



Information literacy in academic context: a “scientific” media education?

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Information Literacy, a “scientific” media education?

“Information literacy and media literacy have the same objective – training people to access, understand, evaluate, communicate, use, and create media messages and information. Both highlight the importance of the ethical use of information, the critical analysis of content, the use of multimedia platforms, and knowledge production.”*

- ▶ Competency in searching, evaluating, and using information
- ▶ Based on critical thinking and ethics
- ▶ Need for educations and trainings

*A. Lee, C. So, Media Literacy and Information Literacy: Similarities and Differences
, Comunicar; Comunicar 42: La revolución de la enseñanza; 137-146



What's on at ULiège Library?

How are we organised and what do we do about information literacy?

Working group on Information literacy teaching and research support at ULiège



(WG SUPPER – SUPPort of Education and Reasearch)



► Teaching

Coordinating the teaching of information literacy

- Scheduled courses
- Information Literacy



► Training

Coordinate one-off training outside the curriculum



► Research

Coordinating support for researchers

Working group on Information literacy teaching and research support at ULiège



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► Teaching

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► Training

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► Research

Coordinating support for researchers



► Teaching

- 54 courses
- +-600 hours of lessons
- Given to +-3800 students every year
- Based on common guidelines 5 PMIs (5 pillars)



What are the new projects for 2025?



► Teaching

- Update and complete all the help on the lib.uliege.be website
- Transversalisation: development of pedagogical and didactic skills, in collaboration with IFRES and the digital education department
- Teaching cadastre: updating (recurring)
- Identify courses in which there are no InfoLit courses done





► Training

- 62 sessions
- 626 hours of lessons
- Given to 840 researchers by 18 trainers
- Based on common guidelines 5 PMIs (5 pillars)
- Other types of training (Tutorials on Youtube, ...)



What are the new projects for 2025?

► Training

- Training cadastre: updating (recurring operation)
- Cross-disciplinary training: pooling and benchmarking of what is being done elsewhere
- Development of a catalogue of short and on-demand training courses for URs

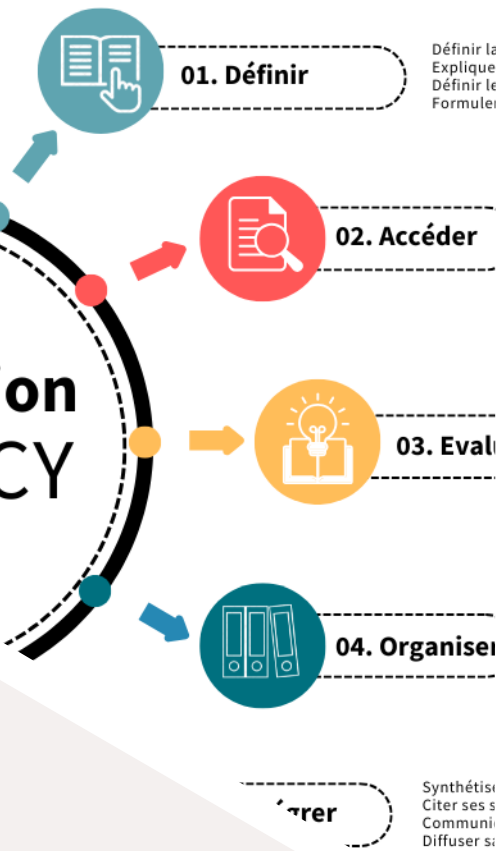




► Research support

- Search query in database
- Open science
- Bibliometric support
- Research evaluation (DORA...)
- Systematic review
- ...





02

Did you say 5 PMIs?



