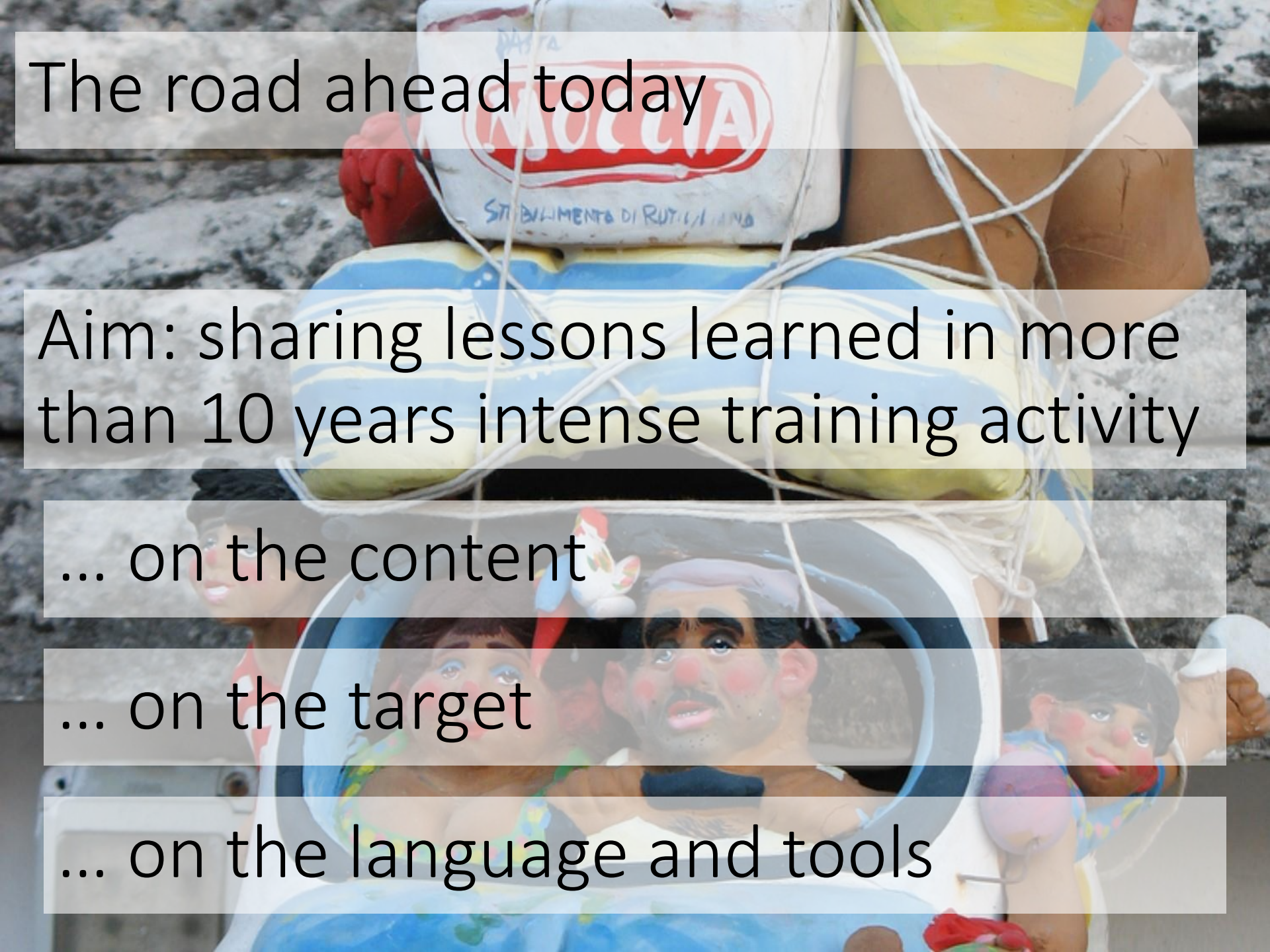


# Training on Open Science: lessons learned



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September 15, 2020  
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 @egiglia





