones afectivas que modifican el mismo. Pero antes vamos a dedicar unas



líneas a las teorías que nos hablan acerca de la facultad que percibe lo bello.

### Opiniones sobre la facultad que percibe lo bello.

En el siglo XVII Hutcheson hablaba de un nuevo *sentido*, que entre otras habilidades tenía la singular de percibir lo bello, o lo estético en general. Muchos le bautizaron con el nombre de 'sentido de lo bello'. Sentido íntimo, intermedio entre la 'sensibilidad' y la razón, que reconoce la unidad en la variedad, y el orden establecido entre ellas.<sup>1</sup>

Para otros lo bello es objeto directo del sentimiento<sup>2</sup>, aunque no concuerdan en entender lo que es 'sentimiento'.

Unos lo explican como un 'conocimiento' intuitivo de la perfección, real o aparente, de lo percibido"<sup>3</sup>. Otros, como "una absoluta identidad entre el conocimiento y el apetito"<sup>4</sup>, o como "una pasividad de la mente mediante la cual puede recibir e identificarse con lo bello, como en una especie de *hinopsis*"<sup>5</sup>.

Otros reducen la relación de lo bello con el sujeto a una mera infusión o proporción de nuestras emociones con el objeto estético<sup>6</sup>.

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<sup>1</sup> cfr. Alibert, "La Psychologie Thomiste et les Theories Modernes", pg. 288-89; También M. Pelayo, Ideas Estéticas... t. III, VI. Cree M. Pelayo que este nuevo sentido no tiene valor más que como 'protesta contra el sensualismo exclusivo y como una manera todavía vaga de designar la amplitud de la conciencia una y entera, donde se dan los fenómenos sensibles lo mismo que los intelectuales, y a la par de ellos los que participan de algo espiritual y algo sensible a la vez como es el fenómeno de la impresión estética."

<sup>2</sup> cfr. Mercier, "Psychologie," n. 135-136. Nuestro Ortega y Gasset en "El Tema de nuestro Tiempo" (Madrid, 1934), al hablar del "imperativo cultural" dice: "la belleza, es objeto directo del sentimiento al cuál corresponden, como imperativo cultural, la belleza; y como imperativo vital, el deleite. El sentimiento debe por tanto ser regulado y dirigido por estos imperativos."

<sup>3</sup> cfr. "Pesch. Institut. Philosoph., 1119.

<sup>4</sup> cfr. id. id., Beck, Esser, Zimmermann.

<sup>5</sup> cfr. Bergson, "Les donnés immédiates de la Conscience", p. II. pg. 50. "Art aims to lull to sleep the active powers of our personality and to bring us to a state of perfect docility in which we sympathize with the sentiment expressed. In the methods of art we find under a refined and in some sort spiritualized form, the methods by which hypnosis is ordinarily obtained", citado por Marshall, "The Beautiful", London, 1924.

<sup>6</sup> "Il est curieux de constater que le 'venin' subjetiviste introduit par Kant dans la pensée moderne a pousse presque fatalment les philosophes a chercher dans l'emotion, en depit de Kant luimeme, l'essential de la perception esthetique. C'est ainsi que le subjetivisme Kantien a donné son plus recent fruit dans la theorie de l'Einfühlung, de T. Lipps et de Volkelt, qui



Para H. Warren la emoción estética depende de un sentimiento 'sintético' (uno de los sentimientos que nos muestran las condiciones orgánicas del propio cuerpo, como la digestión, respiración, generación), unido a la representación de una idea 'de valor'<sup>7</sup>.

Para Ribot, como para otros seguidores de la teoría fisiológica de la emoción, siendo ésta la sensación consciente de ciertos estados orgánicos, la afectividad que llamamos superior es una evolución de la inferior, y por ello el sentimiento nunca perderá enteramente el carácter propio emocional. Es decir que los sentimientos incluyen de sí modificaciones fisiológicas. El palcer estético resultaría, según esta doctrina, de la *sensación consciente de los estados orgánicos producidos ante los objetos bellos*<sup>8</sup>; de la 'intoxicación' que causaría el sonido, el movimiento, la representación ect.

En cambio para muchos 'Intelectualistas', la emoción es propia de la 'afectividad', y no incluye esencialmente transmutaciones orgánicas. El sentimiento estético sería también propio de esa facultad. Algunos de ellos, Leibtniz, explica en concreto

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ramene la perception du beau a une projection ou a une infusion de nos emotions et de nos sentiments dans l'object", cfr. Maritain, "Art et Scholastique", 1927.

<sup>7</sup> "A sentiment is an experience which is made up of systemic sensations and ideas". "Esthetic sentiments arise when the feeling tone of an experience is specially intense and combines with an idea of value. This produces a sentiment of beauty of harmony if the feeling is pleasant, and a sentiment of ugliness or discord if the feeling is unpleasant". cfr. "Elements of Human Psychology", 1922, c. IX pp. 218-221. cit. por P. A. de Blas. "La Naturaleza de la Afectividad" art. publ. en Unitas, 1933 p. 230, 232.

<sup>8</sup> Escribe Ribot: "Just as in intellectual order there is an ascending scale, leading from the concrete, successively, to the lower, medium and higher forms of abstraction, so in the affective order there is a scale ascending from fear or anger to the most ideal emotion. And in the same way as the highest conception retains the characteristics of the concrete whence it sprang, on pain of being merely an empty word, so the most ethereal sentiments cannot entirely lose the characteristics which constitute the emotions." cit. por P. A. de Blas, l. c. pg. 209.

"If we are to believe certain over-subtle critics, aesthetic emotion would have the privilege of moving in the region of pure contemplation... It is an abstract mode of feeling substituted for the concrete. Complete esthetic emotions, without regard to its quality, does not always require advanced culture. The savage, who, along with his companions, excites himself over his dance and song, becomes intoxicated with sound and motion; the native spectator quite carried away by the interest of a crude melodrama; the Spanish peasant, contemplating his church crammed with rococo ornaments and strangely-dressed saints; all these experience the concrete emotion which shakes the frame, makes the heart beat, produces tears, laughter, or gestures" (cit. por. id. id. p. 212.) "The Psychology of Emotions" por T. Ribot.



el sentimiento estético diciendo que proviene de una representación obscura y semi-inconsciente.<sup>9</sup>

Freud, o mejor dicho, sus comentadores, refieren el sentimiento estético a la satisfacción de las tendencias de *introversión*. Los sentimientos artísticos, religiosos, para Freud son transformaciones de las emociones inferiores. Transformaciones que en el sistema freudiano se verifican por medio de la 'sublimación', fenómeno que tiene lugar cuando el curso de la 'libido'—instinto vital fundamentalmente sexual—se desvía de la dirección que tenía y se 'sublima', cambiando de rumbo hacia otro término—más elevado y puro.

De esta sublimación dependen las tendencias, 'cathesis', o las diversas inclinaciones que dominan la vida del hombre. En el sentimiento son tres:

Tendencias subjetivas —ego cathesis—, en las cuales la 'libido' se dirige, por medio de la 'sublimación', hacia el propio yo, terminando en el 'Narcismo'.

Tendencias objetivas,—object cathesis—, en las cuales la sublimación desvía el curso de la libido hacia el mundo de la realidad, hacia los demás, concluyendo en el 'aleorotismo', o amor de los otros.

Tendencias de introversión —phantasy cathesis—, cuando la corriente de la libido es enfocada hacia el mundo de la representación—ideas e imágenes—. La satisfacción, resulta de la contemplación y combinación de imágenes con los objetos externos.<sup>10</sup>

Bien se echa de ver que la emoción estética sería la satisfacción de la tendencia de 'introversión'.

Otros, como Spencer, el mismo Ribot, Schiller, son de parecer que el placer estético proviene del gasto de la energía superflua del poder asociativo. Es idéntico al placer que resulta del juego. En el organismo hay mayor virtud nerviosa que la que se consume, y el exceso origina la tendencia a emplearla sin finalidad, sólo por el placer de gastarla. Esta tendencia a su vez engendra la necesidad del deporte, el gusto por las aven-

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<sup>9</sup> "El goce estético, es más, hasta el placer sexual, consiste en una percepción confusa del orden, armonía, de la perfección" cfr. Augusto Messers. "La Filosofía Moderna" trd. por E. R. Sadia, cit. "en *Unitas* (P. A. de Blas, l. c.) También, Wulf, "L'Histoire de l'Esthetique", pg. 248.

<sup>10</sup> "cfr. The Structure and Meaning of Psychoanalysis" por W. Helay, Branner y Bowers, 1931, pg. 8-14.



turas, la pasión por la caza y la emoción estética. Al principio se manifiesta en juegos salvajes e imperfectos; luego la sociedad, a medida que va evolucionando, los refina, dándoles cada vez más tonalidad estética.”<sup>11</sup>

Schiller en su carta XXVII desarrolló con gran novedad y entusiasmo esta teoría de que lo superfluo engendra necesidades e inclinaciones al juego.<sup>12</sup>

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Todas estas teorías si bien han contribuido en lo que tienen de verdad—algunas bastante poco—a fijar y determinar más el elemento psíquico del sentimiento estético y sus derivaciones y precedentes en el entretendido de afectividad y de tendencia, se fundamentan en opiniones inadmisibles desde el punto de vista psicológico y metafísico.<sup>13</sup>

Todos los fenómenos que se verifican en el proceso del sentimiento estético pueden explicarse perfectamente, como veremos enseguida, por las operaciones de los sentidos externos e internos, del entendimiento y apetito, sin necesidad de recurrir a nada que esté desacorde con el sentido común.

Los mismos nombres inventados por esas teorías, que acaba-

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<sup>11</sup> “les puissances les plus hautes, mais les moins essentielles, aussi bien que les puissances le plus essentielles et le plus humbles, viennent ainsi a avoir des activités qui se déploient en vue des satisfactions immédiates qui en dérivent, abstraction faite des avantages ultérieurs; et c’est a ces puissances supérieures que les productions esthétiques fournissent la matière de ces activités supplémentaires, comme les lieux fournissent une matière a l’activité des puissances inférieures”. Spenser, ‘**Principes de Psychologie**, t. 2. pg. 668-69, edc. Paris, 1875.

<sup>12</sup> “No contento con añadir a lo necesario una superabundancia estética, el instinto del juego, busca lo bello por sí mismo o convierte lo útil en fuente de goces. La forma que se ha ido acercando gradualmente al hombre mismo, y le transforma primeramente en lo exterior y luego en lo interior. Los saltos desordenados se convierten en danza; el gesto informe en pantomima; los acentos confusos del sentimiento comienzan a someterse a la medida y a la forma del canto. El ciego instinto sexual se trueca en amor y sobre el modelo de la libre alianza entre la fuerza varonil y la dulzura femenina se van armonizando en la sociedad todos los elementos de dulzura y energía... El impulso estético va formando insensiblemente el imperio del juego y la apariencia”. Carta XXVII.

<sup>13</sup> Hemos de dedicar otro capítulo a la exposición de los sólidos principios del Neo-Escolasticismo que hacen inadmisibles todas estas teorías. Desde luego que admitimos la distinción entre la **emoción** y el **sentimiento**. La primera incluye **esencialmente** un movimiento psíquico **acompañado de transmutaciones orgánicas**. El sentimiento, de sí, no incluye transmutación orgánica y si a veces le acompaña, es por la interacción de las dos afectividades radicadas en un mismo sujeto consciente.



mos de indicar, para designar 'la facultad estética', tienen muy poco valor y fundamento psicológico.

Por ejemplo:

'El ingenio estético' no es más que el mismo entendimiento en cuanto forma un ideal y por medio de la imaginación lo expresa con belleza en las creaciones estéticas.

'El gusto estético' es la facilidad de juzgar—acto del entendimiento, por tanto—de la adecuación entre la forma y la materia de las obras bellas.

El "sentimiento estético" no es más que la facilidad para percibir y sentir lo bello; se deriva por tanto de entendimiento y de la voluntad, incluyendo también alguna resonancia en el apetito inferior, como veremos enseguida.

Es decir que en el sentimiento estético intervienen y concurren casi todas las facultades humanas.

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### **Funcionamiento de las facultades en el proceso de la percepción de lo bello.**

Las facultades *perceptivas* que intervienen en este proceso son: los sentidos externos, principalmente la vista y el oído; los internos, capitalísimamente la imaginación, y, por fin, el entendimiento, juez supremo y propio receptor de la belleza.

Estudiemos el papel de cada uno de estos elementos.

#### **1.º Los sentidos externos.**

La belleza se nos manifiesta a través de lo sensible; los sentidos por tanto, son la vía obligada del conocimiento estético. No le completan, ni mucho menos; porque la percepción acabada de lo bello incluye el comprender ciertas relaciones que están por encima de lo sensorial. Los animales, por eso, no pueden sentirlo. Los sentidos externos vienen a ser como los peones que ofrecen la primera materia sobre la cual las otras facultades han de trabajar.

Antes, pues, que el entendimiento disfrute de la belleza, los sentidos deben ya haber gustado la complacencia operativa, y el objeto estético tiene que haber ofrecido también una aptitud conatural para mover fácil y plenamente los órganos sensoriales. La belleza, por tanto, empieza a insinuarse halagando con la ma-



teria propia de cada arte o de la naturaleza, la inclinación del sentido externo.

La música antes que nada debe agradar al oído, la pintura, a la vista. El ruido, la obscuridad, no pueden ser bellos.

Pero este placer es tan solo la contraseña de lo bello para poder llegar al alma; no es todavía el goce estético tal. Quien busca en el arte, en la audición, por ejemplo, de una sinfonía, el deleite meramente sensorial, no *goza* estéticamente.<sup>14</sup>

La razón psicológica de que la vista y el oído nos causen ese placer y sean por tanto los sentidos propiamente estéticos, es bastante obvia:

Existen dos clases de sensación que pudiéramos llamar *sensación subjetiva* y *sensación objetiva*.

La primera es simplemente la modificación o transmutación física, natural, que el objeto de la sensación causa en el órgano sensitivo: cuando tocamos un hierro candente—por usar un ejemplo extremo—no solo sentimos el contacto sino la quemadura dolorosísima que nos produce.

La segunda es la representación mediante la cual conocemos el objeto sentido: el espectáculo que ofrece un anciano caído en el suelo nos impresiona no precisamente porque la vista se inmute orgánicamente, como pasaba con el tacto en el hierro al vivo, sino por la noticia que por los ojos entra en el alma.<sup>15</sup>

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<sup>14</sup> He aquí cómo De Wulf habla de las dos distintas complacencias: "Para los sentidos la música no es arte, sino un voluptuoso excitante. Lo que un gran número de mundanos busca en la ópera es una embriaguez de los sentidos. Arrellanados en sus butacas, la ejecución de la orquesta les morfiniza, los impregna como un ramo de heliotropos. Rebajada a la categoría de adorno teatral, fascina sus oídos, como la brillantez de los trajes fascina su vista. Aun así, se encuentran personas que estando solas, sienten necesidad de oír un trozo de música para facilitar la digestión.

En el que es capaz de una impresión estética verdadera, nada de esto sucede. Ninguna pasividad en su ser, sino al contrario, una viva reacción hacia lo que impresiona su oído. Para él, la forma artística lo es todo: penetra, se da cuenta de ella, la sigue en sus detalles, percibe las delicadezas del ritmo, la marcha simétrica de las voces, la ponderación de las frases melódicas, el ejercicio de los diversos timbres, en una palabra, penetra en toda su intensidad **la idea del compositor.**" cfr. "**Le valeur esthétique de la moralité dans l'art**". pgs. 28.29. trad. de E. G. Blanco.

<sup>15</sup> cfr. Bray, "Lo Bello" c. 3. P. Paredes, **Ciencia Tomista**, año, I| pg. 348. Mercier, "Psychologie," no 219-220. "Dupliciter organum animae potest transmutari: uno modo transmutatione spirituali, sec. quod recipit intentionem rei; et hoc per se invenitur in actu apprehensivae virtutis sensitivae, sicut oculus immutatur a visibili, non ita quod coloretur, sed ita quod recipiat intentionem coloris. Est autem et alia naturalis transmutatio organi, prout organum transmutatur quantum ad suam naturalem dispositionem,



La sensación *subjetiva* depende esencialmente del estado normal o patológico del órgano externo, y su principal fin es avisar al hombre del buen o mal estado de su sensibilidad o de su salud, y no precisamente causar conocimiento cabal y claro de los agentes externos.

En cambio las sensaciones representativas, propiamente tales, no nos refieren ninguna impresión subjetiva. Esta es secundaria: la sensación enseguida se funde en la percepción, convirtiéndose en noticia *objetiva*, expresando una cualidad del excitante externo.

La primera clase de sensaciones predomina en los sentidos inferiores, tacto, gusto y olfato. La segunda, es más propia del oído y de la vista.

Las sensaciones inferiores nos producen agrado fisiológico: lo suave, lo perfumado, lo dulce son agradables. A los objetos de las superiores les llamamos bellos o feos.<sup>16</sup>

La causa de esta distinción radica en la misma naturaleza de las operaciones sensitivas. El olfato y el gusto y el tacto son sentidos más materiales que la vista y el oído, tanto en el modo de verificarse la excitación sensible como en las condiciones de su funcionamiento. Domina en ellos más la inmutación natural que la representativa. Además están destinados principalmente a la conservación de la buena marcha del organismo, declarándonos el estado funcional del mismo. Son potencias defensivas y conservativas del individuo y de la especie. El oído y la vista, en cambio, están destinados capitalmente a la vida de relación.

No queremos decir que esto sea exclusivo. Los sentidos inferiores también son potencias cognoscitivas, y pueden ser, sin duda alguna, principio de percepción objetiva. Lo mismo que la vista y el oído en cuanto órganos físicos pueden darnos sensaciones subjetivas. La confusión en este punto ha dado lugar a bastantes errores estéticos y psicológicos.

Otra razón de la preeminencia cognoscitiva de la vista y del oído radica en la grandísima variedad de sensaciones que nos pueden ofrecer. Es decir, que sus excitantes son de tal

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puta quod calefit aut infrigidatur, vel alio modo simili transmutatur; et huiusmodi transmutatio per accidens se habet ad actum apprehensivae virtutis sensitivae; puta cum oculus fatigatur ex forte intuitu..." I-II, q.22,art.2 ad 2m.

<sup>16</sup> cfr. I-II, q.27.a.1.ad 3m.



naturaleza que haciendo entrar en juego plenamente al aparato sensorial, no ofrecen, en la multiplicidad de la excitación, obstáculo alguno para que el sentido reciba esa variedad conexas y armónicamente.

La vista nos muestra la más grande y delicada variedad de colores en el conjunto de una unión complicadísima, maravillosa. Percibe los colores como algo simple. El amarillo y el rojo, mezclados, no los ve confusamente, sino como un distinto color, anaranjado: una onda de longitud intermedia entre los colores que lo forman. El oído, aunque no nos pueda dar un conjunto notable y *simple* de sonidos al mismo tiempo, pues en cualquier armonía percibe separadamente los sonidos que la componen, lo hace tan vertiginosamente que la conciencia los recibe conjuntamente, haciendo posible las infinitas formas de sonidos y armonías que convierten a la música en un arte tan encantador.<sup>17</sup>

Spencer, curioso analizador de los efectos estéticos, coloca la causa del placer sensitivo estético en el ejercicio de las facultades sensitivas lo más intenso posible con el menor número de compensaciones negativas procedentes del exceso del mismo. Así supone que aquellas disposiciones de la forma serán bellas que muevan eficazmente el mayor número de elementos nerviosos necesarios a la percepción sin llegar al exceso.<sup>18</sup>

En la vista las exigencias de la armonía y de la proporción—unidad en la variedad—piden que se verifique este principio para evitar la monotonía de lo igual sin desperdigar por eso la atención visual.

El ritmo, proporción de colores y de luz, requerido por la vista en las percepciones complejas de líneas, contornos y colores, es el elemento que une la multiplicidad de los mismos, apoyándola, como si dijéramos, en los diversos acentos rítmicos—

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<sup>17</sup> cfr. Frobbes, "**Psicología Experimental**", trad. de Menchaca tom. 2, p. 330. También, P. Brennan, "General Psychology", Macmillan, 1937. pg. 171.

<sup>18</sup> Spencer, l.c. pg. 672. 674 ss. "La source primitive du plaisir esthétique est une combinaison de telle nature qu'elle exerce les facultés le plus complètement possible, avec le moins de compensations négatives venant de l'excès d'exercice". Qu'un grand nombre d'éléments de la faculté perceptive doivent être mis en jeu, tandis, qu'aucun n'est condamné à un exercice excessif: il doit y avoir un corps de sentiment considerable, résultant de leur activité modérée, sans qu'aucune peine due à une activité extrême vienne le diminuer."



uniones, altura, distancia, adornos, ect—, produciendo de ese modo un descanso regulado que permite al órgano en medio de la operación, un goce prolongado. En una catedral gótica, por ejemplo, los arcos, las columnas, las volutas, agradan tanto al sentido estético por ese ritmo mudo de la proporción y la simetría. Un arco roto, torcido, una unión a destiempo, harían sufrir; sería un obstáculo para que nuestros ojos percibieran la armonía total, teniendo que intervenir la imaginación para soportarlo. Lo asimétrico, lo quebrado, por falta de ese ritmo, es tan difícil para el sentido. Lo mismo en los colores. Cuando no hay buena combinación de los mismos, buen 'casamiento', es brusco el cambio de tonalidades; y por tanto, el ejercicio ya no es desenvuelto ni agradable: un color café sobre un amarillo limón o un verde mar no los sufriría fácilmente la vista.

En la música el fenómeno es parecido. El ritmo, la cadencia es lo esencial para que el oído trabaje suave y libremente según se van sucediendo las diversas frases musicales de la melodía. El oído artista no pide siempre un movimiento retardado, ni un allegretto, ni siempre el piano o el forte. El paso de unas tonalidades a otras lo quiere mediante la ligazón dulce, donde no haya brusquedad ni confusión. Una orquesta perfecta es aquella en que cada instrumento al dar la variedad de timbre y adorno, no se sale de la unidad de tono, contribuyendo, tanto en la armonía de los diversos timbres como en el acompañamiento de adorno, a la sonoridad natural del conjunto.

Advertimos de nuevo que este placer sensitivo, no es el goce estético cabal; es tan sólo uno de los elementos que concurren a producirlo.

#### *Repercusión afectiva de los sonidos y colores.*

Esta misma graduación armónica, variedad en la unidad, unida muchas veces a la asociación imaginativa, es la causa de la repercusión misteriosa, pero indiscutible, de los simples colores y sonidos, desvestidos todavía de la forma estética, en la tonalidad afectiva.

Se habla hoy de la 'Cronopatía', o ciencia de los colores, y de las relaciones que tienen con la emoción. No es en verdad ningún descubrimiento el hecho de que la tonalidad de los colores pueda llegar a influir hasta en la misma salud mental.



Muchas de nuestras posiciones afectivas, con frecuencia, dependen simplemente de esta influencia de la luz y del color sobre nuestro organismo.<sup>19</sup>

La asociación juega aquí también mucho papel. Los hechos son ya triviales. El sacerdote hindú usará invariablemente cascaca amarilla, porque cree que ese color suscita respeto religioso. Los rapsodas de la antigüedad se vestían de distintos colores conforme al poema que recitaban. La ira no la asociamos con el color blanco, sino con el rojo, porque de ese color se suele poner la cara del furioso. Los colores chillones excitan, mueven a verbena; los tonos apagados, enfrían. El azul es sedante. —Dos enamorados románticos nunca preferirán para cenar una habitación color caoba. etc.—En las representaciones, Operas, Cines, la luz y el color intervienen en el agrado de una manera casi transcendental.

Se quiere dar al color casi la misma categoría que a la música y hacer sinfonías de colores como las de sonidos. Existe un arte bautizado con el nombre de "Lumia", que consiste precisamente en ello. El inventor es Thomas Wilfred, quien mediante un 'clavilux', un teclado eléctrico, completamente mudo, proyecta colores sobre una pantalla cinematográfica, produciendo 'armonías' de color, de un sedimento afectivo agradabilísimo inolvidable.<sup>20</sup>

<sup>19</sup> "A young woman who had moved into a newly purchased house developed an irascible temper. Having always been a person of poised emotions, the change in her was not understood until her friend suggested that the walls of her living room where she spent the larger part of her time, might be at fault. Chromopathy, it seems lists mahogany as an exciting color. Anyway, a soft green was substituted and the young lady's benignity and graciousness are said to have returned." From "Color Comes to Life," art. pub. en *Psychology*, June, 1938, p. 26, by Eldorado Field.