Information Literacy

5 PMIs, 5 PMWhat?

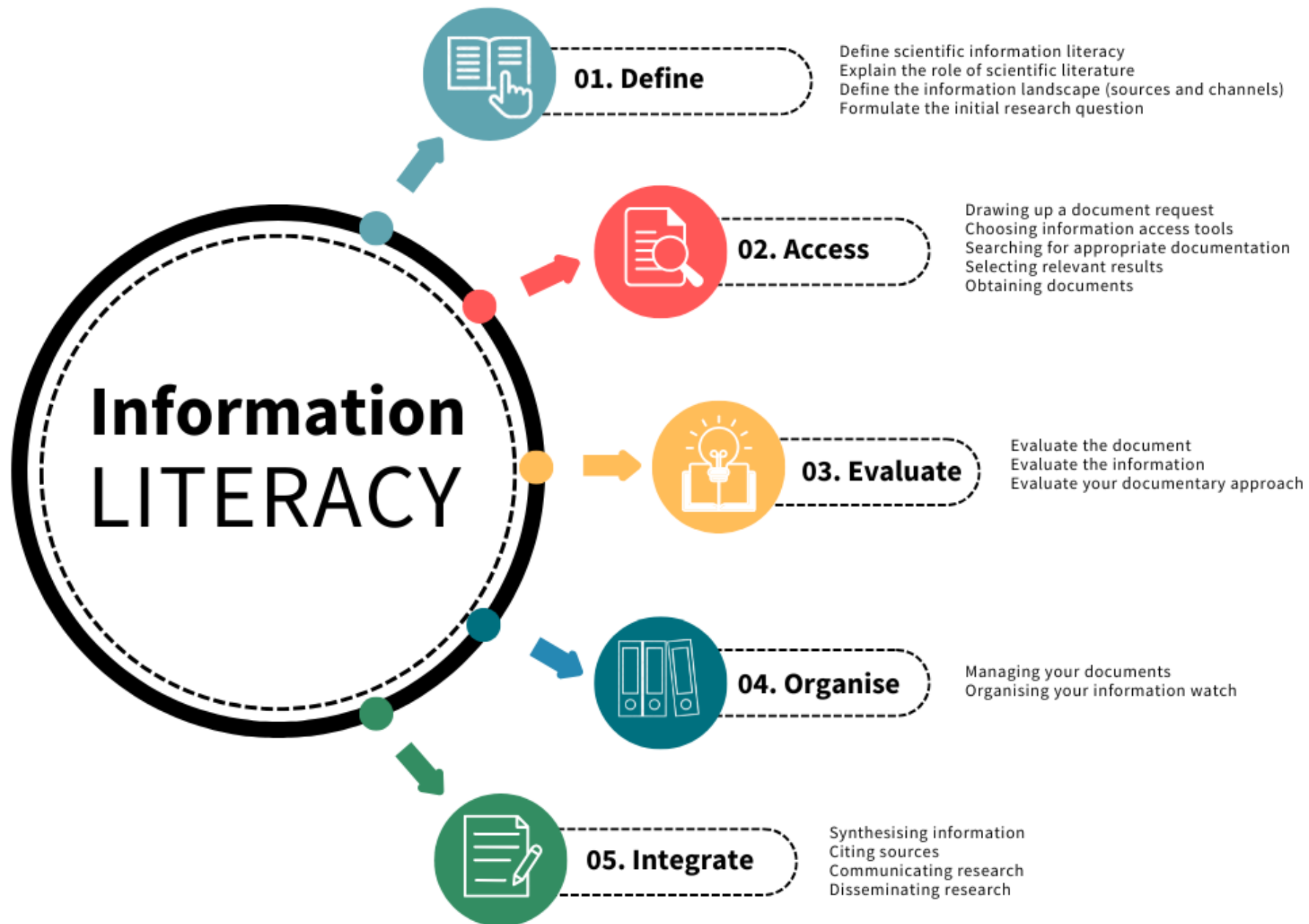


Throughout

Teaching

Training

Research
support



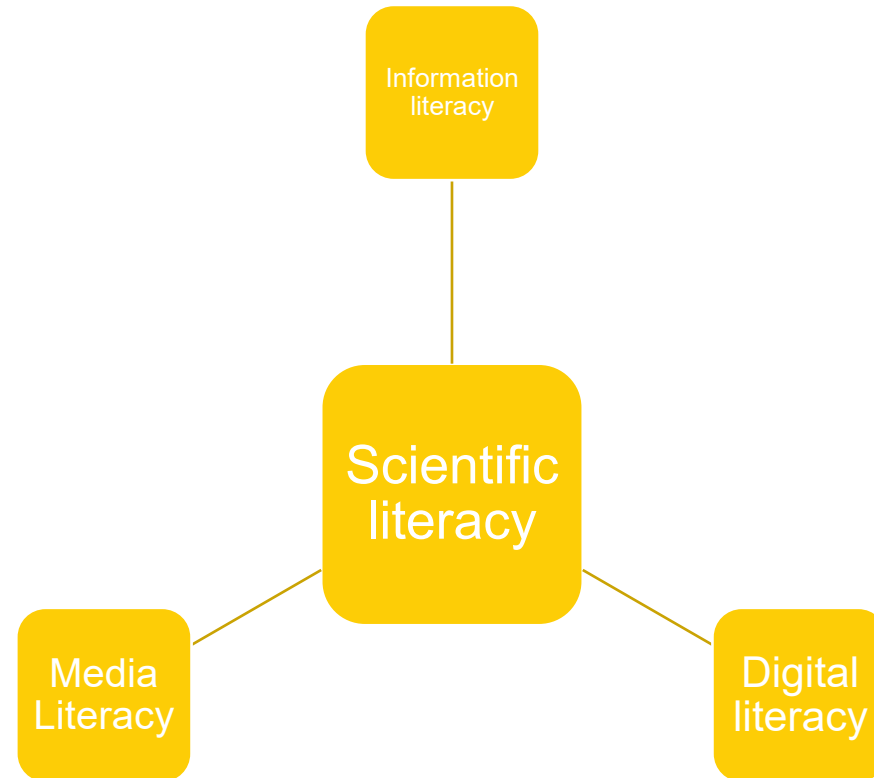


03 **Scientific rhetoric: an example**

Information literacy: the only literacy ?