The road ahead today

Aim: sharing lessons learned in more than 10 years intense training activity

... on the content

... on the target

... on the language and tools



# ...but first... politeness



I'M ELENA, I WORK AT THE  
UNIVERSITY OF TURIN

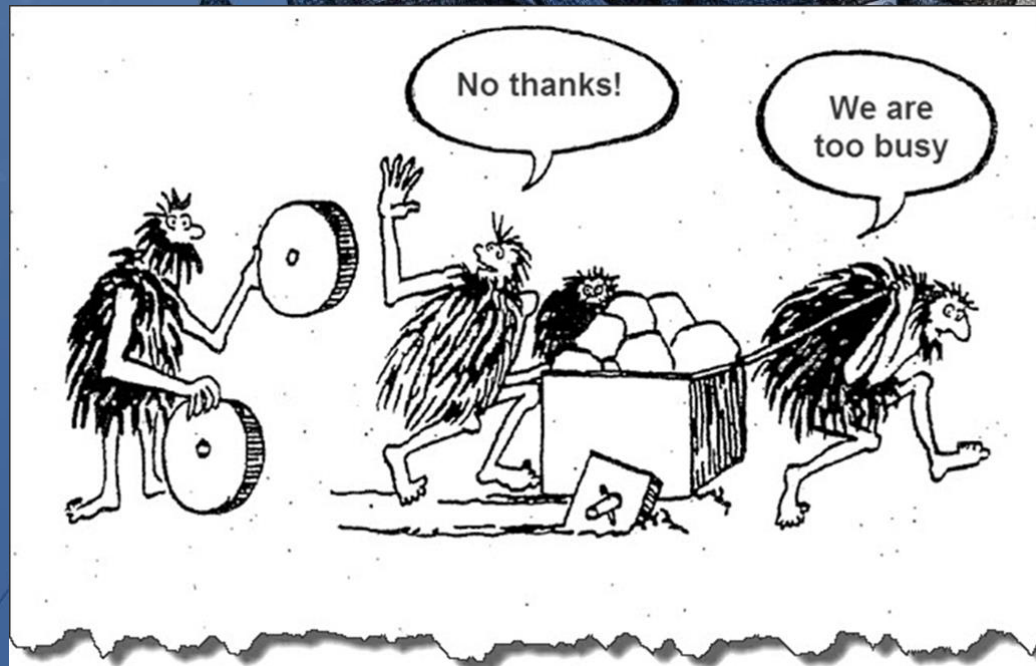
I'VE BEEN TRAINING ON OPEN SCIENCE  
FOR THE LAST 10 YEARS.  
ALL MY LESSONS ARE ON [ZENODO](#)

## DIFFERENT KIND OF TRAINING

- COURSES/WEBINARS FOR OPENAIRE
  - COURSES FOR MY UNIVERSITY
- IN HOUSE TRAINING (INVITED BY UNIVERSITIES/RPOs)
  - WORKSHOPS FOR OPERAS
  - [LATELY] WEBINARS

...and a general warning

**NOBODY HAS TIME FOR OPEN SCIENCE,  
BUT...  
IT CAN BE A GAME CHANGER...**





# Content / structure / 1

SO, FIRST STEP:

MAKE RESEARCHERS THINK AND REFLECT

ASK THEM **WHY THEY DO RESEARCH**

ASK THEM IF THE CURRENT SYSTEM IS OK

...OPEN SCIENCE HOLDS A HUGE  
**TRANSFORMATIVE POTENTIAL...** IF YOU DON'T  
FOCUS ON ITS REAL VALUE, IT WILL BE SEEN AS  
THE UNPTEENTH **ADMINISTRATIVE BURDEN**



FOCUS ON THE «WHY» THEY SHOULD  
DO OPEN SCIENCE, NOT ON THE  
«HOW» AND THE TECHNICALITIES.  
THIS COMES LATER

BECAUSE  
OPEN SCIENCE IS JUST SCIENCE, DONE RIGHT



A photograph of two young girls wearing black graduation caps and gowns. They are looking down, and the background is a blurred brick wall. The text is overlaid on the image.

...and you'll get the best feedback  
ever

ASK THEM TO ANSWER VIA  
EMAIL, AFTER REFLECTING, ON  
«WHY DO I DO RESEARCH»  
...INTERESTING CONSIDERATIONS  
COMING!

«IT WAS REALLY HELPFUL TO HAVE IN MIND **THERE IS AN  
ALTERNATIVE WAY** THAT GIVE US THE CHANCE  
OF **BEING TREATED WITH DIGNITY**  
AND **TRULY FOCUS ON THE ESSENCE OF OUR WORK**»

Petra, PhD student, May 2020

# Content / Structure / 2

START FROM THE CRISIS OF  
THE CURRENT SCHOLARLY  
COMMUNICATION SYSTEM

THEY ARE NOT  
AWARE/HAVE NEVER  
CONSIDERED UNDER  
THIS PERSPECTIVE...TOO  
BUSY TO «PUBLISH»

