

# SPECIAL COLLABORATION

### **Review article**

# **Annals: History and Heritage**

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#### **ABSTRACT**

Since 2011, *Annals of the Cuban Academy of Sciences* is a digital multidisciplinary journal and press publication of the Cuban Academy of Sciences; this paper has as precedent a scientific journal and newspaper of the Royal Academy of Medical, Physics and Natural Sciences of Havana that was published between 1864 and 1898. Between 1899 and 1958, the publication was the scientific journal and newspaper of the Academy of Medical, Physics and Natural Sciences of Havana, which they kept publishing despite difficult conditions they had to face sometimes. The objective of this paper is to characterize *Annals*, proposing to divide its history in two different stages and to assess the heritage importance of the volumes that the Cuban Science Academy keeps in his Archives as a collection of documents generated by the academy in the XIX<sup>th</sup> and XX<sup>th</sup> centuries.

Keywords: Annals; Academy; history; heritage; Cuban science

# Anales: Historia y Patrimonio

#### RESUMEN

Anales de la Academia de Ciencias de Cuba es, desde el año 2011 una revista científica digital, multidisciplinaria y órgano difusor de la Academia de Ciencias de Cuba; esta publicación tiene como antecedente directo una revista científica y periódico homónimo de la Real Academia de Ciencias Médicas, Físicas y Naturales de La Habana que se publicó de 1864 a 1898. Entre 1899 y 1958, la publicación se mantuvo entonces como revista científica y periódico de la Academia Ciencias Médicas, Físicas y Naturales de La Habana. El objetivo de este trabajo es caracterizar la revista Anales, proponiendo periodizar su historia en 2 etapas y valorar la importancia patrimonial de los tomos conservados en la institución, como colección de documentos, generados por la Academia en los finales del siglo XIX y poco más de la mitad del XX.

Palabras clave: Anales; Academia; historia; patrimonio; ciencia cubana



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### INTRODUCTION

Annals of the Cuban Academy of Sciences is, since 2011, a digital, multidisciplinary scientific journal and press publication of the Cuban Academy of Sciences; This publication has as antecedent a newspaper of the same name published by the Royal Academy of Medical, Physical and Natural Sciences of Havana "destined for the publication of the works read and approved in the sessions, as well as the minutes of these sessions and news of an official matter and others of the nature of the newspaper...". (1)

The appearance of that publication, aspiration of the scientists who created the Academy, shown from its founding statutes, took just over 3 years and overcame several obstacles. *Annals* was, on the one hand, the public record of the internal functioning of the Royal Academy and, on the other, the communication means of Cuban academics and other scientists to publicize the most innovative of their research and of those that came from abroad; it was also a showcase of the performance of the Academy in areas related to public hygiene and legal medicine.

"Without a doubt, long before this Royal Academy was erected, there was no lack of professors recommended for their illustration, appreciable for their talent and for their fulfilled tasks; but science was able to take little or no advantage of their studies, practice and experience because they communicated little or nothing to their companions lacking means and opportunity..." (2)

Annals was published from 1864 to 1958, as a press publication first of the Royal Academy and, after the beginning of the republic, of the Havanan Academy. In 2011, the Cuban Academy of Sciences began to publish a journal with that name again, but this time in digital format and dedicated to the publication of scientific articles and the annual research prizes awarded by the institution.

Any attempt to write the history the Havanan Academy and its publication must start from the content of *Annals* itself, not only because it contains first-hand information on the functioning of the corporation, but also because, among its members and directors, it was always a major concern to safeguard and publicize aspects related to the history of the institution and its press publication, as it happened from the first volume of the magazine with the work of Ramón Zambrana: Notes for its history. <sup>(3)</sup>

Thus, the fundamental source of information for this work is the journal itself, although, as will be seen in its development, a book such as Science and scientists in colonial Cuba by Pedro Pruna Goodall and various articles published by Pruna himself, Orieta Álvarez Sandoval and Mercedes Valero González are invaluable for their guidance strength.