<sup>20</sup> "On the stage is a large screen. As the performance begins dusk, like a gentle mantle, envelopes all. Utter blackness follows (this preparation has been found best for the human eye, as well as for the psychological effect) and then, somewhere out in front, light begins to dawn. Perhaps deep blue...shading to violet...pulsating...back to blue...a dazzling white form emerges...changes shape... unfolds into rose, orange-crimson...singing red. Other forms arise and in other colors...almost as melodies come to life from the strings of an orchestra...through space, the colors keep pulsing...vibrant turquoise...back through blue to violet...growing into dawn and sunrise over the ceaseless rhythm of wave and wind...and the skilled fingers of the Lumanist move over the keyboard... It is all so new and strange so endless beautiful, so detached, mystical and stimulating, that you want a language equally new to express it... You feel the joy of something unknown...all quivering with revelation... You are out in the ether. A great calm, a deep silence surrounds with a fairy world." cfr. el mismo artículo antes citado de "Eldorado Field"— En la Exposición de Barcelona tuve la



Ya Goethe distinguía entre colores negativos y positivos, y Fechner entre colores activos y receptivos, según que exciten al movimiento o insinúen tranquilidad y concentración.<sup>21</sup>

Tratándose de los sonidos sucede idéntico fenómeno. El mismo Aristóteles hablaba ya de las modalidades afectivas causadas por los distintos timbres de los instrumentos y de los géneros de música, asegurando que para la juventud no es buena la música de cualquier instrumento.<sup>22</sup>

La asociación de sonidos es también una fuente de este fenómeno. Un sonido dulce nos produce simpatía: además de la suavidad con que mueve al sentido, nos recuerda el timbre de la voz humana en la afabilidad, cortesía, ect. Un sonido ronco, puede llegar a infundirnos cierta precaución y temor, pues nos trae a la imaginación la voz de la ira, de la brutalidad. El silbato que el cartero suena en algunas regiones para anunciar la correspondencia, complace, no por lo estético del sonido, sino

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oportunidad de ver una cosa parecida cuando por la noche iban sucediéndose los colores de la iluminación de una manera semejante, con la ventaja de que la pantalla era la obscuridad de la noche, esfumándose por ello la luz, deliciosamente para la vista, en la lejanía.

<sup>21</sup> "Los colores ativos, a saber, el púrpura, el rojo, el anaranjado, el amarillo, ejercen una influencia excitante, excitan a la acción y al movimiento. Los colores receptivos, entre los cuales deben clasificarse los colores azules, ejercen una influencia de tranquilidad y paralizamiento y no inducen a obrar hacia el exterior. A la oposición de la luz y de la obscuridad corresponde en el dominio del oído, la oposición de sonido y silencio. Hay un placer natural agregado a todo ruido, solo porque pone en acción nuestros órganos auditivos. La música ensordecedora de los niños y de los salvajes no hace más que satisfacer esta necesidad de hacer funcionar vigorosamente estos órganos. Como en las series de los colores se ha establecido la oposición nos dejan sombríos o graves o melancólicos. Se han clasificado en la misma relación de oposición los timbres de los instrumentos..." cfr. Hoffding, "Psicología Experimental," tr. de E. G. Blanco, VI, a. 3,d.

<sup>22</sup> *Per musicam animus afficitur... Sed quibusdam ad fletum magis animo contracto moveantur, ut eo qui dicitur mixolydisti; aliis mente fiant molliores, ut remissioribus modis (las piezas que abundan en 'retardos'...).. alio concentu media et moderata et constanti ratione afficiuntur, quod ex concentibus Doricus efficere videtur; qui vero Phrygius appellatur, furorem infert.... Ratio est.... quidam enim mores habent magis constantes, alii mobiliore: et ex his quidam motus importunos concitant, alii magis liberales; quo plane intelligitur vim musicae inesse mores animi fingendi.... Musica vero suapte natura suavis est, et concentus atque numeri **quamdam cum homine cognationem habere videntur**" Polit. c. V. "Tibia non ad mores inducendos, sed ad orgiorum enthusiasum facit... adde quod tibiae in usu accidit id quod disciplinae contrarium est: nam eius cantus uti ratione prohibet... Multa ex veteribus instrumentis reiecta sunt ut pectides, barbiti, et quae pertinent ad voluptatem audientium eos qui instrumentis utuntur, septangula, triangula, sambucae et quaecumque manuum operam scienter adhibitam postulant..." id. VI.*



porque nos recuerda las buenas noticias que nos trajo otras veces o porque presumimos que ahora será mensajero de otras parecidas. El timbre del sonido asociado en la experiencia con la impresión de placeres recibidos, ha adquirido la propiedad de causar el mismo placer. Los sonidos que la imaginación asocia a impresiones pasadas, nos suscitan la misma afectividad que ellas.

Como se ve, tanto la misma clase de excitación del sonido y del color, como la asociación que suscitan, son el origen de esa repercusión afectiva tan ordinaria.

### **Los otros sentidos externos.**

Respecto de los otros sentidos, ya indicamos que en cuanto cognoscitivos, por reforzar la impresión de los superiores, podrían servir para apreciar algún elemento estético. Mas sería tan débil, tan confusa su ayuda que bien pudiera ser contada por negativa. La intensificación del efecto estético, efectuada por estos sentidos, ha de tenerse siempre como secundaria, cuando no como perjudicial.

Cuando se ve una figura moviéndose, fácil e instintivamente surgen reflejos en el sentido muscular, semejantes al percibido, acompañando el ritmo del movimiento. Una línea horizontal engendra una impresión agradable de tranquilidad; y no es más que la posición horizontal al excitar el órgano visual, hace a éste necesariamente ejecutar un movimiento semejante, y, como depende de su solo músculo, es menos fatigoso que el requerido por la visión de una línea vertical.<sup>23</sup>

Así la mímica con que seguimos instintivamente al orador o al cómico parece que refuerza el efecto producido.

Los otros sentidos afirman a veces también el resultado estético. Un cuadro de paisaje invernal lo asociamos con la sensación de frío y parece más hermoso; un paisaje del Paular, por

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<sup>23</sup> "Nous observons que le charme qui résulte des lignes flottantes, a l'exclusion des lignes anguleuses, est du en partie a cette action harmonieuse et facile des muscles de l'oeil, qu'implique la perception de telles lignes: il n'y a la aucun desarroi résultant d'arrets soudains du mouvement et du changement de direction—semblable a celui ou l'on est jeté quand l'oeil parcourt une ligne en zigzag. Ici encore, par conséquent, nous avons un sentiment accompagnant une activité qui est dans son plein, mais qui ne contient aucun element pénible venant d'un excess" cfr. Spencer. L.c. pg.675.



ejemplo, nos trae invariablemente a la imaginación el aroma de los pinos.

Es decir, que el papel que juegan estos sentidos en la percepción y gusto estético además de ser secundario, es más bien asociativo, usando como intermediaria a la imaginación.

### **Con respecto a la creación estética.**

Los sentidos externos, vista y oído, ofrecen la materia remota de la obra. El ritmo, la palabra, la luz, etc. son el mundo de donde el artista ha de sacar su 'creación'. En las obras de imitación, la habilidad sensorial desempeña un oficio capital, si bien no son las obras de imitación y de la forma las que producen mayor y más fina emoción estética.

### *Concluimos resumiendo:*

Los sentidos externos en cuanto nos dan sensaciones *objetivas* son la base de la percepción de la belleza sensible.

La vista y el oído son los principales y exclusivos.

Los otros pueden contribuir muy secundariamente, y por medio de la asociación, a intensificar el efecto sensitivo estético, siendo otras muchas veces impedimento para apreciar y sentir normalmente la belleza.

El placer que de su operación, libre y plena, resulta es sensitivo, no llegando a ser más que *condición e introducción* del goce estético tal.

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## **2.º La Imaginación.**

La llave del sentimiento estético la guarda la imaginación humana. El entendimiento, en la contemplación de la forma resplandeciendo a través de la materia sensible, vendría a resultar como un día frío y nebuloso, sin la ayuda de la fantasía.

Tanto en la creación como en la percepción de lo bello el trabajo principal, y pudiéramos decir que decisivo, lo efectúa la fantasía por medio de su doble función representativa y creativa.

### *En la percepción.*

Como es sabido la fantasía es el complemento de la percepción sensitiva, incluyendo ésta, como incluye, no sólo los elemen-



tos de los sentidos externos reunidos en un conocimiento actual ante el sentido común, sino también las imágenes implicadas en el mismo, así como las libremente asociadas.

Expliquemos, para proceder con orden, este papel de la imaginación en el conocimiento estético, analizando la imagen implicada en la percepción y la imagen libre o asociada.

a) *imagen implicada.*

La percepción propia, del hombre la definen en un sentido muy amplio algunos psicólogos, como un complejo de estados psicológicos, de sensaciones, de imágenes, de recuerdos, de juicios y de razonamientos que surgen a propósito de una impresión actual.<sup>24</sup>

De un modo más estricto, diríamos que es una fusión de los elementos sensoriales externos e imaginativos verificada por medio del sentido común y cuyo resultado es el conocimiento completo *sensitivo* de un objeto externo. No excluye la intervención de elementos intelectuales, pero de sí no los necesita.

El elemento imaginativo esencial a la percepción sensitiva es la imagen *implicada*; es decir, *fundida* con los elementos captados por los sentidos externos de tal manera que dé *una sola impresión*, y *objetivada* con los mismos, o sea, presentada en la conciencia tan objetiva como los provenientes de la experiencia externa actual.<sup>25</sup>

Vemos colores pero *percibimos* objetos coloreados. Al ver, por ejemplo, en un árbol una esfera anaranjada, decimos que aquello es una naranja: actualmente nada más sentimos la impresión de la imagen visual, que los rayos de luz, reflejados en la superficie coloreada, forman en la retina; sin embargo, *percibimos* una naranja, mediante los elementos que tenía guardados la imaginación, y ahora son *fundidos* y *objetivados* en la unidad de la percepción. El tic-tac de un reloj que actualmente no vemos nos hace percibirlo mediante las imágenes implicadas, que unimos al elemento sonido, único excitante presente, etc.

Esta imaginación es propiamente reproductiva, copia exac-

<sup>24</sup> cfr. La Vaissiere-Palmés "Psicología Experimental, No. 37

<sup>25</sup> cfr. Brennan l.c. p.188-189. La Vaissiere, no. 37



ta de las cualidades objetivas, tal cual se nos presentaron a los sentidos.

Su papel en la actividad estética.

La imagen implicada o fundida en la percepción, común a todo conocimiento, es uno de los elementos importantes en la actividad subjetiva, propia de la intuición estética. Su influencia es ante todo sugestiva.

Partamos de ejemplos. Un pintor blanquea parte del lienzo para formar el fondo de un cuadro de paisaje; allí no hay más que una superficie uniformemente blanca. Da unas cuantas pinceladas, curvas, irregulares, de tonalidades diferentemente grises, y aquello es ya un cielo con nubes. Dibuja un brazo de mujer uniformemente blanco; pinta en la muñeca un brazalete, y el brazo se redondea. La imaginación ha añadido en los dos casos el relieve.

La caricatura se basa en este poder sugestivo que necesariamente tiene que completar la percepción del espectador. A veces los dibujantes caricaturistas, Sem, Sirio, Lasa, no delinean más que el rasgo fundamental característico de sus figuras, dejando a las imágenes implicadas del espectador el cuidado de dar cuerpo a la silueta.

El título de muchos cuadros tiene el mismo poder de sugestión. Recuerdo ahora la impresión del cuadro de Esteve, cuyo título reza solamente: "¡Pobre hijo mío!": en el lienzo no hay más que dos mujeres llorando, mirando al suelo; allá al fondo, un ciprés junto a una capilla solitaria. La sugestión es completa: se tiene que percibir lo que el artista quiere, y cuanto mejor se complete la percepción, mayor será el placer.<sup>26</sup>

La mímica del buen orador, del buen actor, da muchas veces, aunque no intervenga la palabra, la máxima emoción de la tarde. ¡Cuántas veces un gran actor ha conseguido hacer vi-

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<sup>26</sup> Escribía Walgrave: "El gran poeta es el que sabe callarse a tiempo. Adivina lo que es necesario y suficiente para despertar la actividad imaginativa. El poeta que merece este nombre, transforma a sus lectores en poetas. Todos los que gustan de la misma lectura, se asimilan lo escuchado en la proporción de su capacidad poética....Se requiere, es verdad, cierta educación artística para percibir la obra, pero cuando ésta es verdaderamente bella, todos, no privados en absoluto de gusto, sabrán hallar en ella el placer de esa actividad imaginativa sugerida." cfr. *l'emotion poetique*, Rev. Neo-Scol., 1902, p.327 ss.



brar a todo un público escuchando simplemente a su interlocutor!<sup>27</sup>

Todos estos fenómenos dependen del juego de la imaginación en la percepción cabal de los objetos. Lo que el arte o la naturaleza nos pone delante de los ojos, lo completa la imaginación a su modo, *objetivando*, creyendo real lo que sólo es imagen, uniéndolo a lo expresado por el objeto exterior, dejando en la conciencia, no un mosaico de elementos, sino una percepción acabada y real. *La variedad en la unidad.*

Pero este papel de la fantasía en la percepción de lo bello, no es único ni principal.

b) *la imagen libre o asociada.*

A la percepción se asocian también otras imágenes, no fundiéndose y objetivándose con la impresión actual, como las implicadas, sino libremente, conservando su independencia. Nos representan un objeto distinto que tiene alguna relación o analogía, objetiva o subjetiva, con el objeto percibido.—Una fotografía de mi casa suscita en mí un mundo de imágenes y sentimientos, que no me sirven precisamente para darme la percepción del edificio.—

Este fenómeno es llamado vulgarmente asociación de ideas, en virtud del cual unos estados de conciencia, evocan esponta-

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<sup>27</sup> Como curioso ejemplo de esta doctrina referiremos el siguiente, histórico, caso. Representaba en Córdoba "Don Juan Tenorio" el eminente Vico.... Dn. Juan había matado ya al Comendador y a Mejía, cuyos cadáveres ocupaban el centro de la escena, y acuciado por Ciutti, que avisaba la llegada de la justicia, dirigióse precipitadamente al balcón para decir los versos finales y arrojarle de cabeza al Guadalquivir. El momento era de una solemnidad enorme. La expectación por oír al gran actor la emocionadísima frase, indescriptible.. De pronto Vico tropieza primero con el cadáver de Mejía y luego con el del Comendador, que, como decimos, habían tenido la mala ocurrencia de desplomarse en el centro de la escena, y está a punto de caer de bruces.. El momento, de trágico se convierte en cómico. Una carcajada general estalla en el teatro... Vico se da cuenta de lo comprometido de la situación y queriendo salvarla, **hace una mueca terrible de asco, de miedo, hacia los muertos con quienes acaba de tropezar. En sus ojos se pinta el espanto con los caracteres más horrorosos.** Y el público, sobrecogido, emocionado, atónito ante aquella mueca, deja de reír y sigue con la mirada a Vico que volviendo la cabeza con repugnancia y horror hacia los cadáveres llega hasta el balcón, se encarama en la barandilla y pronuncia, como él sólo sabía hacerlo cuando quería, la frase celeberrima: 'llamé al cielo y no me oyó,—y pues sus puertas me cierra,—de mis pasos en la tierra,—responda el cielo y no yo.—La ovación fué estruendosa.



nea o voluntariamente a otros por la analogía real o aparente que entre ellos existe.

Esta es la base de la imaginación constructiva propia del hombre, y de la imaginación propiamente estética.<sup>28</sup>

Porque la función *estética* de la fantasía, no se limita al fenómeno, común a todo conocimiento, de completar la percepción sensitiva de lo bello. No solo la acaba sino que asocia, crea en cierta manera, junto a esa primitiva percepción, otra realidad subjetiva, si aparente, tanto o más encantadora que cualquier otra.

Por eso L. Dugas, al definir en general la imaginación estética, decía que es una representación *subjetiva* de las cosas; una visión de los objetos desde el punto de vista del sentimiento.<sup>29</sup>

Al contraponer, unas líneas más abajo, esta definición con la de la imaginación científica, o aquella que representa las cosas tales como son, prescindiendo del sentimiento, hace que no se tomen sus palabras en un sentido exclusivista, como si quisiera decirnos que la imaginación estética es solo aquella que se funda en asociaciones subjetivas o meramente sentimentales, sin fundamento analógico objetivo alguno.

El sentimiento, realmente, es el grano de sal de la imaginación estética, pero no en la misma proporción en todas las formas de la misma. La asociación tanto objetiva, como subjetiva, puede ser motivo estético.

El dominio de la primera, es decir, de imágenes concretas, realistas, nos dará una forma imaginativa estética en que la imagen se *sobreponga* al sentimiento. El dominio de la segunda, imágenes vagas, difusas, afectivas, nos dará otra forma, en la cual el sentimiento se sobrepondrá al elemento imaginativo. Por fin, otra forma intermedia, resultado del equilibrio de imágenes asociadas *objetiva* y *subjetivamente*: la imagen realista, plástica, dará colorido a la difluente, y ésta, tonalidad a la plástica.

Siempre lo sentimental en juego.

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<sup>28</sup> "Sed ista operatio (quae componit et dividit formas imaginatas) non apparet in aliis animalibus ab homine, in quo ad hoc sufficit virtus imaginativa." cfr. S. Tomás, I. q. 78, art. 4. También Brennan, I. c. p. 219.

<sup>29</sup> "L'imagination esthetique au sens le plus general du mot est la representation subjective des choses, leur interpretation du point de vue du sentiment et de la volonté". cfr. *L'Imagination*, París, 1903, pg. 277.



Es la asociación fundada en las propiedades reales del objeto y que más o menos espontáneamente se manifiesta en todos los hombres, estando sujeta a ciertas leyes, no despóticas, de semejanza, contraste y contiguidad. Las imágenes en que se fundamenta son objetivas, plásticas, representantes de los objetos tales cuales son en la realidad.

En el mundo estético esta asociación no es sólo de imágenes sino de sentimientos mediante ellas. Sentimientos que al cabalgar en lo plástico, en lo realista, hacen del arte un manantial emotivo para todos, pues todos fácilmente pueden encontrar la analogía objetiva, escondida entre la imagen y el sentimiento. El goce que causan la metáfora, el símbolo, no es otro que la actividad a que inducen a la imaginación y al entendimiento, al hacerles ver la inclusión del sentimiento en la imagen objetiva.

Describamos hechos. La significación simbólica y natural es una manifestación del fenómeno: la violeta es el símbolo de la modestia; la primavera, de la juventud. Dos expresiones que dependen de propiedades reales, objetivas: la violeta siempre nace escondida y da un perfume discreto, como el hombre modesto y de valor; la juventud en la vida es como la primavera en la naturaleza.

El orador y el poeta se sirven con frecuencia de esta asociación objetiva para causar los efectos portentosos de su arte.—Mella era célebre como pocos en este concepto.— Unen en una metáfora cosas distantes, traídas por la imaginación representativa de alguna propiedad real de las mismas, dando lugar a hermosísimas asociaciones:

'la juventud es una corona de rosas; la ancianidad, una corona de espinas'.

'eres, aunque yo no quiera,  
el imán que siempre sigo:  
con todos soy una fiera,  
y una paloma contigo'.

A veces sirviéndose de palabras que evocan imágenes vivas, claras, donde el sentimiento se presenta descarnado y palpitan-



do, conmueven a las multitudes produciendo transformaciones maravillosas.

El goce que causan las artes de la forma, pintura, arquitectura y escultura, se funda en esta imaginación objetiva, encerrando en ella lo sentimental. Las arcadas de la catedral gótica, por su curva fugitiva que va ascendiendo, parece que nos elevan dándonos aspiraciones ultraterrenas. Las formas expresivas de la escultura y de la pintura para causar placer estético deben responder objetivamente a la expresión que el sentimiento produce en la realidad: el Laoconte sería un "bibelot" si tuviera la expresión de quien toma el fresco a la orilla del mar. La imaginación en estas artes reproduce lo objetivo, y a través de ello suscita lo emotivo, mediante la asociación de que venimos hablando.

Se echa de ver bien a las claras que a veces esta asociación objetiva, establecida por el artista, no la percibe tan fácilmente el contemplador por la sencilla razón de que requiere previo estudio, cierta cultura que ocasiona y hace el deleite estético más fino. Un cuadro histórico nos agradará infinitamente más, si conocemos el hecho histórico representado y nos lo imaginamos en las circunstancias en que ocurrió. El cuadro de 'las lanzas' conmueve infinitamente si se sabe quienes intervinieron en la rendición de Breda; el carácter español, reflejado en la expresión de Espínola al recibir las llaves...

Cuando falta esta preparación, lo más que se obtiene es el placer sensible, sin llegar al sentimiento estético tal.<sup>31</sup>

#### Asociación subjetiva.

Depende, no de las propiedades objetivas, sino más bien del tono afectivo del sujeto, o de experiencias exclusivamente personales de tipo intelectual o fisiológico. Las imágenes en que se apoya son vagas e indecisas, unidas entre sí subjetivamente, sin estar sujetas al rigor de las leyes de asociación; muy fre-

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<sup>31</sup> "Voici un gars de la campagne qui, pour la première fois au musée, raconte la Kermesse de Téniers. Il est bien probable que la riche gamme de tonalités, l'harmonieuse disposition de personnages, le jeu d'ombre et de lumière, les dessins et les reliefs des figures, au lieu d'appaitre nets et distincts dans leur convergente diversité, ne produiront sur lui que l'impression vague d'une partie de boules, comme il en faisait avant de venir à la ville." De Wulf, L'Esthétique de Saint Thomas d'Aquin.



cuentemente descansan en contigüidades accidentales y raras, asequibles solo al propio sujeto.<sup>32</sup>

Ciertamente que al individuo este género de asociación le procura un deleite subdísimo; pero no es de ninguna manera la clave para juzgar de la obra estética, ni podemos fijarnos en ella para probar la universalidad objetiva del sentimiento estético; pues es evidente que en estos casos de asociación se goza más de sí que del objeto estético contemplado.

Los temperamentos románticos son los más predispuestos a este goce de la asociación subjetiva.

Pero donde principalmente domina, y tal vez sea la causa de la intensidad sentimental producida por ella, es en la música. La música es el mayor resorte de asociación subjetiva, sentimental, que se conoce.

Cada músico es un mundo independiente, todo lo ve en pentagrama.<sup>33</sup>

El fenómeno es curioso: si el espectador es a la vez músico-compositor, transpone, transforma la impresión exterior o interior, cualquiera que ella sea, en elemento musical. Todo lo asocia caprichosamente a imágenes musicales.

Los ejemplos abundan:

“Beethoven decía de la *Mesiada* de Klopstock: ‘siempre *maestoso*, escrito en *re bemol mayor*’. En su cuarta sinfonía expresaba musicalmente el destino de Napoleón; en la novena, pretende dar una prueba de la existencia de Dios; y al lado del cuerpo de un amigo difunto y en una habitación cubierta de paños negros, improvisó el *adagio* de la sonata *do dieze menor*”.

El caso de Schuman es tal vez el más curioso...

‘Me siento afectado, decía, por todo cuanto pasa en el mundo: hombre, política, literatura, lo reflejo todo a mi manera y lo exteriorizo en forma de música; por esta causa son muy difíciles de comprender muchas de mis compo-

<sup>32</sup> cfr. Ribot, l.c., pg.205.

<sup>33</sup> El músico vive en un mundo que le es propio; lleva en su cerebro un sistema coherente de imágenes tonales; donde cada elemento tienen su sitio y su valor; percibe la delicada diferencia de los sonidos y los timbres.... Intervalos y acordes, ritmos y tonalidades son como los tipos con que relaciona sus percepciones actuales.” Ribot “La Imaginación Creadora,” pg.222.



siciones que se relacionan con asuntos de un interés ya lejano, aunque importante; todo lo notable que me suministra mi tiempo me es fatalmente preciso expresarlo musicalmente".<sup>34</sup>

No hay duda que la luz al entrar en el cerebro de los artistas hace una refracción especial, subjetiva, que no se parece a la verificada ordinariamente en la generalidad de los hombres.

En cambio en el simple auditor, —si da la coincidencia de que en él predominen las imágenes objetivas, plásticas, —la música, la sinfonía será convertida en representaciones visuales. La imagen difluente, vaga, será interpretada por medio de la asociación subjetiva, en algo preciso que no tiene nada más que una analogía aparente, hija del estado actual del oyente. Por eso la música cada uno la interpreta a su modo; si está triste le hará llorar; si alegre, le aumentará la alegría. Si predomina en él la imaginación visual, la música será asociada infaliblemente a esa clase de imágenes.

Goethe, por ejemplo, al oír a Mendelssohn ejecutar una overtura de Bach, exclamó: ¡Oh, qué pomposo y grandilocuente es todo esto! Me parece ver una procesión de altos personajes, en traje de gala bajando los peldaños de una escalera gigantesca".<sup>35</sup>

El simple sonido de una campana, 'llora' doblando a muerto; 'alegra' la campiña; 'se regocija' tocando a bautizo.<sup>36</sup>

Ribot señala una diferencia entre los oyentes que poseen cultura musical y los profanos. En los primeros, esta trasposición de la imagen difluente en plástica no se verifica: el sentimiento brota sin que haya precisión en la imagen. En cambio en los segundos, la trasposición subjetiva es inevitable y el sen-

<sup>34</sup> cfr. Ribot, pg. 224.

<sup>35</sup> cfr. Ribot, l.c. pg.225.