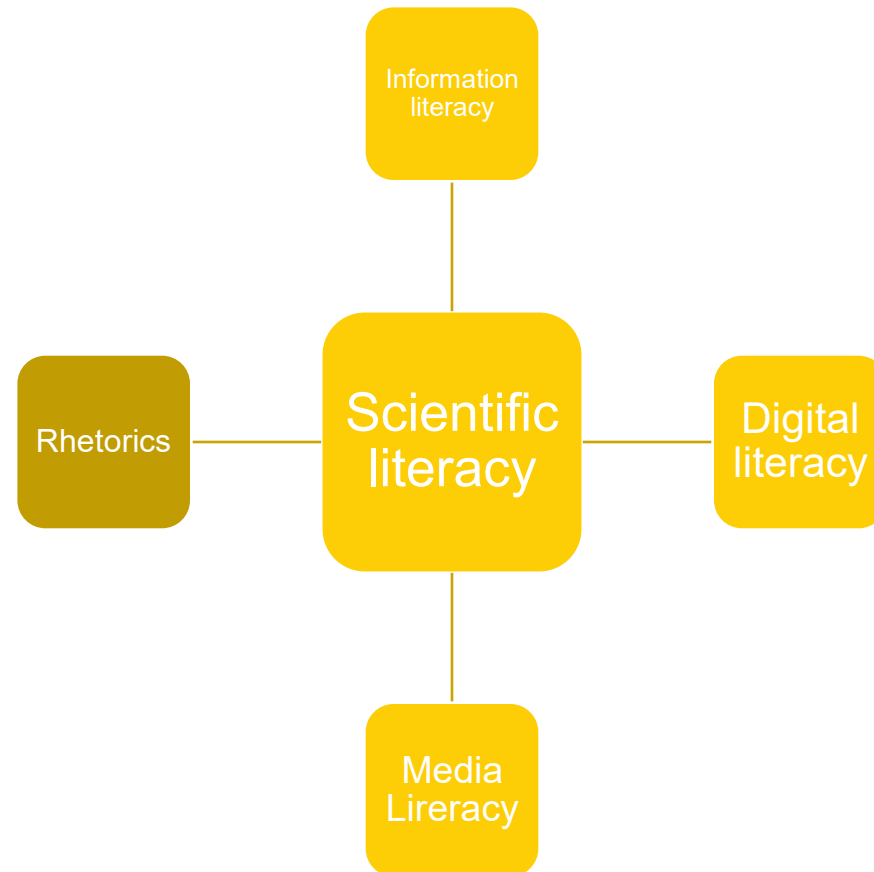
Information literacy in science involves two other literacies: understanding scientific media (platform, publishers, etc.) and the technical use of digital tools. Information literacy without media literacy and digital literacy is useless.