The objective of this paper is to characterize the journal *Annals*, proposing periods of its history, i.e., two stages. It is also to assess the heritage importance of the volumes preserved in the institution, as a collection of documents generated by the Academy between the late nineteenth century and 1958.

#### **DEVELOPMENT**

The history of *Annals* cannot be written separated from the history of the Royal Academy of Medical, Physical and Natural Sciences of Havana, that brought its publication from its own statutes approved on November 6, 1860. The fourth point of the article 37, Attributions of the censor, states that he should: "Manage the direction of a newspaper that will be published with the title of *Annals of the Academy* as soon as its funds allow for it", while in the fifth point he is given the responsibility for reviewing and correcting the style of the works to be published. <sup>(4)</sup> This idea will evolve over time since the publication will have directors who will be responsible for the tasks mentioned.

The history of *Annals* as a specific publication of science in Cuba can be divided into 2 stages:

- Between 1863 and 1898 it is the publication of the Royal Academy of Medical, Physical and Natural Sciences of Havana and, from 1899 to 1958, it is that of the Academy of Medical, Physical and Natural Sciences of Havana.
- From 2011 to the present. Linked to the creation of the Cuban Academy of Sciences, now as a digital, multidisciplinary scientific journal and its press publication.

Despite the fact that the end of the colonial period marks the change of the name of the institution, which loses the appellation of Real (Royal), as can be seen from 1899 in the journal itself, no substantial changes immediately occurred in the structure of the publication, as no changes took place in the Havanan Academy of Sciences. As the 20th century progressed, and especially in the 1950's, some transformations occurred in the publication, to which we will refer in the development of the text.

### First stage. Between 1863 and 1958

The Royal Academy of Medical, Physical and Natural Sciences of Havana had been established on May 19, 1861 in the chapel of the University of Havana. Several commissions were created in the institution for the purpose of founding and publishing the *Annals*, but during the first triennium none was successful. Nicolás José Gutiérrez himself, promoter for many years, founder and first president of the Academy, alluded to the lack of resources as an explanation for this, but it evidently took more effort than expected to reach a consen-

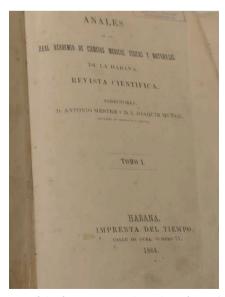
sus among academics about the characteristics of his newspaper. For the Cuban scientists of that time, its publication was as essential to expound the results of their research as the museum that they would also found and the library that they quickly had, all in the spirit of science in the 19th century.

In December 1863, the first number of the journal appeared with a very small edition, so no known copy is preserved; however, its presence was celebrated by the press at that time, which demonstrates the importance attributed to the new publication by the Havana society. The notes appeared in El Siglo, Diario de la Marina and La Gaceta de la Habana, and below we refer to the one that appeared in the newspaper Prensa de la Habana:

"ACADEMY OF SCIENCES. -The Royal Institute of Medical, Physical and Natural Sciences established in this capital has begun to give birth to its ANNALS, drawn up by a commission from within and based on the Royal Decree of its formation, by deliveries that are announced they will continue to be monthly until composing every year a volume of sixty printing sheets, at the price of fifty cents." (sic.)<sup>(5)</sup>

According to the abovementioned newspaper, this first number presented the Royal Decree for the formation of the Academy and the approved regulations, an article entitled *Notes for its history*, the speech delivered at the opening ceremony of the Academy by the president of the corporation, Dr. Nicolás José Gutiérrez, on May 19<sup>th</sup>, 1861, as well as the minutes of the sessions that were held from May to July that year. <sup>(6)</sup>

August 14<sup>th</sup>, 1864 is the date of presentation of the first number generally mentioned of *Annals*, since it is the first that



**Fig. 1** Title page of the first recognized number of *Annals* August 14, 1864

has been preserved and establishes continuity with the numbers that followed (figure 1).

