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#### *About the Institute*

The Hunt Institute for Botanical Documentation, a research division of Carnegie Mellon University, specializes in the history of botany and all aspects of plant science and serves the international scientific community through research and documentation. To this end, the Institute acquires and maintains authoritative collections of books, plant images, manuscripts, portraits and data files, and provides publications and other modes of information service. The Institute meets the reference needs of botanists, biologists, historians, conservationists, librarians, bibliographers and the public at large, especially those concerned with any aspect of the North American flora.

Hunt Institute was dedicated in 1961 as the Rachel McMasters Miller Hunt Botanical Library, an international center for bibliographical research and service in the interests of botany and horticulture, as well as a center for the study of all aspects of the history of the plant sciences. By 1971 the Library's activities had so diversified that the name was changed to Hunt Institute for Botanical Documentation. Growth in collections and research projects led to the establishment of four programmatic departments: Archives, Art, Bibliography and the Library.

EL PROYECTO INDEX NOMINUM GENERICORUM

Por IDA K. LANGMAN  
MÁRY F. SOUTHWELL

En 1954, en el Congreso Internacional de Botánica en París, se reconoció definitivamente la importancia de preparar un índice de nombres genéricos, y se nombró un comité ejecutivo encargado de realizar los trámites necesarios para poner el programa en marcha. Este comité, formado bajo los auspicios de la International Association of Plant Taxonomists, constaba de los señores doctores J. Lanjouw, redactor general, A. A. Bullock y R. C. Collins, redactores con sejeros, y F. A. Stafleu, redactor técnico.

La necesidad de preparar un índice de esta naturaleza había existido por muchos años. Por falta de tal índice se habían publicado en muchas ocasiones nombres ilegítimos homonímicos, dando lugar a la subsiguiente complicación de la literatura con cambios de nombres. Sin un índice de nombres, es preciso gastar mucho tiempo en revisar la literatura para evitar duplicaciones al proponer un nuevo nombre genérico.

El índice se presenta en forma de tarjetas impresas, del mismo tamaño de las tarjetas del Gray Card Index (5 x 12½ cm.). El primer grupo de 1 000 tarjetas se publicó en octubre de 1955. Desde esa fecha se han publicado 22 000 más, siempre en juegos de mil. Puesto que el Índice incluye no solamente nombres de plantas actuales, sino también plantas fósiles, y plantas de todos los grupos desde las *bacterias* hasta las *espermatofitas*, se calcula que el proyecto se encuentra más o menos a medio terminar.

Muchos botánicos de varias partes del mundo han aceptado la invitación del Comité Ejecutivo para colaborar en el proyecto, o han ofrecido sus servicios para ayudar en la obra. Entre ellos se encuentra un comité de consejeros de diez botánicos y cerca de setenta más que se han encargado de compilar y revisar los datos necesarios para las tarjetas. Para evitar errores es preciso, en cada caso, consultar la publicación original en la cual se haya descrito el nuevo género, igualmente que todas las publicaciones secundarias relacionadas con el nombre genérico: aquella en que se refiera a un sinónimo nomenclatural, la que incluya la descripción del basónimo etc.

En vista de que el proyecto se había prolongado mucho más de lo que se había pensado originalmente (cuando se esperaba terminar el proyecto en tres años), se hicieron gestiones ante la *National Science Foundation* de los Estados

Archives # 179



THE

# BULLETIN

American Association of  
Botanical Gardens and Arboreta



VOL. 14 No. 1

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TAXON 24(4): 533-542. AUGUST 1975

NOMENCLATURE

See also p. 474, 488, 497.

REPORT OF THE SPECIAL COMMITTEE FOR FUNGI AND LICHENS

The last report of the Committee was published in Taxon 23(4): 647 (1974). Since that time, the Secretary has been informed of the list of nomenclature commands submitted for

see p. 538  
John W. Sargent

Archives # 179

July 16, 1968 Gordon Wood 153-6035 /  
Dear Dr. Sohns:

I am writing you at this time time at the suggestion of Mr. Gordon Hubel, director of the University of Pennsylvania Press, on a problem connected with the copies of my bibliography which the Press has on hand. As you know 2000~~0~~ copies were printed but only 1000 copies were bound at the time of publication. As you already know from the reports of the Press, about half of the bound copies have been sold (or otherwise distributed) and Mr. Hubel <sup>feels</sup> that the remaining copies will probably take care of whatever demand there is in the future for my bibliography.

Several months ago, the business manager of the Press asked me for suggestions ~~on~~ <sup>as to</sup> how the 1000 unbound copies <sup>should</sup> be disposed of ~~since~~ so that storage fees for these copies could be eliminated. I felt that the best solution would be to make the material <sup>available</sup> to the botanical institutions of Mexico - universities, botanical garden, Institute of Biology etc. My idea was that a copy of the

bibliography could be presented to each  
botany majoring in  
graduate ~~at the various~~ at the various  
institutions. Accordingly I wrote to several  
of my friends at the two principal institutions  
in Mexico: the Instituto de Biologia and the  
Instituto Tecnologico, ~~ix~~ describing  
the situation to them and the answers came  
back that they would be very happy to receive  
the books. They could bind them in their own  
~~binding~~ workshops and they would be glad to  
pay the mailing costs *under*

Earlier this week I discussed the  
matter with Mr. Hubel and he felt that before  
we committed ourselves in any way we ought to  
check first with you. He was not sure if we  
needed approval from you for taking the action  
we contemplate. Or, perhaps, you have some  
other suggestions with regard to the <sup>disposal of</sup> 1000  
unbound copies.

I expect to be in Washington the week  
of July 15 and will call you at ~~xxx~~ that time,  
Or, if you prefer, you might write directly  
to Mr. Hubel at the University of Penna Press  
3933 Walnut St. Phila. Pa 19104.

Dr. Gomez Pompa *Reynold*.

He tardado algo en contestar la carta de Ud. fechada <sup>al</sup> 6 de junio 1968, y la del Dr. ~~Redowski~~, con fecha de 27 de mayo. Eso se debía en parte a una reorganización en la University of Pennsylvania Press. El señor encargada de asuntos financieros dejó su puesto para encargarse de otros encargos en la Universidad, y yo tuve que esperar para conseguir una cita con el director de la Press. Hace unos días, tuve la oportunidad de platicar con el y, por el momento, quedamos <sup>solución</sup> en que sería una ~~disposición~~ excelente poner a la disposición de las Universidades mexicanas y otras instituciones de enseñanza superior, las copias no encuadradas de mi bibliografía. Resta hacer dos cosas: averiguar los costos de transporte, los cuales les proporcionare tan pronto que el director me los informa. Pero, antes, quiere el director informarse <sup>responsables</sup> ~~si~~ como opinan sobre este asunto ~~los personas~~ en la National Science Foundation (que habia proporcionado gran parte de los <sup>gastos</sup> de preparación y publicación de mi b. *Microfilm*)

Ya he escrito a ellos y ~~en~~ ~~mas~~ ~~tarde~~, en ochos dias - mas o menos - estare en Washington. Entonees podre platicar con el Dr. Soins, de la seccion de Informacion Cientifica, que se encargaba de la publicacion de la bibliografia. A ver que dice. Espero que el no encontrara nada inconveniente en la solucion que hemos propuesto. De todos ~~mis~~ modos, ya les informare todo. Mientrastanto reciban Uds. los dos, mis mejores saludos y gracias sinceras por su cooperacion en este asunto. Saluden de mi parte, tambien, todos mis amigos en sus institutos y a los otros miembros de ~~mis~~ sus familias.

Cordialmente.

Memorandum re:

A Selected Guide to the Literature on Mexican Flowering Plants

by Ida K. Langman

(Published by the University of Pennsylvania Press)  
\$25.00

The book (over 1000 pages) was published in December 1964. Two thousand copies were printed; 1000 copies were bound and the remainder were partially bound to await the addition of the cover. Reviews of the book have been, almost, entirely, highly favorable and include notices not only in the United States but also in several European countries. However, only 500 copies have been sold and the publisher feels that the remaining bound copies will probably take care of the demand in the foreseeable future. He would, therefore, like to dispose of the unbound copies.

Inquiries to Mexico have revealed that institutions like the Instituto de Biologia, Instituto Tecnológico Nacional, Escuela Nacional de Agricultura could put these copies to good use by placing them in appropriate libraries and distributing others, over the years, to graduates who have majored in fields where the bibliography would be useful: botany, biology, pharmacology, ethnobotany, linguistics, etc. In addition, copies could be made available also to similar institutions in other countries of Middle and South America, as well as some of the countries in the Caribbean area where there are the appropriate institutions: Jamaica, Puerto Rico, Cuba, Trinidad, etc. Under no conditions would the books be sold.

Before this distribution, however, can be effected, money must be obtained to pay for the following: the charge for the partial binding of the copies to be distributed (about \$600) and the cost of sending the books to Mexico (via freight) (about \$550). The Instituto de Biologia in Mexico City would receive the copies and take charge of distributing the copies both to institutions in Mexico and those outside the country.

Memorandum re:

A Selected Guide to the Literature on Mexican Flowering Plants  
*by Sara A. Ferguson*  
published by the University of Pennsylvania Press  
*Price \$5.00*

One thousand copies, partially bound, are available for distribution (under conditions to be specified) to selected institutions in Mexico. Before this can be done, the Press will have to be reimbursed for the cost of the partial binding ( \$ 617.00). The cost of sending the books to Mexico (via freight) would come to approximately \$550.00).

Can we find any way of meeting these costs?

The books would be distributed to the principal institutions of higher learning in Mexico: universities, polytechnical institutes, agricultural schools, etc. Some copies could be placed in the main libraries of the various institutions; others in the appropriate departmental libraries, where they exist - botany, biology, pharmacology etc. The remaining copies could be saved and distributed over the years to graduates who have specialized in the fields where the bibliography would be useful.

In addition, copies could be distributed to similar institutions in other countries of Middle and South America, as well as some of the countries in the Caribbean area where there are the appropriate institutions; e. g. Jamaica, Puerto Rico, Cuba, Trinidad etc.

Under no conditions are the books to be sold.

Although details could be discussed later, after the necessary financial arrangements have been made, it would seem that the simplest way to handle the distribution would be to send the books to one institution at the beginning. The Institute in Mexico City would seem to be the logical place. From there the books could be distributed in accordance with a plan previously agreed upon.

Memorandum re:

A selected guide to the literature on Mexican flowering plants  
(Publicado por The University of Pennsylvania Press)

Mil copias, parcialmente encuadernadas, están ahora disponibles<sup>S</sup> para distribuirse (bajo condiciones especiales) a escogidas instituciones<sup>e</sup> en México. Antes de que esto pueda realizarse, The Press (citada arriba) tiene que cobrar el precio de la encuadernación o sea \$617.00. Los gastos de enviar los libros a México (por flete) suman aproximadamente \$550.00.

El problema es conseguir el dinero que se necesita.

Los libros se distribuirán a las instituciones principales de enseñanza superior<sup>e</sup> en México: universidades, institutos politécnicos, escuelas de agricultura, etc. Unas copias se ~~podría~~<sup>podrían</sup> depositar en las bibliotecas principales de las distintas instituciones; otras en las varias bibliotecas agregadas a las distintas<sup>e</sup> departamentos, si existen<sup>e</sup> - de botánica, biología, farmacología etc. Las copias restantes se guardarían<sup>n</sup> ~~en~~<sup>en</sup> se distribuirían<sup>e</sup> durante el curso de los años a los<sup>e</sup> ~~que~~<sup>quienes</sup> se reciban habiéndose especializado<sup>s</sup> en los varios campos donde la bibliografía les sería útil.

Además, <sup>algunas e</sup> copias podrían ser distribuidas a instituciones semejantes en otros países de América Central y América del Sur, tanto como a países del Caribe - donde existen instituciones del<sup>la</sup> mismo índole: e. g. Jamaica, Puerto Rico, Cuba, Trinidad etc.

Una sola restricción debe aceptarse: los libros no serían puestos a la venta comercial.

Aunque los detalles necesarios se podrían arreglar más tarde, después <sup>que</sup> se haya solucionado el problema de los fondos necesarios, parece que la manera más sencilla<sup>lla</sup> de hacer la distribución sería de enviar los libros a <sup>un solo centro</sup> una sola institución. El Instituto de Biología en México parece ser la más lógica. De allí, los libros podrían ser distribuidos <sup>de</sup> en acuerdo con un plan que queda para arreglarse.

Descripcion de la bibliografia:

Numero de paginas 1015 (pesa mas de 5 libras)  
Numero de fichas bibliograficas entre 20,000 y 25,000  
Indice consta de 156 paginas

Las referencias, a que la bibliografia sirve como guia, abarca no solamente el campo de la botanica sistematica y la fitogeografia, sino tambien incluye referencias a la etnobotanica, la historia de la botanica en Mexico, viajes de exploracion y descripcion del pais, los usos economicos de las plantas de Mexico - en la industria, la medicina, farmacologia etc. y vocabularios de lenguas indigenas donde se refiere a nombres de plantas. Las referencias no se limitan a Mexico, sino incluyen obras que tratan de regiones cercanas, con las cuales la flora mexicana esta relacionada: el sur de los EE UU, America central y ecuatorial, y los paises del Caribe.

Agregada a la bibliografia hay algunas secciones que tambien tienen alguna utilidad para los investigadores. Primero hay una lista de bibliotecas donde se revisaron los trabajos (no hay obras citadas que la autora no las vio personalmente). Segundo, una lista de mas de 350 bibliografias consultadas en la preparacion de la bibliografia. Y finalmente, una lista de revistas y otras publicaciones seriadas (que ocupa 30 paginas) que se revisaron en busca de articulos que debian incluirse en la bibliografia.

La obra ha recibido criticas muy favorables no solamente en las revistas publicadas en los EEUU sino tambien en varios paises de Europa, como Francia, Alemania, la Union Sovietica etc.

When I was first asked to speak to you, I was quite flattered; for it is flattering, you know, to be invited to address a group. A few days later, however, in looking through a book on Race, I came across a statement that wasn't quite so flattering yet helped to explain, at least in part, why I might have asked to meet with you today. This was the statement: "Nowadays, it seems, the principal equipment necessary to qualify as an authority on race consists in a well rounded ignorance and an unshakeable confidence". Well, I certainly qualify on the first count, even though I don't on the second; my confidence shakes very easily.

And yet I am indebted to you for this invitation, for even if I should bring you any ideas or facts worth remembering, you may be sure I will have gained as much, probably much more, than you. For in preparing the talk, there was so much to be done in the way of reading, organizing of material and clarifying of my own thinking, that regardless of what the audience may get from the discussion, I will have gained a great deal. So for this opportunity, many thanks.

It hasn't been easy for me to prepare this talk on Race. To do the subject justice, one should be not only a biologist, which I am of sorts, but a biologist with a thorough grounding in genetics, an anthropologist, a psychologist and a sociologist. Just listing the things I should be, and am not, indicates how well rounded my ignorance is. And yet, I've given the lots of thought to the subject of Race. Any one who is a member of a minority group, sooner or later, has to face the problem of the various barriers which prevent different elements in our population from being freely accepted into the community where they live, or work or play. And since the term race has been used so loosely in the past, it hasn't mattered much whether one approached the problem as ~~xxx~~ a member of a national minority, a religious minority or a racial minority.