Information literacy: the only literacy ?



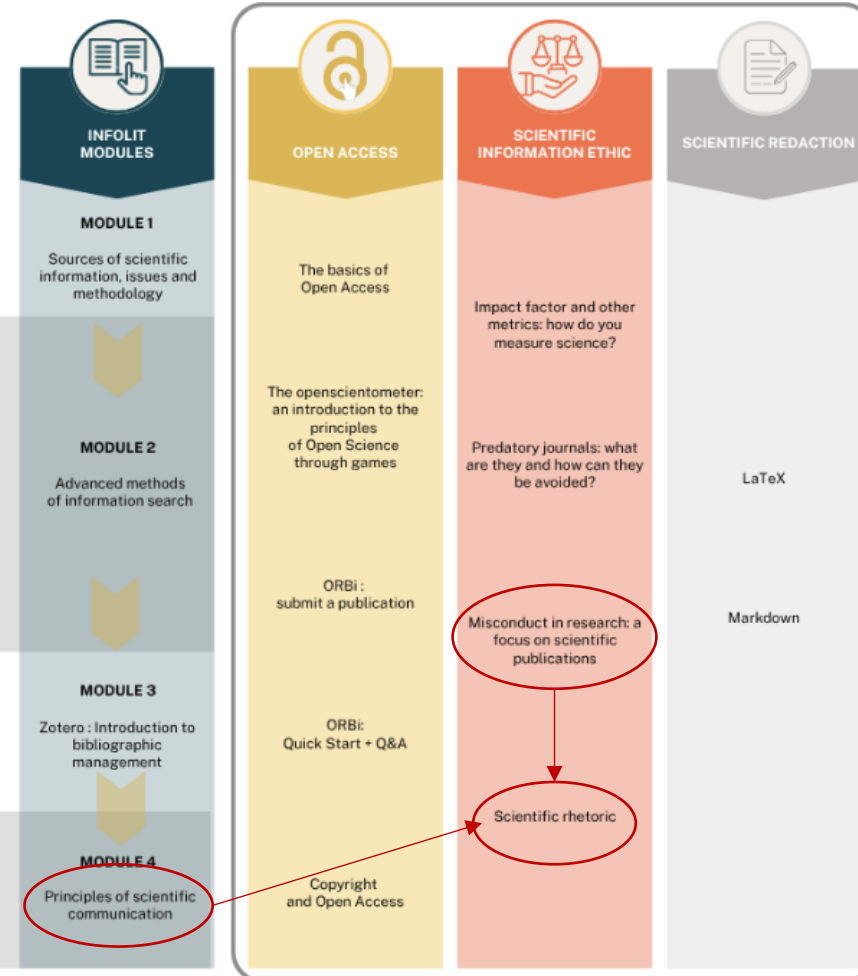
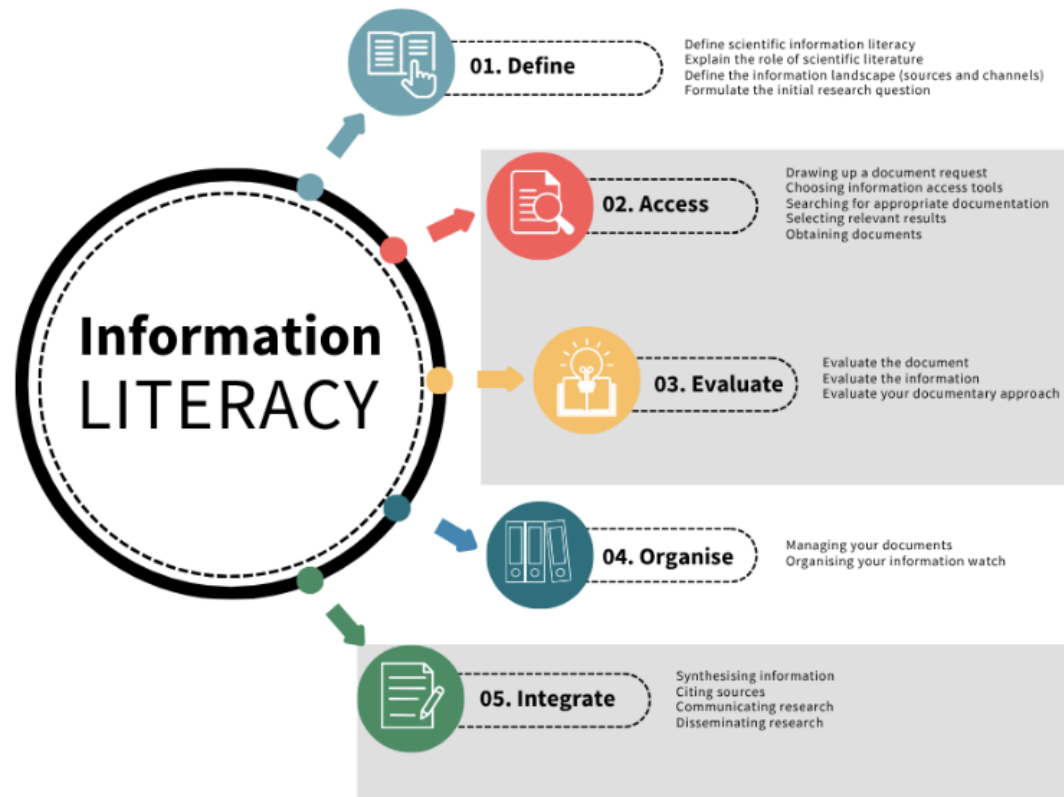
Media and information literacy require rhetorics to assess the nature and quality of documents and information.