The definitive appearance of *Annals* was responsibility of the academics Antonio Mestre and José Joaquín Muñoz, who had been designated to stabilize its delivery only on July 1864, due to the fact that the last commission of 12 members named to attend the publication was unable to proceed in agreement.

Mestre and Muñoz had been working to publish a journal dedicated to medicine and evidently, they put in *Annals* everything they had conceived for that purpose, in addition to the necessary commitment and knowledge. In the first volume and under the title "Prospect" they defined the interests and intentions of the newspaper:

... "desiring to fill in one of the needs foreseen and indicated in its statutes, may the Academy come today to offer the public a newspaper, in which not only the works and observations of the people who compose it are recorded, but also those of all doctors or lovers of science who, outside of it, cultivate it for their own glory and the benefit of their fellow citizens; ..." (7)

It is to Antonio Mestre, who was in charge of *Annals* for 23 years, and to his meticulous work and organization that the present-dayAcademy owes knowing all the most important events and discussions that took place within the corporation of the 19th century. <sup>(8)</sup> He defined a way of doing things that, in the 20th century, Jorge Le Roy Cassá, a faithful follower of his work, kept stable and completed for more than 30 years (figure 2). Mestre and Muñoz made very clear in the aforementioned prospectus the double intention of the academic publication: "The *Annals* will be, as well as an official newspaper of the Academy, a scientific journal..." <sup>(9)</sup>

As the official newspaper of the Academy, *Anales* published what happened in the corporation, the minutes of all the scientific and administrative sessions. The statutes and regulations of the corporation stated that every May 19<sup>th</sup> a solemn jubilee session should be held for the anniversary of the foundation. During the colonial period the governor presided over those sessions and after 1899 the president of the nation did it; other top-level personalities in Cuban social and political life, as well as foreign representatives, participated in these solemn activities. In this act there were speeches and an accounting of the results of the work during the previous year called task review. *Annals* was therefore organized from May to April of the following year.

Each issue begins after the title page and the index with the opening of the solemn session of May 19<sup>th</sup> and the inaugural speech by the president of the corporation; afterwards,

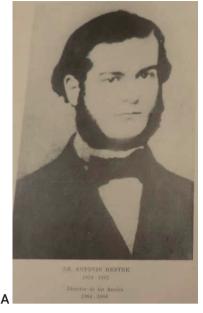




Fig. 2. A) Antonio Mestre, B) Jorge Le Roy Cassá. Source: Annals volume LXXV

the task review was presented in a report by the secretary, which condensed the work done by the corporation during the previous year.

This report declared the state of the finances, the number, description and origin of the pieces entered into the museum and the increase (and their origin) of the library's books.

The review also included the status of the reconstruction, repair and expansion work of the building of the corporation, whenever works were done. An important point in this annual review of tasks was the commented summary of the works presented and discussed in the scientific sessions of the corporation, as well as the papers that preceded the incorporation of new members to the Academy and their presentation speeches; the obituaries and tributes made were also part of this report.

Another point of the task review was the annual call for awards program, as stipulated in the article 55 of the statutes. (10) Annls published the Academy awards that received a prior evaluation by 3 academics who did not know the name of the author and who presented not only the written report, but also offered their criteria to the academics to make a final decision. Annals also published the reports of each work evaluation commission even when the work was considered inadequate to receive the award.

"After a few years without the Academy having had the opportunity to award any of its prizes, either because of the lack of contenders, or because the reports sent for that purpose did not fully meet the conditions required in

the Program -of the 6 works that were received, only 3 have been deemed worthy of such a distinction..." (11)

Singular importance had in the task review the consultative work of the Academy to the Government. Examples of this are issues related to legal medicine and public hygiene. In both cases it was very clear the consultative link that existed since its foundation between the Academy of Sciences and the colonial government.