My own consciousness of minorities dates back to elementary school. The one I attended was in South Philadelphia, practically next door to a Catholic school, and during the school year fights between the two student bodies were an ordinary occurrence. I'll be perfectly frank and admit that I never knew who started the fights, (Only the boys took part in them). But I do remember that they were not between Jews and Catholics, but between the students as Catholics and non-Catholics. It was then that I first became conscious of Catholics as a special group in our population. I remember, too, that we always spoke of them (if you will pardon the expression) as Micks, and I'll have to confess that the reason for the name didn't dawn on me until I was much older. But then name calling was a more or less accepted part of my childhood environment. I had long ~~xxx~~ before learned that I could expect to be called a number of not very pleasant epithets too- and if you will again pardon me-names like sheeny, kike and worst of all Christ-killer.

From my father, I learned of other aspects of the minority problem. When he had arrived from Europe, he wore, as did most of the elegant young men of the continent of that time-a handsome pointed Van Dyke beard. I didn't appreciate how handsome he really looked, however, until again I was much older. For beards were not in fashion here and my father's beard only ~~xxx~~ served to identify him as a foreigner and a Jew, since in our neighborhood the only foreigners were Jews. As a result of this distinguished, or maybe I should distinguish appearance, my father had to suffer not only name calling, but personal injury as well from time to time as a result of stone throwing on the part of some of the tougher young men of the neighborhood.

My high school experience was much happier. I was fortunate in attending South Philadelphia High School, when it was opened with Dr. Wilson as principal. She was a pioneer in handling minority relations, as she was a pioneer in ~~handling minority~~ so many other phases of education. In her school we were made to feel proud of our various national, racial and religious backgrounds. Talent was recognized wherever it was found and never denied because of race, creed or color. So it wasn't until long after I was out of school that I again became uncomfortably aware of my status as part of a minority group when I ran into restrictions on admissions to hotels and vacation resorts, or in trying to rent apartments.

It seems only natural to me that under these conditions I should have become particularly sensitive to the problems of other minorities, especially those of Negroes, for while the obstacles placed in the way of being a Jew were difficult enough to accept, those placed in the way of Negroes seemed to be unbearable. Then came Hitler, and the whole question of Race exploded as one of the burning problems of the day, for everyone, not just members of minority groups.

By this time I had settled on Biology as my major academic interest and I was ~~so~~ deeply disturbed when I saw the term "race" being distorted from its original harmless ~~application~~ application in the scientific fields into a vicious weapon in the persecution of minority groups. In Biology, the term race is used to describe a subdivision of a species which has certain physical or physiological characters which distinguish it from its near relatives. A race is usually isolated geographically from these close relatives, restricted more or less to a certain environment, yet able to interbreed with the other races if the opportunity is provided.

We can take a familiar bird to illustrate. The common song sparrow is spread widely over North America, yet the bird student divides it into about twelve races each of which is just a little different from others near it, and more or less restricted to particular areas. If we take extremely differing areas, like a desert region and an area with a great deal of rainfall, the song sparrows that inhabit these two regions will at first glance look enough different from each other to be considered separate species. But when we get specimens from all the areas in between this dry region and the rainy one, we find that all the ~~x~~ varieties grade into each other very gradually. So it is with Man. All varieties of living Man are considered races of one species—our Latin name is Homo sapiens—with the most extreme differences appearing in groups that are geographically widely separated from each other.

And that's about as far as we go in Biology. There never was any question as ~~whether~~ whether one race of red legged grasshoppers, or song sparrows, ~~is~~ was superior to another. Nor indeed was this idea of superiority common in the thinking of people when the term race was introduced into the vocabulary of the study of man about 200 years ago. In 1795, a scientist who published one of the first classifications of ~~approximate~~ people into races said, "No variety of mankind exists whether of color, countenance or stature, etc. so singular as not to be connected with others of the same kind by such an imperceptible transition that it is very clear that they only differ from each other in degree—not in kind."

However, somewhere along in these last 200 years, our thinking has certainly gotten fouled up. And this deterioration in thinking, unfortunately, too often can be found not only in so called ignorant people but in people who consider themselves quite well educated. To quote from one of the references I consulted, "Sometimes even professional men of science when they pass beyond the frontiers of their own special studies exhibit no more balanced judgement or unprejudiced outlook than do non-scientific men of comparable social or educational standing." In the first place, when many people use the term "race" they do not do so in the sense above defined. Here is what the UNESCO publication 791 "The Race Question" has to say on this ~~question~~ problem: "To most people a race is any group of people whom they choose to describe as a race. Thus many national religious geographic linguistic or cultural groups have, in such loose usage, been called "race", when obviously Americans, are not a race, nor are Englishmen or Frenchmen or any other national group. Catholics, Protestants, Moslems and Jews are not races, nor are groups who speak English or any other language thereby definable as a race. People who live in Iceland or England or India are not races, nor are people who follow the customs of Turkish or Chinese thereby describable as races. "Worse than just the loose use of the term race, have been some of the completely unscientific statements made about some of

*these so called races.* I don't want to burden you with too many ~~more~~ examples of what I consider unscientific thinking; I think ~~the~~ the following illustrations will suffice. In the north of Europe we often find people who are long headed, tall, blond haired and blue eyed. They have been called Nordics and this is what one of their admirers had to say of them— or rather of people who weren't Nordics: "Non-Nordic man occupies a midway position between Nordic man and animals—next to the ape. He is therefore not a real man. He is in fact not a man at all as opposed to an animal, but only a transition—an intermediate stage. Better and more correct is the designation sub-man." Another said "The long heads of German descent represent the bearers of higher spiritual life, the occupants of ~~dominant~~ dominant positions, to which they are destined by nature. Their whole character prede-~~termines~~

For the  
44 complete  
2000  
S. ...  
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termines them to aristocracy. The round heads keep more aloof from purely scientific interests to which the longheads are driven by their desires for knowledge and to which they devote all the impetus of their character. The inclination of the roundheads to the democratic theory of equality of due to the fact that they themselves do not exceed mediocrity and thus they feel nothing but an aversion, if not hatred, against grandness which they can not understand". Another, evidently disliking certain gestures which he associated with non-Nordics wrote "The Nordic body is so constituted that only a specific ~~xxx~~ type of bodily movement conforms to it". I tried hard to figure out what this writer meant but I didn't get very far. (Discuss Jewish shrug, Latin American movements)

Then there is the prejudice against Negroes, with which we are all too familiar. Today the prejudice is a little more subtly expressed than it was in this statement, "The effect of education would be so to alter the Negro's brain and the consequent of his skull on his spine as to deprive him of his center of gravity and would thus render him incapable of standing on his feet or of an upright position on any terms".

Sometimes, prejudice was directed against these very same Nordics by other groups. Thus a Celt, from Ireland, had this to say on one occasion: "The Saxons are the very dregs and offal of the white population in America. These flaxen haired German men & women are lower than the race with black wool". Does the phrase "black wool" bother you? Notice that we have for so long associated the term flaxen hair with the "superior" Nordics that Black wool seems like an insult whereas flaxen hair does not. (over)

One point that is very strong in the popular conception of race is that whatever differences are found between people are hereditary and will be handed down from one generation to the next. Scientists approach the problem quite differently. They would say that if there are differences between groups of people that are inherited, then these differences could certainly be made the bases for races of people. But the strange thing is that only fairly recently have we begun to study this problem scientifically. And we are discovering that many characteristics that we might have considered hereditary are enormously influenced by environment. (Most of my examples will have to come from other animals rather than man, because it is still too early to have many reliable figures on humans since we cannot experiment with them as we can with animals.)

For example there ~~is~~ is a genetic difference between chickens which gives some yellow shanks and some white shanks. But his difference appears only if the chickens are fed yellow corn or green feed. If they are all fed white corn, they all have colorless shanks. Then there is a deformity in fruit flies which produces an abnormal abdomen, but only in flies grown in moist cultures. If grown in dry cultures, they will be perfectly normal. Again in chickens, there is a variety known as Frizzle which remains practically bare throughout its first year and is extremely delicate and difficult to bring up. The down is so fragile that it constantly breaks off and this leads to great loss of body heat, increased heart rate, lack of fat, diminished hemoglobin, etc. But recently it has been shown that this chick will develop a complete plumage over the whole body in 3 weeks if it is protected from heat loss by enclosure in a woolen jacket and confined to a warm room.

In barley plants, there is a kind of albinism or lack of green color, if the plants are grown below 6 degrees C., but if grown around 18 degrees C. they are quite normal. And in Himalayan rabbits and Siamese cats, the black pigment is produced only below a certain temperature. In man there have been studies that show definite changes in height and body form when immigrants from Europe are compared with their descendants here in America. Similar results were obtained in studies of Japanese in Hawaii, their relatives who remained in Japan, and their offspring who were brought up in Hawaii. Even identical twins have shown amazing differences when raised in different environments. In a book published about 14 years ago, there was a report of twins reared in the same general community but separated by social barriers. "John's ~~father~~ foster father brought him up ~~to~~ to be industrious and respectable, while Richard's father was neither industrious nor respectable. John grew up to be a good steady respected citizen, while Richard early got into bad company, has lived a very irregular life, and has had several difficulties with the laws of the land which he has had to expiate in appropriate ways" ( I take it this means he had to go to jail)

Now I am not giving you all these examples to make you think that environment is all important and that there are no such things as hereditary characters. Quite to the contrary. Many characteristics seem not to be affected at all, or at any rate very little, by the environment. But what I do want to emphasize is there will have to be an enormous amount of research carried out before we can say definitely just what characters are inherited



and to what extent, if any, they are due to, or affected by the environment. Another point that has been brought out in recent studies is that not only races, but even species and genera will change--sometimes as a result of sudden mutations, sometimes as a result of interbreeding, etc. As a matter of fact, one writer has said that biologic groups are static--that is they don't change--only when they exist under conditions to which they are well adapted, and as long as the conditions don't change.

Now if the varieties of mankind, or races, intergrade to such a large degree into each other, and if they are likely to change in response to changing conditions and as a result of interbreeding, does this mean that we should discard completely the idea of races as applied to mankind? There are some anthropologists who would do this. And they may be right. For, says one author, "Unless we let atomic weapons destroy most of the people of the world, (in which case the world may be left to a few isolated groups like the aborigines of Australia, the Eskimos, and inhabitants of central Africa and the Amazon,) then the population of the world will probably continue to grow increasingly more uniform". More of this later.

At the present time, however, most people are still concerned with the differences they observe in various groups and they will probably continue to classify them into varieties or races, particularly as long as groups with certain physical characteristics continue to live more or less in geographic isolation from others. Classifying seems to be one of our commonest traits, whether we are dealing with grasshoppers, butterflies postage stamps, or other human beings.

In classifying human beings, many different characters have been used in attempting to set up systems of grouping: skin color, texture and color of hair, height, eye color, the presence of an eye fold which produces the so called slant eye, shape of head or lips or nose, hairiness of body, blood types, etc; all have been used. Of course, an observant person could easily see that as in plants or other animals, no one physical character will ever enable us to distinguish the various races of man from each other. And when we begin to combine characters, we can make almost as many groups as there are combinations. However, most anthropologists nowadays agree that if you must classify people, you can put them into three main groups based chiefly on a geographical arrangement: the Caucasoid group which originated in Europe and has a large number of light skinned people in it, the Mongoloid group which developed in Asia which a large proportion of yellow skinned people in it, and the Negroid group which has its center in Africa and has a large proportion of dark skinned people in it. The American Indians are supposed to have come from the Mongoloid groups.

In his recent studies on blood types, Boyd, in his "Genetics and the Races of Man", reports some interesting findings. While all the blood types ABO are present in all groups, with the possible exception of the B type which seems to be practically in the American Indian and until recently in the Australian, the percentage of these blood types seems to vary considerably in different geographical groups. Thus Type B seems to be commonest in Asia and Africa, less in Europe and America. The rh factor in blood has also been found to vary geographically, with the rh negative factor being most common in European groups and practically lacking in the Australian and American Indian.

Boyd mentions, incidentally, other characteristics which are inherited; characters which I suppose if we felt like using them could be the bases for dividing mankind into races. For example, there seem to be no prematurely bald men among the Navajo Indians. Or there is a disease caused by the eating of certain kinds of beans, to which the English seem to be quite immune, and to which the Italians are very susceptible. Some people, and also apes, are very sensitive to the taste of a chemical known as phenyl thio carbamide--abbreviated PTC. Now I know some of us have been sensitive to PTC for a long time, but other people find this chemical completely tasteless. Similar variations, by the way, were found among rats, in response to a closely related chemical ANTC and it turned to be a very useful rat poison for those rats, (Norway rats, I think they were), which did not taste this chemical.

I think you will have noticed that no emotion is aroused when I suggest that we might group races according to their tasting abilities, their blood groupings or their inheritance of baldness or their lack of it. That is, I think we would agree, because we have not come to associate certain ideas of superiority or inferiority with any of these characters, as has happened with certain other characteristics.

There are still many people, aren't there, who continue to associate such traits as dark skin color, thick lips, or very curly or kinky hair, with inferiority. If you can talk to these people, and by that I really mean if they will listen to you, maybe you can tell them that Ernest Hooton, one of our noted anthropologists, says "No anthropologist or anatomist believes that there is any relationship between the form or individual features of the face or body and the character or abilities of the owner." The Unesco report states this even more bluntly "Whatever classification the anthropologist makes of man, he never includes mental characteristics as part of those classifications." ~~xxxxxxx~~

Ask them if they judge the superiority of a horse by its color or by its performance. Then why judge humans by their color. You might ~~xxxxx~~ tell them about the pigments found in all skins - the darker melanins and the lighter carotenes. Dark colors seem to have become predominant in areas where there were forests and where there is intense heat and more direct rays of sunlight. ~~xxxxxxxxxxxxxxx~~ Likewise light colors seem to have developed in open areas, in deserts and in regions of heavy snow.

the

Would it help to call attention of our prejudiced friend that in the thin lips, hairier bodies and straight hair, the white is much more like the apes than is the Negro. If they point to flat noses, you might tell them that, according to anatomists, the flat nose is, for a person who comes from the jungle, a mark of superior adaptation because it seems to be much better fitted to higher temperature than the thinner, higher arched nose of other groups. If he complains about odors, which in some cases are purely imaginary, tell him that to many Chinese, Japanese and Hindus the odor of Europeans is almost unbearable. And an American Indian is reported to have said that to him white people smell like raccoons.

As a matter of fact, it would seem that most of our ideas of what is pleasant and attractive is based almost entirely on what we are used to. If we were Mexican Indians, we would like to eat fried caterpillars, and so it is with our ideas of what is beautiful. Here is the way one author describes an imaginary beauty contest to choose the world's most beautiful girl: (Quote Henry Pratt Fairchild in Race and Nationality)

Your opponent may then raise the question of intelligence, character, civilized versus so called uncivilized behavior. You might remind him that civilization is a relative matter and has moved in leaps and bounds from one part of the earth to another. When Europeans were still in the stone age, clothed in skin and with the family unit the highest type of organization they had achieved, the Africans were already prorgized into powerful states and were using iron, bronze and beautifully woven textiles. When the Romans invaded the British Isles, they reported that it was a country inhabited by savages. Later, it was similar barbaric hordes who destroyed the Roman Empire, and yet after a mingling of the two ways of life, the Europe of today emerged. Still later, Marco Polo traveling in Asia in the 13th century, was amazed at the heights the Chinese had achieved in their civilization as compared with the Europeans of that time. The Aztecs in Mexico had not gotten beyond the use of copper, but had built magnificent pyramids. In Peru, the Incas had only gold as a metal, but had woven exceedingly fine textiles. The Mayas in Central America were still living in the stone age as far as tools were concerned, yet had produced beautiful buildings, pottery, and had developed an outstanding number system and a surprisingly accurate calendar. One point to be remembered in this connection is that all peoples are more or less limited, until they begin to trade with others, by the materials in their environment. If there is no stone in the jungle, then bamboo may have to be used. Shells will be used as axes in some parts of the world, and the tail of a horseshoe crab will be used as a very efficient spear point in some other area.