TRANSVERSAL TRAINING

ON SCIENTIFIC INFORMATION LITERACY

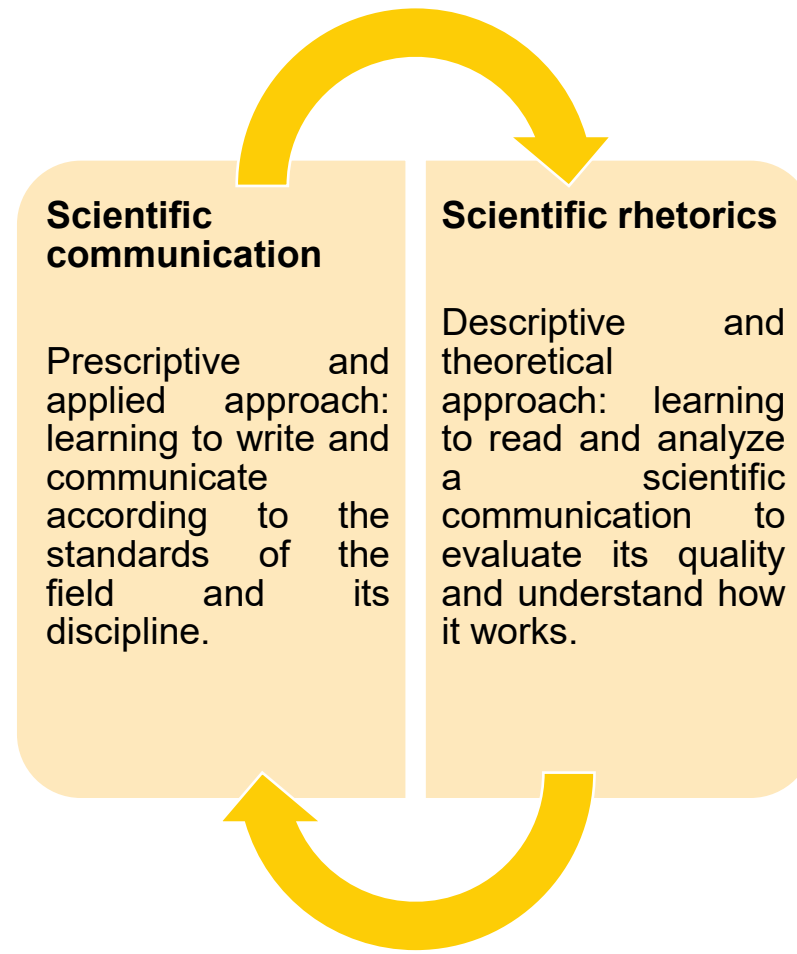




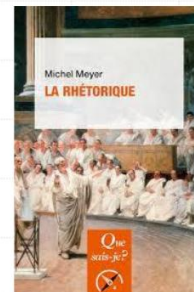
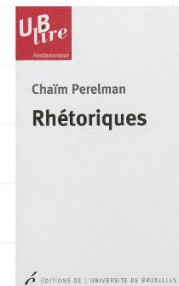
Scientific communication and scientific rhetoric: two sides of the same coin



Media and information literacy require rhetorics assess the nature and quality of documents and information.