"This satisfactorily explains the reason for the confidence and appreciation with which the Government responds to the consultations that it asks of us on matters pertaining to Public Hygiene, the no less honorable ones that the courts of the entire island dispense us, when it requests our assistance in the clarification of the multiple questions that concern the administration of justice" (sic) (12)

The contribution of the Academy to the government in the solution of criminal cases and regarding public hygiene went on during the  $20^{\text{th}}$  century:

"In those Annals, there appear the great services that the academy has been providing since its foundation to date to the public powers and especially to the courts of justice, as a problem of legal medicine has been submitted to its consideration; and they also include the great services it has provided to the country, worrying since its foundation about public hygiene..." (13)

The newspaper published initially a summary of the minutes of the ordinary, scientific and extraordinary sessions.

Later, Mestre considered it of great importance that these minutes be published in their full extension and he undertook the task of doing so, starting with volume V (1868), but he was not able to fulfill his promise in publishing those of the previous 7 years.

As a scientific journal, *Annals* published works by the most important Cuban scientists for almost a century and also published the debates they generated, showing that there was not always unanimity of criteria within the corporation. The journal published the works read, discussed and approved in the scientific sessions, not only by the academics, which allows us to understand that the structure and writing of them generally responded to the spoken language rather than to the written one. In any case, the approval of the papers presented in the Academy sessions constituted a guarantee of quality similar to what currently occurs with peer review.

A first look at the different types of works published in *Annals* allows us to affirm that some are similar to those published today. Thus, we have been able to identify bibliographic assessments, (14) presentation of clinical cases, (15) review articles (16) and brief communications. As for the typical article with the results of an original research, those that can be classified as such do not correspond in any observed case with the structure of Introduction, Methodology, Results and Discussion, although they do have an introduction, analysis of the structure or parts of the article and the chapters or parts of which it consists. In the 20th century, they included a bibliography. (17)

Illustrative are the instructions to the authors that appear under the name of *Los Anales, Notas,* in which it is requested that the works discussed in the sessions of the Academy be immediately delivered to the table and it is specified that they must be typed to 2 spaces with the extension of between 15 and 20 typed sheets with 3 or 4 attached engravings.

The journal did not assume responsibility for the theories and opinions of the authors or for their style and the lack of veracity of the bibliography and consulted literature that appeared in the references. As can be seen, no emphasis is placed on requirements in terms of methodology for the publication of the papers discussed.

The reports of the verdicts that were requested from the Academy by the judges in matters of legal medicine appeared published in *Annals*, giving a good account of the seriousness they put in this subject. *Annals* functioned, in fact, as the editorial house of the Academy, far beyond the fact of being its press publication, by releasing "...important and original works by eminent scientists...". Among the books published are:

 Works of the Commission of Legal Medicine and Public Hygiene, 3 volumes

- The Cuban flora I volume, Dr. Francisco A. Sauvalle
- Contribution to Cuban Mammalogy, Dr. Juan C. Gundlach
- Contribution to Cuban Ornithology, Dr. Juan C. Gundlach
- Research on the antiquities of the island of Puerto Rico,
   Dr. Henri J. Dumont
- Essay on a medical-surgical history of the island of Puerto Rico, Dr. Henri J. Dumont
- Pathology and therapeutics of the lenticular apparatus of the eye, Prof. Otto Becker translated from German by Carlos Finlay
- Contribution to the study of Cuban molluscs, Mr. Rafael Arango y Molina

Despite all the difficulties involved in the operation of the Royal Academy of Sciences in the midst of the crisis of the colonial system, its publication maintained its continuity during the 19th century and this was a source of great pride for academics:

"The «Annals» of this corporation, whose publication has reached the very rare privilege among us, of having reached its twentieth volume, have been appraised for their scientific merit, in the most honorable way, in the exhibitions of this genre in which they have figured, as evidenced by the diplomas and medals that, like enviable trophies, this Corporation displays with noble pride on the walls of this meeting room." (18)