<sup>36</sup> Véase cómo habla el pueblo: Martín, el viejo campanero del drama de los Quintero "Malvaloca", dice refiriéndose a la campana del asilo llamada "la Golondrina": "Pos que diga la hermana: **Paresía** una voz de los **sie- los despertaba** a los pueblos con sus sonos; alegraba los campos **al sé** de día; **yamaba** a **resá** a la gente cristiana; **yoraba** por los muertos... Cuando murió mi compañera, yo doblé por **eya** con la 'Golondrina' y no tuve mejó consue- lo que sus tañios... ¡con qué **doló** sonaba!... "Malvaloca," acto, lo.



timiento sensible, más bién que de otra cosa, surge después de la trasposición.<sup>37</sup>

Ortega y Gasset atribuye a la música de Beethoven la virtud de suscitar asociaciones subjetivas; a la de Debussy, la de producir directamente el deleite. Vale la pena copiar sus palabras, como ejemplo de todo lo que llevamos dicho:

“a veces se abre en el fondo de nuestra intimidad un manantial de recuerdos deleitables. Entonces parece que nos cerramos al mundo exterior y recogiéndonos sobre nosotros mismos, permanecemos atentos al íntimo hontanar, degustando ensimismados el trémolo brotar de las fragantes reminiscencias. Esta actitud es la concentración hacia adentro.... Cuando oímos la *romanza en fa* de Beethoven, y otra música típicamente romántica, solemos gozar de ella concentrados hacia dentro. Vueltos, por decirlo así de espaldas a lo que acontece en el violín, atendemos al flujo de emociones que suscita en nosotros la irisada polvareada sentimental que el son pasajero levanta en nuestro interior con su talón fugitivo. En cierto modo gozamos, pues, no de la música sino de nosotros mismos. En tal linaje musical viene a ser la música puro pretexto, resorte, choque que pone en emanación los flúidos de nuestras emociones. Los valores estéticos se prenden por lo tanto, más bien en éstas que en la línea musical objetiva, en el tropel de sones que transita sobre el rubio violín. Yo diría que oímos la *Romanza en Fa*, pero *escuchamos* el íntimo canto nuestro.

La música de Debussy o de Stiawinsky nos invita a una actitud contraria. En vez de atender al eco sentimental de ella, en nosotros, ponemos el oído y toda nuestra fijeza en el sonido mismo, en el suceso encantador que se está realmente verificando allá en la orquesta. Vamos re-

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<sup>37</sup> “El lenguaje emocional, en la música es el compuesto de sonidos sucesivos y simultáneos, de melodías y armonías que son los signos de los estados afectivos. Para ser comprendido debe evocar en la conciencia las disposiciones afectivas correspondientes. Entre los no músicos este poder de evocación es débil, las combinaciones sonoras no suscitan más que estados interiores superficiales e inestables. La excitación de los sonidos, sigue la línea de menor resistencia, y obrando según la naturaleza psíquica de cada individuo, tiende a suscitar imágenes objetivas, cuadros y escenas visuales bien o mal adaptadas,” Ribot, l.c.p.229.



cogiendo una sonoridad tras otra, paladeándola, apreciando su color, y hasta cabría decir que su forma...nos sentimos puros contempladores. Gozamos de la música en concentración hacia afuera”<sup>38</sup>

*La Imaginación en la creación estética.*

La imaginación en la obra artística es quien ofrece al entendimiento la *forma*. La *materia* es obra de la percepción sensitiva, donde se reúnen los elementos tomados por los sentidos externos del mundo exterior. La *forma* es lo que da la originalidad a la obra artística y lo propio de la fantasía creadora.

Esta podría definirse como la facultad de crear complejos de imágenes, coordinándolos de una manera nueva y esplendente.<sup>39</sup>

El medio que emplea la fantasía es doble: de asociación y de disociación de los materiales sensitivos. La dirección del trabajo la lleva el entendimiento; el calor para la moción viene de la afectividad.

Es tanta la intervención del factor intelectual en esta habilidad imaginativa, que a veces es imposible seguir el proceso creativo. ‘La actividad creadora y la actividad racional se mezclan estrechamente... Las sugerencias de la imaginación son a la vez la materia y el resorte de nuestros razonamientos; hasta le guían en cierto modo, con frecuencia. Por otra parte la imaginación normal está orientada por el juicio recto y el razonamiento exacto’.<sup>40</sup>

La multitud de imágenes sugeridas al calor del sentimiento, se presenta ante el entendimiento, el cual las compara con el ideal, para elegir las más convenientes y bellas, y poder así vestir con esplendor y decoro la idea artística. La imaginación sirve al entendimiento en la colocación y disposición de lo sensible para que el ideal quede expresado bellamente, y todo, coloreado, caldeado por el sentimiento. A veces se presentan con tanto ímpetu estas imágenes y bullen en la fantasía excitadas por la afectividad, que el autor se ve en el compromiso no pequeño de

<sup>38</sup> ‘Notas’ Madrid, Espasa-Calpe, 1933.

<sup>39</sup> cfr. Frobbes, l.c. pg. 220.

<sup>40</sup> cfr. ‘Psicología’, Abel Rey, Trd. de D. Barnés, Madrid, 1932, pg. 280.



separar, de rechazar las que impiden o pudieran ahogar la idea dominante.<sup>41</sup>

Cualquiera de estos elementos que falte, viveza de la imaginación, factor intelectual o fuego del sentimiento, hará de la obra artística algo frío, pobre, incoloro. El predominio de cualquiera de los tres, es lo que da el matiz a la infinidad de creaciones estéticas. Lo mismo que el abuso de cualquiera de ellos produce las aberraciones o desviaciones estéticas.<sup>42</sup>

Expliquemos brevemente el papel *exclusivo* y propio de la fantasía en la creación.

En la creación la fantasía puede trabajar bajo tres formas: plástica, difluente o mixta.

La plástica entra en las creaciones de las artes de la forma. Emplea imágenes objetivas, visuales, motoras, siendo elegidas siempre las que dan más realidad y aire de vida al ideal concebido. Nunca junta dos cosas que no tengan entre sí una analogía o proporción objetiva. Ordinariamente el elemento afectivo queda relegado a segundo lugar, aunque en el arte perfecto se equilibran los dos. Diríase que la imaginación materializa la abstracción ideal, dándola carne y hueso con la imagen objetiva.

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<sup>41</sup> La manifestación que hace Bécquer en la Introducción a sus leyendas indica algo de esto: "Por los tenebrosos rincones de mi cerebro andan acurrucados y desnudos, revueltos y barajados en indescriptible confusión, los hijos de mi fantasía, aguardando que el arte los vista de la palabra para poder salir a presentarse en la escena del mundo". (Obras escogidas, Madrid. Tom. I).

<sup>42</sup> El predominio de la asociación subjetiva ha dado, por ejemplo, las creaciones fantásticas en Literatura: "en el género maravilloso... la imaginación se entrega a sí misma sin exámen ni freno... esta forma de invención no consiste en idealizar el mundo exterior ni en reproducirle con la minuciosidad del realismo, sino en rehacer el universo a su antojo... Se desarrolla con frecuencia en un medio de pura fantasía, en el que no reina más que el capricho, y los personajes se presentan con claridad bien dibujados y vivaces. (Ribot, l. c. pag. 214-15.)

**El predominio abusivo de la imaginación objetiva**, nos ha dado, verbigracia, el 'Parnasianismo', que sigue la doctrina de la "forma impecable e impasibilidad". Las palabras tienen, según esta manera, en sí mismas, aparte del sentido que encierran, una belleza y un valor propios. (id. id. p. 199-200).

La preponderancia **de lo intelectual, de la idea**, ha producido el Cubismo: "En el Cubismo tenemos un arte que no quiere ser hermoso, en el sentido que durante siglos se había dado a esta palabra. Ni hermoso ni **agradable**; rechaza todo cuanto pueda halagar el gusto del público. Es un arte voluntariamente seco, casi **científico**. **En vez de tener mucha imaginación**, el artista quiere **saber construir**. En vez de encantar desea interesar. Strawinsky me decía que quería hacer una música que fuera tan objetiva como los registros de un notario. Raynaldo Hahn ha publicado, hace poco un artículo en que expresa su antipatía hacia una voz que sea siempre bonita. **Que la**



En esta clase de creación el artista busca ante todo la claridad en la complejidad.

Pudieran ser ejemplos, fuera de las artes de la forma, las Novelas Ejemplares de Cervantes; Pereda; Los Quintero; Benavente; P. Valdés etc. En la Música, la llamada "pintoresca.

La difluente es todo lo contrario. Emplea asociaciones subjetivas; imágenes abstrusas, sentimentales, exclusivas del carácter del artista. Las cosas se unen, no porque tengan alguna analogía, sino porque accidentalmente coinciden con el momento subjetivo, intelectual o afectivo. El artista se preocupa más de dar suelta a sus emociones que de suscitarlas en los demás por medio de una forma adecuada y más universal.

El ideal se forma de un motivo sentimental y exclusivo.

"El aspecto cualquiera de una cosa, dice Ribot, esencial o no, se le pone de relieve únicamente porque está en relación directa con la disposición de la sensibilidad, sin preocupación alguna, una cualidad o un atributo se escogen espontánea y arbitrariamente porque nos impresionan en el momento actual, y en último análisis, porque nos agradan o desagradan en algo".<sup>43</sup>

Como ejemplos, aparte de la música, arte propio de esta forma de imaginación, pueden citarse las novelas caballerescas; El Impresionismo y el Expresismo, —las Máscaras de Ensor— que construyen a base del color como a base de un tema musical.<sup>44</sup> En Arquitectura, la manera 'funcionalista' de Gandí.<sup>45</sup>

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voz sea expresiva, que llegue a interesar, que tenga personalidad". ('El Cubismo, arte científico'. art. publicado en ABC por A. Revesz.)

El abuso de superponer **el sentimiento** a todo ha engendrado el 'Modernismo' y el 'Simbolismo': el arte de provocar y traducir estados sentimentales por medio del color y las formas. (cfr. Maritain, l. c. not. 131) "Esta forma de arte desdeña la representación nítida y luminosa del mundo exterior, y la reemplaza por una especie de música que aspira a expresar la intimidad móvil y fugitiva del alma humana. Por esta razón usa de una imprecisión natural o artificial, todo flota en un sueño, hombres y cosas con frecuencia sin asomos de tiempo ni de espacio; cuanto ocurre no se sabe dónde ni cuándo ocurre, ni en qué país ni en qué época: es **la floresta; la Ciudad, el Caballero**; o simplemente **El, Ella, Uno**. En resumen, todos los caracteres vagos e inestables del estado afectivo puro y sin contenido". (Ribot, id., pag. 212).

<sup>43</sup> cfr. La imaginación creadora, pg. 206.

<sup>44</sup> cfr. Historia del Arte por J. F. Rafols, Barcelona 1936, pg. 712, 671.

<sup>45</sup> cfr. id. id. pr. 712.



Al final de este análisis del funcionamiento imaginativo en la percepción y creación de lo bello, cabe preguntar, cuál es la causa íntima psicológica de que todo él suscite placer estético.

Aparte del ejercicio interno y fácil de la potencia, existe la tendencia a reducir la imagen a la realidad, a pensar que aquel mundo fantástico, fabricando por la asociación, es real, objetivo.

Un artista, un dramaturgo o un poeta, cuando crean su obra, se identifican con sus personajes; si es pintor se embebe completamente en la contemplación del cuadro que está naciendo y tomando vida a cada pincelada; si músico, no existe nada más que su mundo sentimental, melódico. Durante la creación o la intensa contemplación artística, se vive en el mundo real, pero se siente en el mundo aparente. Una verdadera ilusión psicológica.

El contemplador, si está en la disposición conveniente para gustar de la obra bella, y si ésta posee la aptitud suficiente para conmoverle, se olvida de su personalidad y de las cosas que le rodean. Por unos momentos vive hipnotizado, sugestionado; se cree un habitante del mundo de la fantasía. Por eso cuando tiene que desvanecerse el éxtasis, cuando hay que volver a la realidad, el choque es brusco, y a veces se siente una finísima nostalgia, y se sigue allá, interiormente, paladeando el recuerdo y la imagen de lo vivido por unos momentos felices.

Los que piensan que la imaginación estética es un puro juego, un desgaste de las energías por desgastarlas, aparentan ignorar esta fenómeno; que hay otra realidad además de la visible que en ciertas situaciones es la única: la realidad de la imaginación. Realidad fantástica que la misma imaginación la cree extrasujetiva por la tendencia a atribuir ser real a todas sus creaciones y porque, por el momento, cualquier otra realidad verdadera es pálida y difusa ante la que ella siente.<sup>46</sup>

Por eso la belleza se busca por sí misma, sin ningún fin

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<sup>46</sup> Hablando de esta construcción imaginativa decía Dugas: "L'imagination l'objective, la pose comme existante, parce qu'il est dans sa nature d'attribuer l'être a toutes ses créations, et parce qu'elle ne conçoit pas présentement une autre réalité, devant laquelle celle qu'elle évoque palisse et s'efface, comme un flambeau devant la clarté du jour... Ces créations nous paraissent non seulement empreintes de réalité absolue. L'art donne une impression de plénitude. Cette impression tantôt se dégage à la longue, tantôt se impose d'emblée, tantôt est une pénétration lente, intime et profonde, tantôt un ravissement soudain, une extase..." cfr. *L'imagination*. pg. 301.



ulterior, desinteresadamente, por el solo placer de verla y vivir en ella. Por esto a la creencia estética, fundada únicamente en el poder alucinatorio de la imagen, para que produzca el goce, nada tiene que desvanecerla: en el momento que se trate de analizarla, se la destruye y el encanto se esfuma.

Así que quien goza propiamente del arte es el tipo 'cooperador', el que se olvida de la realidad y siente y acompaña lo que expresa la obra.<sup>47</sup> El crítico catoniano por fijarse más en la trama, en lo esquelético, en la forma en que está urdida la ilusión para querer descubrir la fuente del encanto, se queda sin la delicia. La del indio, que por querer *apresar* la música que tanto goce le producía, rompió el violín, para ver si la encontraba dentro, y se quedó sin violín, sin música y sin encanto.

*Resumimos:*

La imaginación, unida al entendimiento, desempeña el papel principal en la contemplación estética.

Su funcionamiento abarca todas las formas de imaginación asociativa.

En la percepción:

a) completando la percepción por medio de las imágenes implicadas.

b) asociando a lo percibido imágenes libres, que pueden ser objetivas y subjetivas o sentimentales.

c) objetivas, si se fundan en alguna propiedad real de las cosas. Subjetivas, si se apoyan solamente en la idiosincrasia del sujeto, estado afectivo o intelectual momentáneo, guardando poca relación con lo exterior.

En la creación:

a) dando la *forma* a la obra estética y cooperando con el entendimiento en la disposición y proporción de la materia a través de la cual ha de resplandecer el ideal.

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<sup>47</sup> "se distinguen dos tipos en la contemplación de la obra de arte: el 'cooperador' y el 'espectador'. El cooperador se olvida de que está en el teatro; siente él mismo los sentimientos de los personajes, se aíra, tiembla con ellos. Sobre todo los niños y los adultos sencillos gozan así de una narración, de un espectáculo. Otro es el comportamiento del mero espectador: no siente con los personajes, sino sobre ellos... No le arrebató el sentimiento... Ordinariamente en la primera lectura ocupa la preferencia el cooperador; en la segunda, el espectador. En general los cooperadores son la mayoría de los que gozan: su comportamiento puede conciliarse también con el supremo grado de inteligencia"... Frobbes, L. c. p. 336.



b) si es plástica, sirviéndose de asociaciones objetivas; si difluente, valiéndose de imágenes subjetivas, originando así las diversas maneras de creación artística.

El goce estético sensitivo—no completo por tanto—depende del perfecto y fácil ejercicio con que la belleza mueve a la imaginación, *y de la satisfacción de la tendencia a tomar por reales todas sus creaciones viéndolas limpias de las imperfecciones y fealdades de la realidad verdadera.*

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### 3.0 El Entendimiento en la contemplación estética.

El goce estético no pasaría de sensitivo sino fuese por la intervención de la inteligencia en la percepción de lo bello. Gracias al entendimiento podemos percibir y contemplar lo bello, las relaciones que unen a tan diversos elementos como entran en él y en su percepción sensitiva.

Escribía Chebruliez:—“en una pradera, delante de un paisaje, el vacuno ve lo que yo veo; sin embargo para él no hay paisaje: él paca, yo contemplo la hermosura de la naturaleza”.<sup>48</sup>

Y es que la belleza es patrimonio de la inteligencia. La variedad en la unidad, el orden, la analogía, ningún sentido puede captarlos, como tampoco la consonancia de la forma con la idea en ella encerrada ni percibir ésta a través de aquella: todo esto es algo que traspasa el poder sensitivo.

Decimos que una estatua es bella cuando al *compararla* con el ideal, los encontramos acordes, completándose y sirviéndose mutuamente. Se dice que el espectador aprecia, se dá cuenta de la belleza encerrada en un drama, cuando no sólo percibe lo externo y decorativo, sino la consonancia de la acción de los personajes con el carácter que representan y la de éste y el de toda la trama de la obra con la idea del drama.

Es decir, que la contemplación de lo bello consiste en una comparación explícita o implícita, que llega a veces a ser instintiva por lo natural y casi intuitiva por la rapidez con que se verifica. Es *una comprensión* de los elementos que constituyen la perfección y esplendor de lo bello y su mutua relación. Com-

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<sup>48</sup> Cit. por Montagne, l. c. pg. 404.



prensión que se hace posible bien por el estudio del arte, bien por la habilidad natural, más o menos desarrollada que todos los hombres poseen para percibir lo bello.

Un labriego, que, al salir de madrugada a su faena, ve al sol levantarse y *siente* el aspecto que ofrece la naturaleza en esa hora de la alborada, exclama: ¡qué *hermosa* mañana! ¿De qué proviene esta exclamación?

Es que hace inconscientemente, espontánea, rapidísimamente, 'único intuitu' una implícita comparación entre lo que presencia y 'el ideal' de perfección y esplendidez que él tiene en su mente, según su carácter y temperamento sentimental. Tal vez junta en la imaginación la impresión de la luz del sol, de la resurrección de la naturaleza ante el nuevo día, con ideas e imágenes, a lo mejor religiosas; o con el trabajo que ha de llevar a cabo en ese día espléndido para dar pan a los suyos; o simplemente con su espíritu semejante a la luz. De estas ideas que el entendimiento ve relacionadas mutuamente le brota la exclamación y se siente con la felicidad tranquila del goce estético natural, espontáneo.

### *El Ideal.*

Podemos distinguir dos clases: el natural o dependiente de la idiosincrasia innata y adquirida fuera de la educación artística, y el artístico, adquirido por la cultura estética del arte.

Tanto el natural como el artístico, no son algo metafísico, fijo, escueto, que cada vez que vamos a apreciar lo bello se nos presente como un patrón para que comparemos. Cada contemplador tiene una forma ideal distinta. Coincidirá, en lo que coincide todo lo humano, con el de los demás, con el de unos más que con el de otros, por la semejanza del medio ambiente; pero siempre en la apreciación de la belleza cada uno mide según el alcance propio de *su* ideal.

Y el ideal propio de cada uno no es más que la síntesis de creencias, de ideas, de aspiraciones innatas o adquiridas, claras o confusas, a través de las cuales se ven las cosas; síntesis que se va adquiriendo durante los años juveniles casi con la misma inconsciencia con que se respira, y que va dejando un tono sentimental que colorea después todas las manifestaciones de la vida.



Por lo que se refiere a lo bello, es la clave del *gusto natural estético* o habilidad para juzgar de la relación entre los elementos de la belleza. Podrá decirse que este ideal natural estético que poseen más o menos todos los hombres es una forma de belleza tipo, con la cual comparamos la exterior, al presentárenos en los objetos o acciones naturales y artísticos.<sup>49</sup>

*El ideal* artístico es el fruto de la educación artística, fundado, desde luego, en el propio carácter sentimental del sujeto y en el ideal natural que su educación ordinaria, medio ambiente etc. le han ido formando en la vida.

El mismo labriego del ejemplo anterior, con toda su aptitud natural para percibir lo bello, no podría llegar a la delicadeza de apreciar y sentir completamente la belleza de un cuadro del Greco o de Fra Angelico, de un drama o de una sinfonía, simplemente porque carece de principios, de ideal adecuado para poder establecer la comparación.

Por eso hace tanto la educación para sentir y apreciar las obras de arte, y los que la poseen gozan infintamente más que los profanos en los cuales el deleite pocas veces pasa de lo sensitivo, sino es por la redundancia y comunicación de las distintas facultades del hombre.

Hay que tener en cuenta que la formación del ideal o elemento de comparación, que todos estos conceptos, que se requieren para formar el gusto, no son sino meras disposiciones, preparación de la emoción estética. Esta no es suscitada sino mediante una operación activa, fundada en la comparación de que hemos hablado. La preparación, el estudio, hacen el ideal, y mediante éste se verifica el juicio estético, resultando de todo ello el sentimiento.<sup>50</sup>

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<sup>49</sup> Véase a Medina cómo se explica sobre el particular: "Est enim in animo cuiusque species quaedam vel a natura, vel ab arte, vel a consuetudine deducta, bonitatis aut pulchritudinis, et contra, malitiae aut deformitatis. Pictura ergo rei exterior, picturam interiorem contingens, si congruit cum nostro bono et pulchro amamus, si cum malo et turpi reiicimur, unde existit in iudiciis boni et mali, pulchri et deformis varietas et dissensio." Expositio in Iam. Part. Summae Theol. q. 27, cfr. También Dugas, L. c. p. 146: "L'Idéal est donc plutôt un sentiment, qu'une idée"...—Ribot, l. c. pg. 94 ss.

<sup>50</sup> Ajoutons que si l'acte même de la perception du beau a lieu sans discours et sans effort d'abstraction, le discours conceptuel peut cependant avoir une part immense dans la préparation de cet acte. En effect, comme la vertu d'art elle-même le goût, ou l'aptitude a percevoir la beauté et a juger d'elle, suppose un don inné, mais se développe par l'éducation et l'enseignement... toutes choses égales d'ailleurs, plus l'intelligence est informée de règles, des procédés, des difficultés de l'art et surtout de la fin poursuivie



### *El Entendimiento en la Creación estética.*

El entendimiento concibe una idea madre, fecunda, de gran contenido sentimental. Su aparición en la conciencia puede ser brusca, inopinada, con motivo de una asociación fortuita o de una impresión causada por la contemplación de un espectáculo, lectura de alguna poesía etc., por un acto cualquiera, propio o externo.

Supone empero un trabajo lento y sordo, inconsciente, aunque al presentarse con la intensidad repentina característica, venga disfrazado con la espontaneidad y como si no se hubiera verificado preparación alguna.

Se presenta además como algo exterior y superior que viene a excitar al artista y a obrar por medio de él. De ahí la atribución mítica a los dioses, a las Musas, a lo sobrenatural, que aun los poetas, por tradición, siguen invocando sin creer en ello.

Esta idea es lo que se llama inspiración, que tantas explicaciones ha tenido.<sup>51</sup>

La inspiración es una idea, no simple ni fría, sino como *una iluminación súbita del entendimiento, fruto de un trabajo subconsciente, que a impulsos del sentimiento produce una armónica y esplendorosa asociación de la imagen con la idea en orden a la manifestación sensible del ideal.*

Naturalmente esta idea madre, inspiración, fecundiza todo el trabajo mental. Esa asociación armónica en la que brilla la llama de la idea-inspiración, evoca otras muchas imágenes ya de carácter afectivo ya de carácter sensorial. Después, el entendimiento se limita a dirigir la ejecución. Separa en primer lugar la idea dominadora de todas las evocadas. Al mismo tiempo elige las más convenientes y rechaza las deslustradoras, con-

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par l'artiste... mieux est préparée e recevoir en elle par le moyen de l'intuition des sens le resplendissement intelligible que mane de l'ouvre et agouter la beauté de celle-ci." Cfr. Maritain. l. c. p. 87.

<sup>51</sup> Entre otras comparaciones y explicaciones que ha tenido la inspiración: "se parece a un despacho cifrado que la actividad inconsciente trasmite a la actividad consciente, la cual lo traduce" Ribot, l. c. p. 72.—"No es más que una mano febril que toma notas de una nube de soles que pasa por la mente deslumbrada". Mella en su Discurso sobre el Quijote, Obras, tom. IX.

Se la ha comparado a una especie de locura y otras veces a una especie de revelación divina. Frobbes, l. c. p. 224.

Platón hablaba de ella como un furor divino infundido por los dioses, cfr. Phoedro, XXII.



forme el carácter sentimental del artista, para que el ideal resplandezca armónicamente.<sup>52</sup>

Es evidente que en este trabajo de la inteligencia colaboran la imaginación y la memoria, como queda indicado más arriba.

La afectividad se suscita propiamente en el artista al concebir el ideal en el momento de la inspiración. Precisamente a impulsos de esa emotividad es como se verifica... verifica todo el trabajo creador.

Mientras ejecuta la obra la idea queda relegada a segundo lugar por el frío y la lucha de la ejecución. Se renueva de vez en cuando al encontrar un elemento nuevo que sirve notablemente para la expresión del ideal.

Una vez ejecutada la obra, el sentimiento, con frecuencia, se enfría al ver que los medios materiales, la forma, no logra expresar lo que la concepción le pedía: el descontento de los grandes artistas ante sus obras.

El impulso a expresar lo concebido radica en el amor. Porque se ama lo bello por la emoción producida ante él, el artista quiere perpetuar esa belleza concebida, preveniendo la debilidad de la memoria, para que siempre la pueda contemplar, no sólo él sino sus semejantes: el bien es comunicativo.