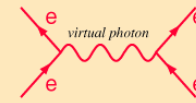
Scientific rhetorics: between rhetoric and sociology of science



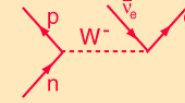
Scientific rhetorics: various example



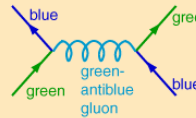
Examples from Textbooks on Egg and Sperm		
Description		Reference
Female - egg - Role	Male - sperm - Role	(Martin, 1991: pp)
Menstruation as a disintegration of form.	Sperm tails can "propel the semen into the deepest recesses of the vagina."	Guyton, 1984
Menstruation as a failed production. All of the ovarian follicles containing ova are already present at birth, they slowly degenerate and age.	"Perhaps the most amazing characteristic of spermatogenesis is its sheer magnitude."	Vander et al, 1980
"The female <i>sheds</i> only a single gamete each month."	"The seminiferous tubules produce hundreds of millions of sperm each day."	Mountcastle, 1980
"Oogenesis is wasteful". The egg is rescued by the sperm.	Sperm are small, "streamlined", with "strong" tails and efficiently powered.	Alberts et al, 1983
"From the tip of the sperm's triangular head, long, thin filament shoots out and harpoons the egg".		Schatten et al, 1984
The sperm penetrates the egg and fertilizes it.		Wassarman, 1988



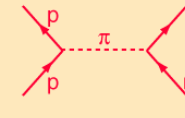
Electromagnetic



Weak



between quarks



between nucleons

Strong Interaction



Writing

Studying scientific style (use of pronouns, grammatical mode, diathesis, vocabulary).