According to Mestre, when the third installment of *Annals* was distributed, the money provided by subscriptions was sufficient to guarantee the payment of printing costs, <sup>(19)</sup> and we can think that this would happen at least in some issues. However, it must be emphasized that, sometimes, only the personal contribution of some academics allowed the publications of the academy to go out to the public:

"It is fair to state here, as a token of gratitude, that the completion of the first two works mentioned was due in large part to the obsequious liberality of Dr. Gutiérrez..." (20)

Only at the end of the 19th century did *Annals* stop being published due to the convulsive situation of the colony that was fighting for its freedom and Valeriano Weyler's cruel policy of repression. Let's see the perspective of the Academy on this subject expounded, through the review of tasks of 1899, when the publication returned, once the colonial period came to an end. This review spanned 2 years:

"...they were forced into silence: the city was wrapped in the greatest sadness, nothing was felt in the streets other than the groan of a people dying amid the horrors of hunger; in the fields the most transcendental problem of our future was resolved and there in the distance, among the mists of the sea, the most powerful American squadron circled our coasts

These halls were deserted because our most illustrious companions, some had fled abroad, others had been snatched by treachery leading them to exile and ostracism, and not a few hid in their homes avoiding being seen so as not to be sacrificed; Those of us who attended here hardly raised our voices, because danger hovered over our heads, and because under this roof we did not believe we were safe.

Every word was measured, every gesture was calculated, every thought was silenced or wrapped in the garments of the most refined dissimulation.

The academy did not interrupt its tasks for fear of closing its doors forever, but those tasks did not mean calm progress, but rather the communion of hidden feelings that brought us here together." (21)

The journal presented some delays in the  $20^{\text{th}}$  century, again due to lack of resources and printing problems that were always solved.

"We have the satisfaction of announcing that the publication of our «Annals» which had been getting delayed, is today up to date referring to our daily work. We only need to complete the years 1902 and 1903, whose publication is well advanced, to bridge the gap that the needs of the building's reconstruction and the lack of funds forced to make ". (22)

When there was an interruption in the appearance of *Annals*, the pertinent explanations were published on the front page:

"Overcome the difficulties that, for a long period of time, opposed the regular publication of the Annals of the Academy of Medical, Physical and Natural Sciences of Havana, and once the obstacles that caused that suspensión were removed, they return to take their place, with the opportunity among our scientific publications" (23)

The practice of the Academy was that, when there were missing numbers, they were published later to maintain the sequence of the publication. Only the crude socioeconomic and political situation of the years 1930-1933 generated an interruption (1928-1934). (24) In fact, it was not just the publication, but the situation affected the life of the Academy and restricted the number of its meetings, limiting itself to fulfilling its functions supported only by its Governing Board.

It was the decision of this board to resume the publication of *Annals* with volume 70, arguing that, when conditions permit it, they would publish volumes 65 to 69, which never happened. From this volume on, the phrase "Scientific journal" disappeared from the title page.

"The scientific activity of the Academy of Medical, Physical and Natural Sciences of Havana interrupted, and therefore also the release of its official publication, the *Annals* of the Academy of Physical and Natural Medical Sciences of Havana, due to economic problems and political events that are known to all, when the work of this institution resumes and the *Annals* continue their publication, we must make a brief report on the internal affairs as far as these *Annals* are concerned" (25)

Álvarez Sandoval and other authors, in their article «The Academy of Medical, Physical and Natural Sciences of Havana 1926-1943" make us note how, in addition to the convulsive situation in the city, other factors influenced the interruption of the publication. On the one hand, of a financial nature and, on the other, the physical disappearance of Jorge le Roy Cassá in February 1934, who had been responsible for the publication since 1903. (26)

According to Pruna, the circulation of the *Annals* never exceeded 250 copies, although he refers to the Royal Academy, that is, to the 19<sup>th</sup> century. (27) In this same work, Pruna presents a table in which he summarizes the debates presented in *Annals* (occurred in the Academy) classified by themes, which he calls informative units. The largest number of debates were about medicine and within them he comments that the epidemiological issues were most relevant.