Perhaps your friend will then suggest that the best way to rate the intelligence of groups is to test them. But do we have tests that really analyze inborn intelligence? How can we separate a person from his environment and what he has learned from it? Do we have tests that rate intelligence in all kinds of environments, or just for the one the examiner is familiar with? Can we prepare a test that will be really objective and equally useful with, let us say, Peruvians, African pygmies, Alaskan Eskimos, Mississippi sharecroppers, Tennessee mountaineers, Chicago slum dwellers and Philadelphia Main Line residents? To some people, just the use of a pencil represents a stumbling block of considerable magnitude. Do you know the story of the Kentucky mountain girl who was asked, "If you want to the store and bought 6 cents worth of candy and gave the clerk 10 cents what change would you receive?" She answered, "I never had 10 cents, and if I did, I wouldn't spend it for candy and anyway I don't buy candy." My mother makes it

Steel  
Inventor  
in Ind.  
-Turkish  
gun prod in  
China  
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printing  
China  
17th cen  
gun prod  
Arabians  
17th cen  
a. other

Even if we choose fairly similar environments, surely we know how results are affected by malnutrition, worry, or even the presence of a hostile or, at least, unsympathetic examiner.

When we consider character tests, our preparation is even more inadequate. Do we have tests that check our capacity to see the other fellow's point of view, our ability to be a good husband or wife or parent, our judgement in selecting the important thing to do when faced with a lot of unimportant details, our enthusiasm in starting a job and our perseverance in finishing it, our persistence in the face of obstacles, our kindness to people in need, etc? As a matter of fact, there are some so called primitive peoples who have been so trained to do everything as a group that cooperation rather than competition seems to them to be the natural way of life. And when they are tested, they can't understand why they should not ask their neighbors for help, or why they should try to do better than their friends. Actually, so far as disposition and ~~personality~~ ~~character~~ ~~values~~ ~~for~~ ~~which~~ ~~we~~ ~~are~~ ~~testing~~ ~~the~~ ~~best~~ ~~for~~ ~~all~~ ~~people?~~ ~~Perhaps~~ ~~the~~ ~~things~~ ~~we~~ ~~rate~~ ~~important~~ ~~don't~~ ~~seem~~ ~~at~~ ~~all~~ ~~important~~

personality and character are concerned, these may be considered raceless, for there is no definite evidence that there must exist inborn differences between human groups. In every human group a rich variety of personality and character types will be found, and there is no reason for believing that any human group is richer than any other in this respect. (Unesco report)\*\* see last page

Furthermore, are we always certain that the values for which we are testing are the best for ~~all~~ ~~people?~~ Perhaps the things we rate important don't seem at all important to the individual or groups being tested. For example, here is what one member of a so called primitive group thought of our civilization: "Before the foreigners came we lived in peace. The forest fed us simply but sufficiently. But now comes struggle—the struggle to make money. We do not need alarm clocks, and photographs and electric lights. They spoil the sounds of the forest and the light of the moon. We do not need the telephone, we can talk to those on faraway plantations through the shell trumpet. Our young men are upset by the idea that they must do something, even if it is something useless. On the athletic field near the school a track has been made where the boys may run around in a circle. That is what your civilization is—running around in a circle." I've experienced much the same thing in some of my biology classes, when I thought it was important for the students to understand the process of photosynthesis or osmosis and there were always students who did poorly in the work because I hadn't succeeded in making them feel the importance of knowing those particular facts.

Now until we have devised tests that would meet all the conditions that I have just suggested, what can we say about the relative intelligence of various groups of mankind? Well, I think it is quite obvious that, in general, groups of people in different parts of the world have shown the power to adapt themselves quite satisfactorily to their varying environments. When they have been moved to other environments, or their environments have been changed for them by people who have brought in new ideas, there does not seem to have been any difficulty on the part of any race of mankind to adapt itself to a new environment. *Frans Boas has summed it up very well. "If we were to select the most intelligent, energetic, and emotionally stable third of mankind, they would be representative."*

If, then, physically and mentally, the different races seem to be just varieties of one big species, the question naturally arises, how has this terrible problem of race prejudice arisen? Here I would say my contribution for today ends. For the problem of race prejudice today, as I see it, has its roots in social conditions, in economic conditions and in the personal and emotional relationships between individuals and groups, and is therefore a problem primarily for the psychologist and social scientist. Frequently the minority has served as a scapegoat and for this purpose the targets of prejudice have varied through the years. To cite just one example, Tertullian wrote of Rome in the days of the early Christians as follows: "If the Tiber rose to the walls of the city, if the inundations of the river failed to give the fields enough water, if the heavens did not send rain, if an earthquake occurred, if famine threatened, if pestilence raged, the cry resounded, "Throw the Christians to the Lions". *For more detailed details of the history of prejudice through the ages see Race Science & Politics*

To do away with prejudice is not easy; it will disappear only when we have

\* see below

solved those problems in our personal and social relations that produce fears, frustrations and aggressive behavior. No one ever loved any other human being just because he was told it was his duty to do so.\* At the same time, we need a great deal of study of the whole question of race from the truly scientific view and that means the genetic point of view—a wider and much more intensive study of the whole subject of heredity. Boyd says, "Our final goal is the determination of the mechanism for the inheritance of all human physical and mental traits. It would be especially important to identify those genes, if any, which influence human behavior either directly by producing different varieties of temperament, or indirectly by affecting various glands. We already know enough to predict that genes must exist which largely control such things as musical ability, mathematical ability, and the high degree of physical coordination necessary for outstanding performance in such games as tennis and polo. This will, of course, be of great value to parents and educators. Children who are known to be born without any genes for musical ability, for example, would be spared the ordeal of years of ~~useless~~ useless music lessons." But whether conditions at present are conducive to this type of research seems very doubtful. As Boyd says, "It is important to know how to manufacture plutonium, but nobody cares how your great uncle Joe got that extra big toe".

He goes on to say that this research would be even more useful to the anthropologist and the sociologist, and to our thinking in general, for we should be able then to classify men more accurately and minutely than is possible at present. We shall be in a position to assess the relative abilities, in regard to any particular line of endeavor of different persons, or of different geographical groups, if those differences do really exist in any fields. But by that time, perhaps the whole problem of race differences will have lost its present urgency. For as he says, the human race will probably have become much more ~~like~~ uniform than it is today. His exact prophecy is as follows: "If we judge the sizes of present populations, the future world state will be largely Asiatic by descent. The man, and woman, of the future will be more or less roundheaded, about as tall as present day inhabitants of southern Europe, with dark eyes brown skin and straight, or perhaps slightly wavy, hair. The very fair skinned people may continue to inhabit the frozen North and the southern tip of South America and Antarctica." ~~And it is to be hoped that the more we know of the present to prospect, depending on how you feel about the subject, of this kind of research, the more we can bring out to the fore, of that, too.~~  
\*\*\* finished in last page.

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\* And just education will not be enough, although it will help. Knowledge of the truth does not always help change emotional attitudes that draw their real strength from the subconscious or from factors beside the real issue.

\*\* And groups have changed their behavior and customs, even though you will still hear people assert very positively that "you can't change human nature". One has only to compare the fierce Vikings of the past with the well behaved Scandinavians of the present, or the bloodthirsty Aztecs with the humble Mexican Indian of today to appreciate the deep changes that have taken place. *As compare the peaceful history of the Japanese until 1853, and then war like behavior since that time after the country was opened up to "civilization".*

But whether this prophecy comes true or not doesn't really matter. For says the UNESCO report, " All normal human beings are capable of learning to share in a common life, to understand the nature of mutual service and reciprocity, and to respect social obligations and contracts. Biological studies lend support to the ethics of universal brotherhood; for man is born with drives toward cooperation, and unless these drives are satisfied, men and nations alike fall ill. Man is born a social being who can reach his fullest development only through interaction with his fellows. The denial at any point of this social bond between man and men brings with it disintegration. In this sense, every man is his brother's keeper. (And as another writer has put it "When the bell tolls, referring to the trials of any individual, it tolls for thee" ) In this sense, every man is his brother's keeper."

I can see no better way to close than by quoting the statement of one of the greatest scientists of all time, Charles Darwin. In 1875, he wrote, "As man advances in civilization, and small tribes are united into larger communities, the simplest reason would tell each individual that he ought to extend his social instincts and sympathies to all the members of the same nation, though personally unknown to him. This point being reached, there is only an artificial barrier to prevent his sympathies from extending to the men of all nations and races".

especies mexicanas del género *Quercus*, cuya revisión, que ha ido apareciendo poco a poco (l. c) no pudo, desgraciadamente, terminar.

Otros descubrimientos del Prof. Martínez que poseen destacada importancia taxonómica comprenden el de un nuevo género, *Balnea* (Rubiaceae), que describió en Bulletin of the Torrey Botanical Club 69:438. 1942, y el de la identificación del "palo morado" (*Pelogyne mexicana* Martz.), curiosa especie de un género principalmente sudamericano, que era sólo conocido por un ejemplar de madera existente en las colecciones de la Universidad de Yale.

#### RECUERDOS DEL PROFESOR MAXIMINO MARTINEZ

por IDA K. LANGMAN

Conocí al profesor Martínez en 1948, cuando vine a México a continuar mis investigaciones en la bibliografía de la flora mexicana. Había venido con un plan de trabajo, según el cual iba a pasar la primera parte de mi estancia en la biblioteca del Instituto de Biología, que se encontraba en aquel entonces en la Casa del Lago en el Bosque de Chapultepec. Llegué con el propósito de revisar todos los libros, revistas y folletos, relacionados con la botánica que existían ahí y siguiendo el arreglo de la biblioteca, me tocó comenzar por el segundo piso. Así es que me proporcionaron una mesa de trabajo, que por fortuna estaba al lado de la mesa donde trabajaba diariamente el profesor Martínez.

Si no recuerdo mal, él llegaba por las tardes como a las tres y trabajaba hasta las siete, por lo menos. Venía siempre vestido de negro; subía la escalera con pasos lentos; me saludaba con mucha cortesía; e inmediatamente se ponía a trabajar. Nunca interrumpía, él mismo, su tarea para charlar o platicar. Dejaba su lugar solamente para buscar algún libro en los estantes. Pero cuando yo le pedía informes o aclaraciones estaba siempre dispuesto a ayudarme con la mejor voluntad. No importaba cuál fuese la pregunta: el nombre científico de alguna planta del que yo había encontrado solamente el nombre vulgar; el nombre completo de algún autor que se citaba solamente por iniciales; o datos biográficos de varios personajes que habían contribuido al progreso de la botánica en México. Y entonces fue cuando a veces extendía sus comentarios para darme una mejor idea de las distintas etapas que México había pasado en el desarrollo de sus instituciones científicas. Pero nunca se prestó a críticas personales, a chismes, o detalles similares; siempre me hablaba en términos objetivos e impersonales.

## RECUERDOS DEL DR. FAUSTINO MIRANDA

Conocí al Dr. Miranda en 1941, durante una visita a México, que hice con el objeto de coleccionar plantas en varias regiones de la República. Regresaba, de vez en cuando, a la capital para dejar una serie de duplicados de las colecciones en el Instituto de Biología, según lo exigía la ley. En una de aquellas ocasiones me presentaron al Dr. Miranda, quien había entrado, no hacía mucho, a trabajar en el Instituto. Nunca antes había oído a alguien hablar con acento puramente castellano y lo único que recuerdo de nuestra primera conversación es que tanto me llamó la atención su manera de hablar, que casi no me di cuenta del sentido de sus palabras. Poco después llegué a saber que el Dr. Miranda había salido de España como refugiado del régimen franquista y entonces sentí como si hubiera encontrado a un viejo amigo. Porque yo era una de tantas personas en el mundo que había tratado de ayudar, en lo que podía, a las fuerzas republicanas de España durante la guerra que el Dr. Miranda solía llamar "incivil". Me recordaba los mítines en Filadelfia, en los que hablaron personajes como Constancia de la Mora e Isabel de Palencia, pidiendo contribuciones de dinero, medicinas, etc., para ayudar a la República. Pero en 1941 el Dr. Miranda ya no quería pensar en esos días tristes. Había decidido dedicarse a su nueva vida y a su nueva patria, y para ésta iba a dar lo mejor de su existencia, como si fuera su tierra natal.

A fin de año regresé a Filadelfia. Pasaron siete años, durante los cuales empecé a trabajar en la bibliografía botánica de México. Desde el principio el Dr. Miranda me animaba a continuar mis investigaciones, en particular durante los largos años en que no pude conseguir ayuda para el proyecto. Yo, a mi vez, trataba de ayudarle a él, cuando necesitaba datos e informes bibliográficos de libros y revistas que no se encontraban en las bibliotecas mexicanas. Cuando vine a México en 1948, con la primera beca que recibí para seguir mis estudios bibliográficos, el Dr. Miranda ya se había destacado como uno de los botánicos más sobresalientes de la América Latina. Sus publicaciones sobre la vegetación de distintas partes de México habían llamado la atención de todos los botánicos del mundo interesados en la flora de la América tropical. En otra revista (véase *Ateneo de Chiapas*, de agosto, 1957) ya me referí a las oportunidades que, debido a la cooperación del Dr. Miranda, se me brindaron para conocer,

aun en pequeña escala, las selvas del sur de México. En esas ocasiones, durante las excursiones al campo, una podía darse cuenta de la fascinación que la selva tenía para este explorador botánico. Mucho más tarde, en 1957, cuando regresé a México con otra beca para terminar la recopilación de datos para la bibliografía, en una sesión de la Sociedad Botánica de México, pude escuchar de boca del Dr. Miranda la descripción de una expedición a la selva, que había hecho con el personal de una compañía maderera. Fue una expedición sumamente difícil, de largos caminatos y de varios días sin comida. Pero para él, como para algunos botánicos con semejante afán por conocer lo antes desconocido, ésta era una oportunidad muy valiosa para estudiar la vegetación de la región del Sureste de México, y le interesaba tanto que estaba dispuesto a aguantar todo lo incómodo, todo lo penoso.

Pero el Dr. Miranda encontraba también mucho interés en hacer excursiones por tierras templadas. En 1959, durante las sesiones del Congreso Internacional de Botánica de Montreal, su gran amigo, el Dr. Sharp, organizó una excursión al campo, no muy lejos de la ciudad. Invitó a varios botánicos de México, incluso a la gentil y amable mujer que, unos años después, llegó a ser la esposa del Dr. Miranda. En esa excursión pudimos darnos cuenta de sus grandes conocimientos y de su interés por la vegetación canadiense. Después del Congreso, cuando con sus compañeros pasó por Filadelfia, hicimos una excursión a los famosos "Pine Barrens" de Nueva Jersey, acompañados por el conocido botánico de la Universidad de Pensilvania, Dr. Edgar Wherry.

