

Ludus' 10th Anniversary

Jorge Nuno Silva (Ludus & University of Lisbon, Portugal)

It is not unusual for the Museu Nacional de História Natural e da Ciência (MUHNAC) to host open extension events on a Saturday. On 25 June 2016, however, the reason for the festivities was new: Associação Ludus (AL)¹ was celebrating its 10th anniversary!

Along one of the avenues leading to Jardim Botânico, several tables were prepared for games. Besides the Rubik's cube and origami, one could find traditional games, such as Mahjong, but the boards were mainly intended for abstract (i.e. mathematical) games. Visitors could play Hex, Amazons, Dots & Boxes, Traffic Lights, etc. These, among others, can be found at the National Championship of Mathematical Games,² a competition that has been attracting over 100,000 young people each year since 2004. In these games, luck plays no part. To beat the opponent, a player must be better at thinking with rigour and creativity.



Final of the 11th National Championship of Mathematical Games, Vila Real, 6 March 2015.

We believe that mathematics should be promoted not only by calling attention to its applications but also by emphasising what is at its core: the art and pleasure of thinking! Abstract board games are, in this way, very mathematical. As Hardy puts it in his *Apology*: “Chess problems are the hymn-tunes of mathematics.”

In the crowd, one could spot some young people in orange overalls. These are members of the Mathematical Circus (MC),³ showing their tricks as real buskers. The Circus performs regularly in schools, museums, science centres and also in the street. It is a very successful project of AL. As W.F. White has written, “Amusement is one of the fields of applied mathematics”⁴ and we follow suit.

¹ <http://ludicum.org>.

² <http://ludicum.org/cnmj>.

³ <https://www.facebook.com/CircoMatematico/>.

⁴ In *A scrap book of elementary mathematics*.

MC's repertoire includes several mathematical (i.e. self-working) card tricks. After a few years of practice and study, we launched a book on mathemagic with cards.⁵ Jorge Buescu introduced the work to a very interested audience.



An early team of the Mathematical Circus.

Suddenly, *Project Bug*, a jazz band from Mafra, starts performing, its members flowing among the visitors, some of whom start dancing. People are having a very good time... Recreational mathematics and good music go very well together.

AL takes recreational mathematics very seriously. We honour Martin Gardner every year around 21 October, being part of the global Celebration of Mind event.⁶ On odd numbered years, we organise the Recreational Mathematics Colloquia – Gathering for Gardner, Europe.⁷ Of course, on even numbered years, the leading event happens in Atlanta, USA.



Poster of the Recreational Mathematics Colloquium V.

⁵ Silva, A., Freitas, P., Silva, J. N., Hirth, T., *Matemagia*. Ludus 2016, ISBN 978-989973468-5.

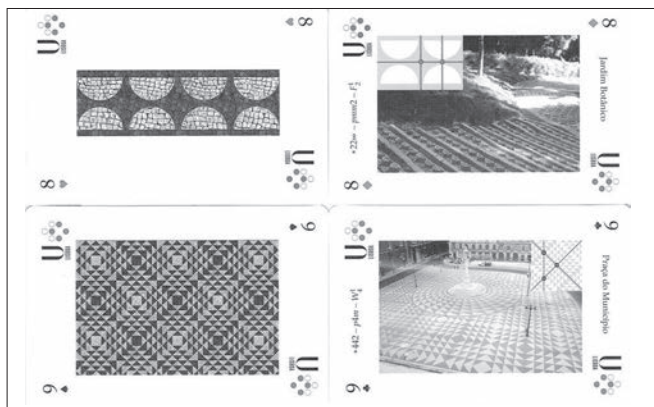
⁶ http://www.celebrationofmind.org/wordpress_site/.

⁷ <http://ludicum.org/ev/rm>.

AL publishes an online journal on this subject, the *Recreational Mathematics Magazine*.⁸ We invite you to browse through its articles and we are sure you will not be disappointed.

The mathematics of combinatorial games is particularly interesting and an active area of research. Every other year, AL organises an international meeting, the Combinatorial Game Theory Colloquia,⁹ where most of the leading experts gather together.

Games in general are mysterious and universal; their history and culture is also a subject that deserves increasing academic attention. AL promotes the online publication of the prestigious journal *Board Game Studies*.¹⁰



A deck of cards with 26 puzzles based on all the symmetries of the traditional Portuguese pavement, and 26 matching answers. A special card (a mirror) helps in figuring out the nature of each frieze/pattern/rosace. (Published by Ludus in 2015.)

⁸ <http://www.degruyter.com/view/j/rmm>.

⁹ <http://cgtc.eu/>.

¹⁰ <http://www.degruyter.com/view/j/bgs>.

From the early hours, a pig was being prepared and roasted, together with many other delicacies (Portuguese wine included).

The meal and the cake with anniversary candles had to wait. It was time for the conference and Henrique Leitão's '*The mathematics of the calendar*'. We all enjoyed learning about the complexities of calendrical calculations. Sophisticated mathematics insinuated itself into this practical/religious topic. The festivities were at a high point!

After the talk came the meal. It was worth waiting for the delicious roasted boar. People shared ideas about the activities of the day while enjoying a nice dinner.

Last but not least, we had a live broadcast of the Croatia-Portugal football match (UEFA Euro championships, last 16 knockout stage). Portugal won and moved on to become European champions.

A perfect day!



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