In the 20<sup>th</sup> century, the number of printed copies of the magazine reached the figure of 500 first and then a thousand. This shows that the financial resources of the institution had increased. "... The *Annals* are practically up to date thanks to the financial resources that we have today, their edition has risen from 500 copies to 1000 and it is published monthly (...) and it is our purpose to increase its printing to 1500 copies" <sup>(28)</sup> and in 1939 "1250 copies are published monthly..."

In 1915, Le Roy published a work with a table of all the previous directors of *Annals*, with each volume and year of publication; the list includes all the printers used, page numbers, and a series of explanatory notes in which it is possible to know, for example, when monetary difficulties prevented publishing an issue or when one was published out of date. <sup>(30)</sup> Subsequently, the newspaper management published the list of directors for 75 years (figure 3).

Jorge Le Roy Cassá was not only tremendously organized and meticulous in his responsibility as secretary of the Aca-

demy, but he was a scientist who revered history and in many moments he emphasized in his writings the importance he gave to the conservation of the documents of the corporation in order to make its history.

"At all times, the study of the documents referring to the events that have occurred has been a historical source of inestimable value, whether it is a question of an era, a nation, the corporations or the men that made it up" (31)

Precisely in this sense, the task of Le Roy Cassá is significant when he published in full extent the minutes of the sessions of the Academy from 1861 to 1868, just as Mestre had wished.

"The management of the *Annals* has had the pleasure of carrying out the idea conceived by the unforgettable secretary Don Antonio Mestre, of publishing all the minutes of the Academy from its foundation until the time he began to publish them regularly, that is, until May 1868. Today, volume XLVII of the *Annals* contains all the minutes of the public and private sessions according to the existing books in the secretariat from 1861 to 1868, thus saving such important documents from the dangers to which unique copies of manuscripts of such importance have been exposed to. It is the satisfaction of the undersigned to have been able to bring this work to a successful conclusion. Adding in notes the titles of the published works

and the place where they were published. Since all the minutes of the sessions held by the academy appear in the Annals..."  $^{(32)}$ 

Annals of the Academy played a fundamental role in the corporation's international relations, since its edition, although initially not very extensive, reached several countries in America and Europe.

"33 volumes of this publication have already been brought to light, that is, about 400 deliveries of 30 to 40 pages, which have been accompanied, printed on a separate sheet, by important and original works by eminent scientists (...)

These publications have been sent to the main national and foreign scientific centers, and have not only served to demonstrate our progress, but have also achieved the exchange of other publications and newspapers from the most educated societies and men of science, with which it increases our library and contribute to intellectual progress..." (33)

It is interesting to learn about the genesis of the Finlay museum. "This academy acknowledges its gratitude to the honorable Mr. President Dr. Ramón Grau San Martín for the initiative he has had offering \$50,000 for the establishment of the Finlay museum in this academy whose decree has appea-

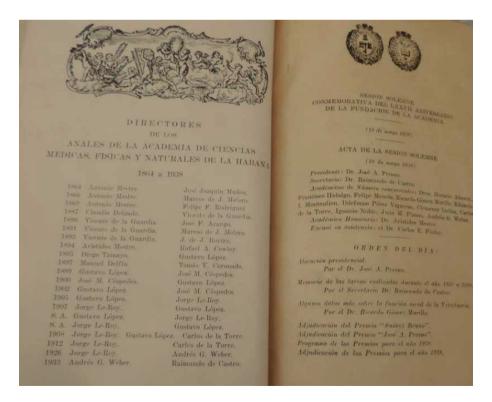


Fig. 3. In 1938, volume LXXV, Annals publishes a list of all the directors of the newspaper since 1864 and a photo of each of them.