“Artifex, decía Sto. Tomás, per vervum in intellectum conceptum et per amorem suae voluntatis ad aliquid relatum operatur”.<sup>53</sup>

El proceso por tanto de la contemplación estética es inverso

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<sup>52</sup> El estado total del alma en la inspiración lo describe Grillparcer: ‘La inspiración propiamente dicha es la concentración de todas las facultades y aptitudes sobre un solo punto que durante este momento, más bien que encerrar el resto del mundo, debe representarle. La intensa fuerza del alma proviene de que sus varias facultades en lugar de diseminarse por el mundo entero se contienen en los límites de un solo objeto sosteniéndose, reforzándose y completándose recíprocamente. Gracias a este aislamiento, el objeto sale del nivel medio, se ilumina por todas partes, se pone de relieve, toma cuerpo, se mueve y vive; pero para ello es preciso la concentración de todas las facultades, pues solo cuando la obra de arte es un mundo para el artista, lo es también para los otros’. cit. por Ribot, L.C. p. 338.

<sup>53</sup> cfr. Olgati, ‘L’Anima di S. Tomasso’. c. III. Jean Maragall dice que compuso su tragedia ‘Nausica’ ‘per hostat jar-hi el seu amor per sempre’, cit. por Capdevilla en ‘L’Artiste en face son oeuvre’, Xenia Thomistica, t. I.



en el creador y en el espectador. Este por medio de la materia llega al ideal y goza. El artista, del ideal, del cual goza, pasa a traducirlo en materia sensible.

Siempre empero, la raiz está en una *contemplación intelectual*.

Los seres que no tienen entendimiento no pueden gozar de la belleza.

Réstanos hablar acerca del factor afectivo, impulsor, regulador y término del proceso cognoscitivo que acabamos de analizar.

—FR. FLORENCIO MUÑOZ, O. P., PH. DR.



## FINE ARTS

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### *Encouragement for Filipino Art and Artists*

THERE ARE those who still think that art is a luxury and that it is something detached from the ordinary schemes of life. This belief, coupled with the inability of the artist to adjust himself to the rapidly changing social and economic conditions, is perhaps, more than any other cause, responsible for the utmost neglect on the part of the Filipino people in the encouragement and development of a truly Filipino art.

To explain art impulse and its origin is to explain life itself, for life and art are one and inseparable. Genuine art has been and will always be an integral part of group life of man. Music, the dance, the drama, architecture and the fine arts have been man's vehicle in expressing his most profound emotion—that of his religious belief.

The magnificent Greek temples were erected not for art's sake but both for religious and civil performances. The most beautiful frescoes of Massaccio and Giotto were painted during the Medieval era as an expression of deep religious conviction and had helped greatly in accelerating the coming and the development of the consummate flower of the Renaissance art, which affect favorably man's social and religious bearing.



Who will deny the powerful influence of Rivera and Orozco's murals in completing the work started by Mexico's revolutionary leaders?

The history of mankind points to us of examples of genuine artists who, at the same time, were shrewd and formidable in practical everyday affairs. Artists can adapt themselves to the conditions of their time. Their creations can be impregnated with human desires, longings and inter-woven with the fabric of the social structure. With the artist's sharper susceptibilities he is more deeply moved by social, economic and political conflicts, and by the aid of his stronger imagination, he is able to give vitality to otherwise abstract lines and colors. With his exceptional relish for the life around him, he translates his experiences into forms in which the dramatic forces of life are so presented in a more convincing manner than when he found them so that his creations play profoundly upon the feeling of the beholder.

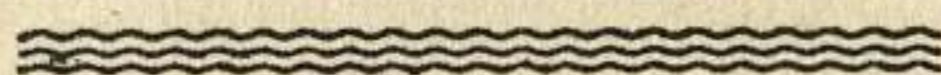
Art and life affect each other in a rhythmic cycle from the highest development to the lowest decadence. If Picasso's abstract cubism and Miro's fantastic surrealism seem artificial and foreign to the life to which they are logical part, is it not because society has driven these artists to the narrow confines of their studios, producing that which only pleases them without any consideration for the society which does not care for a genuinely artistic product? If the creations of such cubists, surrealists and talented society portraitists seem abnormal and decadent is it not because these art works reflect the abnormal and decadent life some of us are leading?

The Philippines today affords a fertile field for artists if only they are properly encouraged. There was hardly a time in Philippine history when means at our disposal was greater than at present in encouraging our artists in creating masterpieces, truly Filipino in character and smacking of truly Philippine soil.

—PROF. VICTORIO C. EDADES



# EDUCATION



## Vocational and Technical Education in the Philippines

### A. ACADEMIES OF "BELLAS ARTES"

413. **College-Academies.** — During the second educational epoch, in the girls' colleges as well as in the colleges of the first class for men, there were organized what were known as Academies of Fine Arts or "Estudios de Adorno". One of these famous academies existed in the Ateneo Municipal, where according to the *Guía Oficial de Filipinas* courses in drawing, painting, piano, voice culture and gymnastics were studied.<sup>1</sup>

Speaking of the Colleges of Santo Tomas and Letran, in the same *Guía* the following statement is found: "There are two fine growing establishments equipped with abundant and well chosen scientific materials for primary and secondary instruction and with good apparatus for the teaching of physics and chemistry, a museum of natural history and an academy of "Bellas Artes". In Santo Tomás, great importance was given to draftsmanship, map-making, "Dibujo de Adorno, Paisaje y de Figura", while in Letran College, special courses were given in literature which courses were divided into four sections, great stress being made on the literature of great orators. Typewriting was also taken up at this college, as well as the study of the violin which was given great importance.<sup>2</sup>

The seminary-colleges specialized in music and in the girls'



colleges, music, embroidery and artistic drawing were given great attention. In all of the boys' colleges, gymnastics were taken under the head of Art. There were expert instructors in this science. A famous instructor of that time was Don José Cuadras, who taught gymnastics in Letran and in the Ateneo Municipal.<sup>3</sup>

414. **The "Escuela de Tiples".**—The Escuela de Tiples (see No. 174) received new impetus during the second educational epoch. Its plan of study was patterned after that of the famous Conservatory of Music of Madrid. Elementary studies were under the charge of some distinguished cleric, and those in music were in the hands of the best ecclesiastic and lay teachers, most of whom had come from Spain. During the last years of the Spanish domination, this college was directed by the famous musician Don Blas Echevoyen who was at the same time teacher of voice culture and Master of the Chapel. Among the celebrated masters of the time were Oscar Campos, and Antonio Garcia, professors in piano; Luis Arche, professor for the study of organ composition; and Ramon Valdez, professor of violin and the violoncello. Most of them taught also in Letran College and in the Ateneo Municipal. Most of the outstanding musicians of the past and many of those of the present day received their training in this college. Among them may be cited Fulgencio Tolentino, Simplicio Solis, José Muezo, Hipólito Rivera, and Pedro B. Navarro. This college lost much of its prestige with the fall of the past regime.<sup>4</sup>

415. **Superior School of Arts.**—The School of Drawing and Painting founded by the Economic Society of Friends of the Country in the first quarter of the XIX century, (see No. 178) was raised in rank by the Royal Order of August 11, 1893, which declared it to be a "superior" school. Sculpture and Engraving were introduced into the curriculum. From that time, the school was known as the Superior School of Painting, Sculpture and Engraving. The same Royal Order widened the scope of its teaching and established the faculties of sketching and coloring; ancient drawing by means of chalk, and clothings, fundamentals of the figure, drawing from the nude, advanced scenery, pictorial anatomy, perspective and pictorial procedure other



than oil painting, scenic painting, ancient and natural sculpture, illustrations, history and theory of the Fine Arts, apparel, customs, and usages of the ancient peoples. At the end of the period we are now treating, the teaching staff of the institution was composed of the following:<sup>5</sup>

Don Lorenzo Rocha e Icaza .....	Director de la Escuela, y Profesor de antiguo y ropaje y desnudo del natural, Perspectiva, Colorido y Composición.
Don Rafael Martinez .....	Secretario y Habilitado, Profesor de Escultura
Don José Martinez .....	Historia y Teoría de las Bellas Artes
Don Vicente Gallegos .....	Principios de Figura hasta desnudo del natural
Don Joaquin M. Herrera .....	Antiguo y ropaje y desnudo del natural, paisaje Elemental y del natural
Don Antonio Garcia .....	Grabado en dulce
Don Melecio Figueroa .....	Grabado en hueco
Don Miguel Zaragoza .....	Anatomía Pictórica

416. **Industrial Work at the Female Colleges.**—Besides the study and practice of music, drawing and cooking, the girl's colleges specialized in sewing and embroidery.

We shall give the original in Spanish language in order not to alter the terms used in their industrial work.

**CLASE INFIMA: Doblar e hilar pañuelos**

- Hacer pespuntos
- Hacer puntos de veinica con cima y festones
- Hacer puntos de tapicería
- Hacer medias

**CLASE MEDIA Hacer costuras sencillas con pespuntos y vainicas**

- Hacer camisas de señora y caballero
- Variación de calados en telas ordinarias
- Puntos variados en algodón y lana con aguja de media
- Labores de crochet
- Labores de horquilla
- Labores de frivolidad en lana
- Bordados de tapicería en paño merino y raso
- Principios de bordado en blanco.



**CLASE SUPERIOR: Coser y disponer por si misma las camisas de caballero**

Variación de zurcidos

Trabajos de macrame

Corte de vara

Coser en máquina

Bordados a realce en holanda y piña

Bordados a relieve con variación de puntos en holanda y piña

Variación de calados en holanda y piña

Variación de calados en puntos de media

Bordados distintos sobre raso, terciopelo, grase, moare y tisó; con abalorios, escamas, felpillos, felpones, sedas, plata y oro

Bordados de lasin negro y de colores

Bordados de cristal con felpillos y oro

Trabajos de papel bristo sobre espejos, rasos, etc.

Hacer flores artificiales de papel, tela, estambre, abalorios, escamas, plata y oro

Frutas de cera

Pasamaneria.

417. **The Theater.**—The theater was not a course parallel in its advance with that of music and literature. Pedagogical institutions contributed much to the growth of the art of "Talia" with its comedies and dramas to solemnize the principal feasts of the institutions and distributions of prizes. Spacious and artistic "salon de actos" of Letran pertained to this epoch. Sta. Isabel, the Ateneo Municipal and Sto. Tomas also had their places for the celebration of such events. Many of the youngsters trained in these colleges later proved themselves worthy in this art. They took part in "zarzuelas" and comedies of higher flight in the theaters of the capital. This created a taste among the people for operas and comedies; at times foreign operatic companies came to the city.

The principal theater built during this epoch was the "Teatro del Príncipe Alfonso" which was located on Calle Arroceros; there was also the "Teatro-Circo" which was formerly the "Plaza de Toros" near Bilibid prison; the "Teatro de Novedades" which was noted for its music and dances; the "Teatro Filipino" in Quiapo on Calle Echague and the "Teatro Zorrilla" on Calle Iris (now Azcarraga). So much did the theaters flourish in the Philippines during this epoch that in some of them, there were showings every evening.



**418. Literature and Journalism.**—Literature and journalism was another of the vocations which reached its highest development in this second period. New books were written on religion and history. Even conscientiously written textbooks on philosophy, commerce, industry and arts; and the noblest poetry and comedies written not only in Spanish but also in all the more common dialects in the Philippines must not be forgotten. During this period, more than 150 different periodicals were published. Some of the periodicals of the time are:

La Oceanía Católica	Revista del Ejercito y Armada
El Boletín del Ejercito	Revista Taurina
Revista Mercantil	Revista de Medicina y Farmacia
El Comercio	La Regeneración
Revista de Filipinas	El Fénix
El Trovador Filipino	El Boletín de Cebú
El Correo de Manila	El Porvenir de Bisayas
Boletín Eclesiástico	El Eco de Panay
La Ilustración del Oriente	La Opinión
La Lira Filipina	Revista Popular
Diario de Filipinas	La Correspondencia
Revista Filipina de Ciencias y Artes	El Ilocano
Diariong Tagalog	La Alahambra
El Faro Jurídico	Anales de Agricultura
Revista Militar	El Domingo
La Semana Elegante	El Consultor del Profesorado
El Bello Sexo	La Voz Española
Todo en Broma	Revista Mercantil de Filipinas
El Mercantil	La Moda Filipina
El Hogar	El Eco del Sur
El Telegrafo	El Express
El Amigo del Pueblo	Apostolado de la Prensa
La Legislación	Crónica de Ciencias Médicas
Boletín del Museo-Biblioteca	El Noticiero
La Vida Industrial de Filipinas	El Heraldo de la Revolución
El Heraldo de Iloilo	Boletín Oficial del Magisterio Filipino
Todo en Broma	La Voz Española
El Mercantil	Revista Mercantile de Filipinas
El Hogar	La Moda Filipina
El Telégrafo	El Eco del Sur
El Amigo del Pueblo	El Express
La Legislación	Apostolado de la Prensa
Boletín del Museo-Biblioteca	Crónica de Ciencias Médicas
La Vida Industrial de Filipinas	El Noticiero
El Heraldo de Iloilo	La Independencia



The literary work were more in number and too varied to be cited here. We shall, however, mention some of them:

TITLES	AUTHORS
La Conquista de Jolo (Drama), 1865 por	D. Antonio del Canto
Artes de la Lengua Tagala, 1865	P. Sebastián Totanes, S.F.M.
Urbano at Feliza, 1866	P. Jacinto Caoili
Diccionario Español-Bisaya, 1866	P. Juan F. Encarnación
A los Vencedores del Carrao (Epo- peya), 1866	P. Joaquín Fonseca, O.P.
Tesaurus Hispano-Cagayán (Diccio- nario), 1867	P. Pedro Payo, O.P.
Manual del Gobernadorcillo, 1867	D. José Feced
Casaysayan Nang Doctrina Cristia- na, 1868	P. Ezequiel Merino
La Instrucción Primaria en Filipi- nas, 1869	D. Vicente Barrantes
Cartilla de Agricultura, 1869	D. Zoilo Espejo
Historia de los PP. Dominicos en Filipinas, 6 v., 1870	P. Joaquín Fonseca, O.P.
La Democracia en el Ministerio de Ultramar, 1870	D. Manuel Becerra
Institutionum Canonicarum (Tex- to), 1871	P. Benito Carominas, O.P.
La Libertad de Comercio, 1871	D. Manuel Azcárraga
Hoebó nang Mañga Campon ni Je- sueristo, 1872	D. Antonio F. Puansen
Arte del Idioma Visaya, 1872	P. Antonio Figueroa, O.F.M.
Avisos Utiles a los Niños, Doncellas y Casadas, 1873	P. Ramón Zueco, O.R.
Memoria Sobre el Ramo de Montes de Filipinas, 1874	D. Sebastián Vidal y Soler
Memoria sobre los Baguios, 1874	Comisión Hedrográfica
El Comercio Exterior de Filipinas, 1875	Cámara de Comercio
Sonrisas Tristes, 1875 (Novela)	D. Francisco Entrala
Agrimensores Practicos de Filipi- nas, 1875	J. B.
El Cultivo del Tabaco (Guía de Co- secheros), 1875	D. Manuel Monfort
Geografía, Geología, y Estadística (Historia), 1875	D. Agustín de la Cabada
Plan de Ferrocarriles (Obras Públi- cas), 1875	D. Eduardo López



Cuentos Filipinos, 1876	Inspección de Sanidad
Geometría Descriptiva (Teria), 1877	D. Joaquín Ibañez
El Cultivo y Comercio del Azucar (Memoria), 1877	D. Francisco Gutierrez
Flora de Filipinas, 1877	P. Manuel Blanco, O.S.A.
Tratado Práctico de Equitación, 1878	D. R. García Ferrero
Republica Domestica (Comedia), 1879	Sres. Regino y Federico
Minas de Mindanao (Memoria), 1879	D. Enrique Abella
Los Terremotos en Filipinas, 1880	Diario de Manila
La Biblia y el Pueblo Hebreo (es- tudio crítico-literario filosófico- social)	D. León de Goicouria
El Progreso de Filipinas, 1881	D. Gregorio Sancianco
Telegrafía Militar	D. Luis Salazar
Medicinas Caseras (Manual), 1882	D. Fernando Santa María, O.P.
Carriedo y sus Obras, 1882	D. Francisco Mas
Construcciones y Fortificaciones (Manual), 1882	D. Manuel Herbella
Historia Natural, Fisiología e Hi- giene (Texto), 1883	P. Ramon Vigil, O.P.
Cartilla Higiénica (Texto), 1883	D. Francisco Capelo
La Cuadratura del Círculo (Resolu- ción), 1884	D. Antonio Jimenez
Una Novia de Encargo (Zarzuela), 1884	D. Ricardo Castro
Codigo Penal, 1885	Gobierno
El Cultivo, Industria y Comercio del Algodón (Memoria), 1885	D. José Martín

## B. STUDIES OF "APLICACION"

419. **Mechanics.**—With the reform of the academic curriculum for secondary instruction leading to the Bachelorate of Arts, the vocational course of Mechanics (as well as other vocational courses) was introduced in the most important colleges of the first class (see No. 371). The vocational courses were usually taken together with the general course of studies, but could be taken separately. If students matriculated just in a vocational course they were exempted from minor subjects of the general plan of studies but were obliged to take some units in mathematics, languages and experimental sciences. In this



case the colleges of the first class acted as the vocational high schools of the present time.

The plan of studies for Mechanics was arranged for two years:<sup>7</sup>

Elements of Mathematics .....	2 years, daily lecture
Physics .....	1 year, 3 lectures weekly
Chemistry .....	1 year, 3 lectures weekly
Industrial Mechanics .....	1 year, daily lecture
Drawing, etc .....	Unlimited course depending on ability.
French .....	1 year, 3 lectures weekly

This course was taken in three years if taken separately from the general course:

#### FIRST YEAR

Spanish Grammar .....	Daily lecture
English Grammar .....	3 lectures weekly
Arithmetic and Algebra .....	Daily lecture
Religion .....	Unlimited course depending on ability.

#### SECOND YEAR

French Grammar .....	3 lectures weekly
Lineal Drawing .....	Daily lecture
Geometry and Trigonometry ....	Daily lecture
Religion .....	Conditioned

#### THIRD YEAR

Physics and Chemistry .....	Daily lecture
Industrial Mechanics .....	Daily lecture
Drawing applicable to machines..	Daily lecture
Religion .....	Conditioned

Upon completion of the course in Mechanics, the candidate could take his examinations for the title of "Perito Mecánico" (Mechanical Expert). Graduates with the degree of "Perito" were allowed to practice their professions and to teach their respective subjects in officially recognized establishments.<sup>8</sup>

420. Commerce.—Another of the vocational courses given at the colleges of the first class was Commerce. The plan of



studies for Commerce was patterned after the demand of the times and included the following:

Arithmetic and Algebra .....	1 year, daily lecture
Commercial Arithmetic .....	1 year, daily lecture
Geography .....	1 year, daily lecture
Bookkeeping .....	1 year, 3 lessons weekly
Accounting, etc. ....	1 year, 3 lessons weekly
Commercial Geography .....	1 year, 2 lessons weekly
Commercial Statistics .....	1 year, 2 lessons weekly

During the last decade of the XIX century the studies under this course were amplified by the introduction of Political Economy, Commercial Legislation, Industrial Legislation and an additional course in English and French. The course of study was for three years at the end of which he could receive the degree of "Perito".

As a practical requisite, the student presenting admission for examination of "Revalida" for the degree of "Perito Mercantil" must have exhibited his practice work in his trade or office covering the period of six months with notebooks under the heading "Journal", "Ledger", "Cash Book", and "Current Accounts with Interest."<sup>9</sup>

421. **Industrial Chemistry.**—Industrial Chemistry counted as no part of the general course, but as a special vocational study for students who desired to specialize in industry. This course was most probably poorly attended, for the Rector of the University complained of the backward state of industry in the Philippines which resulted in the lack of interest of its youth. The illustrious Ramon Vigil, O.P., in energetic language censured and lamented this fact in his speech at the opening of the classes in 1870 while, at the same time, he praised the interest of the students in the other academic courses. Chemistry, nevertheless, was also studied in connection with Pharmacy and Medicine and especially after the introduction of the College of Sciences in the University. As a vocational study in the colleges, this course had the third place. The curriculum arranged for two years was as follows:<sup>10</sup>

Elements of Mathematics .....	2 year, daily lectures
Physics .....	1 year, 3 lectures weekly



General Chemistry .....	1 year, 3 lectures weekly
Chemistry applied to the Arts and Industries .....	1 year, daily lectures
Drawing, etc. ....	1 year, daily lectures
French .....	1 year, 3 lectures weekly
Religion .....	Conditioned

422. **Surveying.**—Surveying, as a vocational study, was even of more acceptance than Mechanics. This course led to the degree of “Perito Agrimensor” or “Surveyor”. From the beginning, the course covered three years, including the subjects of mathematics, physics, natural history, mapping, and scientific and practical agriculture. Eventually, the course was arranged to cover the following subjects:

#### FIRST YEAR

Spanish Grammar .....	Lecture daily
English Grammar .....	Lecture daily
General Geography .....	Lecture daily
Arithmetic and Algebra .....	Lecture daily
Religion .....	Conditioned

#### SECOND YEAR

Geography of the Philippines ...	Lecture daily
Geometry and Trigonometry ....	Lecture daily
Agriculture, practical and theore- tical .....	Lecture daily
Lineal Drawing .....	Lecture daily
Religion .....	Conditioned

#### THIRD YEAR

Physics and Chemistry .....	Lecture daily
Natural History .....	Lecture daily
Typography .....	Lecture daily
Typographical drawing .....	
Religion .....	Conditioned

In the examination of “revalida”, every candidate was required to present three land plans made by him after the three different methods then in vogue, using the three different kinds of instruments in use at that time.

423. **School of Botany and Agriculture.**—The School of Botany and Agriculture (see No. 184), during the second epoch,



took on a more scholastic character and its scientific subjects remained under the direction of the Effective Chief of Secondary Instruction in the Philippines. The municipalities did not send many pensioners, so that the botanical garden and experimental fields for agriculture were almost exclusively used by the students of the colleges of the first class of Manila, as well as by the students of surveying and agriculture as part of the study of natural history. The use by the students of Manila of the facilities offered by this school is shown by the fact that the city government contributed ₱1,500 a year towards the expenses of the institution, while the central government paid ₱3,000.

During the last decade of the Spanish regime, the school was reorganized by the installation of more equipment and the increase in the number of professors and workmen. It was intimately connected with the Board of Agriculture, Industry and Trade and had its budget of nearly ₱40,000 from which the salaries of the officials of the Bureau were paid.<sup>12</sup>

424. **Meteorology.**—The science of meteorology was, from 1865, a study of “aplicación” for students of the colleges of Letran and Sto. Tomas and the Ateneo Municipal. It soon became apparent that the expenses of this subject were not justified by its utility to the students, and, therefore, the course was discontinued. The city government, however, took an interest in the institution which was soon enriched with new equipment purchased not only by municipal and insular funds, but also with donations secured by the Jesuit Fathers. The Observatory was converted into a national institution and placed under the care of the Jesuit Fathers. The first typhoon announced was that of 1879 from which the Observatory gained much fame and importance. During the first quarter of the century, meteorological stations were installed at the expense of the insular government in different parts of the Archipelago such as Albay, Tabaco, Daet, Atimonan, Tayabas, Punta Santiago, Punta Restinga, Cabo Bolinao, Vigan, Laoag, Aparri, Tuguegarao, Bayombong, and San Isidro. The Observatory entered into relations with other observatories in the Orient.

Speaking of the equipment in use in this Observatory toward the end of the Spanish domination, the “Guia Oficial” says: “For the perfect observation of meteorological phenom-



ena, the Observatory has various and numerous instruments, meteorological, seismological and magnetic. Among the most important are the meteorograph of Father P. Sechi of the Society of Jesus, the Beckley anemograph, Sprung-Fues barograph, a Casella rain gauge, a nefoscope by Fr. C. Cecchi, one by Escalpio and another by Hildebrandson, two splendid barometers, thermographs, a mareograph, etc.

“For local meteorology, the general seismographs of Escalpio, Father P. Cecchi, that of Gray-Milne, the protoseismometer and seismograph of Rossi and the Bertelli pendulum for microseismic observation and various other instruments of recent construction or invention were used.

“For the study of terrestrial magnetism, the Observatory used two series of absolute apparatus and another two series of apparatus for variations. Among the first, it has the theodolite compass and the inclinometer of Brunner which on account of its small size serves for itinerant observation; the other series made up of the magnetometer of Elliott and the inclinometer of Dover were used for the absolute determination of the magnetic elements at the Observatory.

“The apparatus of variations are the unifilar, bifilar and the balance, recently invented by M. Mascart; there is a complete series of apparatus for direct reading and another equally complete apparatus for photographic registration.”

“The astronomical section whose work up to date has been reduced to the correction of chronometers which ship captains take to the observatory and the announcing of the official time to regulate the clocks of the capital will in the future be more in use as there are now in Manila all necessary astronomical apparatus and the edifice for the Observatory is in an advanced stage of construction.”

Such was the advance in the Philippines of this science, when because of the change of government in 1898, the announcements of typhoons were ordered to be discontinued, as a result of the influence by the English Observatory in Hongkong. However, the order was soon revoked and the Observatory continues functioning to date under the able direction of the Jesuit Fathers and is also supported by the government.