Pasaron unos años y el Dr. Miranda llegó a los Estados Unidos con una beca de la Fundación Guggenheim. Vino por una semana a Filadelfia para trabajar en el herbario de la Academia de Ciencias Naturales. En aquella ocasión hizo muchas amistades. Realizó una excursión a las Pocono Mountains con el Club Botánico de Filadelfia; dio dos conferencias, una en el Club Botánico mismo y otra ante la Asociación Panamericana de Filadelfia. A fin de año regresó a México y nosotros no volvimos a verlo. Solamente quedaron recuerdos; y entre los recuerdos está su correspondencia. Complementaré esta aportación con algunas citas escogidas de sus cartas, la mayoría de ellas escritas en Chiapas, porque tienen mayor interés botánico (Su estancia en Chiapas se debió a una invitación que había recibido del Gobernador del Estado para formar en Tuxtla Gutiérrez el

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by Herb. Lemana, Recuerdos del Dr. Faustino Miranda  
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(From linguistics to zoology may seem a far cry but here is an example in which a Mexican-Salvadoran scholar uses his knowledge of linguistics to do a detailed study of the raccoon.)

METAPHOR OF THE HAND: THE RACCOON

By Carlo Antonio Castro. Translated &  
abridged by Ida K. Langman. \*

Indo-European linguistics provide us with an example of an animal whose name was given to it because of its well-developed skill in "handling" objects. The animal in question is the elephant, which in the Hindustani language is called hathi. The word "hand" in that language is hath and it was the amazingly prehensile trunk of this proboscidian, which gave the animal its name. This Indo-European root ha- is conserved in the Germanic tongues; thus in English, hand; German, Hand; and Swedish, hand.

In aboriginal America, likewise, the "hand" of a certain animal aroused the wonder of various linguistic groups and resulted in the many names by which it was known. The animal is the raccoon, mapache in Mexico; Procyon lotor to the zoologist. It is the small carnivore, so given to "washing" its food before eating; which wears a natural mask; and whose magnificent banded tail was, in later times, to adorn proudly the caps of the early explorers of North America. \*\*

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\* Metáfora de la Mano: El Mapache, in La Palabra y el Hombre, #22, april-june, 1962. Universidad Veracruzana, México, pp. 207-211. Simultaneously published in Cultura, #24, april-june, 1962. Ministerio de Educación de El Salvador, San Salvador, pp. 59-64.

\*\* Actually hunting the raccoon, in the early days of the United States, was by no means a minor source of income. The skins of the raccoon came to be used as money. In Tennessee, public employees were paid with them. The governor's secretary, for example, earned 500 raccoon skins a month; a member of

The forepaws of the raccoon consist of long thin fingers which permit it to "handle" or hold with two fingers and both hands the little creatures (fish, insects, frogs, birds) and eggs on which it feeds. Since the raccoon inhabits the shores of rivers, lakes and ponds it must hunt for its food under the stones and small slabs where the crayfish and fresh water shrimp generally hide. From this constant contact with water stems the so called habit of "washing" its food.

So it will not surprise us to learn that the ancient <sup>M</sup>exicans had derived the raccoon's name from the verb mapachoa which means to "grasp" or "hold with the hand". The word is composed of 2 morphemes: ma- from maiti "hand" and pachoa, to "squeeze." Thus the name mapachtli came to be applied to the lovable "egg stealer", "he who takes or grips with the hands."

In a manner similar to that of the ancient Mexicans (the Aztecs or Nahuas), the Lenca of Central America derived their name for the raccoon from its habits and manual characters. In a Lenca vocabulary found in a work by Membreño (Hondureñismos, 1897), we see in the dialect spoken in Similaton that the same word guala means both hand and raccoon. And it may be of interest to call attention to the fact that "guala" also means leaf. (To look for a semantic correspondence in English, we need only recall that we often speak of the "palms" of the hands.) In another vocabulary (Hernández and Pinart), included in the Petite Bibliotheque Americaine, Vol. 8, 1897, we find that in a dialect used in Guajiquiro, the word guala means both hand and leaf, but raccoon becomes guayan, which points to the same root.

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the Assembly collected 90. According to Barker, in Familiar Animals of America, 1956, "so great was the demand for the pelts...that late in the 17th century, Colonists passed laws prohibiting taxing or exporting pelts so that there would be sufficient skins for home consumption." In Mexico, this wealth was practically ignored. In some parts of the country, the raccoon is eaten as "wild meat", but use of its skin is practically nil.

Among the Coras, of Nayarit, in northwestern Mexico, the raccoon is mujta and hand is mujca'a. Among the Papagos, the name for raccoon is wawuk; the first syllable meaning "water", the second "dog". \*\*\*

Let us now take a look at South America. The fox in Guarani territories is known as aguará. This term was then used as the root for names of animals that seemed to be similar to the fox: for example, aguará guasú, the big aguará, or wolf; and for raccoon, aguará popé, the aguará with flattened hand, from po "hand", and pe "flattened."

Even the English word "raccoon" comes from a term arakunem, used by the Algonquins, which means literally "he who scratches with his hands." So the Algonquins like the Aztecs, and Incas, based the name of the raccoon on his remarkable front feet. In fact, the early contacts between the Algonquins and the early English explorers and settlers enriched the language of the newcomers with a whole series of useful words for naming the animals until then unknown to the Europeans. In the Anglo-American vocabulary of today we now have such other examples as "skunk" and "opossum" to cite just two.

Before leaving the animal that washes, let us recall that in modern German the name of the raccoon is waschbaer; in Spanish, oso lavandero, "the bear who washes". And of course, in the scientific names of the raccoon, Procyon lotor, we have in the specific name "lotor" an allusion to the "washer."

But it was not only the "hands" which helped to charac-

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\*\*\* Space does not here permit an analysis of the similarities in the word for dog, which the author traces back through widely dispersed Indo-European languages. Such similarities reinforce other evidence of the long association of dogs with early man.

terize the raccoon in his names. Another of the attributes of the washer, but apparently limited to Middle America, was his old age or antiquity. In Sahagun's History of the Things of New Spain, we find this quotation: "There is another little animal called mapachtli, which also bears the name ilamaton, meaning "little old woman." It has hands and feet like a person; it destroys the corn plants when they are green, eating them; it climbs trees and eats their fruit; it eats the honey of the maguey (or century plant) and lives in a cave. It makes its home in the mountains and along the rivers among the reeds and cat tails. In the winter when there is no fruit nor corn, it eats mice and <sup>other</sup> vermin. Sometimes it walks on two feet like a person; sometimes on four like an animal. It steals whatever it finds and because it has hands like a person it is called mapachtli. It is short and plump, with long hair, and a long and hairy tail like a fox. The head is large, the ears small, the muzzle long, thin and black and the body dark and hairy." This is an excellent description, but note the reference to the little old woman. It is most provocative because it suggests a semantic connection between the Nahuatl speaking Aztecs of central Mexico, and the Mayas of farther South. For in the highlands of Chiapas, among the Tzeltals and Tzotziles, the name for raccoon is me'el. This word means also "the old woman" and is derived from me', mother, modified by the morpheme -el, indicating the absolute form. So the little old one is the mother of all, "she who is old", among the Mexicans and the Tzeltal-Tzotzil speakers.

From linguistics to zoology may seem a far cry, but here is an example in which a Mexican-Salvadoran scholar uses his knowledge of linguistics to do a detailed study of the raccoon.

## Metaphor of the Hand: The Raccoon

By Carlo Antonio Castro. Translated and abridged by Ida K. Langman.

INDO-EUROPEAN linguistics provide us with an example of an animal whose name was given to it because of its well-developed skill in "handling" objects. The animal in question is the elephant, which in the Hindustani language is called *hathi*. The word "hand" in that language is *hath*, and it was the amazingly prehensile trunk of this proboscidian which gave the animal its name. This Indo-European root *ha-* is conserved in the Germanic tongues; thus in English, hand; German, hand; and Swedish, hand.

In aboriginal America, likewise, the "hand" of a certain animal aroused the wonder of various linguistic groups and resulted in the many names by which it was known. The animal is the raccoon, *mapache* in Mexico. *Procyon lotor* to the zoologist. It is the small carnivore, so given to "washing" its food before eating,\* which wears a natural mask, and whose magnificent banded tail was, in later times, to adorn proudly

the caps of the early explorers of North America.

Actually hunting the raccoon, in the early days of the United States, was by no means a minor source of income. The skins of the raccoon came to be used as money. In Tennessee, public employees were paid with them. The governor's secretary, for example, earned 500 raccoon skins a month; a member of the Assembly collected 90. According to Barker, in *Familiar Animals of America*, 1956, "so great was the demand for the pelts . . . that late in the 17th century, colonists passed laws prohibiting taxing or exporting pelts so that there would be sufficient skins for home consumption." In Mexico this wealth was practically ignored. In some parts of the country the raccoon is eaten as "wild meat", but use of its skin is practically nil.

The forepaws of the raccoon consist of long

A raccoon illustration from *Obras Completas* by Francisco Hernandez, published by the Universidad Nacional Autonoma de Mexico, Mexico, D.F. 1959-60. Francisco Hernandez lived from 1514 to 1578. The photo is by our photographer, Herbert C. Ulrich. The *Obras* is in three volumes, with the raccoon in Vol. III, page 296.



La Palabra  
<sup>y el</sup>  
Hombre

22

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22

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## With the Editor

An editor has the responsibility of checking articles for factual inaccuracies as well as for grammatical errors. At the Academy I am fortunate to have the assistance of specialists in all the branches of the natural sciences and the use of an excellent research library. However, there are still many gaps in the natural sciences—many areas which are not fully explored. Also, the literature on a region is often available only in the language of its people, and most Americans' grasp of foreign languages is weak.

There is no modern book in English on the tropical birds of continental South America. In 1964 Mr. Rodolphe Meyer de Schauensee, Curator and Chairman of Ornithology and Vice President of the Academy's Board of Trustees, has helped to fill the gap with *The Birds of Colombia and adjacent areas of South and Central America*. The book represents the work of more than a quarter of a century, during which time an outstanding collection of Colombian specimens was assembled.

Three other Academy members shared in its production: Dr. Earl L. Poole, Honorary Research Associate in Ornithology, who contributed 20 paintings; Dr. H. Radcliffe Roberts, Director of the Academy, who assisted in the planning of the volume; and Mr. Philip A. Livingston, President of the Livingston Publishing Company, which published the book this spring. Dr. George Miksch Sutton was the artist for all but two of the lifelike drawings which illustrate each family of birds.

In the preface Mr. de Schauensee gives credit to Mr. Eugene M. Eisenmann of the American Museum of Natural History "through whose pioneering efforts on the standardization of English names for Neotropical birds uniformity is gradually being attained." The common names used in *The Birds of Colombia* are regarded as applicable not only in Colombia but everywhere.

Mr. de Schauensee also acknowledged the assistance of Mr. James Bond, Curator of Ornithology at the Academy; Dr. Ernst Mayr, of Harvard University; Mr. Edwin O.

# FRONTIERS

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## Cover drawing by Harry Seehring

THE ACADEMY OF NATURAL SCIENCES  
OF PHILADELPHIA: GEORGE R. CLARK,  
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30 cents each.

Willis of Berkeley, Calif.; and Miss  
Maude M. de Schauensee. And he  
acknowledged the permission granted  
by Dr. Sutton and his publisher,  
John Wiley & Sons, Inc., to re-  
produce a number of drawings from  
*Fundamentals of Ornithology*.

According to the author, Colombia  
probably has more different  
kinds of birds than any other coun-  
try in the world because of its di-  
verse physical features—an Atlantic  
and Pacific coast line, high moun-  
tain ranges, tropical jungle, flat  
plains, primeval forest, and a dry  
area which becomes a sandy desert.  
Fifteen hundred and fifty-six species  
live there. From the Rio Grande to  
the Arctic Circle only 691 species  
are found! Bird watchers and pro-

fessional ornithologists will welcome  
this guide which covers all of the  
species of Colombian birds and  
many subspecies, 56% of the spe-  
cies of birds of South America and  
80% of the species of birds in  
Central America from Nicaragua  
southward.

A biography of one author was  
omitted. Gwen M. Schultz, author  
of "Was the Ice Age Really So  
Bad?" on page 149, is Assistant  
Professor of Geography at the Uni-  
versity of Wisconsin. She has writ-  
ten articles for both professional  
journals and national magazines,  
and in 1962 Holt, Rinehart and  
Winston published her *Glaciers and  
the Ice Age*.

## NOTA BIBLIOGRAFICA

Por Ida K. Langman  
de la S. B. M.

Desde hace muchos años había pensado en la importancia de visitar la biblioteca de la Universidad de California, en Berkeley. Supe de las valiosas colecciones existentes en la Biblioteca Bancroft de la Universidad, colecciones que se mencionaban como especialmente ricas en obras mexicanas, de las cuales buscaba algunas para incluir en la Bibliografía Botánica de México. Por fin, en el mes de septiembre, pude realizar este deseo. Pasé varios días en Berkeley y, en efecto, encontré en dicha biblioteca varios estudios de gran interés para mi trabajo. Entre ellos se encuentran los que siguen:

Plinio, Cayo. *Historia Natural*. Madrid, 1624, 2 vols. Traducido por el licenciado Gerónimo de Huerta (Gómez de Huerta) y ampliada por él mismo con excolios y anotaciones.

En el Libro 6 del primer tomo, p. 233-236, hay una sección que se titula *América*, y las anotaciones en esta sección incluyen referencias a México y plantas mexicanas. Según he podido saber, la Biblioteca Bancroft es la única en los EE. UU. que posee este valioso libro.

Blázquez Pedro. *Noches del Verano o Estudios Familiares sobre Historia Natural*. Puebla, 1873. 165 p.

Este trabajo, mencionado por León en su Biblioteca Botánico Mexicana, tampoco he podido encontrarlo en ninguna otra biblioteca. El libro debe haber servido como obra de texto; está escrito en forma de conversación entre un padre y sus hijos. Aunque se titula "Sobre Historia Natural", trata solamente de la Botánica, dividida en anatomía, morfología, fisiología, taxonomía y fitogeografía. Todos los ejemplares de plantas citados en el libro son de la flora mexicana.

Gutiérrez, Israel J. *Breves Apuntes sobre Cultivo de la Caña*. México, 1885, 111 p. 1 pl. Tesis (Esc. Nac. Agr. Vet. Serie Agronómica No. 15)

Esta tesis no se encuentra en el archivo de la Escuela de Agricultura en Chapingo; parece que la copia en la Biblioteca Bancroft es la única que existe.

Además de estas obras tan interesantes, me encontré con algunas otras que también me llamaron la atención. Se trata de varios libros que se refieren al Estado de Tabasco. Cuando pregunté cómo la biblioteca había adquirido estas obras, mis sospechas se confirmaron. Eran parte de la biblioteca particular del Lic. Francisco J. Santamaría que éste había vendido, hace ya años, a la biblioteca. Entre los trabajos que me in-

Enero de 1958

## REFERENCIAS

- 1.—AUBREVILLE, A.—Climats forets et desertification de l'Afrique tropicale Société d'editions Géographiques, Maritimes et Coloniales. 1949.
- 2.—CONTRERAS ARIAS, A.—Mapa de las provincias climatológicas de la República Mexicana. Instituto Geográfico. Julio de 1942.
- 3.—KOPPEN, W.—Climatología. Fondo de Cultura Económica. México.
- 4.—MIRANDA, F.—Rasgos de la vegetación en la cuenca del Río de las Balsas. Rev. Soc. Mex. Hist. Nat. 8, 1947; 95-114.
- 5.—MIRANDA, F.—Datos sobre la vegetación en la cuenca alta del Papaloapan. An. Inst. Biol. Méx. 19, 1948. 333-364.
- 6.—MIRANDA, F.—La Vegetación de Chiapas. 2 partes. Ediciones del Gobierno del Estado, 1952-53.
- 7.—MIRANDA, F.—Formas de vida vegetales y el problema de la delimitación de las zonas áridas de México. Mesas redondas, problemas de las zonas áridas de México. Inst. Mex. Rec. Nat. Ren. 1955: 85-109.
- 8.—MIRANDA, F.—Vegetación de Yucatán. Estudio sobre la península de Yucatán, publicado por el Inst. Mex. Rec. Nat. Ren. (En preparación).
- 9.—SWAIN.—Climatic index E.H.P. Forestry Commission N.S.W. Australia, 1938.
- 10.—THORNTON, C. W.—An approach towards a rational classification of climate. Geographical Review. XXXVIII, 1948. No. 1.