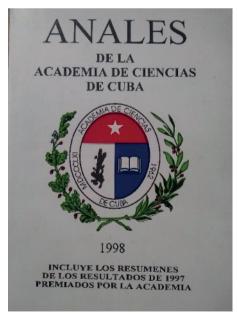
red in the official gazette on April 22, 1948" (34) It is worth clarifying that at this time José López Sánchez, who was the founder and first director of the Finlay Museum, was an academic.

The last issues of the newspaper, already in the 1950's, are almost completely focused on scientific issues, leaving the administrative space to a few pages in compliance with the regulations. The minutes of the sessions were no longer published, but the review of tasks remained. The information on the awards and the tribute to the missing and decorated academics, happened to be within this review. By this date it was almost exclusively a scientific journal. The newspaper maintained by the Academy from 1864 to 1958, which collects the topics discussed in it since 1861, disappeared without explanation or news. It just disappeared.

#### Second stage. From 2011 to the present.

In 1962, the National Commission of the Academy of Sciences was created, whose function was the creation of the new Cuban Academy of Sciences. On June 13<sup>th</sup> that year, the Academy of Sciences of Havana was extinguished by resolution number 8 of the aforementioned commission that functioned as a new science corporation until 1994, when the Ministry of Science, Technology, and Environment (CITMA) was created. In 1996, by Decree Law 163 of that Ministry, the Academy of Sciences of Cuba, as we know it today, was created.

We have found a brochure from 1998 entitled *Annals of the Cuban Academy of Sciences* that includes a small editorial entitled "Why Annals of the Academy?", in which it is made clear that the Academy of the revolutionary period had the intention of resuming the publication of the old newspaper (figure 4).



**Fig. 4.** Brochure from 1998, 77 pages of 22,5 cm by 15.5 cm. Cardboard and paper.

It also contains a summary of the main activities carried out by the Academy in 1997, a list of sponsoring institutions with an introduction, the words of Secretary Daysi Rivero in the extraordinary plenary session of February 1997, the structure of the Academy, the nominations of scientists to titular academics and academics of merit and the summary of all the works awarded in 1997 in the 5 sections.

Unfortunately, the brochure does not have any credits, although we presume that it was prepared in the secretariat with the support and participation of some academics, perhaps the board of directors and some other enthusiast.

The reappearance of *Annals* is only achieved in 2011, just on the sesquicentennial of the old corporation, on May 19. "The Cuban Academy of Sciences rejoices at restarting the publication, now in electronic format and vehicles, of the Annals..." (35) The adoption of the name of the publication of the first Academy of Sciences in Cuba was an expression of admiration and respect that the revolutionary scientists felt then for those who developed Cuban science in the difficult conditions of the colonial period.

Since 2011, *Annals* is a journal, in open access on the open journal digital platform system (OJS), in which all editorial management is done online (figure 5). Multidisciplinary, peer reviewed, it is the scientific official publication of the Cuban Academy of Sciences and declares itself the continuation of the newspaper that emerged in 1864. (35)

First with two issues a year, since 2020 it presents 3 issues every year of the 5 sections of the Academy and in 2021 it adopts a continuous flow. Since 2019, it has been indexed in different databases and repositioning itself in tune with its time, showing greater and better visibility to Cuban science. It is included in DOAJ, in the Latindex Catalog 2.0, in the Cuban Network of Sciences, among the journals certified by CITMA and finally in Scielo. (35) The journal publishes review articles, original research results and presentation of clinical cases in addition to special contributions and has sections for letters to the editor and editorial, generally by the president of the Academy.

The publication of the Academy Awards is something that immediately happened again in its new era. We can even see it in the 1998 brochure. It is a priority of the Academy to give visibility to the awarded works that are the best applied scientific results in the country. Although the awards were resumed in 1986, in 2013 a Commission for the rescue of knowledge project was started to bring to light and support the results of research that had been awarded and not introduced into practice. (36) Between 2013 and 2018, one issue per year of *Annals was dedicated* to the awards, fulfilling a claim by academics. Since 2019, the awarded works are distributed in the 3 annual numbers.



