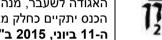**SCIENCE-Fiction Fanzine**   **Vol. XXVII, No. 06; June, 2015**

The Israeli Society for Science Fiction and Fantasy – חדשות האגודה – מאי 2015

<mark>**Don't miss:**</mark>

Bidyon-Tel Aviv 11 June 2015 – see: http://bidyon.sf-f.org.il/bidyon2015

בְּדָיוֹן הוא כנס המוקדש לספרות ספקולטיבית, שמנוהל זה 11 שנה בידי אגודה ישראלית למדע בדיוני ולפנטסיה. הכנס יוקדש לזכרה של קרן אמבר, יו"ר האגודה לשעבר, מנהלת כנסים ופעילה מרכזית בקהילה.
הכנס יתקיים כחלק מאירועי התרבות בשבוע הספר העברי, ביום חמישי, ה-11 ביוני, 2015 ב"בבית בדב הוז", דב הוז 30, תל אביב.

מועדון הקריאה של חודש יוני יעסוק בספרם של ניל גיימן ומייקל ריבס **בין עולם**. עותקים של הספר יוגרלו בין הנוכחים במועדון הקריאה של חודש מאי.

כל האירועים של האגודה מופיעים ב**לוח האירועים** (שפע אירועים מעניינים, הרצאות, סדנאות, מפגשים ועוד)
לקבלת עדכונים שוטפים על מפגשי מועדון הקריאה ברחבי הארץ ניתן להצטרף ל<u>רשימת התפוצה</u> או ל<u>דף האגודה</u>
Society information is available (in Hebrew) at the Society's site: http://www.sf-f.org.il. <u>בפייסבוק</u>

In this issue:

1) The future of CyberCozen: Update + Survey results + About the final installment(s) on Zombies – an executive decision.
2) "Sheer Science" must go on…
3) "Terry-Tech": Pratchett's "science and technology". What the "HEX"?
4) "Just for Fun": Something that may make someone smile ☺

— **Leybl Botwinik (CyberCozen acting editor).**

<u>The Future of CyberCozen - Update</u>

Update concerning current and near future plans for CyberCozen:

- The special issue in memory of Aharon Sheer (ז"ל): prepared and sent out, as promised.
- The special issue in memory of Leonard Nimoy (ז"ל): being worked on, as promised.
- The survey and appeal to our readers to try to formulate the future of CyberCozen and hopefully to set up an editorial board and get more contributions from more people: Sent out. <mark>**Thanks to all who have answered, but I'd like to see more responses**</mark> ☺**.**
- I will continue to prepare CyberCozen in its current format and hopefully with the assistance of others, until an editorial board can decide on its ongoing form, and until…
  until …. Well, only the future will tell. — **Leybl Botwinik (CyberCozen acting editor)**.

Executive Decision: About the final part(s) of the Zombie Articles
After receiving various feedback – both pro and con – concerning the series of articles about Zombies that have been appearing off and on in CyberCozen, I have decided that I will not

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continue printing it in bits and pieces, since it has at times become disconcerting to pick up where it left off previously. Had the articles appeared in consecutive issues, it would have been less of a problem – but the continued delays in publishing between parts, plus the fact that some of the content is not exactly suited to CyberCozen (and its readers), has made me rethink this. So, to satisfy all who are interested in reading the continuation – and for those who are not – I will put together a compendium of all the published and unpublished parts + add some updates, in a special issue to be published sometime after the Leonard Nimoy issue. (**LB**)

Sheer Science

Selected by Leybl Botwinik

Here's a fascinating "piece of work" (as they say), a genuine miniature drone that folds, walks, swims, and even dissolves!
Here's what PC Mag has to say:

"Researchers at MIT have created an incredible new drone …
Start the robot by placing it on a hot surface—it will then assemble itself and zoom around according to your programmed commands. It can travel up steep surfaces, clear obstacles, and even carry loads twice its own weight. But be careful—the device degrades in acetone. Drive it into a puddle and your days of 3cm/s joyriding will be all over…."

To read more, and **to see the incredible video**, go to:
http://www.pcmag.com/article2/0,2817,2485084,00.asp

Terry-Tech: What the "HEX"?

(Terry Pratchett's takes on Science, Technology, and related issues)
By: Leybl Botwinik

As mentioned in a previous article, Terry Pratchett's "Discworld" is all but devoid of Science and Technology, as we know it. Other than simple and mostly primitive mechanical devices (including weaponry) – which we will study in upcoming articles – the 'advanced' energy producing or energy consuming devices are all magical in origin and use. In addition, the setting for the stories are usually in places where there is no technology or where the equivalent setting in our world would be something like at the beginning of the industrial revolution. The equivalent in our world would be something like the 1880s to 1910's (before the airplane) .

That having been said, one of Pratchett's most interesting (and advanced) devices makes a tremendous leap forward to one of our modern world's most unique and significant technological wonders – the computer (and the hi-tech surrounding it).

LEGO HEX

Since the dawn of today's Computer Age, this thinking and calculating machine has been equated with both academics and "magic" in our world. It was therefore very appropriate, that the creators of Discworld's first thinking machine would be the wizards at the Unseen Academy.

In fact, the term "wizard" is used in today's computer lingo as described in Wikipedia:
> "A software **wizard** or **setup assistant** is a user interface type that presents a user with a sequence of **dialog boxes** that lead the user through a series of well-defined steps. Tasks that are complex, infrequently performed, or unfamiliar may be easier to perform using a wizard."
> (http://en.wikipedia.org/wiki/Wizard_%28software%29).
– how fitting!