Datos archivados por la Dirección de Geografía y Meteorología, Avenida del Observatorio, México, D. F.

Notas Adicionales para una Bibliografía sobre la Vegetación de Chiapas.

Ida K. Langman

Dedico esta aportación a mi buen amigo, el Dr. Faustino Miranda, que tanto ha contribuido al conocimiento botánico del estado de Chiapas. En su obra maestra, "La Vegetación de Chiapas", se encuentra una Nota Bibliográfica, con 37 títulos de trabajos, que son de la mayor importancia para los que se interesen por la flora del estado. La lista que sigue es una adición, todavía incompleta, a la enumeración preparada por el Dr. Miranda. Por lo tanto, se omiten aquí trabajos citados por el Dr. Miranda, que se refieren en particular a Chiapas (e.g. los trabajos de Becerra, Lundell, Matuda, Miranda, Miranda y Sharp, Nagel, y Waibel.)

He dividido la lista que sigue en dos partes. La primera trata de obras misceláneas, en las cuales las referencias botánicas son de menor importancia. En la segunda parte, que empieza con el número 120, se encuentran los trabajos botánicos. Hay de notar que, en esta sección, podrían incluirse también algunos trabajos de la primera parte, e.g. las obras de Carlson, Cutak, Gadow, Heller, McDougall, y Miranda.

Explicación de Abreviaciones Empleadas.

- Am. Ind. América Indígena.  
Am. Mid. Nat. American Midland Naturalist.  
Am. Orch. Soc. Bull. American Orchid Society Bulletin.  
An. Inst. Biol. Anales del Instituto de Biología, México.  
Bol. Agr. Min. Boletín de Agricultura, Minas e Industrias del Ministerio de Fomento.  
Bol. Arch. Boletín del Archivo General del Estado de Chiapas.  
Bol. Cam. Ch. Boletín de la Cámara de Comercio, Agricultura e Industria de Chiapas.  
Bol. Ind. Boletín Indigenista.  
Bol. Min. Fom. Boletín del Ministerio de Fomento de la República Mexicana.

- Bol. Soc. Agr. Boletín de la Sociedad Agrícola Mexicana.
- Bol. Soc. Bot. Boletín de la Sociedad Botánica de México.
- Bol. Soc. Geog. Boletín de la Sociedad Mexicana de Geografía y Estadística.
- Brom. Soc. Bull. Bromeliad Society Bulletin.
- Bull. Soc. Geog. Bulletin de la Société de Géographie, Paris.
- C.S.J. Cactus and Succulent Journal.
- Col. Doc. Ined. Colección de Documentos inéditos para la Historia de España.
- Con. Ud. Mex. Conozca Usted a México.
- Cuad. Chiap. Cuadernos de Chiapas.
- D. Of. Diario Oficial.
- Esc. Nac. MVZ Escuela Nacional de Medicina Veterinaria y Zootecnia.
- Esc. Nac. Agr. Escuela Nacional de Agricultura.
- Fac. Med. Facultad de Medicina.
- Fac. F.L. Facultad de Filosofía y Letras.
- J.L.S. Journal of the Linnean Society.
- Mem. Cong. XIX Cient. Memoria del Congreso Científico Mexicano.
- Mem. Soc. Cient. Ant. Alz. Memorias de la Sociedad Científica Antonio Alzate.
- Mem. Sria. Est. Memorias de la Secretaría del Estado, ~~XIXXIXXX~~ y del Despacho de Fomento, Colonización, Industria y Comercio de la República Mexicana.
- Mem. Sria. Fom. Memorias de la Secretaría de Agricultura y Fomento.
- Mex. Am. Com. Mexican American Commerce.
- n.c. nombres científicos.
- n.v. nombres vulgares.
- Rev. Agr. Revista Agrícola.
- Rev. Aten. Revista Ateneo, Chiapas.
- Rev. Lat. Revista Latine-americana.
- ~~XXXXXXXXXX~~

Notas Adicionales <sup>para</sup> a una Bibliografía sobre la Vegetación de Chiapas

Dedico esta aportación a mi buen amigo, el Dr. Faustino Miranda, <sup>que tanto</sup> quien ha contribuido tanto <sup>al</sup> por el conocimiento botánico del estado de Chiapas. En su obra maestra, "La Vegetación de Chiapas", se encuentra una Nota Bibliográfica, que ~~consta de~~ <sup>con</sup> 37 títulos de trabajos, que son de <sup>la</sup> mayor importancia para los que se interesen en la flora del estado. La lista que sigue aquí es una ~~adición~~ <sup>adición</sup> ~~incompleta~~ <sup>aunque</sup> ~~que sea~~, a la enumeración preparada por el Dr. Miranda. Por lo tanto, se omiten aquí trabajos citados por el Dr. Miranda, que se refieren en particular a Chiapas. (Véase, ~~por ejemplo~~, en la citada Bibliografía, los trabajos de Becerra, Lundell, Matuda, Miranda, Miranda y Sharp, Nagel y Weibel.)

*He dividido esta lista en partes y he unido de otros libros de campo. En la sección que sigue en número 1, se encuentran los libros de viaje citados por Calvo. En esta sección se agregan los libros de viaje citados por Calvo.*

Obras de Viaje y Descripción General

ANDRADE, Vicente de Paula.

1. Mi Excursión a Chiapas. Guadalupe Hidalgo, D.F. 1914, 114 p.  
Bibl. Leída <sup>en</sup> la Sociedad Mexicana de Geografía y Estadística

Referencias a plantas observadas en el viaje.

APPELIUS, Mario

2. El Águila de Chamultepec. Barcelona, 1931, 430 p. Traducido por Gonzalo Calvo.

"México bajo los aspectos geográficos, histórico, étnico, político, natural, social y económico". Con una descripción interesante de las regiones selváticas de Chiapas.

AREVALO VÁZQUEZ, Arturo

3. Monografía de San Fernando. Tuxtla Gutiérrez, 1951, 24 p.

Con una sección breve sobre las flores; sólo nombres vulgares.

BALLINAS, Juan.

4. El Desierto de los Lacandones - Memorias 1876-1877.

Tuxtla Gutiérrez, 1951, 77 p. ilus. 2 mapas. Introducción y notas por Frans Blom; ilustraciones por Gertrude Ruby.

Pocas referencias a las plantas.

BARRERA, M. reiano.

3. BARRERA, Marciano.

Apuntes sobre los Ríos de Usumacinta. Mérida, 1865, 136 p.

Con algunas referencias a las plantas y su importancia económica; sólo nombres vulgares.

6. BASAURI, Carlos.

Tojolobales, Tzeltales y Mayas. México, 1931, 163 p. ilus.

Con una lista, nombres vulgares, de plantas medicinales.

7. BLAS MARTINEZ, Mariano.

Geografía de Chiapas. Tuxtla Gutiérrez, 1910, 71 p.  
otra edición, 1921, 95p. (también 1938?)

Libro de texto, con lista de productos vegetales.

8. BLOM, Frans.

I de Store Skove - Breve fra Mexiko. København, 1923,  
230 p. ilus, mapas.

9.

(Pea Jagy og Sejlads i Central America.)

Obra no vista; mencionada en la bibliografía de Frans Blom  
en la Revista Ateneo de Chiapas, 6:189-93, mayo 1956.

10.

Vida precortesiana del Indio chiapaneco de hoy.  
Estudios Antropológicos Publicados en Homenaje al Dr. Manuel  
Gamio, México, 1956, 277-285, ilus.

Con referencias a la importancia de las cebas en <sup>las</sup> ~~en~~ *vidas antiguas*.

11. BLOM, Frans y DUBY, Gertrude.

En la Selva Chiapaneca. En Mañana, 5, 12, 19 de  
marzo, 1949, p. 35-41, 36-43, 28-35. ilus.

*Descripción de una especie.*

12.

Entre los Indios Lacandones de México. En América  
Indígena, 9:155-164, 1 pl. 1949.

Con referencias a las plantas empleadas por el pueblo.

13. BLOM, Frans y LA FARGE, Oliver.

Tribes and Temples. New Orleans, 1926

2 vols. ilus, y mapas.

Informe de un viaje por Veracruz, Tabasco y Chiapas, con  
referencias a las plantas, y vocabulario de lenguas indígenas,  
principalmente de Chiapas.

ns.

14. BRINE, Lindsey.

Travels amongst American Indians London, 1894, 429 p.  
ilus. 2 mapas.

Viajes de un arqueólogo; con un capítulo muy interesante sobre  
Chiapas.

15. BYAM, W.W.

A Sketch of the State of Chiapas. Los Angeles, 1897,  
77 p. 68 ilus. 2 mapas.

Con referencias a productos vegetales.

16. CÁCERES LOPEZ, Carlos.

Chiapas. Mexico, 1946, 168 p. ilus.

u. Capítulo sobre la flora trae una lista de plantas clasifi-  
cadas, según su valor económico.

17. BASTELLANOS R., Oscar.

Principales Aspectos que Ofrece el Problema Forestal  
en Chiapas. México, 1944, 76 p (mecanogr.) ilus.

Con descripción general de la vegetación.

CASTELLANOS R., Oscar.

19. 18.<sup>22</sup>. Principales aspectos que ofrece el problema forestal en Chiapas. México, 1944, 76 h.(mecanógr.) ilus.

Con una descripción general de la vegetación.

CARLSON, Margery y STALEY, Kate.

18. 17. En las selvas de Chiapas. (Américas, edición española, 5(5):20-23, 39 ilus. mayo 1953.)

Descripción de un viaje botánico; incluye una visita a los Lagos de Montebello.

CARRASCOSA, Gabriel.

18. 18. Noticias estadísticas relativas al estado de Chiapas. México, 1882, 27 h. Ms. en la Soc. Mex. Geog. Est.

Con una lista de las plantas mas importantes.

CARRASCOSA, Manuel.

20. 19. Apuntes estadísticos del estado de Chiapas. ( Bol. Soc. Agr. 7:662,692, 694, 1883-1884. )Publicada también como obra aparte, México, 1883, 15 p.

21. 20. La Flora de Chiapas. (Chiapas y México 1(1):23-24, 1908.)

Plantas citadas sólo por ~~nombres~~ n.v.)

22. 21 Memoria de los productos ó frutos de Chiapas. (Bol. Soc. Agr. Mex. 7:643-645, 1883-1884. )

Con una lista de plantas clasificadas según uso, sólo n.v.

CORREA SUAREZ, Jose Fernando.

23. Informe Médico-social de la villa de Acala, Chiapas. México, 1951, 54 p. ilus. mapas. Tesis Fac Med. UNAM.

Incluye una lista de maderas preciosas.

CORROY, M. fils.

24. Extrait d'une lettre. (Bull. Soc. Géog. 18:54-57, 1832.)

Relación de un viaje a Palenque con algunas referencias a las plantas.

70 CHACONAX R., Alberto.

Regiones Naturales de Chiapas. En Cuadernos de Chiapas, No. 7. Tuxtla Gutiérrez, 1946, 29 p.

Descripción fisiográfica, con algunas referencias a las plantas.

79. CHARNAY, Desire

A Travers les Forêts Vierges. Paris, 1890, 391 p.

Informe sobre sus viajes en la selva lacandona; numerosas referencias a la vegetación.

20.2

85 469  
Les Anciennes Villes du Nouveau Monde Paris, 1862, 223 p.  
214 ilus., 19 mapas.

En dos partes: la primera, p. 1-104, Antiquites Americaines, por Edene Emmanuel Viollet-le-Duc; la segunda p. 107-540, por Charnay, titulada Le Mexique - Souvenirs et Impressions de Voyage. La sección de ésta que se refiere a Chiapas ha sido traducido por Andrés Fabrega Bocca, en la Revista Ateneo de Chiapas, 4:97-116; 5:54-65; 6:123-143; Apr/Jun. 1952, Ene/Abr. 1954 y mayo, 1956, con ilus. por Héctor Ventura Cruz y una nota de introducción por E(duardo) J. A(lbores).

23. 7

Mes Découvertes au Mexique et dans l'Amérique du Centre. En Le Tour du Monde 42:273-336, ilus. mapas, 1881.

Incluye <sup>una</sup> relación de un viaje a Palenque.

22. 74

Voyage au Yucatan et au pays des Lacandons. 1882.  
En Le Tour du Monde, 47:1-96, 48:33-48, ilus. mapas, 1884.

Con algunas referencias dispersas a las plantas. ~~xxx~~

23. 35

Cités et Ruines Américaines Paris, 1863, 543 p.

Viajes por los estados de México, Oaxaca, Campeche, Yucatan y Chiapas.

24. CARLSON, Margery y

STALEY, Kate En las selvas de Chiapas. En Americas, edición español, 5(5):20-23, 39 ilus, mayo, 1953.

17  
Descripción de un viaje botánico; incluye una visita a los Lagos de Montebello.

25. CARRASCOSA, Gabriel.

Noticias Estadísticas relativas al estado de Chiapas. México, 1882, 27 p. Ms. en la Soc. Mex. Geog. y Est.

19  
Con una lista de las plantas mas importantes,

26. CARRASCOSA, Manuel.

Asunt<sup>o</sup>s estadísticos del estado de Chiapas. En Bol. Soc. Agr. Mex. 7:662,692,694, 1883-1884. Publicado tambien como obra aparte, Mexico, 1883, 15 p.

27.

La flora de Chiapas. En Chiapas y Mexico, 1(1):23-24, 1908.  
plantas citadas solo por nombres vulgares.

28. ✓

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42. FLORES, Carlos Z. Departamento de Las Casas del estado de Chiapas. San Cristóbal, 1909, 52 p.  
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78. <sup>h</sup> OLVERA, Jorge. Las lacas de Chiapas. Esta Semana, 20:33-35, 32-35, Julio 10, 17, 1954. En inglés y español.  
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86. ROBLES, Clemente F. Chiapas. "Rev. Latino-americana 4(48):1529-1531, 1887.  
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93. RUSSAN, Ashmore. Mighty Hunters. New York, 1909, 286 p. 12 ils.  
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96. SALAZAR, Manuel (Sáazar <sup>Vordove?</sup>) Flora y Fauna de Chiapas.  
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97. SAN JUAN, Alonso de y CIBBAD REAL, Antonio de.

