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# THE FIRST 60 YEARS OF THE "CAHIERS"

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**Résumé**. Petit historique de la création des "*Cahiers*" par Charles Ehresmann en 1957-58 et de son évolution en un périodique trimestriel en 1966, jusqu'à son changement, pour l'anniversaire de ses 60 ans, en un Journal électronique trimestriel librement téléchargeable.

**Abstract.** Short story of the creation of the "*Cahiers*" by Charles Ehresmann in 1957-58 and of their evolution into a quarterly Journal in 1966, up to its change, for its 60<sup>th</sup> anniversary, into a quaterly Open Source Journal, freely downloadable.

**Key words.** Periodical, Open Source Journal, Topology, Differential Geometry, Categories.

**MS Classification.** 01A75, 00B10, 18-06, 53-06, 55-03 enterprise

# 1. The ten first years

While being Professor at the 'Université de Strasbourg', Charles Ehresmann (1905-79) created the *Colloque de Topologie de Strasbourg*, the Proceedings of which were pre-published in 3 volumes (1951-54). He naturally intended to pursue this activity after his nomination in 1955 at the 'Université de Paris' (then also called 'La Sorbonne').

At that time the teaching and research in Mathematics were held at the 'Institut Henri Poincaré'. In particular there were a few specialized regular seminars; their Proceedings were published by Paul Belgodère, the Director of this Institute, in the

Collection des Séminaires de l'Institut Henri Poincaré.

Free copies were given to the participants of the seminar, some other exemplars were sold by a near-by library.

Charles decided to also create his own weekly *Séminaire de Topologie et Géométrie Différentielle*, and to publish its first year Proceedings (1957-58) in the above collection (it will later become Volume I of the *Cahiers de Topologie et Géométrie Différentielle*).

However, this publication raised some problems with Belgodère who wanted the collection to exactly reflect the weekly presentations, while Charles wanted to also include much longer papers such as theses (even asking for more copies to be printed for the thesis-deposit!).

The solution was to find an independent way to publish the papers written by, or of interest for, people participating to the Seminar such as invited lecturers and research students.

- First Charles obtained that the C.N.R.S attributes a post of secretary to his research team to type mathematical texts.
- At that time, there were no computers but only simple typewriters not well adapted to type attractive mathematical texts. While reflecting on the problem, Charles accidentally found (over an I.H.P. cupboard...) an unused Varityper (cf. Figure), an "office composing" machine to produce neat, camera-ready copy for offset printing. This "word processor" of the pre-digital age used an interchangeable type shuttle, and allowed for justified texts by typing each line twice. For having later spent long hours using it for the *Cahiers*, I can assure typing with it required much attention!





• Finally, as almost all the volumes contained theses, the printing costs were covered by the C.N.R.S. subventions given for theses at this time.

Volumes II to VIII of the *Cahiers* were published in this way, irregularly from 1960 to 1966 (and freely distributed). To indicate their progressive independence from the Seminar, the title varied from *Séminaire de Topologie et Géométrie Différentielle* (Volumes II-III), to *Topologie et Géométrie Différentielle*, *Cahiers du Séminaire* (Volume IV-VII (cf. Figure), and finally *Cahiers de Topologie et Géométrie Différentielle* for the Volume VIII.

# 2. The Cahiers become a legal 'Périodique'

However, our secrete ambition was to publish a regular mathematical journal. The opportunity arrived in 1965, when the 'Editions Dunod' published Charles' book *Catégories et Structures*. On this occasion, Charles met M. Dunod and, in their discussion, he presented him the Volume VIII of the *Cahiers* and asked for advice to increase their diffusion through subscriptions.

M. Dunod proposed to ensure their printing and diffusion, and transform them as a legal *Périodique*, the only condition being (for administrative reasons) to publish one volume a year, divided in 4 quarterly issues.



Thus from 1967 to 1972, the *Cahiers* were published by Dunod, with Charles as 'Directeur' and myself (from volume XI on) 'Responsable de la rédaction'. Each quarter, we used to give the complete composed text of the issue (except the cover) to Dunod, then went to the printer to correct proofs. Dunod would take charge of finding and managing subscriptions, and during these years the number of subscribers sharply increased.

All went well up to 1972, when Dunod was bought out by Bordas Editions who considered that the *Cahiers* were not lucrative enough to pursue their publication.

We then decided to publish the *Cahiers* ourselves; the change was facili-

tated by Dunod who gave us the list of subscribers and the backsets, even providing me with a short training for managing the subscriptions' administrative work. In the first years, we were often helped by members of our Paris-Amiens research team *Théorie et Applications des Catégories*.