Among the religious who distinguished themselves in the past in this work, the names of Faura, Algué, Coronas, Masó,



and Selgas, will always be remembered. At the end of the past century, the scientific personnel of this Observatory included Fathers Algué, and Doyle, as director and sub-director respectively; Father Coronas, in charge of the magnetic section; and Father Vives, of the seismic section. The remainder of the personnel were laymen—four observers, two calculators, two draftsman, two assistants and two mechanics.<sup>13</sup>

425. **Museum-Library of the Philippines.**—In order to facilitate studies and investigation, there was also established in Manila, by Royal Order of August 12, 1887, a museum-library. The law required the city government of Manila to build an edifice *ad hoc*. Meanwhile, the museum-library was installed in a rented building in the district of Quiapo, Calle Gunao No. 12. It was directed by a government committee presided over by the Director General of Civil Administration and its immediate director was to be a professional and an expert, which position was held for some years by Don Pedro Alejandro Paterno. The remaining personnel was made up of a secretary, a collector, a library administrator, all of whom worked upon explicit collections, or upon subjects of special interest or subjects which individuals could not ordinarily acquire when such were necessary as a basis of calculation in their enterprises.

The establishment was maintained not only by the city government but also by donations from private persons and from associations. Objects of historical value were either donated by the owners or purchased by the establishment or perhaps left there on deposit for the benefit of visitors. The establishment was divided into two sections—the library and the museum. The latter was subdivided into four general sections: Anthropology and Ethnography; Natural History, Fine Arts, and Philippine Industries; and the Department of Preparations. The last director of this department was Don Pedro Alejandro Paterno. The rooms of the institution were daily opened to the public without pay from 8 to 12 in the morning and from 2 to 5 in the afternoon.<sup>12</sup>



### C. PRACTICAL AND PROFESSIONAL SCHOOLS OF ARTS AND TRADES

426. **Manila School.**—The practical school of Manila was created by Royal Decree of April 5, 1889 and began its classes on October 15 of the following year. Regulations for its government were made by the superior government in 1883 and were confirmed by the Queen Regent at the beginning of the following year. The teaching consisted of oral work, graphic and plastic work and practice work in the shops, laboratories and industrial museums. The classes in oral and graphic work were held at Calle Palacio in Intramuros, while those in the shops were carried on at the Botanical school near the present location of the Metropolitan Theatre. This double establishment was supported by the City of Manila and by the insular government. It covered six sections or departments—general, apprentices, mechanics, electricians, extra-workmen and mercantile experts—and the plan of study ably conformed with those existing abroad during the same period.<sup>13</sup>

427. **General Department of Arts and Trades.**—In this department instruction was given to trade workers and artisans, imparting to them general information in order that they might have a thorough knowledge in their respective trade. The so-called artisans who had not yet chosen their trade, were in this department.

Elements of Arithmetic and Geometry as applied to the arts and trades.  
Physics and Chemistry as applied to the same.  
Notions of applied mechanics.  
Knowledge of materials in their relation to knowledge cultivated in the school.  
Principles of construction.  
Industrial Geometry, Drawing, free-hand and with instruments.  
Drawing, outline and ornamental, with application of color to the ornamentation.  
Modeling and moulding.  
Mercantile arithmetic.  
Bookkeeping and commercial course.  
French.  
English.



The practice in perfecting the student to work was carried on in the shops of schools for the following trades:

Iron worker  
Moulder  
Foundry worker  
Locksmith  
Lathe turning  
Adjuster  
Boiler maker  
Carpenter

Cabinet maker  
Type setter  
Engraver  
Lithographer  
Mason  
Stone cutter  
Potter.

Matriculation in this department was free to all. The schools began in July and ended in March, the same as that of the academic courses. The course was for no fixed number of years but depended on the student, his interest and the degree of perfection he wished to attain. To stimulate interest in the arts and trades, the Director General of Civil Administration gave cash prizes to the most deserving. The newspapers of the city also opened subscriptions for the raising of funds which were to be given in cash prizes.<sup>14</sup>

428. **The Department of School of Apprentices.**— The school for apprentices was carried on for practice work. Upon entering the school, the apprentice selected one of the arts or trades above-mentioned. Matriculation was also 'gratis' and the course began and ended in the same way as the preceding one. Cash prizes were given by the government and by the press of the Philippines to the most deserving students after the March examinations. The plan of study was arranged for three years and was as follows:<sup>15</sup>

#### FIRST YEAR

Notions of practical Arithmetic and Geometry.  
Lineal Drawing.  
Shop work connected with the trade studied.

#### SECOND YEAR

Notions of Physics.  
Study of Materials related to the trade in which the student had matriculated.  
Industrial Drawing.  
Second course in shop work in connection with the trade studied.



### THIRD YEAR

Notions of Mathematics.

Ornamental Drawing.

Third course in shop work in connection with the trade studies.

429. **Department or School for Mechanics.**—This department was really a college of practical mechanical engineering. Matriculation was free. The course of study was divided into four years at the end of which the student, upon satisfactorily passing his examination, received the Certificate of *Mechanical Engineer*.<sup>16</sup>

### FIRST YEAR

Elements of arithmetic and geometry as applicable to problems connected with boilers and engines.

Industrial drawing applicable to representation in projects of machinery.

Shop forging.

### SECOND YEAR

Elements of physics applicable to boilers and engines.

Industrial drawing applicable to representation in projects of complete machines.

### THIRD YEAR

Elements in mechanics under the heading "statics", "kinematics", "dynamics" and "hydraulics".

Industrial drawing.

Making plans from the sketches.

Tracing different systems of distributions.

Exact shop work and lathe work.

### FOURTH YEAR

Modern machinery.

Installation and care of machinery.

Repairing of machines.

Boiler work.

Practical mounting and adjusting of machinery.

Visits to industrial establishments.

430. **Department or School of Electrician.**—This was a practical school of electrical engineering in conformity with the knowledge of the time. Matriculation was 'gratis'. The plan of



study covered four years at the end of which the candidate after having successfully passed the examinations, received a certificate equivalent to that of *Expert Electrician*.<sup>17</sup>

#### FIRST YEAR

Elements of arithmetic and geometry.  
Industrial drawing as applied to representation in projective of the different elements which entered into electrical installations.  
Work with the file.

#### SECOND YEAR

Elements of Physics and Chemistry.  
Industrial drawing with application of practical representation in projective of electrical machinery.  
Elementary carpentry.

#### THIRD YEAR

Practical electricity as applied to hydro-electrics.  
Telegraphic and telephonic apparatus and installation of lines of such.  
Repairs works.  
Measure of electric units.  
Reading of plans.

431. **Department or School for Contractors.**—For those who desired to be contractors, the following studies were covered in four years:

For this course moderate matriculation fees were paid—one peseta for each subject. The student after successfully passing his examination was given the degree of *Master Workman*.<sup>18</sup>

#### FIRST YEAR

Elements of Arithmetic.  
Elements of Geometry.  
Drawing, Linear and Typographic.  
Shop work, stone cutting and masonry.

#### SECOND YEAR

Elements of Rectilinear Trigonometry.  
Elements of Descriptive Geometry.  
Elements of Typography.



Decorative Drawing.  
Work in carpenter's shop

#### THIRD YEAR

Elements of Physics.  
Elements of Mechanics (especially in relation with strong materials)  
Architectural Drawing.  
Blacksmith work in the shop (3 times a week only)

#### FOURTH YEAR

Elements of Stereometry.  
Construction.  
Hygiene of construction.

432. **Department or School of Commerce.**—The courses in this school were similar to those offered by the principal colleges, the only difference being that this was a public school. Students paid one *peseta* for matriculation for each subject. The degree of "Perito Mercantil" or "Mercantile Expert" was conferred the same manner as that of the colleges of secondary instruction. At the end of the Spanish domination, the curriculum of this department of the Practical Professional School of Arts and Trades of Manila was as follows:<sup>19</sup>

#### FIRST YEAR

Mercantile Arithmetic.  
Descriptive Geography.  
French 1.

#### SECOND YEAR

Geographical and Commercial Statistics.  
Accounting and Bookkeeping.  
French 2.  
English 1.

#### THIRD YEAR

Notions of Political Economy.  
Mercantile and Industrial Legislation.  
Practice in Correspondence and Mercantile Operations.

433. **School of Iloilo.**—Another practical school of arts and trades was established in Iloilo by Royal Decree of May 9,



1890. The school followed the same plan of study as that of Manila. It was supported by the City government and also by the Insular government. Matriculation was free. Students in all departments studied as *pensionados* of the City or Central government; the students paid fees only for the commercial classes and the contractors' course and even then, only the insignificant sum of one 'peseta' for each subject was charged. In this school, the same plan laid down by the Insular Government for the Manila school was followed and was confirmed by the Queen on January 27, 1894. Speaking of this Iloilo school and that of Manila, the "Guia Oficial" says: "Both establishments which began their work in a modest way have made surprising progress and it is to be hoped that within a brief period they will find themselves on a level with the best of their class in existence." <sup>20</sup>

434. **School of Bacolor.** — The old college of secondary instruction of the first class of Bacolor, Pampanga, was destroyed by fire in 1869 (see No. 374) just as it was about to begin conferring degrees for the bachelorate in arts. At the time the practical professional schools of arts and trades were established in Manila, the government made plans to build a new college at Bacolor dedicated particularly to vocational and technical studies. In 1892, the plan was accomplished, after the Insular Government had contributed ₱8,000. The Bacolor school made great progress until 1896 when the edifice was destroyed by fire. The plan of study followed those of Manila, but the school never flourished as much as those of the capital, not only by reason of its location but also because the aid extended to it by the Insular Government was less in comparison with that of the schools of Iloilo and Manila. <sup>21</sup>

435. **School of Tambobon.** — The School of our Lady of Guadalupe, established by the Augustinian Fathers for orphan boys (see No. 296), became in the "eighties" an active center of arts and trades. In 1884, when the institution was a year old, it was moved to the famous Augustinian convent of Guadalupe and later on to Malabon near the Tambobon bridge from which it received the name of "Asilo de Huérfanos y Escuela Práctica de Artes y Oficios de Tambobon." <sup>22</sup>



436. **College of Mercantile Experts.**—The school of Accounting, founded by the Chamber of Commerce in 1839, continued during this period and, in general, made progress as is shown by its matriculations, according to the official statistics sent to the Exposition of Amsterdam in 1883 and which reads as follows:

1886-1870—111 students

1871-1875— 82 students

1876-1880—191 students

1881-1882—178 students

There was also a school of languages in which students of English and of French were taught separately. According to the statistics for the last ten years of the above table, there were from 1872, 1881, 228 students of English. Students of French were generally more numerous during this epoch but there are no official records of this fact. A very small percentage of students were graduated, this was due to the strictness of examination. The above-mentioned languages eventually formed a part of the course of study in Commerce, so that during the later years of this epoch, the name of the school was changed from School of Commerce and Modern Languages to that of "College for Mercantile Experts." The Directorate staff of this college just before the Revolution was:<sup>23</sup>

Honorary Director . . . . .	The Director General of Civil Administration
President . . . . .	Don Francisco de Quinto
Vice-President . . . . .	Don Joaquin Perteguer y Astudillo
Treasurer-Accountant..	Don José Yusta
Secretary . . . . .	Don Julio Gonzales Diez.

#### D. AGRICULTURE

437. **Agricultural School of Manila.**—Independent of the schools of arts and trades and of the studies of "Aplicación" in which commerce and agriculture were taught, there were other



technical schools for this course. Among those for agriculture, the best was located in the capital city and was created by virtue of the Royal Decree of November 26, 1887 and inaugurated on July 2, 1889 with 55 students. It was of a higher class than the aforementioned schools, for while in the schools of arts and trades, technical studies were pursued at the same times as those of secondary instruction, in the Manila School of Agriculture a prerequisite for matriculation was graduation from a school of secondary instruction offering elementary course in agriculture, lineal drawing and topography. Another requisite for admission to this school was sound health.

In this school, three ends were kept in view: (1) to give all instructions necessary for the education of agricultural experts, theoretical and practical; (2) to give the necessary instruction for the training of farm overseers; and (3) to promote by observation and experimentation the advance of agriculture in the Philippines. The oral and practical courses began on July 2nd and ended on March 7th with the exception of the practical work of the third year which covered the whole school year. The subjects for the degree of "Perito Agricola" were the following:

#### FIRST YEAR

Notions of Agronomy ..... daily lesson  
 Problems in Arithmetic ..... daily lesson  
 Linear and topographical drawing ..... daily lesson  
 Practice in topography ..... lecture 3 times a week

#### SECOND YEAR

Cultivation of special plants ... daily lesson  
 Elements of Stock breeding ... alternate lesson  
 Agricultural Arts ..... alternate lesson  
 Mounting of machines and managing agricultural implements alternate lesson  
 Drawing of implements and plants ..... alternate lesson  
 Practice in cultivation and industrial work ..... alternate lesson

#### THIRD YEAR

Elements of rural economy ..... daily lesson



Farm Accounting and Agricultural Legislation .....	daily lesson
Projective Drawing .....	daily lesson
General practical work in Agriculture and Stock Breeding ..	daily lesson
Gardening and Industry .....	

The director of this school and all its professors were required to possess the degree of Engineer and Agronomist, and all assistants the degree of "Perito Agricola."<sup>24</sup>

**438. Provincial Schools of Practical Agriculture.** — The agricultural school of Manila had branches distributed throughout the provinces which also served as experimental fields and at the same time as schools of practical agriculture. In conformity with the Royal Order of 1887, these country-schools were opened in the provinces of Isabela de Luzon, Ilocos, Albay, Cebú, Iloilo, Mindanao, Jolo and Leyte, in 1891. A school was also established in Negros (La Carlota), in the same year, and in 1888 there was opened at San Pedro de Magalang, Pampanga, a school particularly dedicated to stock breeding. The technical work entrusted to the agricultural stations was as follows:

1. The study of the physical properties of the soil of the different regions.
2. A mechanical analysis of the same.
3. Physical-Chemical analysis.
4. Chemical qualitative and quantitative analysis.
5. Analysis and experiments in fertilizers with their practical use.
6. Study of irrigation systems, quantity and quality of water employed, dates and hours for the most adequate irrigation.
7. Analysis of seeds, methods of sowing and grafting.
8. Study and analysis of products derived from agriculture and their by-products.
9. Experiments and classification of work by machinery or instruments best adapted for each kind of cultivation, both isolated and associated with other plants.
10. Acclimatization of plants and experiments with new plants with a study of the improvement of which they might be susceptible by agriculture.
11. A study of the climate and its action upon cultivation of plants, of natural fertility of the soil, and of assimilation of atmospheric and terrestrial elements and methods of modifying them.



12. A study of the costs and products of actual cultivation and of improvements distributed for economy of production.
13. A study pertaining to stock raising, breeds, aptitudes, feeding, care and acclimatization of new breeds.
14. Studies in agricultural industry, industrial processes, machinery employed and improvements necessary to these branches of industry.
15. Study of maladies of vegetables and animals with the means of combating them and preserving their products.
16. Solving all other problems of a technical or economic nature which affect or may affect the agriculture of the region.

The directors of these agricultural schools were, by Royal Order, required to possess the degree of Engineer, and all their assistants the degree of "Perito Agrícola."<sup>25</sup>

439. "Boletín Oficial Agrícola de Filipinas".—For the use of all concerned, the superior government decreed that there be published every year reports on work done in all the establishments of agricultural service, beginning with the first of January, 1894. From that date the "Boletín Oficial Agrícola de Filipinas" was published until the end of the Spanish domination. The editor of the bulletin was the Chief of Agricultural Service of the Philippines and the engineer and assistants were required to collaborate. Among the principal collaborators in the publication of the bulletin, the following may be mentioned: Don Manuel del Busto (Director), Don Juan Ramon y Vidal, Don José Sanchez Miranda, Don Baltazar Mira y Merino, Don Manuel Priego y Jaramillo, Don Joaquin Martinez y Llanos, Don Francisco Alcaraz, Don José Rosales, Don Lorenzo Romero, Don Ricardo Pastor, Don Manuel Soto, and Don Joaquin Lopez.<sup>26</sup>

#### *E. MILITARY COLLEGES*

440. **Regimental Schools.**—From the time of Legaspi until that of the last captain general and Civil Governor, the Army as well as the Navy was made up largely of Filipinos. For their training there existed naval schools, preparatory academies and regimental military schools. The greater number of these regimental schools pertained to the infantry which was made up of new regiments almost totally Filipinos. They were the following:

*VOCATIONAL AND TECHNICAL...*



Regimiento de Línea de Legazpi	No. 68
" " " Ibera	No. 69
" " " Magallanes	No. 70
" " " de Mindanao	No. 71
" " " Visayas	No. 72
" " " Jolo	No. 73
" " " Manila	No. 74
" " " Provisional	No. 1
" " " Provisional	No. 2

In addition to these Infantry schools, there were others for other corps such as "Corps of Estado Mayor," Auxiliary Corps for Military Offices, Cavalry, Guardia Civil, 'Carabineros', Artillery Corps of Engineers, Military Sanitary Corps, Administrative Corps of the Army, Invalidated Corps and of the Armory.<sup>27</sup>

441. **Military School.**—The military school of the Philippines was reorganized during the second epoch with a longer course of study. Qualified students in the school were sent to the Military Academy of Spain. For this purpose, there existed a direct relation between the famous Academy of Toledo and that of Manila. The records of the best students from Manila were sent to Toledo and from these were selected the students for scholarships for graduation in the Peninsula. Therefore, many Filipinos were able to carry on their studies in the historical "Alcazar" of the Ciudad Imperial. The preparatory Academy of Manila was under the direction of a Lieutenant-Colonel with other professors of the different grades. This school also offered a general course of secondary education.<sup>23</sup>

442. **Professional Nautical School.**—The nautical school was organized in 1860 by orders of Queen Isabel II and was placed under the direction of the Commander of the Fleet. The number of new students entering every year was, according to Father Arias, between 50 and 60. The professors of this academy were prominent appointees; this is why Señores Cabarrus and Gamero taught theoretical and practical arithmetic, topography and typographical drawing and hydrography for many years. After four years of theoretical study in the school, the student had to get his practical work on board of a ship. If his



practical and theoretical study had been approved, the student received the degree of "Piloto de Marina Mercante" (Merchant Marine Pilot). The Marine corps had schools in each regiment and of the naval Schools that of Cavite was the best.<sup>29</sup>

#### F. OTHER PROFESSIONAL AND VOCATIONAL CENTERS

443. **Statistical Center.**—In 1893, Statistical Center was established in the capital, by order of the superior government of the Islands for purposes partly as follows: "in order to know the wealth of the country, study facts and present true data when such are necessary; to understand conditions and to appreciate with the least error its state and whether a sad or a happy fate awaits it." In addition to its preparation and arrangement of data concerning the wealth of the country, the Center also had charge of the census of the country with all its necessary classifications by sex, civil conditions, religious and other facts. The famous "Guia" or directorate of the Philippine Islands owes much to this Center.<sup>30</sup>

444. **Welfare Centers.**—The Commission of Superior Board of Sanitation was abolished by Royal Order of May 5, 1893 and in its place was created the so-called "Instituto Central de Vacunación" and another institution, the "Colegio Farmaceutico de Manila". In 1897 the provinces were divided into 122 vaccination districts. The midwives had also their school and having passed the examinations, were assigned to the charge of the "General Welfare Inspection", in the same manner as were the doctors. They were classified into midwives of the first, second and third classes according to studies taken and examinations passed. At this time there were six first class midwives in the provinces of Manila and its suburbs. Six of the first class were assigned to the provinces of Albay, Batangas, Bulacan, Laguna, Pampanga and Pangasinan; five of each of the second class to Camarines, Cavite, Ilocos Norte, Ilocos Sur and Zambales; and five of each of the third class to the provinces of Bataan, Cagayan, Isabela, Nueva Ecija, and Nueva Vizcaya.

The hospital for lepers at Mariveles, the Marine Sanitary



Corps and the Public Sanatorium of Medicinal Waters each required its special personnel nominated and approved by the General Welfare Inspection, as doctors after special preparation for their work and under the observation of experts. The same was true of the Military Sanitary Corps as well as of the Military Hospitals with their technical personnel and their chemical and pharmaceutical laboratories.

As regards private Welfare Centers, many took on educational characteristics as we had previously and on occasion remarked. Included under this group were, not only hospitals, asylums, *beaterios* and orphanages, but also the University of Sto. Tomas on account of the number of its scholarships supported by the Order of Preachers. In this class were found the College of San Juan de Letran de Manila, that of San Juan de Letran of the Marianas, the College of San José and the Orphan Asylum of Tambobon which was, besides, a school of arts and trades.<sup>31</sup>

445. **Services of Forests and Mines.**—Independent of agricultural industries and commercial centers, there was created on July 8, 1884, a Central Service of Forestry made up of experts for the special study of forestry in the Archipelago. This body, for convenience, was divided to cover four districts in Northern Luzon, Central and South Luzon, the Visayas, and Mindanao. These districts were sub-divided into sections and the sections into territories. The service had its forestry engineers and assistants and foresters. The engineers were classified as engineers of the first and second class, while the assistants were subdivided into four grades, according to training and ability. The service had its attached experts for fauna and also experts for the collection of interesting animals and insects. The botanical garden of Manila utilized by students of the principal pedagogical centers was under the inspection of the chief forestry engineer. An organization somewhat similar to that of the Center of Forestry was organized for Mines. Under this center was placed not only everything pertaining to metals and mineral substances but also thermal and medicinal waters, as was also all geological studies. This body had its expert chemists, doctors, pharmacists, and engineers. As regards the object in view for this center, its plan included the following:<sup>32</sup>



1. The study of mineral fields and of territories of mineralogical interest, the location and study of construction materials and materials for industry.
2. The inspection and vigilance over all works (subterranean or superficial) which might tend to the exploitation of mineral substances.
3. The making of charts and of geological studies of all classes.
4. The investigation of water by means of subterranean works of whatever class.
5. The study, inspection and care of springs of mineral water which may be a benefit to the state or to individuals.

446. **Summary.**—During the second educational period and after education had been duly established, organized, and further developed, attention was turned to the vocational and technical sides of education. Successful attempts were made to organize vocational and technical schools.

The advent of the nineteenth century brought about educational and cultural facilities to all. In the Philippines, schools and colleges were opened offering courses in Fine Arts, Trades, Agriculture and Commerce, and Military and Nautical studies. The Academies of Fine Arts were opened in the girls' and boys' colleges of the first class.

Sto. Tomas, Letran and the seminary colleges gave instructions in these arts. With regard to Music the college of *Tiples* founded in Manila in 1743 received new impetus, its plan of study being moulded after that of the famous Conservatory of Music of Madrid. The school of drawing and painting already founded in the first quarter of the nineteenth century was raised to the rank of Superior school where a complete course in drawing and painting was given by competent teachers.

Other studies introduced in the colleges of the first class during this same epoch were the so-called *estudios de aplicación* and these were: Commerce, Mechanics, Industrial Chemistry and Surveying. In the College of Commerce, arithmetic, algebra, commercial arithmetic, geography, bookkeeping, accounting, commercial geography and commercial statistics were given as one year subjects. To these subjects and during the last decade of the century, political economy, commercial legislation, industrial legislation, English and French were added. The course comprised three years at the end of which the student received the title of *Perito Mercantil*. Mechanics was another vocational study introduced in these colleges. It was a



two-year course, at the end of which the student received the title of *Perito Mecanico*. Chemistry which was also a two year course was taken by students who desired to specialize in industry. Few students pursued this course. The three-year course of surveying led to the degree of *Perito Agrimensor* or Surveyor. Mathematics, physics, natural history, mapping, scientific and practical agriculture were the subjects given in this course. These courses of commerce, mechanics, surveying and industrial chemistry were later recognized by the American government though subject to some changes.

The School of Botany and of Agriculture took on a more scholastic character during this period and remained under the direction of the Chief or Head of Secondary Instruction in the Philippines. In connection with meteorology and due to the fact that few students enrolled in this course which was then being given in the Colleges of Letran, Sto. Tomas and Ateneo Municipal, the government converted the institution known as "The Observatory" into a national institution. Since then, this Observatory has become one of the most prominent institutions in the Orient.

Eminent and distinguished priests in astronomical science have been directors of this famous Observatory. Among them we may mention, Frs. Algue, Faura, Coronas Maso and Selga.

In order to give practical training in arts and trades, various departments along these lines were organized, and these were the Dept. of Arts and Trades; Dept. School of Apprentices, of Mechanics or Practical Engineering, of Electricians, of Commerce, and of Contractors. Practical schools of arts and trades were opened at Iloilo, Tambobon and Bacolor. With an aim of giving opportunity to all, very low matriculation fees were charged in all of these schools. Courses varied from one to three years, with practical studies in the trade being given also.

As to Agriculture and Commerce, various technical schools were opened, but the best were those of the city. The aim was chiefly to promote interest in agriculture in the Philippines. A three-year course led to the degree of *Perito Agricola*. Schools of Practical Agriculture were likewise opened in the provinces as in Isabela, Ilocos, Albay, Cebu, Iloilo, Mindanao, Jolo and in Leyte in 1891. In Negros and Pampanga, a school for the study



of stock breeding were also opened. In connection with these agricultural schools and with the same aim of fostering agriculture, a *Boletín Oficial Agrícola de Filipinas* was published yearly, giving valuable reports on the work achieved along these lines.