IT IS NOT FUNCTIONAL TO  
THE INTEREST OF SCIENCE  
ANY LONGER

LONG PUBLICATION TIMES, REPLICABILITY CRISIS,  
CRISIS OF PEER REVIEW, RETRACTIONS, SELF-CITATIONS

ALL STEMMING FROM THE  
OBSESSION FOR  
EVALUATION



# Content /structure / 3

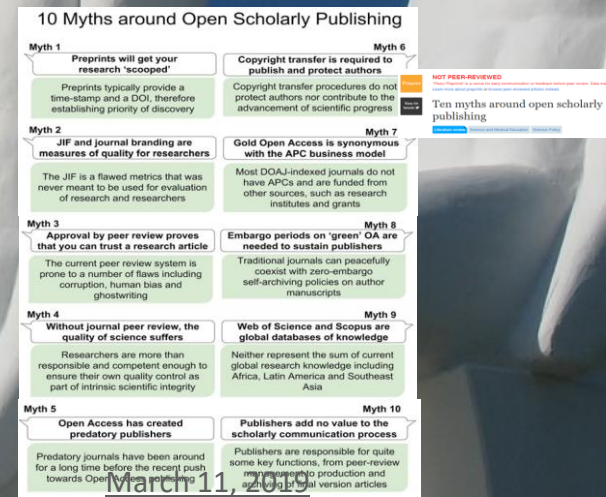
TALK MONEY.  
GIVE DATA ON THE 7.6  
BILLION WE SPEND IN  
SUBSCRIPTION, TO  
CLOSE THE CONTENT

THEY HAVE NO IDEA OF  
THE COMMERCIAL  
INTERESTS NOR THE  
MONEY INVOLVED.  
EVERYTHING SEEMS TO  
BE FOR FREE.

SO EVEN IF (AND I UNDERLINE IF) THEY  
HAVE TO PAY TO PUBLISH, AT LEAST THEY  
ARE PAYING ONCE AND TO OPEN, NOT TO  
CLOSE THE CONTENT

# Content / structure / 4

PLEASE BE CLEAR AGAINST  
THE «MYTHS» ON OPEN  
ACCESS AND OPEN SCIENCE  
(YOU ALWAYS PAY TO  
PUBLISH, THEY ARE ALL  
PREDATORY PUBLISHERS, IF I  
PUT MY DATA OUT THEY  
WILL BE STOLEN...)



March 11, 2019



# Content/structure/5



## BENCHMARK!

SHOW THERE ARE GOOD PRACTICES;  
SHOW WHAT'S GOING ON

- IN SIMILAR COUNTRIES/INSTITUTIONS
  - AT EUROPEAN LEVEL
- WITH THE EOSC: EITHER YOU ARE OPEN AND FAIR  
OR YOU ARE OUT

# Content / structure 6



**BE MODULAR**

POINTLESS (AND IMPOSSIBLE)  
TO HAVE RESEARCHERS FOR MORE  
THAN 2 HOURS, OR POLICY MAKERS  
FOR MORE THAN 1

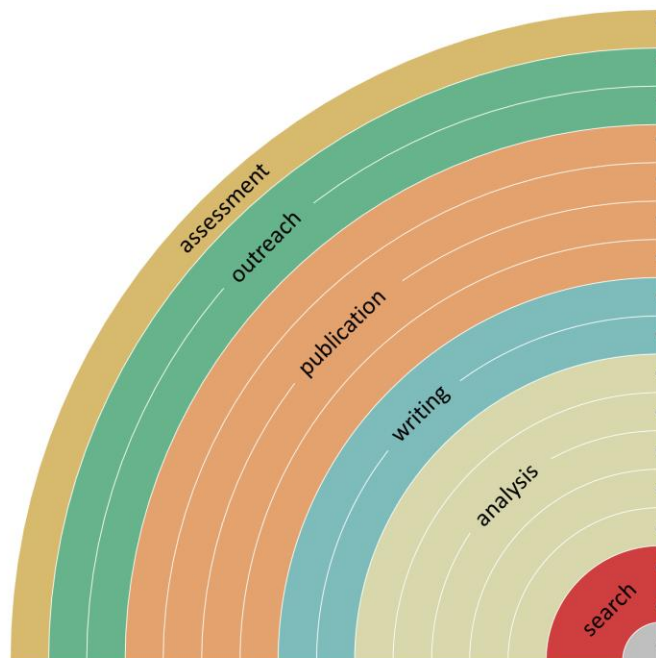
- FIND THE CORRECT BALANCE  
BETWEEN BEING CLEAR (TOO  
SHORT=TOO SYNTHETIC,  
NOBODY WILL UNDERSTAND)  
AND BEING TOO TIME  
CONSUMING. THEY ARE BUSY
- OFFER DIFFERENT MODULES, TO  
BE COMBINED ACCORDING TO  
THE TARGETED AUDIENCE



# Content / structure / 7

BE PRACTICAL...  
AFTER EXPLAINING «WHY», THEN FOCUS ON «HOW»

You can make your workflow more open by ...