#### 3. In 1975 the *Cahiers* are domiciliated in Amiens

In October 1975, Charles (then 70 years old) had to retire. We went to live in Amiens where I was Professor since 1968, and where Charles was invited to give regular lectures at the 'Université de Picardie'. Thus it seemed natural to domiciliate the *Cahiers* there.

Initially we thought that the C.N.R.S would accept that the Secretary post attributed to Charles in Paris would be changed into a post in Amiens. However for accepting the exchange, it was required that the *Cahiers* remain in Paris and that they be really centred on publishing texts in Topology and Differential Geometry, and not texts in Category Theory as in the last volumes.

Naturally, we could not accept this condition, so that we had no more external help: from then on, the *Cahiers* entirely depended on the subscriptions (for paying the printer and the mailing costs). During a time, I myself composed all the texts on Varityper, but soon more friendly word-processors appeared, allowing the authors themselves to prepare good enough texts which I had only to edit in a volume.

From 1975 on, the *Cahiers* began to gain a reputation in the Category Theory circles and the number of subscribers kept on increasing. This was partially due to the many invitations of foreign specialists to Amiens, as well as to the International Conferences we organized in Amiens, with publication of their abstracts:

- Colloque sur l'Algèbre des Catégories, Amiens 1973 (Vol. XIV-2):
- 2<sup>e</sup> colloque sur l'Algèbre des Catégories, Amiens 1975 (Vol. XVI-3).

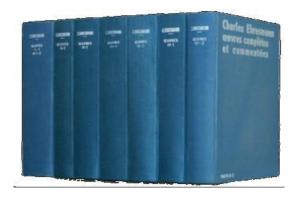
After Charles' death in 1979, I pursued the publication of the *Cahiers* in the same conditions, except that I became Director in 1980.

Among the important papers published at that time figure the Proceedings

of the large international

3ème Colloque sur les Catégories, dédié à Charles Ehresmann

(Amiens 7-12 Juillet 1980) which contain papers from almost all the reknown specialists of that time, covering Volume XXI-4 (1980) and the whole of Volume XXII (1981).



From 1980 to 1983, to make Charles' works more accessible, I also published *Supplements to the Cahiers* devoted to the 7 volumes of

"Charles Ehresmann: Œuvres complètes et commentées".

They contain all Charles' papers, to which I have added long Comments in English to update the texts and extend some of the results.

# 4. Later important changes



In 1984, René Guitart noted that the title of the *Cahiers* did not enough reflect the large number of papers dealing with categories, suggesting to modify it by adding 'Catégoriques', whence the current title:

Cahiers de Topologie et Géométrie Différentielle Catégoriques.

He also suggested that I name an Editorial Board to help me in the selection of the accepted papers. Apart from me, this first Editorial Board consisted of: Jiri Adamek, Marta. Bunge, René Guitart, Peter Johnstone, Anders Kock, Tim Porter, Jean Pradines and Ross Street.

With the passing of years, I became anxious of the Cahiers' future when I shall not be capable of being in charge any more It seemed to me that Marino Gran and René Guitart would be my best successors, and I thank them for having accepted to already help me by joining me as Chief Editors...

With them, in 2015 we decided to enlarge the Editorial Board, inviting some younger members to join us:

Clemens Berger, Maria-Manuela Clementino, Zurab Janelidze, Sandra Mantovani and Emily Riehl.

# 5. Adaptation of the Cahiers to the electronic age

As soon as 2005, I created a site for the *Cahiers* on my personal site

http://ehres.pagesperso-orange.fr

(with Jean-Paul Vanbremeersch's help). It contained general information on the publication, an index, and the abstracts and table of contents of the recently published volumes,

At about the same time, <u>NUMDAM</u> proposed to digitize the old volumes to render all their papers freely downloadable. Because of material problems, they have presently stopped at Volume LII (2011).

To ensure that, in spite of NUMDAM delay, the papers be accessible at most 2 years after their paper-publication, all the issues of the volumes since Volume L (2009) are now freely downloadable from my above site. And the separated papers since Volume L are also downloadable from a second reader-easier new site

cahierstgdc.com

recently created by Isabella and Marino Gran.

Now a new step begins on the 60th anniversary of the *Cahiers*: no more paid subscription, no more 2 years waiting for downloading the papers. Indeed, they become a free "Open Source Journal" (with no Authors' Pub-

lication Charges), while keeping their present objectives and presentation except for paper being replaced by pdf files.

The present Volume LIX-1 (2018) is the first Open Source issue. As will be all its successive issues, it becomes freely downloadable as soon as it appears:

- as a pdf file containing the entire issue (included its cover), on the first site;
  - as separate papers' pdf files on the second site.

This important change will allow anyone to have an immediate and free access to the publication. It corresponds to our initial wish to promote the development and dissemination of mathematics, in particular of Category Theory, to an ever larger circle.

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