Since the early times, military colleges and naval schools existed in the Islands. These schools were established to train Filipinōs in military and nautical sciences. The most outstanding students in the military schools were made to continue their studies in the famous Alcazar of Toledo, Spain. Both the military and nautical schools were properly organized in this second period of education.

Other professional and vocational centers were the Statistical centers, welfare centers in charge of promoting health and sanitation, and the Service of Forestry and Mines, in charge of the study of mineral fields and territories, as well as of the location and study of construction materials for the industry.

During this period, the theater, literature and journalism flourished also.\*

—REV. EVERGISTO BAZACO, O.P., PH.D.

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\* "Vocational and Technical Education" is a chapter from a new work—**History of Education in the Philippine Islands**, by Rev. Evergisto Bazaco, O. P.—which is under preparation by the University Press, hence the paragraph numbers and the footnotes which, we apologize to mention this deadline, are not available. Fr. Bazaco's new book covers the historical progress of educational activities in the Islands during the entire period of Spanish rule.



## NEWS AND NOTES

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**Administration Appointments.**—Before Rev. Fr. Silvestre Sancho, O.P., S.T.D., rector magnificus of this university, sailed for Europe, the following appointments were made:

Rev. Fr. Ciriaco Pedrosa, O.P., former dean of the college of philosophy and letters, as regent of the college of commerce;

Rev. Fr. Evergisto Bazaco, director of the university press and former head of the department of history and political science, as dean of the faculty of philosophy and letters;

Rev. Fr. Jesus Valbuena, O.P., former director of sports, as regent of the college of engineering and school of architecture and fine arts.

Rev. Fr. Angel de Blas, former philosophy and ecclesiastical professor, as head of the newly-created department of experimental psychology and zoology; and

Rev. Fr. Jose Cuesta, O.P., former secretary-general of San Juan de Letran College, as dean of religion.

Also appointed as new members of the faculty effective last June in the following colleges respectively are: Dr. Vicente Alindada, for liberal arts; Dr. Manuel Aycardo, for the college of medicine; Francisco Delgado, liberal arts; Dr. Nora Diokno, medicine and surgery; Rafael Enriquez, architecture and fine arts; Dr. Felix Estrada, liberal arts; Miss Aurora Fenix, pharmacy; Dr. Covadonga del Gallego, medicine and surgery; Dr. Jose Lopus, medicine and surgery; Dr. Carmencita Lopez, medicine and surgery; Felix Manipol, liberal arts; Dr. Serafin Meñez, medicine and surgery; Dr. Francisco Roman, medicine and surgery; Atty. Tecla San Andres, faculty of law; Dr. Jose Sian, medicine and surgery; Guillermo V. Sison, liberal arts; Washington Sy Cip, commerce; and Judge Jose O. Vera, faculty of law.

Bro. Dr. Alberto Mario Camiz, T.O.P., is detailed here from far away University of Bologna (Italy) to bolster the professorial roster of the faculty of medicine and surgery.



Rev. Fr. Alberto Lopez, O.P., is named assistant regent of the faculty of law; Rev. Fr. Santos Galende, O.P., assistant regent of the faculty of medicine and surgery. Also significant appointments are: Dr. Pablo T. Anido, assistant moderator of publications; Rev. Fr. Florencio Muñoz, director of VE, student publication in Spanish; Rev. Fr. Narciso Dominguez, O.P., adviser of the central board of students; and Dr. Renato Ma. Guerrero, secretary of the faculty of medicine and surgery.

Dr. Remedios Ocampo and Miss Rosario Bondoc have also been named to the professorial rank in the college of liberal arts.

Some faculty staffmen on leave: Dr. Rodolfo Gonzalez, advancing his studies at the Johns Hopkins University; Dr. Manuel de Veyra, at the Baguio city hospital; Dr. Claro Gaza, on a tour of Europe; Dr. Perfecto Mendoza, who is in London; Associate Professor Jose Villa Panganiban, as a pensionado to the University of Notre Dame; Marciano Natividad, to the Colorado School of Mines; and others.

Martiniano de Ocampo, Miss Socorro Llanderal and Mrs. Josephine Bass-Serrano have been added to the list of high school teaching staff.

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**The New Academic Year in Santo Tomas.**—With high dignitaries of the church and of the government, members of the faculty and the student-body present, the Most Rev. Dr. Guillermo Piani, apostolic delegate and the Rev. Fr. Eugenio Jordan, O.P., who acts as acting rector in the absence of Rev. Rector Magnificus Silvestre Sancho, O.P., S.T.D., declared the 1939-40 academic year open in a traditional high mass at the University Chapel on June 7. Regular classes were started the following day.

With the exception of the courses leading to "Doctor en Filosofia y Letras" and Doctor of Civil Law which are operated by the university under corporate authority, all the courses now given by the graduate school are recognized by the government. The LL.M. course was given government recognition last March. Enrolment in the graduate courses has, as usual, been limited to students of high academic standing.

Government recognition was also granted to the course in fine arts (under the school of architecture) and the secretarial course (offered by the college of commerce) last May.

The course leading to bachelor of science in foreign service was given government recognition last March. In view of the number of applicants for admission in this course, the university offers it again in the remodelled Intramuros Building.

The different scholarships, besides those granted to valedictorians and salutatorians, inaugurated this year in all the colleges and schools have attracted many bright students. Valedictorians and salutatorians earning a general average of 90% in the freshman year are accorded the same privilege in the succeeding year.

Greater emphasis are given this new academic year to the teaching of Philippine History, Philippine Government and Philippine Economics in all the courses of the university, in line with a policy to round up the university student in the cultural studies.



The faculty of law is now holding morning session for men in all the four years of the course together with the morning section for women. Having been granted the special vocational course permit by the government, many ladies have again enrolled in the "Home Nursing and First Aid" course offered in the faculty of medicine. Classes are held in the Intramuros Building and in the San Juan de Dios Hospital, all practical work being held at the latter.

The Alumni Association of Santo Tomas has given a free scholarship offer to Isagani Santiago of the College of commerce, who obtained the highest rating in the open competitive examination given on June 9 for the same.

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**Seminar for Faculty, Weekly this Year.**—Weekly seminars consisting of conferences on Catholic philosophy and religious and scientific subjects delivered by the local Dominican Fathers are instituted this year for the members of the faculty in education, high school, pharmacy, commerce, liberal arts, philosophy and letters, law, medicine and to any holder of licentiate or master's degree pursuing the doctor's course here.

The first of the series was held on Saturday, July the 1st with Acting Fr. Rector Jordan as the speaker. His topic was "The Binding Force of Conscience." Rev. Frs. Narciso Dominguez and Angel de Blas spoke respectively on the following topics the following weeks: "The Divinity of the Catholic Church," and "Mysteries and Religion."

Open to anyone who may apply for reservation to the dean of the college of philosophy and letters, the seminars are frequented also by members of the religious Brothers and Sisters of educational institutions in Manila who are special recipients of invitations from the faculty.

The following is the schedule, from presstime, of topics and lecturers for the weekly seminars by prominent members of the Dominican Order for the benefit of all faculty members of the university and other professionals who may desire to attend them:

The Social Rights of Christians, Rev. Fr. Jesus Castañon, O.P.; The Catholic Church, the Only Warden of Divine Revelation, Rev. Fr. Vidal Clemente, O.P.; Rights and Duties, Rev. Fr. Jose Ortea, O.P.; How to Discover the True Church, Rev. Fr. Emiliano Serrano, O.P.; The Existence of God as a Basis of Religion, Rev. Fr. Evergisto Bazaco, O.P.

The Moral Problems of the Modern Youth, Rev. Fr. Jesus Valbuena, O.P.; The Education of the Child, Rev. Fr. Tomas Martinez, O.P.; The Right to Rebellion, Rev. Fr. Jose Cuesta, O.P.; Modern Liberties, Rev. Fr. Eugenio Jordan, O.P.; The Apostolate Characteristic of the Catholic Church, Rev. Fr. Angel de Blas O.P.; The Origin of Authority, Rev. Fr. Jose Ortea, O.P.; The Church in the Philippines, Rev. Fr. Evergisto Bazaco, O.P.; The Infallibility of the Church, Rev. Fr. Tomas Martinez, O.P.; The Human Side of the Catholic Church, Rev. Fr. Narciso Dominguez, O.P., Predestination and Liberty Rev. Fr. Vidal Clemente, O. P.; The Morality of Divorce Rev. Fr. Jesus Castañon, O. P.; The Church of Rome Rev. Fr. Emiliano Serrano, O.P.; The Value of the Catholic Teaching in the Formation of Character, Rev. Fr. Jose Cuesta, O.P.; Eternal Justice, Rev. Fr. Jesus



Valbuena, O.P.; The life of the Passions, Rev. Fr. Eugenio Jordan, O.P.; Labor and Capital, Rev. Fr. Jesus Castañon, O.P.; Heretics and Schismatics, Rev. Fr. Narciso Dominguez, O.P.; The Formation of Character, Rev. Fr. Angel de Blas, O.P.; The Coercive Power of the Church, Rev. Fr. Emiliano Serrano, O.P.; The Connubial Society, Rev. Fr. Vidal Clemente, O.P.; Ecclesiastical Hierarchy, Rev. Fr. Jose Ortea, O.P.; Personnel Problems in Teaching, Rev. Fr. Evergisto Bazaco, O.P.; Regeneration of Society, Rev. Fr. Francisco del Rio, O.P.; and The Value of Supernatural Life, Rev. Fr. Aurelio Valbuena, O.P.

These lectures are given every Saturday in the main building, generally in English. All those interested must first notify the office of the dean of the college of philosophy and letters.

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**Day for Red Cross Funds.**—Santo Tomas cooperated as usual in the recent nationwide campaign for the American Red Cross funds (local chapter) as she took over the management of the erstwhile social center at Laong Laan Tennis Club on July 30, with good groups of organized students dropping in during the 14-hour period to help themselves to a good time.

Chairman of the evening was Rev. Dr. Eugenio Jordan, O.P., assisted by an executive committee which included the following faculty members: Dr. Consuelo Belmonte, general manager; Mrs. Esperanza Albuendia, chairman of the canteen committee; Dr. Stanley Prescott, chairman of the invitation committee; and Drs. Josefa G. Estrada and Paz M. Latorena, chairmen of the publicity committee.

A lively group of professors and instructors, and officers and members of the different colleges, most of whom are popular coeds, assisted in the affair. After completing preparations, invitations were extended to the public, particularly to all members of the U.S.T. alumni and students and their parents and friends, promising a pleasant evening to all. Anticipating a big attendance in the evening, the executive committee arranged for tents put up on the tennis courts adjoining the clubhouse, and the open dance floor was also readily used.

No entertainment program was arranged but there was no lack of entertainment for college students have never been slow to devise ways of having fun. There was the usual treat of a good orchestra for dancing in the clubhouse and in the open air dance floor while those who did not wish to dance walked under a full moon and listened to the music.

The delicious refreshments included a Chinese dinner and the following miscellaneous items: pancit molo, pancit guisado, galantina, sandwiches, coffee, chicken salad, fruit salad, cakes and ice cream, hot dog rolls, soft drinks and beer.

The university netted as expected a remarkable sum to the Red Cross annual fund, maintaining alike, in the hard as in the easy years, her place among the best contributors to the humanitarian drive in the universities and colleges' group.

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**Instructor is First in Government Exams.**—Dr. Nora Diokno, local gra-



duate and a new member of the faculty obtained first place among 204 successful candidates who passed out of more than 350 medical graduates who took the board examinations on May 9, 10, and 11 given by the bureau of civil service. A large percentage of those who hurdled the tests graduated from this university.

Santo Tomas captured five of the first eight places as follows: Dr. Nora Diokno, 88.81%, first; Dr. Luz Serrano, 83.38%, fourth; Dr. Velia Trinidad, 82.81%, fifth; Dr. Buenaventura G. Umali, 81.63%, seventh; and Dr. Covadonga del Gallego, 81.38%, eighth.

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**Rector in Europe.**—"Associated Press" dispatches reaching the Philippines reveal that Rev. Rector Dr. Silvestre Sancho, O.P., S.T.D., has lectured before elect audiences in Spain and was received privately by His Holiness, Pope Pius XII at the Vatican last summer.

His Reverend went to Europe, it will be recalled, last April following the baccalaureate exercises of the 1938-39 academic year to personally render a report of his administration to the Holy Father and thus comply with the statutes of the university. He carried to Rome, besides, some 2-hour-technicolor motion pictures prepared by Rev. E. Bazaco, O.P., director of publications, showing all phases of student life in Santo Tomas, special screening of which was seen by ex-King Alfonso XIII and Prince Don Juan.

In a cablegram received by the Rev. Acting Rector, the Rev. Rector sent his warm greetings to the university, its faculty and students. He expressed anxiousness to be back to the university where he is expected in October.

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**Plan to Publish Religious Bulletin.**—Definite plans for the publication of a religious journal to be called probably Holy Name Bulletin will be decided in a meeting of the Holy Name Society, faculty unit, on August 20, according to reliable sources from the dean of religion.

The project was approved in principle at a meeting on July 1 in which a committee on ways and means was appointed to study the feasibility and ways of launching the plan. The findings of this committee will be reported and decided upon in the society's next meeting.

The publication is expected to serve as the mouthpiece of the Holy Name Society, the foremost male religious organization in the university, and to spread information regarding the aims, functions and activities of the Holy Name Society units in the Philippines. Officers of the university faculty unit are: Dr. Jose M. Hernandez, president; Prof. Aquiles Mossesgeld, vice-president; and Prof. Angel Centenera, secretary-treasurer.

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**Paintings and Books for University.**—The university has received donations consisting of several hundreds of books from some members of the faculty, and ten works of painting by two famous Italian artists, Ciro Fagnigliulo and Ciro Ragusa to add to the university's treasure of artistic collections.



About 250 of the books are from Rev. Dr. Silvestre Sancho, O.P., rector magnificus, who gave them freely from his private library for the university library, according to Library Prefect Rev. Emiliano Serrano, O.P. They consist of works on Religion, social sciences and Theology.

Prof. Cheri Mandelbaun of the school of architecture and fine arts donated 8 volumes of Sweet's Catalogue Files for Architecture, Engineering and Contractors.

Dr. Edmund Burke of the college of medicine and surgery, donor of the Burke Prize offered to topnotchers in the medical board examinations and of the Burke Scholarship, has also donated to the university the accumulation of his two per centum deductions from his monthly salary which is kept in the Faculty Reserve Fund.

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**Special Classes.**—Special classes in Social Culture and Medico Morals are given regularly to students in Sampaloc and medicine internes in Intramuros respectively. Prof. Stanley Prescott, dean of the college of commerce, handles the course on Social Culture which includes the study of the code of ethics of human behavior, the correct conduct in every activity of modern social and business life and the modern exactions of courtesy for all occasions.

The studies in "medico-morals" covers the moral aspects of medicine life to be experienced by internes after graduation. Some of the topics are: "Natural Birth Control," "Therapeutic Abortion," "Sterilization of the Unfit," and "Euthanasia." Lectures are conducted by Rev. Vidal Clemente, O.P., secretary general of Santo Tomas.

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**Release Enrollment Figures.**—Total enrollment of the U. S. T. faculties, colleges and schools for the first semester of the current school year is 4,864, according to an official release received from the secretary's office on July 10, a few days after registration definitely closed. This is slightly better than last year's corresponding figure, the release pointed out.

The exclusive enrollment is registered in the following courses as follows: Ecclesiastical course, 82; Philosophy and Letters, 90; Law and Foreign Service, 462; Medicine and Surgery, 1,298; Engineering, 163; Education, 532; Liberal Arts, 774; Commerce, 659; Architecture & Fine Arts, 90; and High School, 291.

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**UAAP Contests Start August.**—Two UAAP series will revive the inter-university sports fued next week, when the local Gold and White tankers, last year's champions, will defend the swimming title on Friday August 18, against the University of the Philippines and the Far Eastern University at the Rizal Natatorium, National University, the fourth side of the quadrangle, failing to seize up her sharks for this year's tussle. The basketball series will augment the college shrieks and cutthroats' bedlams of the current NCAA league, when the Golden Avalanche tackle the touted National University five in a big opener, while the Far Eastern champions will clash with the State University boys in the concluding game of a double header.



Coach Allan Case, ace mentor of the local splashers, expressed confidence of the ability of his team, banking on Montinola, who is undisputably the leading sprinter in the century, free style; D. Roque, conceded second fiddler in the breast stroke, who may upset the dope in the coming swimfest; Barton, last year's fancy diver, who may duplicate his feat this year; and Banzon, UST's best bet in the back stroke.

Coach Rodriguez' varsity cagers are pulling strong in their gym workouts and are conceded a strong contender to wrench the basketball pennant this year. With Salvador Siao, quondam NCAA bombshell, Guillermo Salvador, scare-guard of Letran's NCAA champions, Skipper Fajardo, and "Kindergarten" Arcenio in the line-ups, the Golden Loopers of the pontifical university are expected to go places in the coming UAAP tangle.

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**Lawyers Dump Architects in Intramural Opening.**—College hysterics lent the air when this year's intramural basketball gonfalon, the most colorful since 1611, swang underway amidst impressive preliminary ceremonies at the renovated gymnasium, on Saturday, July 29. The Law basketeers crippled the towering Architecture giants, in a rough and tumble opener, 32-25, while the formidable Medicine quintet repulsed the lowly, green-shirted Liberal Arts dribblers, in a lopsided encounter, 31-18. The Commerce hoopsters, this year's defending champions, subdued the fast-stepping Engineers, last year's "sportest" team, after an uphill battle, 18-15, winding the inaugural day.

A parade of competing athletes in their complete regalia, from the west side of the local emporium to the center gym whereupon Fr. Jose Ortea, O.P., moderator of UST athletics delivered the opening remarks, featured the opening. Sergio Villanueva, captain of the Engineering team, lead the oath of sportsmanship, while Dean Stanley Prescott, manager of the champion Commerce cagers, tossed the first ball.—**F. de Leon.**

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**Errata:** (1) Line viii of "Lotus," the poem on page 24, must please read, *May waken to the touching tenderness...*, not *May wake to (etc.)*; (2) the last paragraph on page 19 or line 38, read, "In Chaucer as in Cervantes, etc.—EDITOR.

## NOTICIAS EN ESPAÑOL

**La Conferencia del Nuestro Rector P. Sancho en Barcelona.**—La conferencia que con el tema "La Universidad en la paz de España", dió en la Universidad de Barcelona, el 22 de junio, el M. R. P. Silvestre Sancho, O. P., Rector Magníficus de la Universidad de Santo Tomás, resultó un magnífico acto, según informa el Dr. C. A. Santos, Presidente de la Delegación de España-Filipinas en Barcelona, quien dice que en dicha ciudad no se habla estos días de otra cosa entre intelectuales y profesores sinó de dicha conferencia.

El Dr. Santos, al hacer una reseña de acto que ha enviado por cor-



reo aéreo a esta redacción (La Vanguardia), dice: "Al acto asistió nutridísimo público integrado por gran número de intelectuales y de profesores, así como de conspicuos elementos de la colonia filipina e hispano-filipino, que desbordaban la amplísima sala en que se celebró. Entre los que ocupaban la presidencia estaban el Rector de la Universidad de Barcelona, los obispos de Barcelona y Urumba (Peru), el superior de los dominicos P. Montoto,... el admirable charlista Sr. Garcia Sanchez.... etc. "No queremos ponderar el éxito obtenido por el gran predicador puesto que ello se hace innecesario tratándose del padre Sancho. Digamos que deleitó, entusiasmó y convenció a sus ávidos oyentes, que a menudo demostraban con sus murmullos un asentimiento completo o prorrumpián en calurosos aplausos de admiración, ante la claridad del concepto, lo valiente de la doctrina y lo persuasivo de la argumentación.

"No es posible en breves líneas dar ni siquiera un resumen de una conferencia tan sabia y elocuente, pero sí puede afirmarse, que el efecto obtenido por el cálido verbo y la persuasión misionera del magnífico religioso, perdurará mucho tiempo en Barcelona, donde todos los periódicos, le han dedicado extensísimas reseñas encomiásticas en alto grado.

"La concurrencia fué tan numerosa que gran cantidad de personas tuvieron que permanecer en pié ante la puerta y aun a lo largo de los corredores adyacentes, a los que alcanzaba la clara voz del conferenciante. A la salida de éste, todos se disputaron el honor de saludarle y de manifestarle una admiración respetuosa al par que efusiva en alto grado.

"Un "Viva España", "Viva Filipinas" terminó el acto."

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**Nombrado a la Junta Examinadora de Ingenieros Electricistas.**—El Sr. Justo N. Lopez, profesor de nuestra Facultad de Ingeniería, fué recientemente nombrado miembro de la Junta Examinadora de Ingenieros Electricistas.

El Sr. López es muy conocido en los círculos Tomasinos por haber sido Secretario de la Asociación de Ex-Alumnos de Santo Tomás. También es el actual secretario ejecutivo de la Asociación de Ingenieros Mecánicos y Electricistas de Filipinas.

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**El Sr. Francisco B. Icasiano da una Conferencia.**—La conferencia del conocido periodista filipino Sr. Francisco Icasiano de la Empresa T-V-T para los alumnos de periodismo de Santo Tomás que estaba señalada para el 25 de los corrientes se llevó a cabo el miercoles, 19 de Julio.

El Sr. Icasiano es uno de los periodistas filipinos que ha llamado mucho la atención del Signor Zampetti, profesor de esta universidad. Bajo el "nom de plume" de **Mang Kiko**, tiene un departamento regular de literatura en la revista semanal del **Tribune Magazine** donde apareció por vez primera el ensayo "A Falling Leaf" que es considerado por el Signor Zampetti como una obra maestra.

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**Las Estudiantes de Derecho se Reunen.**—A iniciativa del Regente del



Colegio, Rev. P. Aurelio Valbuena, O. P., se inauguró el mes pasado en nuestro Colegio de Leyes, la primera de una serie de conferencias dedicadas a todos los alumnos de dicho colegio.

Estas conferencias tienen como fin el que todos los estudiantes se conozcan unos a otros facilitándose así el fomento de un animadísimo espíritu colegial entre ellos.

Hablaron en dicha primera conferencia, además del Regente y Decano del Colegio, los presidentes de diferentes clases. Las próximas conferencias se celebrarán en el renovado paraninfo del edificio antiguo.

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**La Sociedad del Santo Nombre se Dividirá en Seis Unidades.**—La Sociedad del Santo Nombre de Jesús, Unidad de Sulucan, se dividirá en seis sub-unidades, cada una bajo la jefatura de un prefecto y un vice-prefecto, según los planes mas recientes de las autoridades de dicha Cofradía. Esta división de los miembros de la Sociedad ha tenido que acordarse por motivo del aumento de miembros de la organización y para mayor entusiasmo y cooperación entre todos. De este modo, también se espera facilitar el trabajo de las autoridades centrales en cuanto a la notificación a los miembros de cualquiera actividad de la Sociedad, pues el Secretario solamente tendrá que notificar a los seis prefectos, quienes ya se encargarán de notificar a su vez a todos los promotores bajo ellos.

Dichos prefectos y vice-prefectos serán elegidos por todos los miembros de cada división o capítulo, y estos serán los representantes, ante el P. Director de sus respectivos capítulos. Al finalizar el año escolar, se premiará al **"capítulo más activo"** del año con un estandarte. Varios otros premios serán ofrecidos en relación con las actividades de este año. En el siguiente número se darán a publicidad más detalles. He aquí la proyectada división de la Sociedad en 6 sub-unidades: Capítulo I: Filosofía y Letras y Pedagogía. Capítulo II: Primer año de Medicina. Capítulo III: Ingeniería, Arquitectura y Bellas Artes. Capítulo IV: Preparatoria de Leyes. Capítulo V: Preparatoria de Medicina. Capítulo VI: Comercio. El 9 de Julio, se llevó a cabo la primera misa y comunión general de todos los miembros de la Cofradía del Santo Nombre de Jesús. La misa y comunión general para el mes próximo de Agosto de la Cofradía del Santo Nombre de Jesús, que debiera llevarse a cabo el 13 de dicho mes, se ha pospuesto para el 20, o sea una semana después, según informes recibidos en la oficina de dicha Sociedad.

Razón dada para el traslado es que los días 14 y 15 son días de fiesta, y, por lo regular, todos los estudiantes se retirarán desde la tarde del 12, y no se cree posible reunir de ese modo a muchos para la actividad del día siguiente.

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**Los Estudiantes De "High School" Publican Su Periódico.**—Los jóvenes de nuestro "high school," bajo la activa dirección de su director, le Rev. Fr. Tomás Martínez, O. P., publicarán empezando este mes, un periódico estudiantil, **El Aquinian**, de 12 páginas, mensualmente. Los redactores de



dicho periódico serán elegidos por los alumnos del "high school" al comenzar el año escolar. Los redactores de este año han sido elegidos hace poco.

Editor-jefe es el joven Ireneo Lara, alumno del cuarto año. Este tiene como asistenta a la Srta. Milagros Correa. También fueron elegidos los editores de los diferentes secciones; así como sus auxiliares y "reporteros". Con la publicación de este periódico, se espera fomentar más la actividad en el "high school" y también animar más a los alumnos con el muy necesitado "college spirit".