Created by Ponder Stibbons and some student wizards in the High Energy Magic building of the university, they dubbed the contraption "HEX". Pratchett does wonders in his creative use of many hi-tech terms and concepts. The very name "HEX" is a perfect example of his combining many elements familiar to Discworld and to our world. A 'hex' is another term for a magical spell. 'Hex' in computer lingo is short for 'hexadecimal' (=base 16, incorporating the digits 0-9 and the letters A,B,C,D,E,F), which is one of the counting systems used in computer mathematics and logic.
In addition to the above, there are several computer terms and products reminiscent

of the sound and letters 'h.e.x.' that may or may not have also influenced Pratchett:

> LEX – **LEX** is a stream cipher based on the round transformation of AES. ….
See: http://en.wikipedia.org/wiki/LEX_(cipher)

> Lex – **Lex** is a computer program that generates lexical analyzers ("scanners" or "lexers")
See: http://en.wikipedia.org/wiki/Lex_(software)

> TeX – **TeX** is a typesetting system designed and mostly written by Donald Knuth and released in 1978.
See: http://en.wikipedia.org/wiki/TeX

[I believe that there is at least one more related "HEX" – your turn to look it up ☺]

For a very thorough and enlightening study of the development of the HEX thinking machine in Terry Pratchett's books, I direct you to an excellent presentation here:
http://en.wikipedia.org/wiki/Hex_(Discworld)

Terry Pratchett has a ball playing with HEX and its development. For one thing, it is continually building itself – magically adding parts to increase its utility – similar to the constant upgrades and new versions of both hardware and software in today's computers. The continually growing set of new features also develop HEX's artificial intelligence and communication capabilities.

To describe HEX, one has to see it develop. In the original 'first generation' HEX, it was simply a complex network of glass tubes, containing ants. The wizards would use little boards with holes in them (like the old punch-cards) to control which tubes the ants could crawl through, enabling it to perform simple mathematical functions. (Thus we later find a sticker that magically appears on HEX saying "Anthill inside" – reminiscent of the "Intel inside" stickers). In its self-building, HEX is discovered one day to have sheep's heads added to it (RAM)

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and bee hives (for external memory and long-term storage).

Let's take a look at some interesting insights directly from the books.
In an obvious clash between conservatism/tradition and progress we find the following in "*Interesting times*": "Look, I don't mind summoning some demon and asking it…That's normal. But building some mechanical contrivance to do your thinking for you, that's … against Nature…" (p18)

Here is an excerpt about the self-building and new versions of hardware and peripherals that are discovered as add-on features every once in a while: "But a lot of it had just… accumulated, like the aquarium and wind chimes which now seemed to be essential. A mouse had built a nest in the middle of it all and had been allowed to become a fixture since the thing stopped working when they took it out…" (p39).

Of course HEX's printed output messages are lots of fun too. The specific responses depend on the context of the queries made of it. However, the standard responses are just as fascinating (p41-42):

```
????? Eternal Domain Error.
+++++ Redo From Start +++++
```

```
++ Out of Cheese Error. Redo
From Start
```

HEX is like child, and beginning to develop some form of artificial intelligence. Ponder and some others at the university suspect as such – and are somewhat concerned. The entity known as DEATH, however, who is an expert on what is and isn't alive (or dies) immediately picks up on the fact that there is a spark of life in HEX.

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In the book "**Hogsfather**" (the equivalent of our Santa Claus – the book is about him and Discworld's equivalent "Christmas" which Pratchett coins "Hogswatch"), we find the entity known as "Death" replacing Hogsfather on Hogswatch eve, because the latter has disappeared. In order to attempt to solve the mystery, Death comes to the Unseen University seeking help from the wizards, where he is introduced to HEX. They begin communicating about some issues that are quite profound (p293-295):

"*It took several minutes. The wheels spun. The ants ran. The mouse squeaked. An egg timer came down on a spring. It bounced aimlessly for a while and then jerked back up again…*" and an answer is forthcoming. At this point, Death is about to leave, when HEX begins to write again:

```
+++ Dear Hogfather, For Hogswatch I want –
```
OH, NO. YOU CAN'T WRITE LETT – Death paused and then said YOU CAN, CAN'T YOU.
```
++ Yes. I am Entitled +++
```
Death waited until the pen had stopped, and picked up the paper.
BUT YOU ARE A MACHINE. THINGS HAVE NO DESIRES. A DOORKNOB WANTS NOTHING, EVEN THOUGH IT'S A COMPLEX MACHINE.
```
+++ All Things Strive +++
```
YOU HAVE A POINT, said Death
…
LET ME SEE … HOW OLD ARE YOU?"

Terry-Tech: **Our readers are heartily welcome and strongly encouraged to contribute with some of their own favorite observations of Discworld's hi- and low-tech. Of course other Pratchett takes on SF-ish topics such as astronomy and space, or time travel, etc. are also most welcome.**

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☺ JUST FOR FUN ☺

While looking for something else on the CNET website, I came across the following interesting item. Neat!

"I love you," you say. "I know," says your fridge.

ThinkGeek has released an amazing mini-fridge that's sure to please "Star Wars" geeks, as it looks just like Han Solo frozen in carbonite. What better way to keep your beverages cool than by putting them inside a block of carbonite like the one Han was frozen in before the scruffy-looking nerf herder was handed over to Jabba the Hutt?

[Read more here]:
http://www.cnet.com/news/han-solo-mini-fridge-lets-you-store-your-drinks-in-carbonite/?tag=nl.e214&s_cid=e214&ttag=e214&ftag=CAD3c77551

We'd love to hear your thoughts on any of the above subjects and we may publish some of them!

Don't forget: BIDYON – Tel Aviv 11 June 2015 – *see:* http://bidyon.sf-f.org.il/bidyon2015/