Fig. 5. Image of Annals digital platform.

The change of support goes further beyond an information vehicle, which keeps it defined as a document. The printed newspaper was the means of communication of the Academy of Havana in the 19<sup>th</sup> century, with 30 initial members that soon increased to 50; in the first half of the 20<sup>th</sup> century, the Academy had 70 academics, and its newspaper transmitted what happened in the corporation and the most important issues from the scientific point of view that concerned its members and the government, reaching a greater circulation; the magazine of the 21<sup>st</sup> century is the official organ of the presidency, of just over 400 academics from the country and some foreigners. According to its time, it carries only current scientific information while administrative information no longer fits in its pages, for which the Academy has other means.

### Annals: heritage of the Cuban Academy of Sciences

Nowadays a total of 96 volumes of Annals are kept in the Archives of the institution, which are an essential part of the heritage values that the Academy preserves; likewise, another 80 volumes are stored in the Library. Those found in the Archive sweep across the whole chronological spectrum of the journal's existence.

It is a collection of documents of high heritage value that permits knowing in detail the history of the Havana Academy and its publication, its internal functioning as an institution through the minutes of the scientific and administrative sessions, its mechanisms for solving the difficulties it faced, as well as a source of information about the individuals that formed it, many of them unavoidable personalities in the history of Cuba.

Annals is also a source of information that allows us to access the history of science and its different social contexts, mostly, but not exclusively in Cuba. The greatest concerns of society -and of that society's government- were debated in the hall of the Academy and later published in its Annals. The Havana Academy produced benefits for society, not only in Havana, on issues such as fighting the Spanish flu and other epidemics, vaccination, public hygiene, legal medicine issues, among others.

Annals is an essential part of the collective memory of the Cuban scientific community expressed not only in its scientific contents but also in those related to the management of science and public health. It is the heritage not only of the Cuban Academy of Sciences and Cuban scientists, but of the entire nation whose history appears in it in a less known but not a less important area.

The collection has an acceptable state of conservation, which can be improved, as well as its accessibility and dissemination. The digitization of the journal's collection is more than a necessity, it is a requirement to improve the availability, dissemination, access, and preservation of the information and knowledge that the Havana Academy developed for almost a century.

#### **Conclusions**

Annals was the most important multidisciplinary scientific publication in Cuba, with greater emphasis on medical issues. Annals was the proper way for establishing the scientific authority of the Academy in the Cuban and international context. It was also the public record of the internal life of the corporation, an act of transparency thanks to which we know its operation in detail. Antonio Mestre's work at the beginning of the journal was vital to guarantee its appearance and stability. At the beginning of the 20th century, the work of Jorge Leroy y Cassá was equally vital for such purpose.

Annals meant a guarantee of conservation of many of the documents generated by the institution for over 100 years, issue that was in the spirit of its directors. The copies that are preserved in the archive of the headquarters of the Cuban Academy of Sciences, all those published, are an invaluable reference source for the study of Cuban science in the different historical contexts in which it was an actor aware of its importance. The content of the journal is also vital to learn about the work and life of many of the most important scientists in Cuba.

The digital journal was recognized since the beginning as the heir of that publication appeared in the 19<sup>th</sup> century and remained in operation throughout the 20<sup>th</sup>. *Annals* continues in its quest for improvement, showing itself in its stability, balance and indexing, becoming more and more the "umbrella journal of Cuban science".

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Received: 06/04/2022 Aproved: 07/28/2022

#### **Conflict of interests**

The authors declare that there are no conflicts of interest between them, nor with the research presented.

### How to cite this article

González Navarro L, Arduengo García DA. Annals: history and heritage. Annals of the Academy of Sciences of Cuba [internet] 2022 [cited in day, month and year];12(3):e1251. Available at: <a href="http://www.revistaccuba.cu/index.php/revacc/article/view/ID1251">http://www.revistaccuba.cu/index.php/revacc/article/view/ID1251</a>