- adding alternative evaluation, e.g. with altmetrics
- communicating through social media, e.g. Twitter
- sharing posters & presentations, e.g. at FigShare
- using open licenses, e.g. CC0 or CC-BY
- publishing open access, 'green' or 'gold'
- using open peer review, e.g. at journals or PubPeer
- sharing preprints, e.g. at OSF, arXiv or bioRxiv
- using actionable formats, e.g. with Jupyter or CoCalc
- open XML-drafting, e.g. at Overleaf or Authorea
- sharing protocols & workfl., e.g. at Protocols.io
- sharing notebooks, e.g. at OpenNotebookScience
- sharing code, e.g. at GitHub with GNU/MIT license
- sharing data, e.g. at Dryad, Zenodo or Dataverse
- pre-registering, e.g. at OSF or AsPredicted
- commenting openly, e.g. with Hypothes.is
- using shared reference libraries, e.g. with Zotero
- sharing (grant) proposals, e.g. at RIO





# [and if you can, make them play]

sharing all papers as preprints and calling these publications

depositing papers in a subject repository

having executable, forkable publications, including text, code and data

sharing research relationships as research objects

USE THE CARD SET (BASED ON THE RAINBOW) IN DIFFERENT WAYS

- BUILD YOUR IDEAL OPEN WORKFLOW
- IN EACH STEP, WHAT ARE THE EASIEST THINGS TO DO
  - OR THE MOST DIFFICULT ONES
- PICK THE ACTION YOU COMMIT TO DO STARTING FROM TOMORROW...

having open lab tests and so avoid being influenced by external parties

using easily attainable (open source) software to allow anyone to reproduce your results





# Content / structure / 8

FOCUS ON FAIR DATA AND THE EOSC,  
IT'S THE FUTURE

GIVE PRACTICAL ADVICE ON DATA  
MANAGEMENT PLANS

«NO DISCIPLINE MUST BE LEFT BEHIND»  
(EOSC DECLARATION): ADAPT!

A photograph of a chessboard set up on an asphalt surface. The board is a standard 8x8 grid with alternating light and dark squares. Various chess pieces are scattered across the board, including white pawns, black pawns, a white knight, a black knight, a white rook, and a black rook. The pieces are in the background and foreground, creating a sense of depth. The lighting is bright, casting shadows on the board.

# Target / 1

SPEAK THE DIFFERENT PLAYERS'  
LANGUAGE:  
POINTLESS TO TALK CITATION  
ADVANTAGE WITH THE  
ADMINISTRATIVE DIRECTOR,  
POINTLESS TO TALK RETURN ON  
INVESTMENTS WITH  
RESEARCHERS

TAILOR THE  
CONTENT/LENGTH  
ACCORDING TO  
YOUR TARGETED  
AUDIENCE



The background of the slide features a close-up, artistic photograph. On the left, a hand is visible, adorned with a silver-toned metal link bracelet and a vibrant pink string tied around the wrist. The hand appears to be holding or manipulating a dense collection of multi-colored threads. These threads, in shades of red, yellow, blue, and purple, are spread out across the right side of the frame, creating a complex, web-like pattern. The lighting is warm and focused, highlighting the textures of the threads and the skin.

Target / 2

WHEN THE «UNIVERSITY» IS  
ORGANIZING, YOU GET 90%  
LIBRARIANS/ADMINISTRATIVE  
STAFF IN THE AUDIENCE

TRY TO CONTACT SCIENTIFIC  
SOCIETIES, RESEARCH GROUPS,  
DISCIPLINARY NETWORKS. IT  
WORKS BETTER

Three golden retriever puppies are sitting on a red brick floor, looking up at the camera. The puppy on the left is slightly lower and to the side. The middle puppy is in the center, and the one on the right is slightly higher and to the side. They are all looking directly at the camera with dark eyes and black noses.

Target / 3

FOCUS ON PHDs, EARLY CAREER  
RESEARCHERS: IT'S IMPORTANT THEY KNOW  
THAT A DIFFERENT WORLD IS POSSIBLE, NOT  
TO BE «BULLIED INTO BAD SCIENCE»



# Language

TO EASE DISCUSSION,  
STICK TO NATIONAL  
LANGUAGES

AVOID TECHNICALITIES  
AND LIBRARY SLANG





...and in the end

**GIVE ALL THE PRACTICAL SUPPORT TO MAKE  
OPEN SCIENCE PRACTICES EASY!**





I HOPE IT WAS NOT SO BORING! THANK YOU