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102. SOUSTELLE, Jacques. La Culture Materielle des Indiens Lacandons  
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103. TERMEK, Franz Die gegenwaertigen wirtschaftlichen und sozialen zustaende  
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104. VISTA MONTIEL, Virico. Estudio medico higienico sanitario y socioecnico del

104. ~~104~~ TISTA MONTIEL, Viriaco. Estudio médico higiénico sanitario y zootécnico del municipio de Tillaflorés, Chiapas. Bol. Soc. Geog. Est. 42:331-335, 1930.  
 Con una sección ~~certa~~ <sup>breve</sup> sobre la flora indígena y sobre plantas cultivadas.
105. ~~105~~ TOZZER, Alfred Marston. A comparative study of the Mayas and the Lacandonés. New York, 1907, 195 p. 29 pl. 49 ils.  
 Con una lista ~~certa~~ <sup>breve</sup> de plantas útiles, nombres vulgares y científicos.
106. ~~106~~ ~~XXX~~ TRAVEN, Bruno. Land des Früehlings. Berlin, (1928), 429 p. maps, 64 páginas de ilustraciones.  
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109. ~~109~~ VALLE, Rafael Heliodoro Las frutas raras de México. Mapa 9(101):10-11, ils. agosto 1942.  
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110. ~~110~~ ~~XXXX~~ VARGAS, Elvira. Por las rutas del sureste México, sin fecha, 323 p. mas 3 páginas de vocabulario.  
 Viaje por Tabasco, Yucatán, Campeche y Chiapas; unas cuantas referencias a las plantas.
111. ~~111~~ VELASCO, Alfonso Luis. La riqueza agrícola de Chiapas. Rev. Agr. 4:197-198, 1888-1889.  
 Con una lista también, de plantas silvestres, nombres vulgares.
112. ~~112~~ Geografía y Estadística de la República Mexicana México, 1898, 164 p. Vol. 20 de la serie es Chiapas.  
 Con listas de plantas, clasificadas según uso económico, y según distritos dentro del estado; solo nombres vulgares.  
 (Hay muchas otras geografías de la república en que se trata de Chiapas; la obra de Velasco es una de las mejores.)  
<sup>era, en su tiempo.</sup>
113. ~~113~~ VIVO, Jorge Abilio. Geografía económica y demográfica de Chiapas. Mexico, 1952, 239 p. (mecanogr) tesis Fac. Fil. Letras. UNAM  
 F.L.  
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114. WOOLRICH BEJARANO, Manuel A. Primeras Flores "spanoles llegadas a Chiapas.  
Chiapas 1(1):53, ils. 1949.

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XXX. OBRAS ANONIMAS

116. Chiapas. Mexico, 1895, 31 p. mapa. Publicado por la  
Oficina de Información de Chiapas. Traducido al inglés  
por J. Yorba y publicado bajo el título The State of Chiapas.  
Mexico, 1895, 28 p. mapa.

Con referencias breves sobre los productos vegetales de  
los diferentes distritos.

116. Datos estadísticos del estado de Chiapas.  
Tuxtla Gutiérrez, 1898, 16 p.

Recopilados en el año de 1896; con una lista de plantas  
cultivadas.

117. Documentos estadísticos del territorio de Soconusco.  
San Cristobal, 1856, 11 p. mapa.

Con una lista de plantas cultivadas.

118. Geografía e historia del estado de Chiapas.  
Tlalpam, 1931, 27 p.

Con una lista de productos.

119. Jardin Botánico Tropical. Chiapas. 4(1):10-12, Apr. 1951.

Relación en forma de fotografías con texto.

120. Noticias geográficas y estadísticas sobre Chiapas y  
Soconusco Diario oficial 8(335):2-3, 1<sup>o</sup> ec 1874.

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1845-1848 de Carl S. Haller, 1853.

121. Noticias históricas y estadísticas de Chiapas. Ms en la  
Soc. Mex. Geog. 2<sup>da</sup> st. 1 pag. 16 oct. 1814.

Parte 2 de la colección es una Lista de las clases de árboles  
en la costa del sur en el partido de Actoyaque.

Botanica de carantenas  
Información y Filogeografía  
Obras Fitogeográficas y Taxonómicas.

[Para evitar mayor extensión a este trabajo, se han omitido] artículos

[de naturaleza taxonómica] en que se describen adiciones a la flora de Chiapas, sean  
estas adiciones de carácter específico o genérico. Tampoco están incluidos trabajos

agropecuarias sobre plantas económicas de Chiapas. Por otro lado, obras monográficas de un  
grupo de plantas, limitadas al estado de Chiapas, no están incluidas. Faltan también,

unos 20 vocabularios de lenguas indígenas de Chiapas, en los cuales se encuentran

122. ALVAREZ DEL VILLAR, Jose. Esquema geobotánico de Chiapas.  
Bol. Soc. Mex. Geog. Est. 73:96-124, mayo, 1952.

Enumera las zonas y cita las plantas dominantes en cada región.

123. AVILA HERNÁNDEZ, Mario. Riqueza forestal del estado de Chiapas.  
Villahermosa, 1946, 99 p. (mecanogr.) Tesis Esc. Nac. Agr.

Con una lista de los pastos principales, nombres vulgares y científicos; lista de maderas preciosas, semi-preciosas y comunes, nombres vulgares y científicos.

124. BALME, Juan. Algunas notas sobre Orquídeas de Chiapas.  
Chiapas 1(1) 32-33, dic 1952.

Con una lista alfabética, <sup>con</sup> nombres científicos, de las especies principales; algunas <sup>ilustradas</sup> con nombres vulgares también.

125. GADOW, Hans. Altitude and Distribution of plants in southern Mexico  
Journ. Linn. Soc. 38:429-440, 2 diag. 1907-1909.

Considera el origen de la vegetación en las diferentes regiones, <sup>separados</sup> con clasificación en grupos originarios ~~en el~~ norte de México, al sur de México, <sup>de</sup> que son endémicos.

126. HERNÁNDEZ XOCLOCOTZI, Efraim. Los frijoles y otras leguminosas cultivadas en Chiapas. Bol. Soc. Bot. Mex. 5:4-6, mayo 1947.

Estudio basado en 82 muestras de semillas; discusión preliminar sobre los especies encontradas en 7 generos.

127. CUEVAS RIOS, Atanasio. Tipos de maíz en Chiapas. Chapingo, 1947, 34 p. (mecanogr.) ils. Tesis Esc. Nac. Agr.

128. GUTIÉRREZ, José del Carmen. Orquídeas chiapanecas. Chiapas Nuevo, Tapachula, 15 julio, 1937.

129. LUGO ARELLANO, Armando. La Madera aserrada de la costa de Chiapas. Chapingo, 1944, 50 p. Tesis Esc. Nac. Agr.

Con una lista de las plantas de la región, nombres vulgares, y científicos, y las familias.

130. MATUDA, Lizi. Las Bromeliaceas de Chiapas. An. Inst. Biol. 23:85-153, ils. 1952.

Con una clave <sup>para</sup> a los generos y especies y descripciones de algunas entidades nuevas.

131. Burmniaceas de Chiapas. Bol. Soc. Bot. Mex. 15:19-23, 19-23, ils. junio 1953.

con una clave para los generos Burmannia y Gymnosiphon.

132. A contribution to our knowledge of the wild flora of Mt. Cvando, Chiapas. Mid Nat. 43:1950-223, 1950.

Lista anotada de 791 especies y variedades en 476 generos y 122 familias; en orden sistematico por familia, y alfabético por generos y especies.

133. Beliaceas de Chiapas. An. Inst. Biol. 19:407-425, ils. 1948.

1373/3 MIRANDA, Faustino. Actividades científicas en Chiapas - la vegetación de Chiapas. Novedades, Mexico, 15 Junio, 1952.

1374/4 Un botánico en el borde de la selva lacandona  
Mem. Cong. Ci. Mex. 6:285-303, 1953.

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1375/5 Premio Chiapas, 1953. Rev. Ateneo Chiapas.  
5:137-141, 1954. *el Huerto*

1376/6 *lacotar*  
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1377/7 *to*  
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ils. 1952.

Al noroeste de Cozucuautila; descripción detallada de la vegetación clasificada en zonas; con listas de las plantas más importantes que son típicas de cada región.

1378/8 *o*  
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2 vols. ils. mapas. bibl.

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1379/9 NAVARRO, Adolfo A. Orquídeas del Huixtlapec. Bol. Cav. Com. Agr. Ind. Chiapas. 31 marzo 1928. Reimpreso en Chiapas Nuevo Tuxtla Gutiérrez, (fecha?)

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1380/0 *g*  
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1381/1 *o*  
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1382/2 *el*  
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Nota 1:

Nota 2:

The Search for Corycarpus Zea  
Ida K. Langman and James A. Mears\*

When Diarrhena Palisot de Beauvois (1812) was conserved against Corycarpus Zea the Zea reference, "Acta Matr. 1806", had not been located (Stafleu, priv. comm.). One of us (I.K.L.) had begun to think that the publication was fictitious. Our interest in the Linnean system of publication abbreviation and the observation of the item "Bejaria Mutis ex L. corr. Zea ex Vent." in Airy-Shaw's 1973 edition of Willis' Dictionary of Flowering Plants and Ferns rekindled the search for the Zea publication. Our search has demonstrated that the Zea reference is an unpublished memoria. Moreover, Diarrhena and Corycarpus are based probably upon seed progeny of the same collection.

The Royal Society List of Scientific Publications (1867) lists only one scientific publication existing in Madrid in 1806: Anales de Ciencias Naturales. Madrid. In the complete series (vol. 1-7; 1799-1804) there are a number of articles by Francisco Zea, but no reference to Corycarpus. Colmeiro (1858) indicated that Zea published in the Anales Hist. Nat. in 1800 and 1802 and in the Seminario de Agricultura y Artes in 1805. The first periodical is apparently the same Anales de Ciencias Naturales. Madrid. The paper in Seminario de Agricultura y Artes (1805) yields no information on Corycarpus. Lagasca's Genera et Species Plantarum (1816) is apparently the major source of information on our subject:

on p. 4      "Corycarpus Zea"

\* Botany Department, Academy of Natural Sciences, Philadelphia, Pennsylvania 19103.

on p. 47. "Koryc. arundinaceum Ze. Ac. Matr. 1806. syn. diandra Hornem. H. Haffn. 1. p. 97. Habitat america colitur subdio in R.M.H. ex seminibus a D. Touhin Holcus sp. nov. nomine missis an 1803."

in Appendix p. 34. "adde Diarrhena americana Palisot de Beauvois Agrost. p. 142 Tab XXV p. 11."

✓ In Lagasca's "Notarum Explicatio" are two relevant abbreviations:

"Ze. Ac. Matr. - Zea in Actis Academiae Medicae Matritensis"

"H.R.M. - Hortus Regius Matritensis"

There is no abbreviation "R.M.H." explained in the "Notarum Explicatio."

The Union List of Serials (ed. 3 1965) indicates only one publication of an academy of medicine in Madrid in 1806: Memoriae Academiae Medicae Matritensis, available in a complete series (vol. 1-10; 1797-1889) in the United States only in the Regenstein Library of the University of Chicago. Mrs. Christine Longstreet, reference librarian of the facility, examined the first four volumes and found in volume 2 (1853-1865) that the members of the academy met between 1797 and 1853 but were unable to overcome financial, political and religious censorship difficulties in order to publish. Sr. Director Pedro Rocha of the Real Academia de Medicina, Madrid, had the minutes of the meetings of the Academia Medica Matritensis in 1806 and 1807 examined for us. No relevant references were found in the 1806 minutes, but there is a reference in the 1807 minutes:

"..los Memoriales de Dr. Francisco Zea y Dr. Claudio Boutelou, ...; la del 1<sup>o</sup> sobre las Gramineas y la del 2<sup>o</sup> sobre el genero Stevia." The minutes record the presence of Dr. Pavón, Mociño, Ximénez, Sessé, Boutelou, La Llave and a few others, unnamed. Dr. Rocha looked for the Zea memoria but did not locate it in the archives of the Real Academia de Medicina. The minutes themselves are very sketchy and could never be considered valid publication, if they do mention Corycarpus or Korycarpus.

Korycarpus probably was mentioned in an oral memoria delivered to the Academia Medicae Matritensis in 1806 or 1807. There is no evidence that the memoria was deposited in an archive. There is no evidence that Korycarpus was published before Lagasca's reference to it in 1816. Perhaps Lagasca saw a living or preserved specimen to which Zea's name had been attached. How else did Lagasca know the origin of Zea's material and the synonymy with "Festuca diandra Hornem."? How did Lagasca subsequently (in the appendix discover the synonymy of Korycarpus with Diarrhena Beauvois?

An analysis of Palisot de Beauvois' Agrostonomie<sup>graphie</sup> (Niles, 1925) ✓ has indicated that Beauvois' two references "Diarrhena Smart" (p.42) and "Diarrhena Shmal" (index) are evidence that Diarrhena arundinaceum Beauvois is the first valid publication of Diarina festucoides Rafinesque-Schmaltz, nomen provisionum (1808, 1809), clearly based upon Festuca diandra Michaux (1803). Beauvois knew that L.C. Richard was responsible for the Michaux Flora (Niles, 1925). Clearly Hornemann was using the (Richard in) Michaux name. The identity of "D. Touhin" provides the missing link. The seeds of Festuca diandra (Richard in) Michaux (1803) were distributed to Hafnia and to Madrid probably by

a major source of seed material from Paris - Thouin! We can find no reference to D. Touhin in Barnhart (1965). "Touhin" is apparently a spelling error in Lagasca (1816).

Palisot de Beauvois formalized Rafinesque's publication of Festuca diandra Michaux as a new genus. The priority of Festuca diandra Moench (1794) prevents the retention of the species name. Hornemann retained the Michaux name (perhaps used on the seed distribution labels), but Zea probably labeled a cultivated specimen as Korycarpus arundinaceum.

Clearly there is no need to conserve Diarrhena americana Palisot de Beauvois (1812) against Korycarpus arundinaceum Zea ex Lagasca (1816). We believe that the generic synonymy should read as follows:

Diarrhena Rafinesque ex Palisot de Beauvois,  
Agrost. 142, 160, 162. 1812.

= Korycarpus Zea ex Lagasca, Gen Sp. Plant. 47. 1816.

It is possible that some publication more obscure than those we have examined will yield a description of or reference to Korycarpus published before 1816. Such publication should be brought to the attention of the taxonomic community, should it be found.

March 11, 1975

F. A. Stafleu, Editor  
Taxon  
Room 28.04.04  
Tweede Transitorium  
Withol  
Utrecht, Netherlands

Dear Dr. Stafleu:

Ida Langman suggested that you might be interested in this manuscript for Taxon. This manuscript is not part of the series of papers on important collections of the herbarium of the Academy of Natural Sciences.

Sincerely,

James A. Mears

JAM:ms

*changed to  
Mexican Libraries More Abundant*

#### THE NEW LOOK IN MEXICAN LIBRARIES

I first became acquainted with Mexican libraries in the fall of 1948, when I went there to collect material for a bibliography on Mexican flowering plants. I stayed a year, working most of the time in Mexico City libraries but taking a few trips outside the capital. I soon discovered that the job could not be completed in a year, but it was not until 1956 that I was able to return to finish the job. Again, Mexico City was the headquarters, but this time an attempt was made to visit as many libraries outside Mexico City as possible. As a result of my experiences, I think I can indicate some of the problems which face the scholar in Mexico while, at the same time, I can point out advances in library facilities, personnel and procedures which should, in the near future, give Mexico a modern, efficient library system.