Moderador de dicha publicación, como es de esperar, será el mismo director de los jóvenes, el popular Fr. Tomás Martínez.

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**El Triduo a Santo Domingo.**—Los solemnes cultos y triduo que la V. O. Tercera y Comunidad de PP. Dominicos de Manila dedican a su Santo Patriarca y Fundador con motivo de su festividad se llevó a cabo en los días de Julio 31 y 1-2 de Agosto de 1939. El orden de los cultos será como sigue:

Día 31 de Julio—A las 5 a. m. comenzar; el ejercicio de las Cuarenta Horas. A las 7:30 a. m., misa solemne. Por la tarde, a las 5:30, Completas cantadas.

Día 1 de Agosto—Por la mañana se tendrán los mismos cultos y funciones que el día anterior. Por la tarde, los mismos cultos y la misma hora que el día anterior.

Día 2—Desde las 5 a. m. de este día hasta las funciones de por la tarde, la velación ante Sto. Domingo. A las 7:30 a. m. Misa solemne. Por la tarde, a las 5:30, se rezarán las Completas.

Día 4—Festividad de Sto. Domingo. A las 6 a. m. Misa de Comunión general. A las 8 a. m. Misa solemnísimas.

Día 8—A las 8 a. m. se cantará una Misa de Requiem con Vigilia y Responsorio, en sufragio de las almas de los Hermanos y Hermanas de la V.O.T. ya difuntos.

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## NEWS ON SCIENCE

**Insulin Substitutes.**—Sovereign remedy for the treatment of diabetes is insulin, the chemical produced by a group of cells in the pancreas called the islands of Langerhans.

The dramatic story of the discovery of insulin and of the consequent rescue of thousands of patients from both death and a miserable starved existence that made death a welcome release has been told and retold.

Yet stories of insulin substitutes, which can be swallowed instead of injected hypodermically, keep cropping up and arousing hope that all diabetics can keep well without the bother of needle and syringe.

In view of these stories, and to emphasize the fact that so far insulin substitutes to be taken by mouth are only in the hoped-for stage, it might be well to summarize a discussion of the subject by Dr. Hans Jensen, of the Johns Hopkins University, in his recently published book, "Insulin."



Dr. Jensen says that at present there is no substance which is non-poisonous and which can be given by mouth as a substitute for insulin in the treatment of diabetes. A number of substances, he points out, have been found which reduce the amount of sugar in the blood and which when given to patients with mild diabetes have caused a decrease in the sugar in the urine. Yet there are objections to each of them which have prevented their being universally accepted for treatment of diabetes.

The crucial test which an insulin substitute must pass, before being used for treating patients, Dr. Jensen says, is its ability to prevent symptoms of diabetes in animals from which the entire pancreas has been removed. Insulin itself does this.

These remarks on insulin substitutes do not refer to the new, so-called "slow action" insulins, which are prepared from insulin itself but altered so as to prolong the effect of the insulin.—**Jane Stafford.**

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**Problem-Solving Abilities of Dogs.**—Dogs display marked individual differences in "I.Q.," no less than their two-legged lords and masters, Dr. E. G. Sarris, of the Institute for Environmenttl Research in Hamburg, Germany, has found. Tested by their abilities to solve problems connected with the getting of a coveted piece of meat, their mental abilities ranges all the way from very bright to plain, doggone dumb.

Dr. Sarris started with eight dogs of assorted sexes, breeds and ages. At first he gave them an easy problem, of getting the meat when they were separated from it by a serpentine fence constituting a simple maze. All the dogs could solve that one, though some of them made hard work of it, while the cleverer individuals went through it very quickly.

Then he increased the difficulties, imposing such brain-puzzlers as getting the meat out from under a can loaded on top with bricks, hauling it over a wall on the end of a string, moving small carts and boxes that would enable them to reach it when it was hung too high for direct approach, etc.

At each set-up in difficulty, some of the animals found the problem too hard and gave it up. Finally, Dr. Sarris was working with his two brightest dogs, a male named Argos and a female named Niki. They could think their way through all the problems he posed them. Of course, Dr. Sarris was careful to devise situations in terms of dog mentality, rather than of human minds.

The Hamburg zoologist believes that practical uses of some importance can be derived from his study. His results, he holds, cast considerable doubt on the universally accepted idea that certain breeds of dog are best for particular working purposes, like herding or hunting. Of far greater importance, he believes, is a dog-by-dog examination for individual differences in learning capacity, based on individual variations in temperament and intelligence.

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**Motion Pictures at the Richmond Meeting**—Each year motion pictures play an increasingly important role in the meetings of the American Asso-



ciation for the Advancement of Science. This year some twenty of the papers presented in the special sessions used motion pictures as a method to demonstrate, in part or in entirety, the results of research. About one third of them were photomicrograph films in the field of the biological sciences.

An added feature of the Science Exhibition was the more or less continuous showing over a period of two and one half days of a wide variety of technical and popular scientific films. Many of the research films shown in the special sessions were repeated before this more general group. The United States Film Service made a substantial contribution by providing a series of government films. "Three Counties against Syphilis" was noteworthy. "The Plow that Broke the Plains" and "The River" were repeated two or three times, upon request, for the audience was a continuously changing one.

Color and sound films were liked best. The bird pictures contributed by Dr. Gross and Dr. Pirnie and the insect pictures of Dr. Melander and Mrs. Brues were at times breath-taking in their beauty.

In general the film exhibition was well attended; the hall, seating 175 people, averaged a little less than half full. The attendance during the first part of the morning was low; on the other hand, at a popular picture in the late afternoon every seat would be occupied, with people crowding around the door for a view of the screen.

In general, the addition of the motion pictures to the Science Exhibition proved popular. It might have been anticipated that visitors would be distracted by them and spend less time than they otherwise would have done in the exhibition hall proper, but the consensus of opinion seems to be that, as a whole, the showing of the motion pictures increased rather than decreased the attention received by the exhibits.

The latter opinion received some confirmation when a group of biological motion pictures by Chambers, Bailey and Strandkov were shown at four o'clock on Thursday afternoon. Notice of this special showing was posted in the morning at the Medical College, the meeting headquarters of the zoologists, and a number of biologists went down to the Mosque especially to see them.

The motion pictures of native and animal life in Sumatra shown by Dr. Wm. M. Mann, of the National Zoological Park, attracted by far the largest audience of any film. These pictures, shown through the courtesy of the National Geographic Society, were exhibited one morning in the auditorium of the Mosque in order to accommodate the great number who came to view them.

\* \* \* \*

**"Inferior" Children in Superior Homes**—Experiments undertaken to assess the hereditary factors in sub-normal intelligence continue to give perplexing results. One of the latest of these is a study of 16 children of feeble-minded mothers who were placed in good foster homes shortly after birth, which is reported to the Society for Child Development of the National Research Council from the State University of Iowa.

All these children are developing up to the normal level, according to Marie Skodak, of the university staff, who conducted the experiment.



The fathers of these children also were known and in nearly every case were worthless individuals. Both mothers and fathers, Miss Skodak says, "came of families distinguished for long records in welfare offices even during predepression years and for familiarity with various state and local penal, mental and charitable institutions."

All the babies were taken away from their mothers before they were 3 months old and placed in carefully selected middle-class homes. All were given standard intelligence examinations at two and a half and four and a half years. Miss Skodak expected that they would show up quite poorly. To the contrary they showed intelligence quotients almost identical with the average for children of the same ages.

The point has been raised, she says, that the mental development of these children will slow up rapidly as they enter adolescence so that they will revert nearly to the feeble-minded level when they are about 16. There is no evidence, she claims, for such sudden declines.

"The general conclusions which may be drawn from these results," she reports, "are that children of feeble-minded mothers and grossly inferior family background, when placed in average or superior foster homes at an early age, are indistinguishable in mental development from children whose mothers are not feeble-minded. The results indicate that if a child is physically normal and if the placement is made at so early an age that the child experiences only the environment of the foster home, the mental state of the mother ought to be no bar to adoption in a permanent foster home."

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**Sleep Longer**—A two-hour nap may add as much as half an inch to a child's stature. This phenomenon, demonstrating the semi-elasticity of the human body, is reported to the Society for Child Development of the National Research Council by Drs. Janet M. Redfield and Howard V. Meredith, of the State University of Iowa. They made exact measurements on 22 children, 4 and 5 years old, in the university's nursery school.

The children had a rest period every afternoon. Some fell asleep regularly, while others lay awake on their cots. Both groups showed increases in stature, with the sleepers far in the lead. The average gain for the slumberers, they report, was a trifle less than half an inch, and almost 90 per cent of this gain was between the hips and top of the head. Those who did not sleep gained about a quarter inch for each rest period.

The phenomenon is explained, they believe, by the constant pressure on the tissues of the body. The ribs constantly are being pressed closer together by the weight above them. This is especially true during vigorous play when the tissues are "shaken down." When the body is recumbent all this pressure is released, and the naturally elastic body returns to its greatest length. The explanation for the increased growth during sleep is that there is almost complete relaxation and hence no muscular resistance to the snap back.

Hitherto gains in height during sleep have been reported for individuals, chiefly adults. Some German investigators have found increases of almost an inch in adolescents.



The gains registered by the Iowa children, it was found, nearly all disappeared during the first two hours of play after their naps.—**Thomas Henry.**

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**Splitting of Uranium Atoms**—Almost simultaneously near the end of January four experimental laboratories equipped with very high voltage electrical machines announced that they had verified the breaking up of uranium atoms into two roughly equal parts. The disintegration of the uranium atoms was produced by bombarding them with neutrons, one of the fundamental constituents of which all atoms are composed. Sensational press statements concerning the experiments played up the fact that when an atom of uranium is caused to divide into two parts by a bombarding neutron, it gives up enormously more energy than is carried into it by the neutron. This fact does not suggest the way to a new almost limitless source of energy, because in obtaining the neutrons for the bombardment much more energy is used than the uranium releases. In the domain of physics there is as yet no promise of being able to get something out of nothing.

In order to make clear the importance of these experiments it may be desirable to recall a few of the properties of atoms and of uranium in particular. A common description of atoms is that they are somewhat similar to miniatures of the solar system, consisting of central nuclei containing most of their mass and negative electrons revolving about the sun. It is misleading, however, to carry the analogy far, for in very important respects atoms are quite unlike the solar family. The experiments under consideration pertain to the nuclei, though the chemical properties of atoms depend almost entirely upon their outer negative electrons. It is the atomic nuclei that contain the keys to the most important properties of matter, including explanations of the principal sources of the energy radiated by the stars. For this reason the recent experiments are of great interest.

Historically the sequence of experiments began in October or November when Professor Hahn and Dr. Strassmann, in Berlin, found radioactive barium in uranium which had been bombarded by neutrons. Uranium, with an atomic weight of 238, is a radioactive element which spontaneously degenerates into lead through a series of about a dozen steps in which small particles are successively emitted. The degeneration stops at the one of isotopes of lead which has an atomic weight of 206. Since the atomic weight of radioactive barium is about 139, it could not come from uranium by the previously known type of degeneration. For this reason Hahn and Strassmann at first suspected that the barium which they found in uranium which had been bombarded with neutrons was an impurity in the original materials.

The experimental results obtained in Berlin were communicated to Professor R. Frisch, at Copenhagen, and Dr. Lise Meitner, an exile from Germany. They suggested that the barium which had been found might have been produced by division of the uranium nuclei into two roughly equal



parts. Moreover, they outlined an experimental test of the hypothesis which was based on the fact that in the suggested splitting up of uranium there would be a known decrease in total mass through what is known as the "packing effect" with a corresponding release of energy, in conformity with the principle that the sum of mass and energy, in suitable units, is constant whatever transformations they may undergo.

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**Age of Meteorites**—A few minutes' watch of the sky on any clear night is almost certain to show one or more sudden streaks of light produced by meteors dashing into the earth's upper atmosphere at high speeds. We know that some of these wanderers from space have been permanent inhabitants of the solar system, for their velocities relative to the sun are less than 25 miles per second. Others of them have traveled the interstellar spaces. The distances between the stars are so great that 15,000 years would be required for a meteor to come from the nearest star to our system if it moved with a constant velocity of 50 miles per second.

Most meteors are so small that the energy of their motion transformed into heat in the high upper atmosphere of the earth entirely consumes them. Occasionally, however, one is so large that it survives its fiery bath and is eased down by the atmosphere to the surface of the earth. These meteorites, as they are called, are often recovered, a few each year, and are preserved in our museums and scientific institutions.

Since meteorites are the only visitors from the celestial spaces, they are of extraordinary interest. Essentially all other information about the universe beyond our earth comes to us through light. One of the questions that always arises when we consider meteors is their ages. The answer to this question, taken together with their chemical and physical constitution, will throw light on their origin and possibly on the origin of the earth.

As is well known, the best method of determining the ages of terrestrial rocks is based on the extent to which their uranium and thorium compounds, if any can be found in them, have degenerated through radioactive transformations. By this method it has been found that certain terrestrial rocks are 1,850,000,000 years old, the most ancient at present known. This is not, however, the age of the earth, for these rocks in which the uranium has been found are intrusions in older rocks.

If meteorites contain uranium their ages can be similarly determined. Fortunately many meteorites do contain small quantities of uranium and other radioactive elements. Dr. Robley D. Evans, 1937 winner of the Theobald Smith Award in Medicine of the American Association for the Advancement of Science for his work on radium poisoning, has recently made a survey of all determinations of the ages of meteors. He states that the typical meteorite contains about one part of uranium in ten million parts of other elements. As soon as the meteorites were formed or became separate bodies their uranium clocks began steadily to tick off the millions of years of their wanderings. According to investigations of 23 iron meteorites, their



ages range all the way from 2,800,000,000 years down to about 100,000,000 years, with approximately uniform distribution over the range. Although there are considerable uncertainties in the determinations, eight of the 23 specimens are older, but not greatly older, than any terrestrial substances whose ages are known.

\* \* \* \*

**Detection of Carbon Monoxide in Medicinal Oxygen**—The revision of the United States Pharmacopoeia has become a continuous process. Research on new and old drugs is constantly in progress in the laboratories of the subcommittee chairmen of the General Committee of Revision. Supported by funds from the Board of Trustees of the United States Pharmacopoeial Convention, Dr. Frederick K. Bell has been working on the standards for and the assays of the medicinal gases of the Pharmacopoeia in the Department of Pharmacology of the School of Medicine of the University of Maryland for two years.

The detection of carbon monoxide in medicinal oxygen is an extremely important medicinal problem. The present official method which depends upon the reduction of iodine pentoxide at an elevated temperature by carbon monoxide is non-specific and traces of other substances such as thylene and acetylene respond positively to this test. The presence of such a large quantity of oxygen makes the carbonyl hemoglobin test far less sensitive than required for this purpose. Dr. Bell has observed that freshly prepared alkaline solutions of sodium hydrosulfite will absorb the oxygen and leave behind the impurity, carbon monoxide, if it is present. Thus by adding a very small volume of nitrogen to a large volume of oxygen and allowing the hydrosulfite to absorb the latter gas, the carbon monoxide may be greatly concentrated in the nitrogen. Besides, most of the oxygen which has an affinity for the hemoglobin is removed. Using freshly drawn dog's blood, Dr. Bell has been able to detect specifically carbon monoxide in oxygen in concentration of 5 parts per million.

\* \* \* \*

**The Use of Tear Gas to Fight Weeds.**—Back during the world war, tear gas was one of the weapons of military offense. Many a crucial objective was gained while its defenders were weeping, helplessly, like small boys.

To-day, when strikes and riots prevail, tear gas is the weapon used by police to reduce crowds, temporarily, to non-resistance.

But next year, perhaps, tear gas will find a new use and one far removed from violence. It will help produce weed-free putting greens for wealthy golfers!

J. A. DeFrance, of the Rhode Island Experiment Station, traces the use of tear gas to kill weeds back to the shell-battered No Mans Land of France. The gas squads of wartime contained men trained in chemistry. One of them noticed that where the tear gas liquid spread on the ground, weeds were quickly killed.

Out of this remembrance has come soil sterilization by tear gas which renders the future soil of golf greens free of weeds.



In the present practice the soil destined for the green is placed in a large box and several holes drilled in the earth. Down each hole are poured a few drops of liquid tear gas, a canvass cover applied and left for about two days.

The soil is then removed and placed directly on the golf green and seeded. All the weeds in the soil are killed and the grass takes root without competition from its fast-growing rivals. The putting green is thus free from weed contamination until wind-blown weed seeds alight on it and take root, something which is not too easy when a thick, velvety coat of grass is already there first in husky growth.

Commonest sterilization method for greenhouse soils is the application of live steam while heat, applied by flame, is often used in outdoors locations such as highway roadsides and railroad-of-way.

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**Musical Ability**—You need not be a great composer or an orchestra leader to be credited with the blessing of a musical mind.

Musical talent is bestowed on man in a great variety of forms and degrees, and the ignorant railroad worker enjoying the rhythm of his hammer blows has his share as does the suave critic at the opera.

Underlying all musical ability are the four sensory capacities of apprehension of pitch, loudness, time and timbre, it is pointed out by Dr. Carl E. Seashore, psychologist student of musical talent in analyzing the musical mind as part of his new book, "Psychology of Music" (McGraw-Hill).

These four capacities, and their more complex forms, the sense of tone quality, of volume, of rhythm and of consonance Dr. Seashore calls the four great branches of the musical family tree. They are inborn and are fully developed in the very young child. By the age of ten they can be measured, so that the child's native musical talent can be estimated before his training.

A great musician tends to have these four trunks of capacity branching out in balanced and symmetrical form, but in most of the less distinguished musical minds some one branch is dominant.

Musical achievement does not depend upon great capacity in all these lines, Dr. Seashore says, so long as the individual follows the line of his ability. If a person has only average sense of pitch, for example, he should not try to be a singer or violinist, but he may become a pianist of great distinction.

With the underlying trunk of sensory capacity, the musical mind has the ability to hear with his "mind's ear." He must live in a world rich in auditory images. He must be able to hear over music in memory and create new musical structures in his imagination.

The musician must be able to think musically. He must have musical intelligence.

And finally he must be able to feel musically and express a wealth of emotions in music by esthetic deviation from the regular and rigid.

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## BIBLIOGRAPHY

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**THE NAME OF LIFE**  
By Marjorie Allen Seiffert  
Scribners...

EVER SINCE *Spectra*, that pointed and witty literary hoax which Arthur Davison Ficke and Witter Bynner loosed on a surprised literati, Marjorie Allen Seiffert has been a favorite with this reviewer. Peeping timidly out at first from the pages of *Spectra* un-

der the pseudonym of Elijah Hay, she soon came forth more boldly in colors of her own, and the years have proved her stature. A singular gallantry, seldom met in this day of confusion and uncertainty, seems to inspire her poetry. Not that she has found the answer to the confusion. The title poem of her latest volume, **The Name of Life**, declares:

*This triumph, this delight,  
This pause with panting breath  
Is part of the wild, wounded flight,  
And pain is part of it.*

*The pounding hoofs of the deer  
Cry out: "Who followeth?"  
Flight is more ecstasy than fear  
At the very start of it,*

*For flight is the name of life,  
And we have tasted death  
Like the deer before the hunter's knife  
Is plunged in the heart of it.*

As an attitude there is nothing extraordinary about the conclusion, which is the conclusion of our day. What is remarkable is that

she should be so conscious of the ecstasy. After all the years of living and laboring sturdily, she is still surprised at the unaccountable way



life has of balking the individual. Many of her poems and ballads deal with frustrations and dream terrors. But behind them and through them shines none the less a spirit so courageous and unconquerable, so essentially youthful in fact, that the total effect of this new book, as of the older ones, is thoroughly tonic. If the life force which ani-

mates it can take so much pleasure, even ecstasy, in the struggle of the human spirit, then that in itself becomes a triumph.

The volume, then, is essentially the record of this gallant combat. Sometimes the poet comes near to a resolution of her difficulties, as in these two stanzas from **Time Dances**:

*Time gathers up the scattered days, and dances  
For those who watch her feet a formal measure,  
Turning to ordered beauty, curved and clear,  
Tangled tragedies and old romances.*

*Even the barren years hope withered under  
In hot impatience, Time with infinite leisure  
Displays in rhythmic patterns, that appear  
Significant with beauty and with wonder.*

But more often she flashhes out as in these lines from a poem which

begins, "Love is the cruel huntress, not the prey":

*Wind is her wine, and hunger is her feast;  
She wounds and will not slay;  
For either pity or shame  
She falters not the least.*

*And yet one midnight, hearing her forlorn  
Far call, you will obey  
And follow, crying her name  
Beyond the frozen stars of Capricorn!*

In a day when the awakening social consciousness has, like the will-o-the-wisp, lured much poetry into the bogs and quicksands of sociology and the class struggle, it is a pleasure to find a volume so maturely handled which continues to face the fundamental and eternal problems—and not only to face them, but to face them with a high heart.

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#### **SOCIOLOGICAL ASPECTS OF POVERTY IN THE PHILIPPINE ISLANDS...**

**By Rev. J. Valbuena, O.P., Ph.L.  
U.S.T. Press, 1939...**

THE WORK is an exhaustive one and, dealing on poverty in the Philippines which is today a sociological problem, it is probably the keenest and first of its kind released to the reading public. Isolated facts of the problem have been



linked in a satisfactory manner with their causes, effects and remedial measures and a word of individuality goes to the author, who is a professor of philosophy in Santo Tomas, for his personal observation and researches, considering that literature on poverty here is very rare.

Because it strips open lessons before relief and social workers in their efforts for relief and betterment of the poor for whom it seems particularly addressed, Fr. Valbuena's thesis has, among other things, a very commendable purpose. It also puts to light the absurdity of some practices which directly or indirectly cause problems and the tasks of countries in the interest of the poor and the results of these efforts. It might be added, in passing, that some chapters of the work appeared in this magazine last year.

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### THE LITERARY LIFE AND THE HELL WITH IT...

By Whit Burnett...  
Harper & Bros. \$2.50

IT'S a good title for a book, but it doesn't have much to do with this one. Mr. Burnett's loving connexion with the literary life has been as co-editor of the magazine **Story**, which he and his wife, Martha Foley, founded eight years ago in Vienna. They put it out as a bi-monthly, mimeographed periodical for a while, then packed off to Majorca where they set it up in type, a much cheaper process. A year later they turned up in New York to launch the first American

issue on a most auspicious occasion, the national bank holiday declared by Roosevelt.

To give variety to **Story's** contents, the editors have introduced book reviews, verse, and essays, of which last many have been written by Whit Burnett himself. Some twenty of these make up **The Literary Life and the Hell with It**.

Marginalia, they don't pretend to say anything profound about writing or writers. With an ability to convey the light or nostalgic moods through the minor technique of the informal essay, Mr. Burnett makes good use of personal reminiscence, bits of dialogue, characterization, and narrative. Lots of literary people you may know or have read pop in, what they did or said at various times and places making amusing gossip. The piece on "hammock writing" I thought the funniest, and the one on the death of Vienna a fine elegy.

It's a casual book, to be read casually. Put it on your night table between Clarence Day and Frank Sullivan.

—Hipoll

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**La casa HERDER & CO. de Friburgo de Brisgovia nos ha honrado con los siguientes volúmenes:—**

**IMITACION DE CRISTO O KEMPIS**, la edición del Príncipe de los Oradores Sagrados Españoles, Fr. Luis de Granada, O.P., según la impresión hecha en Sevilla en 1536, seguida de oraciones y ejercicios religiosos del mismo orador, nuevamente impresa en Friburgo y aprobada por los Excmos. e Ilmos. Sres. Arzobispos de Friburgo y de Valladolid.



La edición en cuestión es, a juicio nuestro, la mejor de cuantas existen en la lengua castellana.

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**A AURORA DE LA NIÑEZ**, del P. Antonio Huonder, S.J. Autor numerosas obras sobre meditaciones para Sacerdotes ocupados, dejó al morir valiosos manuscritos sobre los primeros años de la vida de Jesús, que el P. Baltasar Wilhelm, de la misma Orden, acaba de recoger y dar a luz bajo el título de la obra citada.

Recibimos y saludamos con gran regocijo este pequeño volumen que completa la serie de meditaciones sobre la vida y pasión de N. S. Jesucristo por el P. Huonder, recomendándole al mismo tiempo a nuestros sacerdotes filipinos por la sencillas y sana doctrina que encierra y la gran utilidad que les reportará en el púlpito y en el confesionario.

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**SED LUZ**, por el P. Benito Baur, O.S.B. y traducida al castellano por los PP. Justo Pérez de Urbel y Enrique Díez, de la Orden Benedictina. Va dirigido principalmente a los sacerdotes y constituye todo un sermionario para todos los días del año, desde Septuagésima hasta Pentecostés. Otros dos volúmenes esperados, sobre Adviento y el tiempo después de Pentecostés, completarán la gran obra emprendida por el P. Baur.

El presente volumen tiene además la ventaja de servir de pequeño misal a los fieles cristianos en la asistencia a la Santa Misa y encontra-

rán en él un maestro experto que les ayudará a comprender mejor y, sobre todo, a vivirlo, a sacar de él los tesoros de alegría, de fuerza, de alimento espiritual que encierra.

