Popular science writing

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Why? What? How?
Why popular science?

• Be able to write different kinds of texts in working life.
• Be able to communicate with colleagues with a different background.
• Spread knowledge to the society.
• Researchers who write popular science are more frequently cited.
• Popular science communication supports learning.
What does the reader want to know?
So what?
Questions to be answered

What makes this research interesting?

Which are the benefits for society?

What's in it for me?

How can it be part of a larger context?
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How should I write?
The canons of rhetoric

- **Analysis** – adapting to rhetorical situation and audience
- **Invention** – choosing contents, message, level of abstraction, perspective
- **Arrangement** – choosing structure, highlighting structure (with paragraphs, headings, metatexts) introduction, conclusion
- **Style** – words, expressions, composition
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Analysis

Who is the reader?
When does he/she read the text?
Where?
Why?
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Invention

What content may interest the reader? (Or not)
Which perspectives?
Application?
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Arrangement

Introduction – create interest and curiosity.
Background – brief and objective, ”zoom out”.
Message – clear and distinct.
Main part of the text – explicate and motivate the message.
Ending – conclusion, e.g. application, call, future.
Other text-patterns

Scientific report (IMRAD)
• Aim at the beginning
• Detailed description of methods
• Detailed results
• Conclusions at the end

Crime novel
• Clues
• Solution at the end
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Style

What words and expressions should I choose?
Technical terms, everyday language?
Sentence structure?
Stylistic devices?
Illustrations?
The title should ...

- start from something familiar and ordinary
- highlight the key message
- catch the reader
The introduction should …

• connect to the title
• put your own work into a larger context
• and ... make the reader go on.
The end should ...

- reflect the introduction
- have a clear conclusion, e.g.:
  - speculate on the implications of your results
  - tell what issues remain to be answered
- wind up nicely with a punch line.
Stylistic devices

Concrete example
Let an example explain the general phenomenon
Snow flakes – fractals
Poker game – probability theory

Metaphor or analogy
Relates to something familiar
The Earth is a huge magnet.
The flow of electric current is like water in a garden hose.
Personification
Abstract phenomena acquire human traits
... "rogue" planets kicked out of our solar system eons ago.
(New Scientist 26 March 2014)
This article will discuss ...

Thought experiment
Different premises
Imagine there is no oxygen in the atmosphere ...
If we could travel through time ...
Rhyme and alliteration
Sound techniques that create emphasis
Genetics and gene-ethics.
Big bang birthday: Six mysteries of a cosmic bombshell.
(New Scientist 22 February 2014)

Metatext
Comments on your own text
As I mentioned before …
Here will follow three examples ...
How could this be explained?
Canny titles

Guilt-free fossil fuels
First coal plants that clean up as they burn
(New Scientist 8 March 2014)

Higgs thunder
Listening in on the birth pangs of universe
(New Scientist 22 February 2014)

What's inside a black hole?
Fuzzball, ice wall or unexploded bomb
(New Scientist 8 February 2014)
What makes a well-written text?

Traits in the genre of scientific writing:

- Arguments that connect details and the whole, the specific and the general.
- Coherence – how the parts of the text are tied together.
- How concepts are introduced and recur through the text.


- The same goes for the popular science genre!
On popular science writing
http://awelu.srv.lu.se/genres-and-text-types/writing-in-academic-genres/popular-science-writing/

Google images
http://images.google.com/
Which are the writer’s benefits?

Popular science writing can help us ...

- change and add perspectives
- see the relevance of our project – to society and the individual
- develop our ability to critically reflect and bring forward arguments
- become aware of our own competence
- develop our scientific writing skills as well.

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