In order to appreciate fully the changes that are taking place, we should look first at the conditions which have existed, until recently, in Mexico and we should try to discover the factors which have been recently <sup>responsible</sup> for those conditions. Suppose we call, as our first witnesses, on the Mexicans themselves. In 1955, Angel Bassols Batalla, author of the Bibliografía Geográfica de Mexico, had this to say in Cuestiones de geografía (Boletín de la Sociedad Mexicana de Geografía y Estadística), "Our general impression after traveling through the Republic, in search ~~ix~~ of books, is that almost everywhere public libraries are in a lamentable state of abandon."<sup>\*</sup> The following year, in fichas de Bibliografía Potosina, Rafael Montejano y Aguinaga, director of the library of the University of San Luis Potosí, quoted one of Mexico's outstanding bibliographers as follows: "Unfortunately we do not have in Mexico, in public libraries or private institutions, documented collections, methodically organized, save as some very rare exception. It is therefore extremely difficult, if not painful, to undertake in them any moderately important research. The student, or any one else who must come to these libraries for information, must make unusual efforts to get results; must go hither and yon, sometimes following his intuition, in order to

\* translation mine.

achieve anything worthwhile. Outside of the individual efforts of a very few officials, the government has never been interested in attending effectively and with sufficient resources to the needs of libraries - which are now just desolate warehouses filled with books. Under these conditions, the researcher is often a lonely hero who carries on his work without any encouragement, within an atmosphere of abandon and misery". Thus spoke Genaro Estrada in 1935. \* (translation mine.)

This, even allowing for the more emotional expression of the Latin American, it is a pretty black picture and, had I written ~~it~~ this article in 1949, I'm afraid my report would have coincided pretty closely with that of Sr. Estrada. But recent experiences, both during my second year in Mexico and in United States libraries, indicate that the picture is by no means so discouraging, either with reference to Mexico alone, or by comparison with the United States. And when one considers certain historical factors with regard to Mexico, the need to temper one's criticism becomes obvious, although the necessity for the criticism and for remedial action is thereby in no way diminished.

What are the historical factors? First of all, Mexico lacks the public library tradition, so taken for granted in the United States. In Mexico, libraries originally were either private collections or belonged to religious institutions - churches, convents or monasteries. When the Reforma brought these latter collections under public control (and in many parts of the country these collections are still the core of the local public library), there was no body of trained personnel to safeguard and administer the collections for the public good, nor indeed, any tradition to consider these collections public trusts and encourage making them available to the public under specific regulations. To this background must be added the long years of civil disturbance, from the War for Independence to the period of the Porfirio Diaz dictatorship, and again following the Revolution of 1910 - periods in which extremely valuable collections were either completely destroyed or repeatedly sacked. Often the cream of these collections was drawn off into private hands. to be followed by sale to foreign collectors. True, through the years, in various parts of the country, there have always been a few concerned and devoted individuals

collections for the public good, nor, indeed, any tradition to consider these collections public trusts and encourage making them available to the public under specific regulations. To this background must be added the long years of civil disturbance, from the War for Independence to the period of the Porfirio Díaz dictatorship, and again following the Revolution of 1910--periods in which extremely valuable collections were either completely destroyed or repeatedly sacked. Often the cream of these collections was drawn off into private hands, to be followed by sale to foreign collectors. True, through the years, in various parts of the country, there have <sup>always</sup> been a few concerned and devoted individuals who have dedicated themselves to cataloguing and caring for the collections in various public libraries. But there was no continuity in the administration of these libraries and, when one of these rare individuals died, his place was often taken by incompetent and, what in some ways is even worse, indifferent persons; and collections, preserved in part, began again to disintegrate.

The public circulating library, to all intents and purposes, still does not exist in Mexico. The scholar must stay in the library to use its books, or must buy his own, and this practice extends even to the elementary school pupil. The research investigator often has a better personal library in his field than the institution with which he is connected. Occasionally, one of these truly magnificent private collections has found its way back into one of the larger libraries of the country, but more often, on the death of the owner, it has been sold into other private hands or to libraries out of the country.

One of the most serious problems which confronts the researcher in Mexico today is the inadequate cataloguing of many of the collections. Some of the most important collections have no catalogue at all, or their catalogues are typed, or even handwritten, inventories on sheets of paper. These may be arranged by authors, or subject, or title--rarely all three. Often, these inventories, and sometimes even the catalogue cards, are not freely available to readers but must be requested from the librarian who releases them most unwillingly and with obvious suspicion.



One minor point should be noted. Library hours in Mexico are apt to be quite different from those familiar in the United States. Some libraries are open only in the morning from 9 A.M. to 2; others, only in the evening. It is wise, therefore, always to check the library's schedule before making up one's personal work plans.

So much for the darker side of the picture. What about the improvements being made and the hopes for the future? The first good sign is the growing interest in, and recognition of the need for libraries all over the country. Libraries are being established in practically every town and, though they are not yet collections of any significant size, and do not circulate their holdings, that possibility may not be too far off. One library in Mexico City, the Biblioteca "México", is already circulating some books on a limited scale. Perhaps, in this connection, the United States can take a little credit for having set a good example. For, no matter how critical at times Latin Americans may be of our foreign policies, they are unanimous in praising the United States type of libraries we have established. Of these, the Biblioteca "Benjamin Franklin" is an excellent example. These libraries are organized catalogued and administered according to usual United States procedures (and that includes circulating the books) and there is no doubt in my mind that the pattern they have set has served as a stimulus, at least in some measure, for Mexican libraries to follow suit.

The establishment by UNESCO of a Centro de Documentación in Mexico City is another building block in the structure of the library system there. In this Center, an attempt is being made to secure modern scientific literature, particularly in periodicals, and to catalogue such material already in Mexican libraries. Then arrangements can be made to get such materials to readers who desire them, on an exchange basis, or through photostat or microfilm service. The beginnings of inter-library loan service have also been made through both the Benjamin Franklin Library, and the Main library of the Universidad Nacional. In short, the picture up until recently so gloomy shows definite signs of a much brighter future.

Another aspect of the library <sup>situation</sup> ~~picture~~ in Mexico is the question of training of librarians. In the past, there have been attempts to establish training courses for librarians but they have been short lived and <sup>have</sup> turned out a comparatively small number of graduates. Now, there is a well planned program for students in library science, described as follows by Srita. María Teresa Chávez, director of the Biblioteca "México": "There are two schools of library science: the Escuela Nacional de Bibliotecarios and the course on Library Science given by the Facultad de Filosofía y Letras, both 3 year courses. The National School of Library Science was established in 1945 and the University began to teach library science three years ago. The first graduates will finish this year (1958)". There is also in Mexico a growing number of well trained librarians who have studied abroad, either in the United States, or in Europe, and these librarians are setting the standards for the operations of Mexican librarians<sup>es</sup>. These same librarians have been reactivating the Association of Librarians, which has sponsored conferences for presentation of library techniques, suggesting methods for improving conditions and drawing up plans for raising professional standards and the status of Mexican librarians. Their activities are one of the brightest features of the library scene in Mexico today.

Lic. Montejano sees the ~~book~~ librarian in Mexico today as "not the cardboard pedagogue, rigid and petrified, inflexible jailer of books who was in fashion years ago. Today's librarian should be amiable, cultured, well trained; his mission is to see that all profit from the ~~infinite~~ treasures which pour out of that fountain which is the library. The reader ~~comes~~ comes to the library to see what works there are which may help him. And the librarian should satisfy that need as well as he can, with precision, ease and speed. In addition, if the library, besides having its own dictionary type catalogue has been able to compile a collective catalogue (our Union catalogue) in which are registered all the works deposited in all the libraries of the city or region, the bibliographic service will be that much more extensive. The majority of readers do not know how to consult a library nor what service it can give.

Many times they come ~~simply~~ <sup>simply</sup> because they need a book. If it's there, they take it; if not, they go away. And this should not be. There may be other more useful works than the one asked for, or at least which will conveniently take its place. In this case, the reader does not ask for bibliographic service, but the librarian should give it to him". (translation mine) If some of Lic. Montejano's suggestions seem elementary to American readers, may I suggest they only indicate more forcefully the present situation in Mexican libraries.

Another good sign of recent times is the acquisition by Mexican libraries of collections which in the past might have left the country. In this connection, the library of the Instituto Tecnológico de Monterrey is the outstanding example. This library, with its air-conditioned Rare Book Room, its modern catalogue, its efficient service, is on a par with many of the finest libraries in the United States. And the fact that money has been secured there for the purchase of such collections as those of Pedro Robredo, Salvador Ugarte and Méndez Plancarte gives the lie to the old legend of the stinginess of the Monterrey citizen.

Monterrey is not alone with its handsome library. The State Library of Sonora, in Hermosillo, is similarly beautiful and well-run. The library of the Secretaría de Hacienda y Crédito Público (which might be compared, I suppose, with our Department of the Treasury) is not only housed in a modern, well-equipped building but adds something new for Mexican public buildings—central heating! (The library however, is in great need of more well-trained personnel.) Lest anyone think it strange that I mention the library of the Department of the Treasury in an article referring to libraries for the scientific investigator, let me say that in Mexico one often finds material of use to the scientist in the most unexpected localities

Finally, here is a list of the most important libraries in Mexico; those most useful to the biologist are starred (\*) I have attempted to include at least one library in each state, even though in some cases the library listed will leave a great to be desired. I have no information on libraries in Baja California.

## Mexico City

\*Academia Nacional de Ciencias "Antonio Alzate" - now closed but due to reopen  
on construction of new headquarters.

Banco de México

\*Biblioteca "Benjamin Franklin"

Biblioteca "México"

Biblioteca del Congreso de la Unión

\*Instituto (Museo) Nacional de Antropología e Historia

Biblioteca Central (one of the best)

Instituto Nacional Politécnico

Escuela de Ciencias Biológicas

→ \*Instituto Panamericano de Geografía e Historia

\*Oficina de Estudios Especiales (Rockefeller Foundation)

Secretaría de Agricultura

Dirección de Economía Rural (badly crowded, but gives excellent service)

\*Secretaría de Hacienda y Crédito Público

Secretaría de Relaciones Exteriores

\*Secretaría de Salubridad y Asistencia Pública (especially for medical periodicals)

\*Sociedad Mexicana de Geografía y Estadística (excellent all around library in  
Mexico's oldest scientific society)

Universidad Nacional Autónoma de México

\*Biblioteca Nacional (cataloguing under way)

\*Facultad de Ciencias

\*Facultad de Ciencias Químicas

\*Facultad de Medicina (to be catalogued)

\*Hemeroteca Nacional (for magazines and serial collections; excellent)

\*Instituto de Biología (in the process of being rehoused)

*see also Spex*

Outside Mexico City (by states)

Aguascalientes

Aguascalientes - Instituto de Ciencias

Campeche

Campeche - Museo del Estado

Coahuila

Saltillo - Ateneo Fuente

Colima

Colima - Biblioteca Publica del Estado

Chiapas

San Cristobal Las Casas - Biblioteca "Fray Bartolome" (in the home of Frans Blom)

Tuxtla Gutierrez - \*Biblioteca Publica del Estado  
*specializes in material relating to Chiapas*

Chihuahua

Ciudad Juarez - \*Escuela Particular de Agricultura

Durango

Durango - \*Biblioteca Publica del Estado

Guanajuato

Guanajuato - Biblioteca de la Universidad *see catalogue*

Guerrero

Chilpancingo - Biblioteca Central del Estado (

Hidalgo

Pachuca - Biblioteca Publica del Estado

Jalisco

Guadalajara - Biblioteca Publica del Estado

Mexico

Toluca - Biblioteca Publica del Estado

Michoacan -

Morelia - Biblioteca Publica del Estado *see catalogue*

Morelos

Cuernavaca - Biblioteca Publica del Estado

## Morelos:

Cuernavaca - Biblioteca Publica del Estado

## Mayarit:

Tepic - Biblioteca Publica del Estado

## Nuevo Leon:

Monterrey - \*Instituto Tecnológico

Biblioteca Universitaria "Alfonso Reyes"

## Oaxaca:

Oaxaca - \*Biblioteca de la Universidad "Benito Juárez"

## Puebla:

Puebla - Biblioteca Palafoxiana

## Querétaro:

Querétaro - Biblioteca Publica del Estado

## Quintana Roo:

Chetumal - Biblioteca Publica del Estado (fide Angel Bassols Batalla)

## San Luis Potosí:

San Luis Potosí - \*Biblioteca de la Universidad

## Sinaloa

Culiacan - Biblioteca Publica del Estado

## Sonora:

Hermosillo - \*Biblioteca Publica del Estado (good for material on northwestern Mexico)

## Tabasco:

Villahermosa - \*Biblioteca Publica del Estado

## Tamaulipas :

Tampico - Biblioteca Municipal

## Tlaxcala:

Tlaxcala - Escuela Preparatoria

## Veracruz:

Jalapa - Escuela Secundaria

## Yucatan:

Merida - Museo del Estado

## Zacatecas:

Zacatecas - Instituto de Ciencias

TULANE UNIVERSITY

College of Arts and Sciences

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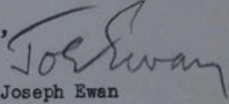
Department of Botany

12 January 1959

Dear Ida:

I worked thru the paper "Mexican Libraries Today and the Biologist" en route from Washington to St. Louis on the B&O, and first thought I might do something additional to it before its return to you but this seems too uncertain to delay its return longer. I hope my remarks will not a) deter you for a moment from publishing the article and b) make the rewrite too onerous. SEND IT TO BULL. AIBS. It will fit so well the late comment and report that the Bulletin has been publishing. Will ~~ghere~~ do do much good for the working biologist who would miss the Fan American Union publications.

Hastily but with fervent good wishes,

  
Joseph Ewan

TODAY AND THE BIOLOGIST

REPORT ON MEXICAN LIBRARIES

suggestion  
by Joe Cronin

ten {or whatever}

report

(This ~~summary~~ <sup>report</sup> is based on close to two years' work in Mexican libraries in connection with the compilation of a bibliography on Mexican botany. It is hoped that the report may serve ~~two purposes: one,~~ <sup>first,</sup> to indicate the conditions, by and large, in which the researcher in Mexico must work and second, to report on recent advances in library facilities, personnel and procedures—advances which point to the possibility of an efficient system of libraries in Mexico in the very near future.)

assembling

date from beginning

My first experiences with Mexican libraries ~~were~~ <sup>date from</sup> in the year <sup>beginning</sup> September 1948 to ~~September 1949~~ <sup>when</sup>. Most of the time was spent in Mexico City, with a few trips to libraries outside the capital. Work started in the Instituto de Biología, which at that time was housed in the Casa del Lago, alongside the lake in Chapultepec Park. <sup>Today</sup> Its new ~~headquarters~~ are in University City, along with the other divisions of the Universidad Nacional Autónoma de México. The library in this institution is still the major library in all of Mexico for biological literature, though much related material will be found scattered through numerous libraries in Mexico City, as well as in some centers outside the capital, particularly in other institutions of higher learning.

My original reactions to Mexican libraries, ten years ago, were rather disheartening and they were not my reactions alone but were strongly supported by criticisms from Mexicans themselves. ~~He~~ <sup>He</sup>, for example, is what Angel Bassols Batalla, author of Bibliografía Geográfica de México, has <sup>the</sup> to say in Cuestiones de Geografía Mexicana, (Bol. Soc. Mex. Geog. Est. 79(2), 1955), "Our general impression after traveling through the Republic, in search of books, is that almost everywhere public libraries are in a lamentable state of abandon." (translation mine.) The

\* = title of article? then not to be italicized?