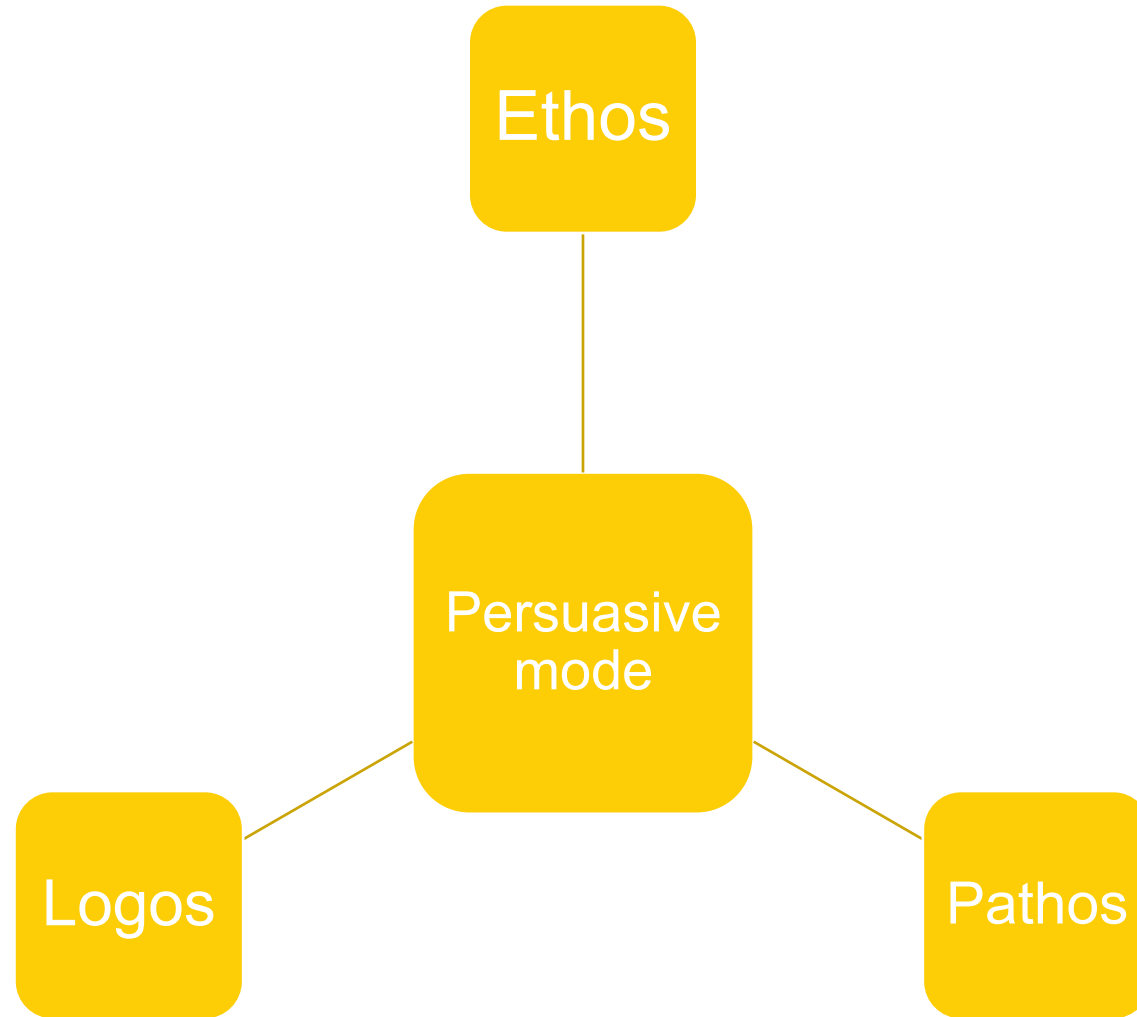
Image

Studying how images construct knowledge, support argumentation, and facilitate understanding.

Storytelling

Studying how storytelling and the use of metaphors construct scientific knowledge and influence reception.

Rhetorics triangle





03 **Scientific rhetoric: hands-on!**

Confirmation bias

<https://www.cognitivebiaslab.com/biases>



Dunning-Kruger bias

Halo effect bias



Article Hydroxychloroquine

Article MMR



03

Scientific rhetoric: a little feedback

"For ethical reasons and because our first results are so significant and evident we decided to share our findings with the medical community, given the urgent need for an effective drug against SARS-CoV-2 in the current pandemic context"

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PMID: [32205204](https://pubmed.ncbi.nlm.nih.gov/32205204/)

Hydroxychloroquine and azithromycin as a treatment of COVID-19: results of an open-label non-randomized clinical trial

[Philippe Gautret](#),^{a,b,\$} [Jean-Christophe Lagier](#),^{a,c,\$} [Philippe Parola](#),^{a,b} [Van Thuan Hoang](#),^{a,b,d} [Line Meddeb](#),^a [Morgane Mailhe](#),^a [Barbara Doudier](#),^a [Johan Courjon](#),^{e,f,g} [Valérie Giordanengo](#),^h [Vera Esteves Vieira](#),^a [Hervé Tissot Dupont](#),^{a,c} [Stéphane Honoré](#),^{i,j} [Philippe Colson](#),^{a,c} [Eric Chabrière](#),^{a,c} [Bernard La Scola](#),^{a,c} [Jean-Marc Rolain](#),^{a,c} [Philippe Brouqui](#),^{a,c} and [Didier Raoult](#),^{a,c,*}

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See editorial "[Publishing in face of the COVID-19 pandemic](#)" in *Int J Antimicrob Agents*, volume 56 on page 106081.



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"For ethical reasons and because our first results are so significant and evident we decided to share our findings with the medical community, given the urgent need for an effective drug against SARS-CoV-2 in the current pandemic context"

"Such results are promising and open the possibility of an international strategy to decision-makers to fight this emerging viral infection in real-time even if other strategies and research including vaccine development could be also effective, but only in the future. We therefore recommend that COVID-19 patients be treated with hydroxychloroquine and azithromycin to cure their infection and to limit the transmission of the virus to other people in order to curb the spread of COVID-19 in the world. Further works are also warranted to determine if these compounds could be useful as chemoprophylaxis to prevent the transmission of the virus, especially for healthcare workers. Our study has some limitations including a small sample size, limited long-term outcome follow-up, and dropout of six patients from the study, however in the current context, we believe that our results should be shared with the scientific community."