Sobre la presente obra ha habido muchos y entusiastas elogios, entre otros, del Arzobispo Hauck que nos dice: "Considero una idea feliz el presentar a los fieles el tema de sus meditaciones, en armonía con el proceso del Año Litúrgico y en estrecha unión con la Liturgia de la Misa de cada día. Quien haga diariamente su meditación bajo la dirección experta del P. Baur, conseguirá seguramente grandes ventajas espirituales, y progresará rápidamente en la vida religiosa. Sentirse movido a vivir cada vez más intensamente en la Doctrina, y aún en la Vida de Jesucristo, para hacerse cada vez más semejante a El."

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**LA VIDA ESPIRITUAL**, del P. Mauricio Meschler, S.J., traducida al español por otro religioso de la misma Orden, el P. Juan M. Restrepo. E. P. Meschler reduce la vida espiritual a tres principios fundamentales,—la Oración, el Vencimiento Propio, y el Amor a N.S. Jesucristo. "Este libro—dice su propio autor—podría llamarse "Ascética del bolsillo", pues en él se contiene la quinta esencia de la vida espiritual y es, como si dijéramos, la ascética en miniatura, compendiada en estos tres principios."

—Rdo. P. E. B.

(De venta en la Librería Católica de Sto. Tomás, P. O. Box 147 Manila.)



**THEOLOGIA BIBLICA: Scripsit  
Padre F. Ceuppens, O.P.  
Sacre Theol. Professor Theologias  
Biblicae et Exegeseos veteris Testa-  
menti. Dos Volms.**

LOS dos tomos de Teología Bíblica que anunciamos constituyen esa clase de libros Guías de orientación segura que, en todo género de disciplinas, son indispensables: y sirven, como los presentes, para penetrar el valor, fuerza y alcance probatorio de los textos que comunemente se aducen para probar el dogma católico por el testimonio de las mismas fuentes sagradas del Antiguo Nuevo Testamento.

La solidez de argumentación, orden y método de exposición de la doctrina revelada, cualidades sobresalientes que se reúnen en la persona del P. Ceuppens, resaltan en todas las páginas de los dos volúmenes publicados. En estos dos tratados "De Deo Uno," "De Sanctissima Trinitate" sigue el mismo orden de cuestiones de la "Summa Theologica" de Sto. Tomás de Aquino. En ellos y en los principales textos que analiza, referentes a las tesis dogmáticas, tales como se encuentran en el Antiguo y en el Nuevo Testamento, muéstrase el insigne profesor, teólogo, exégeta y prolífota de cuerpo entero: todo en una pieza.

Comienza en cada cuestión por fijar y determinar el sentido exacto de los textos escriturarios que le sirven de prueba de las tesis que defiende. Del análisis gramatical y filológico de los textos, deduce con el exámen de una crítica interna, impecable y concienzuda, el contenido doctrinal dogmático. Cuan es necesario, para corroborar más sus deducciones lógicas acude al exámen

de las diferentes familias de Códices hebreos, griegos y arameos, y a las traducciones primitivas de los Libros Santos, como la Italia, Copta, etc.

Por sus páginas desfilan deshechos los patriarcas de la herejía. Con verdadera maestría, análisis serenos, visión clara y comprensión de las tesis que defiende, va derribando y demoliendo los muros y piedras de clave de boreda del edificio crítico, levantado sobre arena por los corifeos de las escuelas racionalistas modernistas y protestantes liberales.

En el primer tomo expone, con todo género de argumentos, y con abundancia de textos escriturarios la naturaleza del Ser divino, la perfección infinita de sus atributos y la significación de los nombres que daban al Dios único y verdadero los hebreos: El—Elohim, Adonai, Jahwe. El estudio que versa sobre la Predestinación de los justos es magnífico.

El segundo tomo lo consagra al misterio de la Santísima Trinidad, que en el Antiguo Testamento está solamente insinuado. En él prueba con explícitos testimonios de los Evangelios Sinópticos, del evangelista S. Juan, de las Actas Apostólicas, de las epístolas de S. Pablo y del Apocalipsis los principios dogmáticos acerca de este misterio: la unidad de esencia y distinción de personas. Es un estudio extenso, firme y lógico en el razonamiento, el cual resiste a toda impugnación por seria y aparatosa que parezca. Es un trabajo personal de organización sistemática de Teología Bíblica admirable basado en las mismas fuentes de la divina Revelación: estudio de fina, aguda, alta crítica de



los textos dogmáticos inspirados por Dios.

Creemos que profesores y discípulos no se sentirán defraudados al hacerse con estos dos volúmenes. Esperamos con ansia, los otros dos que tratarán "De Verbo Incarnato": "De Sacramentis et novissimis. Agradeceríamos al P. Ceuppens que la segunda edición de su *Theología Bíblica* tuviese mejor presentación y alguna más presentacia tipográfica. Con ello ganaría la obra.

El P. Ceuppens, professor egregio del Colegio internacional Angélico de Roma, se habrá dado a conocer anteriormente por sus hermosas y profundas obras sobre el "Proto-Evangelio;" "Espameron Bíblico"; "Libro de Job;" "Profecías de Isaías" y la obra más extensa "Profecías Mesiánicas",—todas en latín.

Enriquecen esta obra tres, copiosos Indices: Bíblico: de Autores, ya católicos, racionalistas protestantes, estos últimos son legión: y por último el de Materias tratadas en cada uno de los dos volúmenes.

Deseamos que la *Teología Bíblica* del P. Ceuppens alcance, entre los eclesiásticos de uno y otro clero, amplia difusión y numerosos lectores.

—P. L. de V., O.P.

**OTROS LIBROS RECIBIDOS**, cuya crítica haremos en el número siguientes:

**APUNTES HISTORICOS DEL BEATERIO Y COLEGIO DE SANTA CATALINA Y ESTADISTICA DE LAS RELIGIOSAS**, por Sor

**María Cruz Rich**—U.S.T. Press, Manila, 1939.

**EL ALMA DE LAS PALABRAS DESEÑO DE SEMANTICA GENERAL**, por el P. Felix Restrepo, S.J.—Librería Voluntad, Bogota, 1939.

**APOLOGETICA RELIGION Y MORAL**, por Juan A Ruano Ramos, S.T.D. Friburgo de Brisgovia (Alemania), 1938. Herder & Co.

**LEY CIVIL DE MATRIMONIO**, por el P. Juan Ylla, O.P.—U.S.T. Press, Manila, 1939.

**COMMENTARIUM IN FACULTATES QUINQUENNALES PRO PHILIPPINIS INSULIS**, por P. Juan Ylla, O.P.—U.S.T. Press, Manila, 1939.

**VIRGILIO POETA DE ROMA**, por P. Jose C. Andrade, S.J.—Imprenta del C. de Jesus, Bogota.

**LA PENSEE CONTEMPORAINE**, por P. Leon Veuthey,—Editions Montaigne, 13, Quai de Conti, Paris, Aubier.

**CICERON—PSICOLOGIA DE SU ORATORIO**, por Jose C. Andrade, S.J.—Editorial Santafe, Bogotá calle 14, No. 139.

**DE ABBREVIATIONIBUS ET SIGNIS SCRIPTURAE GOTHICAE**, por M.H. Laurent, O.P.—Apud Institutum Angelicum, Romae, 1939.

**HISTORIA DE LA IGLESIA**, por Juan A. Ruano Ramos, S.T.D.—Herder & Co., Friburgo de Brisgovia (Alemania), 1938.

**Praelectiones cholasticase in II. P.D. Thomae**, por Pedro Lumberras, O.P.—Pont. Insti. Intern. "Analicum", Roma, 1939.



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**"GREGORIANUM". Pontificiae  
Universitatis Gregdrianae, Romae,  
Anno XX, Fasciculus 1. 1939.**

**Pius XII P. M.**

**Pius XI P. M.—In memoriam.  
De problemate necessitatis geo-  
metricae,—Petrus Hoenen, S. J.  
Zur Frage der ursprunglichen  
Ordnung im Johannesevangelium,—  
B. Brinkmann, S.J.**

**L'Eglise, Corps du Christ, chez  
Saint Cyrille d'Alexandrie,—H. du  
Manoir.**

**La Inquisición española incipien-  
te,—B. Llorca, S.I.**

**Recensiones. (cf. folium versum)  
Accepta Opera.**

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**THE NEW SCHOLASTICISM. Ca-  
tholic University of America, Wash-  
ington, D.C. Vol. XII—April, 1939  
—No. 2.**

**The First Sentence Commentary  
of Early Scholasticism,—Arthur  
Landgraf.**

**The Political Philosophy of Yuri  
Krizhanich,—Cyril Bryner.**

**Chinese Philosophers of the East-  
ern Chou (770-249 B.C.),—George  
Barry O'Toole.**

**Book Reviews.**

**Notes and Comments.**

**Books and Periodicals Received.**

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**DOMINICANA. Washington D. C.  
Vol. XXIV—March, 1939—No. 1.**

**Pius XII,—Francis H. Roth, O.P.  
His Testament of Peace—A Me-  
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**Preachers-General,—Urban Fay,  
O.P.**

**Some Shape of Beauty,—Hya-  
cinth Conway, O.P.**

**Free Speech Has a Birthday,—  
Cyril Burke, O.P.**

**Murillo, Spanish Master,—Robert  
Auth, O.P.**

**Methods or Madness,—Mark Bar-  
ron, O.P.**

**Child of China,—Thomas Chang,  
O.P.**

**The Quality of Mercy is Strained,  
—Raphael Gallagher, O.P.**

**Obituary: Rev. John Polycarp  
Siemer, O.P.**

**Friars' Bookshelf.**

**Cloister Chronicle.**

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**UNIVERSIDAD DE LA HABANA.  
Habana, Cuba. 1939—No. 22.**

**El Maestro Eugenio Maria de  
Hostos,—Antonio S. Pedreira.**

**La Domesticación del Maiz, y el  
Problema de la Antigüedad del  
Hombre en America,—Pablo Mar-  
tínez del Río.**

**Genesis de la Llamada "Genera-  
ción del 98",—Luis Ruiz Contreras.**



**Hegel y el Moderno Panamericanismo**,—Edmundo O'Gorman.

**Psicología de la Conducta**,—José Varela Zequeira.

**Nuevas Orientaciones en Materia Constitucional**,—Juan Clemente Zamora.

**La Obra de un Ilustre Cubano en Mexico, el Dr. D. Francisco Javier Conde y Oquendo**,—Manuel Tous-saint.

**Evolución Histórica de la Política y la Democracia en los Estados Unidos**,—Herminio Portell Vilá.

**El Nuevo Código Cubano**,—Angel Ossorio.

**Vida Universitaria.**

**Bibliografía.**

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**ANNALES DE L'UNIVERSITE DE PARIS.** Sorbonne, Paris. 13 Année, No. 6.

**Séance solennelle de rentrée de l'Université de Paris**, Discours de M. le Recteur Roussy.

**Le Jubilé scientifique de M. Georges Urbain**—Paul Job.

**Rapport annuel du Faculté de Médecine**,—M. Tiffeneau and M. Téchoueyres.

**Chronique de l'Université.**

**Statistique des Examens du Baccalauréat.**

**Adresse.**—l'Université de Paris á la Societé Archéologique d'Athènes.

**Table des Matières de l'année 1938.**

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**ALBERTINA.** Rosaryhill, Hongkong. Año 3, Núm. 23.

**La Cruz**,—por fr. Juan Rodriguez, O.P.

**Valor de la satisfacción en pecado mortal**,—por fr. Martin Diez, O.P.

**La opinión más probable**,—por fr. Aniceto Castañon, O.P.

**Praescriptum Can. 304 et primum Concilium Indosinense**,—por fr. Jose Dai, O.P.

**"The Rock", Soldado de España**,—por fr. Sergio Santamaria, O.P.

**Meditación sobre la guerra de España**,—por fr. Esteban Garcia, O.P.

**Boletin de la Academia**, por el Vice-Secretario.

**Cronica**,—por el Cronista.

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**UNIVERSIDAD.** Zaragoza.—Año XVI—Enero-Febrero-Marzo de 1939—III A.T., Núm. 1.

**La enseñanza en Tudela en el siglo XVI.**—José Ramón Castro Alava.

**El conocimiento intelectual: Naturaleza, origen y valor del conocimiento.**—Benjamin Temprano Temprano.

**La defensa de la producción nacional**,—Félix Correa Peró.

**La administración rectal del salicilato sódico como método de elección.**—Benigno Lorenzo Velásquez.

**Fitohormonas en los lignitos**,—Antonio de Gregorio Rocasolano.

**Conferencias y Cursos breves**—Día de los estudiantes caídos por la Patria.—Festividad de Santo Tomás de Aquino.

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**STIMMEN DER ZEIT.** 69. Jahrgang 8. Heft 136. Bano. Mai 1939.

**Religion im Werktag**,—Peter Lip-pert.

**Ontologie oder Theologie als Abichlubniffenichaft?**,—Alois Guggenberger.



**Das Religiöse der Dichtung des deutschen Arbeiters,**—N. Tinnefeld.

**Das unbekannte Volk der Slonsaken,**—Joseph Albert.

**Katholischer Kulturichau,**—Jakob Overmans.

**Wunder oder feierliche Gestaltungskraft?**—Alexander Willnoll.

**Die Hausmarke,**—Ivo Zeiger.

**Befrechungen von Buchern.**

**Nevauffagen von Griftuabechern — Gelebtes Christentum — Thomas einft und heute — Das Bild vom Menschen — Naturphilosophie.**

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**REVISTA CARMELITANA. Tucson, Ariz.** Año XVI Mayo de 1939 Num. 183.

**A María (Poesia),**—por G. y Galan.

**María Modelo de la Mujer y Madre Cristiana,**—P. Sabino de la C. V. del Rosario.

**Página Carmelitana—Instrucción Carmelitana—Eucarística — Actualidades Sección Piadosa—Sección Apologetica — Página Poética — Sección Teresiana—Misional — La Florecita de Jesús—Sección Femenina—Preguntas y Respuestas—Sección Amena—Gracias y Favores, etc.**

We acknowledge also the issues for March, and April.

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**REVISTA DEL COLEGIO DE ABOGADOS DE BUENOS AIRES. VII Piso, Palacio de Justicia, Buenos Aires.** Año XVIII—T. XVII—No. 1.

**Sobre Ruidos Molestos,**—Piossek Adolfo.

**La Constitución reciente de Irlanda,**—Ennis Huberto María

**Matricula de Abogados—Suple-**

**mento No. 5.**

**Nota de Hugo A. Oderigo.**

**Publicaciones Recibidas.**

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**REVISTA DE LA FACULTAD DE CIENCIAS QUIMICAS. Buenos Aires. Tomo XIII.**

**Farmacognosis y Farmacodinamia de la Ouabaina,**—por Rafael A. Bullrich, Orsini F. F. Nicola y Horacio J. Acevedo.

**Métodos analíticos del Pan de Graham y Similares,**—por Antonio Ceriotti, Alfredo Sanguinetti y Eduardo Luquin.

**La Determinación de la Proteínoorraquia,**—por Carlos A. Sagastume, Danilo Vucetich y Raul Nico.

**Obtención de Aminas Secundarias por la síntesis de Leuckart Modificada,**—por Armando Novelli.

**Método de Evaluación directa del Agua en las Conservas de Frutas,**—por Juan Broitman.

**Contribución al estudio de los métodos de evaluación de Celulosa y Lignina en Cereales y Derivados,**—por Margarita F. Rachou.

**Contribución al estudio de la Preparación de Alcohol isopropílico a partir de mezclas líquidas de propano y propileno,**—por Dardo B. Zucherino.

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**REVISTA JAVERIANA. Bogotá. Tomo XI, Núm. 52. (All Previous issues were also received.)**

**Su Santidad Pío XI.**

**Página Artística. (Eduardo Ospina)—Vida Nacional.—Orientaciones,**—Felix Restrepo.

**Estudios biológicos,**—Jaime Pujula.

**Sobre natalidad. Una solución contraproducente,**—Emilio Arango.

**El P. Miguel A. Pro, redentor del obrero,**—Salomón Rahaim.

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**Novedades científicas,** — Pedro Zuloaga.

**Pío XI,**—Guillermo Figuera.

**Comentarios,**—Vicente Andrade y Rudolf Timmermans.

**Revista de Libros.**—Últimas publicaciones colombianas.—Crónica. **Jorge Rojas.**

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**ECOS.** San Beda College, Manila. Año XXIV—Mayo de 1939—Núm. 278.

**El Triunfo de España,**—Exmo. y Rdm. D. D. Guillermo Piani.

**Nobleza Obliga** (poesía),—I. S.

**A los Niños,**—Un Amigo.

**Sección Monástico.**—Litúrgica.—**Nuestra Prensa Católica por España—¡Honor al Trabajo!**—**La Fiesta del Trabajo.**—**La Población de Filipinas se Apróxima a 16,000,000.**—**Algo de Liturgia.**

**Correspondencia de Japón y China.**—**Humoradas del Sambedista.**—**Crónica de la Abadía y del Colegio.** **Bibliografía.**

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**DE REBUS HISPANIAE.** Burgos, calle de Valladolid (España). Número 20—Triunfal III. (Rec'd also Nos. 15, 16, 17, 18 & 19).

**Repuesta a una carta,**—C. Bayle S.J.

**España Nacional Misionera,** — Ilmo. Sabas Sarasola, O. P.

**Tenemos la fuerza y tenemos el derecho,**—A. Castro Albarran.

**Auxilio Social, bendecido por Pío XII.**—**Pío XII y España.**

**Piedad e impunismo,**—T. Rodriguez.

**Doctrina de Maestro, obras de Hermandad,**—A. Carrion, O.P.

**Sección Documental: Información de las pérdidas sufridas por la Congregación de Misioneros del Corazón de María,**—Jose Dueso, C.M.F.

**Bibliografía relativa al Movimiento Nacional.**

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**THE NEW REVIEW.** Calcutta. Vol. IX, No. 52.

**Journal Comments.**

**Editorials.**

**Planning for India,**—P. S. Lokanathan.

**Chesterton's Handwriting,**—J. P. de Fonseka.

**Poisonous Plants of India,**—R. N. Chopra.

**Financial Implications of Prohibition,**—V. G. Ramakrishnan.

**The Significance of Pius XI,**—Bernard Leeming.

**The Anglo-Indian Share,** — Reginald J. N. Maher.

**Archaeological Exploration in Gujarat,**—H. D. Sankalia.

**Verses.**

**Some Recent Books.**

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**FIAT LUX.** National Teachers College, Manila. Vol. IX, No. 9. —

**Message from Justice Jose P. Laurel.**

**Visions and Revisions,**—F. B. V. **Vitalized Teaching,**—Dr. John H. Manning Butler.

**Character Building,** — Eugenio Encarnación.

**National Defense and Education and Leadership,**—F. Santos.

**Defects of our Present Educational System,**—Jose Garcia.

**Rizal's love for the Philippines and the Filipino youth,** — Alfonso P. Santos.

**Perambulations of the Mind,**—C. Tiangco.

**Who is the Greatest Benefactor?** —George Matthew Adams.

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**SEMINARIUM.** Manila. Año 3, Num. 10.



**Pio Duodecimo Papae Nuper Electo**—Su Eminencia el Cardenal **EUGENIO PACELLI**, elegido Papa por el Colegio Cardenalicio el día 2 de Marzo, y aclamado en el orbe católico con el nombre de **PIO XII**.

**The Apostolic Letter of Pius XI to the Philippines.**

**San Carlos Catequista**,—S. Solano, C. M.

**The Mysterious Messenger**,—Deo-gratias.

**Crónica anual de San Carlos.**

**Lessons on Sacraments**,—Fr. G. Vromant, C.I.C.M.

**Dos Modelos de Acción Católica**,—P. Jose Fernandez, C.M.

**Militis Orans pro Sacerdotibus**,—M. O. Villanueva.

**Ceremonies of Confirmation.**

**Patriotismo en las Escuelas**,—V. A. S.

**Notas—Crónicas—Ecos**, etceteras.

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**MISIONES DOMINICANAS.** Año XXII—Num. 249.

**Feliz salida y entrada de año.**

**Consuelos y angustias de los números.**

**"Nigra sum, sed Formosa, Celso Constantini,"** Arzobispo titular de Teodasia.

**Una conferencia religiosa política**,—Mr. Vicente Gonzalez, O.P.

**Inauguración de una Iglesia**,—Fr. C. Esposo, O.P.

**Espantosa inundación en Tonquin.**

**Fiesta de Ntro. P. Sto. Domingo en Tháí Binh**,—Fr. J. J.

**Supersticiones y ritos chinos.**

**No mientas delante del amigo ni digas la verdad delante de la esposa**,—Kailó.

**Crónica Misional.**

**Limosnas, Necrologia, Bibliografía.**

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**REVISTA DE REVISTAS**

**BIBLOS.** Revista da Faculdade de Letras da Universidade de Coimbra. Vol. XIV.

**A divisáo provincial do novo Código Administrativo**,—Amorim Girao.

**Miscelánea vicentina. Notas lexicográficas e etimológicas**,—Joseph M. Piel.

**A Serra de Estrela. Estudio geográfico**,—Carlos Alberto Marques.

**A obra de Gil Vicente vista por um jurista**,—Francisco de Queiroz.

**Tendências e individualidades do romance brasileiro contemporáneo**,—Pierre Hourcade.

**On a Portuguese Carrack's Bill of Lading in 1625**,—C. R. Boxer.

**Sóbre um quadro de Rubens**,—Feliciano Guimarães.

**Os ingleses em Portugal**,—L. Saavedra Machado.

**O soneto: "O Sol é grande"**,—Alvaro da Costa Pimpao.

**Estrutura fónica**,—Armando de Lacerda.

**A música na obra de Gil Vicente**,—A. Eduard Beau.

**Comentarios e correccoes ao intitulado da Primeira relacao da "Historia tragico maritima"**,—Antonio Pinho.

**Jose Antonio Carlos de Seixas**,—Mario de Sampayo Ribeiro.

**A correspondencia científica do Dr. Sachetti Barbosa com Emmanuel Mendes da Costa, Secretario da Sociedade Real de Londres**,—A. Goncalves Rodrigues.

**Verney Contra Genovesi. Estudo do "De re logica"**,—Mariano Machado Santos.

**Notas etnográficas**,—Carlos Alberto Marques.

**Varia.**

**Recensoes Criticas.**

**Publicações recebidas.**

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**CULTURA SOCIAL.** Manila. Año XXVII—Junio 1939—Núm. 317.

**Mensaje de S. S. Pío XII a España.**

**La Obra Misionera en la Provincia Montañosa.**

**Origen único del género humano,**—Rev. P. J. M. Ibero, S. J.

**Mirando al Porvenir.**

**The Great Unknown,**—Rev. Arthur J. McCaffray, S.J.

**Ecos del mundo.**—Apuntes de mi cuaderno.—Crónicas. **Obra Pontificia: Nuestra Responsabilidad.**

**Apostolado de la Oración,**—P. José M. Siguión, S.J.

**La Epopeya del Alcazar de Toledo,**—Alberto Risco, S.J.

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**BOLETIN ECLESIASTICO. U.S.T.,** Manila. Año XVII—Julio, 1939—No. 192.

**Sacra Paenitentiarum Apostolica. Indulgentiarum Apostolicarum.**

**Temas de sermones catequísticos para el tercer trimestre del año 1939.**

**De requisito consensu superioris competentis ad legitimam consuetudinem canonicam.**

**Iglesia funerante segun el codex iuris canonici.**

**Casos y consultas.**

**Noticias de Roma y del mundo católico.**

**Noticias de Filipinas.**

**Bibliografía.**

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**ANALES DE LA UNIVERSIDAD HISPALENSE.** Sevilla. Año II, No. 1, 1939 Año de la Victoria.

**Homenaje al Dr. Eugenio de Cas-**

**tro da Costa,** por el Ilmo. Sr. D. José Mariano Mota Salado.

**Patronato Universitario.**

**Cursos breves organizados por la Universidad.**

**Indice legislativo (en fichas).**

**Los Manuscritos de los trabajos del P. José del P. José del Hierro, S.J. en la Biblioteca colombina,** por Antonio Sancho Corbacho.

**Tres notas sobre restos humanos prehistóricos y antiguos de Andalucía (Carmona-Arva-Cueva de la Mora),** por Francisco de las Barras y de Aragon.

**Sobre preparación de celulosa a partir del bagazo de la caña de azúcar,** por F. Yoldi y Jaime Gracian Tous.

**El Derecho Administrativo preventivo,** por Carlos García Oviedo.

**El Concilio IV provincial Mejicano (Apendice documental),** por Manuel Giménez Fernández.

**Las úlceras pépticas en gastrectomizados,** por Cristóbal Pera.

**Catálogo de documentos de la Sección novena—Papeles de Estado—del Archivo General de Indias,** por Cristóbal Bermúdez Plata.

**Protectores de—Anales de la Universidad de Hispalense.**

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“Unitas” also received the following periodicals: **Japanese Journal of Obstetrics & Gynecology** (Vol. XXII, No. 1), **El Suministro de Energia electrica en la provincia de Buenos Aires** (Fasciculo XVI.), **Rockefeller Foundation Review** for 1938, **Science des Religions**, **Boletin Linotipico**, **Philosophie Psychologie Padagogik**, and other irregular publications.



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