Note by the Communicator of Two Papers, by J. Barrow-Green and by K. G. Andersson, on Poincaré

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The following two papers cover essentially the same topics. However the differences between them as well as the circumstances under which they were submitted justify their simultaneous publication. In the winter of 1990–91 JUNE BARROW-GREEN attended a two-month long work shop on the history of recent mathematics that I had arranged at the Mittag-Leffler Institute. She was working on a Ph.D. thesis concerning POINCARÉ's research on celestial mechanics and was excited to discover a copy of the first printed but virtually uncirculated version of POINCARÉ's prize paper and the related correspondence. When she had finished her thesis, in the summer of 1993, I asked her to condense the part related to the prize competition and POINCARÉ's mistake into a paper that I could communicate to the Archive for History of Exact Sciences. However one week before BARROW-GREEN sent me her paper I received a paper from KARL GUSTAV ANDERSSON on exactly the same subject.

BARROW-GREEN discusses all the problems concerning the prize competition in more detail than ANDERSSON and explains the mistake in a less technical way. ANDERSSON, on the other hand, gives a mathematically more precise summary of the content of the first printed version of the prize paper and discusses PHRAGMÉN's intervention in more detail.

Thus, although King OSCAR II's prize was awarded only once, it continues to create competition. At a time when dynamical systems and chaos enjoy great popularity among mathematicians and physicists, it could have been foreseen that several scholars would take up the dramatic story of the prize competition and POINCARÉ's subsequent discovery of homoclinic points. Indeed, the cause of events is also discussed by DANIEL L. GOROFF in his introduction to the recent English translation of POINCARE's "Les méthodes nouvelles de la mécanique céleste" [1]. GOROFF's discussion of the incident is based on published sources alone and is therefore not as complete as BARROW-GREEN's or ANDERSSON's research which are based on unpublished sources in the Mittag-Leffler Institute. Finally it should be remarked that neither BARROW-GREEN nor ANDERSSON were aware of GOROFF's introduction when they wrote their papers.

Reference

1. H. POINCARÉ. *New methods of celestial mechanics.* Edited by D. L. GOROFF, with an introduction of 93 pages, American Institute of Physics, 1993.

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