Langman - ✓

following year, in Fichas de Bibliografía Fotosina, Rafael Montejano y Aguinaga, ~~dir~~ director of the library of the University of San Luis Potosí, quoted one of Mexico's outstanding bibliographers as follows: "Unfortunately we do not have in Mexico, in public libraries or private institutions, documented collections, methodically organized, save as some very rare exception. It is therefore extremely difficult, if not painful, to undertake in them any moderately important research. The student, or any one else who must come to these libraries for information, must make unusual efforts to get results; must go hither and yon, sometimes following his intuition, in order to achieve anything worthwhile. Outside of the individual efforts of a very few officials, the government has never been interested in attending effectively and with sufficient resources, to the needs of libraries - which are now just desolate warehouses filled with books. Under these conditions, the researcher is often a lonely hero who carries on his work without any encouragement, within an atmosphere of abandon and misery." Thus spake Genaro Estrada in 1935. (translation mine)

This, even allowing for the more emotional expression of the Latin American, is a pretty black picture and, had I written this article in 1949, I'm afraid my report would have coincided pretty closely with that of Sr. Estrada. But recent experiences, both in United States libraries, and <sup>from my second year</sup> in Mexico from September 1956 to June 1957, indicate that the picture is by no means so discouraging - either with reference to Mexico alone or by comparison with the United States. And when one considers certain historical factors with regard to Mexico, the need to temper one's criticism becomes obvious, although the necessity for the criticism and for remedial action is thereby in no way diminished.

*to* In the first place, historically, Mexico lacks the public library tradition, so taken for granted in the United States. In Mexico, libraries originally were either private collections or belonged to religious institutions, churches, convents, or monasteries. When the Reforma brought these latter collections under public control, (and in many parts of the country these collections are still the core of the local public library), there was no body of trained personnel to safe-

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guard and administer the collections for the public good, nor indeed any tradition to consider these collections public trusts and encourage making these libraries *them* available to the public under specific regulations. To this background must be added the long years of civil disturbance, from the War for Independence to the period of the Porfirio Diaz dictatorship, and again following the Revolution of 1910—periods in which extremely valuable collections were either completely destroyed or repeatedly sacked. Often the cream of these collections was *drawn* ~~siphoned~~ off into private hands, to be followed ~~later~~ by sale to foreign collectors. Thus, through the years, in various parts of the country, there have been a few concerned and devoted individuals who have dedicated themselves to cataloguing and caring for the collections in various *public* libraries. But there was no continuity in the administration of these libraries and, when one of these rare individuals died, his place was often taken by incompetent and, what in some ways is even worse, indifferent persons; and collections, preserved in part, began again to disintegrate.

*to* To all intents and purposes, the public circulating library still does not exist in Mexico. The scholar must stay in the library to use its books, or must buy his own, and this practice extends even to the elementary school *pupil* ~~student~~. The research investigator often has a better personal library in his field than the institution with which he is connected. Occasionally, one of these truly magnificent *private* collections has found its way back into one the larger libraries of the country, but more often, on the death of the owner, it has been sold into *other* ~~private~~ hands or to libraries out of the country.

One of the most serious problems which confronts the researcher in Mexico *today* is the inadequate cataloguing of many of the collections. Some of the most important collections have no catalogue at all, or their catalogues are typed, or even hand-written, inventories on sheets of paper. These may be arranged by authors, or subject, or title - rarely all three. Often, these inventories, and sometimes even the catalogue cards, are not freely available to readers but must be requested from the librarian who releases them most unwillingly and with obvious suspicion. Recently,

Lugman - X

the job of recataloguing the enormous collections of the National Library was started and, while this task proceeds at its understandably slow pace, readers will have access only to the recatalogued material. In the Sociedad de Geografía y Estadística, which was also planning to recatalogue its collections, I was told the library would shut down completely, except, perhaps, to more advanced investigators. Often a library is moved out of its headquarters before its new quarters are available and until the new location is secured, prepared for service, and the collection housed again, the library is likely to be closed for the duration. This happened recently to the library of the Secretaría de Educación and to the library of the Academia Nacional de Ciencias Antonio Alzate, one of the country's finest collections, which is still closed.

There are many libraries which are ~~appallingly~~ appallingly overcrowded but since that is a complaint even in United States libraries, perhaps we should pass over this situation. Still it is sad to see books and pamphlets piled helter-skelter on a floor; parchment-covered 17th and 18th century volumes, stacked in no order whatsoever, on damp shelves in a musty cellar. And it must be frustrating to students of an institution to have their library shut up in a storeroom and access to the collection forbidden. When the library of the Medical School was moved to University City, it was decided to incorporate the older <sup>titles</sup> parts of the collection, which, to some scholars, of course, are the most interesting <sup>items</sup> parts, with the general University collections. Unfortunately, because of lack of personnel to do the cataloguing, this part of the library remains packed in cartons, unavailable to anyone.

In Tampico, I ran into a rather unique situation. During the disastrous hurricane and flood of the previous year, the Municipal Library had been used as a hospital and as headquarters for evacuees, and cards were needed for registering those eligible for relief. <sup>What could be more</sup> ~~It seemed only logical~~ <sup>than</sup> to turn to the catalogue cards in the library files! How to replace the ones that were taken is something ~~I would not care~~ to contemplate.

Use  
requisitioned

Langman ✓

One minor point should be noted. Library hours in Mexico are apt to be quite different from those <sup>similar</sup> which are kept in the United States. Some libraries are open only in the morning from 9 A.M. to 2 P.M.; Others, ~~are opened~~ only in the evening. It is wise, therefore, always to check the working hours in a library before making up one's personal <sup>work plans</sup> ~~schedule~~. schedule

Sox much for the darker side of the picture, What about the improvements being made and the hopes for the future? The first good sign is the growing interest in, and recognition of the need <sup>for</sup> libraries all over the country. Libraries are being established in practically every town and, though they are not yet collections of any significant size, and do not circulate their <sup>holdings</sup> contents, that possibility may not be too far off. One library in Mexico City, the Biblioteca "Mexico", is already circulating some books on a limited scale. Perhaps, in this connection, the United States can take a little credit for having set a good example. For, no matter how critical at times Latin Americans may be of our foreign policies, they are unanimous in praising the United States type of libraries we have established. If these, the Biblioteca "Benjamin Franklin" is an excellent example. These libraries are organized, catalogued and administered according to usual United States procedures (and that includes circulating the books) and there is no doubt in my mind that the pattern they have set has served as a <sup>+</sup> stimulus, at least in some measure, for Mexican libraries to follow suit.

The establishment by UNESCO of a Centro de Documentacion in Mexico City is another building block in the structure of the library system there. In this Center, an attempt is being made to secure modern scientific literature, particularly in periodicals, and to catalogue such material already in Mexican libraries. Then arrangements can be made to get such materials to readers who desire them, on an exchange basis, or through photostat or microfilm service. The beginnings of inter-library loan service have also been made through <sup>both</sup> the Benjamin Franklin Library, and ~~through~~ the Main Library of the Universidad Nacional. In short, the picture up until recently so gloomy shows definite signs, ~~at least to me~~ of a much brighter future.

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Another aspect of the library picture in Mexico is the question of training of librarians. In the past, there have been attempts to establish training courses for librarians but they have been short lived and turned out a comparatively small number of graduates. Now, there is a well planned program for students in library science, described as follows by Srita. María Teresa Chávez, director of the Biblioteca "México": "There are two schools of library science: the Escuela Nacional de Bibliotecarios and the course on Library Science given by the Facultad de Filosofía <sup>y</sup> Letras, both 3 year course. The National School of Library Science was established in 1945 and the University began to teach library science three years ago. The first graduates will finish this year [1953]". There is also in Mexico a growing number of well trained librarians who have studied abroad, either in the United States, or in Europe, and these librarians are setting the standards for the operations of Mexican libraries. These same librarians have been ~~active recently in~~ reactivating the Association of Librarians, which has sponsored conferences for presentation of library techniques, suggesting methods for improving conditions and drawing up plans for raising professional standards and the status of Mexican librarians. Their activities are one of the brightest features of the library scene in Mexico today.

~~Here is how~~ Lic. Montejano sees the role of the librarian in Mexico today. ~~24~~  
~~"The librarian today is a"~~ not the cardboard pedagogue, rigid and petrified, inflexible jailer of books who was in fashion years ago. Today's librarian should be amiable, cultured, well trained; his mission is to see to that all profit from the treasures which pour out of that fountain which is the library. The reader comes to the library to see what works there are which may help him. And the librarian should satisfy that need, as well as he can, with precision, ease and speed. In addition, if the library, besides having its own dictionary type catalogue has been able to compile a collective catalogue ~~(we would say~~ <sup>our</sup> ~~Union catalogue)~~ "in which are registered all the works deposited in all the libraries of the city or region, the bibliographic service will be that much more extensive. The majority of readers do not

Laagman - 7

know how to consult a library nor what service it can give. Many times they come simply because they need a book. If it's there, they take it; if not, they go away. And this should not be. "There may be other more useful works than the one asked for, or at least which will conveniently take its place. In this case, the reader does not ask for bibliographic service, but the librarian should give it to him". (translation mine) If some of Lic Montejano's suggestions seem elementary to American readers, may I suggest they only indicate more forcefully <sup>present</sup> the situation in Mexican libraries today.

Another good sign of recent times is the acquisition by Mexican libraries of collections which in the past might have left the country. In this connection, the library of the Instituto Tecnológico de Monterrey is the outstanding example, and the fact that money has been secured ~~for~~ there for the purchase of such collections as those of Pedro Obredo, Salvador Ugarte and Méndez Plancarte gives the lie to the old legend of the stinginess of the Monterrey citizen. This library, with its air-conditioned Rare Book Room, its modern catalogue, its efficient service, is on a par with many of the finest libraries in the United States.

Monterrey is not alone with its handsome library. The State Library of Sonora, in Hermosillo, is <sup>similarly</sup> another beautiful and well-run library. The library of the Secretaría de Hacienda y Crédito Público (which might be compared, I suppose, with our Department of the Treasury) is not only housed in a modern, well-equipped building, but adds something new for Mexican public buildings - central heating! (The library, however, is in great need of more well-trained personnel.) Lest anyone think it strange that I mention the library of the Department of the Treasury in an article referring to libraries for the scientific investigator, let me say that in Mexico one often finds material of use to the scientist in the most unexpected localities.

<sup>Finally</sup>  
To close, here is a list of the most important libraries in Mexico; <sup>the more</sup> ~~the~~ <sup>starred</sup> ~~ones~~ <sup>are</sup> ~~the~~ <sup>ones</sup> ~~which~~ <sup>would</sup> ~~be~~ <sup>most</sup> ~~useful~~ <sup>for</sup> ~~any~~ ~~one~~ ~~interested~~ ~~in~~ ~~biological~~ ~~research~~. <sup>to the</sup> ~~I~~ ~~have~~ ~~tried~~ ~~to~~ ~~list~~ ~~at~~ ~~least~~ ~~one~~ ~~library~~ ~~in~~ ~~each~~ ~~state~~, ~~even~~ ~~though~~ ~~in~~ ~~some~~ ~~cases~~ ~~the~~ ~~library~~ ~~cited~~ ~~will~~ ~~leave~~ ~~a~~ ~~great~~ ~~deal~~ ~~to~~ ~~be~~ ~~desired~~.

Lagman P

Mexico City

\*Academia Nacional de Ciencias "Antonio Lzate" - now closed but due to reopen  
on construction of new headquarters.

Banco de México

\*Biblioteca "Benjamin Franklin"

Biblioteca "México"

Biblioteca del Congreso de la Unión

\*Instituto (Museo) Nacional de Antropología e Historia

Biblioteca Central - *see folder list*

Instituto Nacional Politécnico - Escuela

de Ciencias Biológicas

\*Instituto Panamericano de Geografía e Historia

\*Oficina de Estudios Especiales

(Rockefeller Foundation)

Secretaría de Agricultura - Dirección

de Economía Rural *(Crosby - but few excellent series)*

\*Secretaría de Hacienda y Crédito Público

Secretaría de Relaciones Exteriores

\*Secretaría de Salubridad y Asistencia Pública

\*Sociedad Mexicana de Geografía y Estadística

Universidad Nacional Autónoma de México

\*Biblioteca Nacional - cataloguing under way

\*Facultad de Ciencias

\*Facultad de Ciencias Químicas

\*Facultad de Medicina - to be catalogued

\*Hemeroteca Nacional - for magazines and serial collections - *see list*

\*Instituto de Biología - *in process of being reorganized*

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Mayarit

Tepic - Biblioteca Pública del Estado

Nuevo León

Monterrey - \*Instituto Tecnológico

Biblioteca Universitaria "Alfonso Reyes"

Oaxaca

Oaxaca - \*Biblioteca de la Universidad "Benito Juárez"

Puebla

Puebla - Biblioteca Palafoxiana

Querétaro

Querétaro - Biblioteca Pública del Estado

Quintana Roo

Chetumal - Biblioteca Pública del Estado

(fide Angel Bassols Batalla)

San Luis Potosí

San Luis Potosí - \*Biblioteca de la Universidad

Sinaloa

Culiacán - Biblioteca Pública del Estado

Sonora

Hermosillo - \*Biblioteca Pública del Estado - *good material in Mexico*

Tabasco

Villahermosa - \*Biblioteca Pública del Estado

Tamaulipas

Tampico - Biblioteca Municipal

Tlaxcala

Tlaxcala - Escuela Preparatoria

Veracruz

Jalapa - Escuela Secundaria

Yucatán

Merida - Museo del Estado

Zacatecas

Zacatecas - Instituto de Estudios

*(add any note about special collection belonging to a biologist which now may be found here)*  
*(→ c.g. Comzatti's coll. in Oaxaca? etc)*

*to page A*

*I have no information on libraries in Baja California*

*to p. 7*

INTER-AMERICAN REVIEW OF

BIBLIOGRAPHY

REVISTA INTERAMERICANA DE BIBLIOGRAFÍA



september, 1960-WASHINGTON, D.C.-number

11

(Travel and Descriptive)

## WORKS PRIOR TO 1800 USEFUL FOR STUDIES IN MEXICAN BOTANY

Ida K. LANGMAN

THE following bibliography is part of a larger work now in preparation, to be entitled *A Selected Guide to the Literature on Mexican Flowering Plants*. This will list works in the fields of taxonomy (the identification and classification of plants), in economic botany (on uses of these plants by man), and in phytogeography (on the distribution of the plants and their ecology). It will include also works on the history of botany in Mexico,<sup>1</sup> travel and descriptive works, vocabularies with names of Mexican plants, and botanical texts published in Mexico. The excerpt which follows lists travel and descriptive works, written before 1800, which include references to Mexican plants. Some are limited to the American area; others cover the entire world, as then known. Titles referring to the same period, *but which are limited to Mexico*, will be published, it is planned, in a later issue. Works whose *primary emphasis* is on natural history (Monardes, Hernández, etc.) are not included.

Most of the titles cited here are familiar to the student of Latin American history; many of them are classics in their field. But they are equally important to the botanist, for in them we find many of our first references to the plants of the New World in general, and of Mexico in particular. Yet most of these works were not cited by Nicolás León, in his *Biblioteca Botánico-Mexicana*.<sup>2</sup> The works cited by León are preceded by an asterisk.

All of the works listed are available in the United States, and were seen, for the most part, in libraries in Philadelphia, New York and Washington. In most cases, the edition cited first is the one seen. Information on editions not seen has been added from various catalogues and bibliographies, especially the catalogue of the Library of Congress in Washington. This is abbreviated DLC. The letters RPJCB refer to the John Carter Brown Library in Providence, Rhode Island.

<sup>1</sup> A preliminary listing of such works was published as "Ensayo para una bibliografía histórico-biográfica de la botánica en México," in the *Memorias de la Academia Nacional de Ciencias de México*, 57: 373-429, 1955.

<sup>2</sup> Nicolás León. *Biblioteca Botánico-Mexicana*. México, 1895. 372 p.