



G4 and Public Outreach Communication

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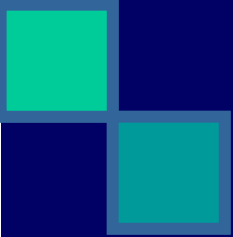

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Outline

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- What about Science Communication
 - Searching for the message
 - Surprising with the message
 - Next step in communication
 - G4 for a public outreach project
 - Methods and program of activity
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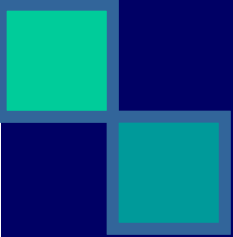
What about Science Communication

- Theorists of communication are looking to this historical period with particular attention to Science. This is because science is giving answers and has problems that don't concern only the scientific community but also the social one.
 - This is called **post-academic era of Science Communication**, intending with this name the passage through a time when scientists have to communicate science only in their internal college (physicists with physicists, biologists with biologists, etc) and also in more internal working groups (such as nuclear physics for example), and the time, that is now, when scientists have to communicate science to no-scientist.
 - We are so looking to a new period – and we are the first that have experimented it – when the face of Science Communication is changing. Could we change with it?
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What about Science Communication

the state of art

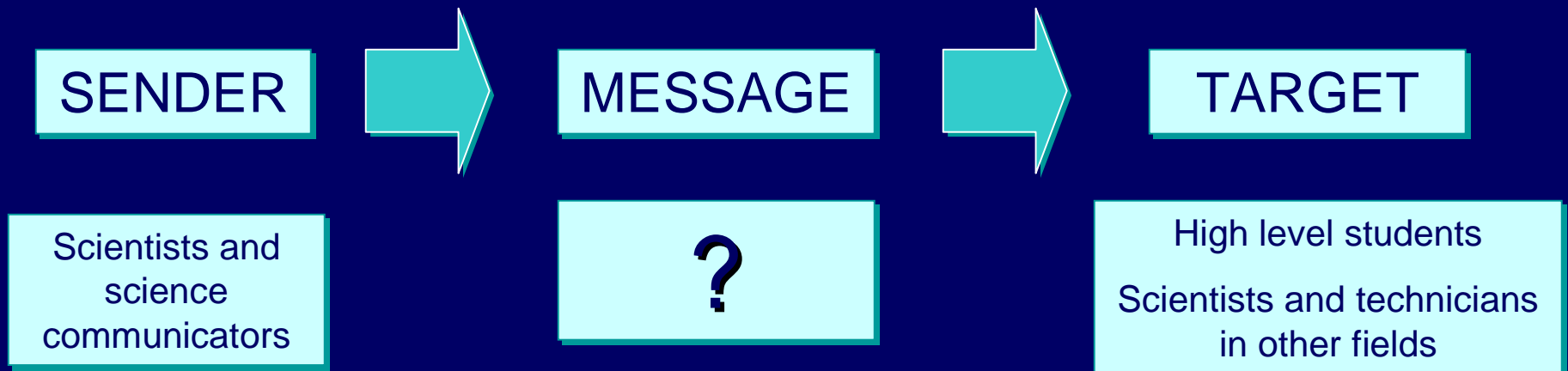


Formal communication between scientist	Informal communication between scientist	Public Communication
Publications Conferences Books Workshops	E-mail Coffee-break discussions Parallel working groups Internet	Internet Lectures journalism interviews ...others...



Searching for the message

- Experience teaches us that there are two kinds of communication, a good one and a bad one.
- The difference is in the choice of the message to communicate



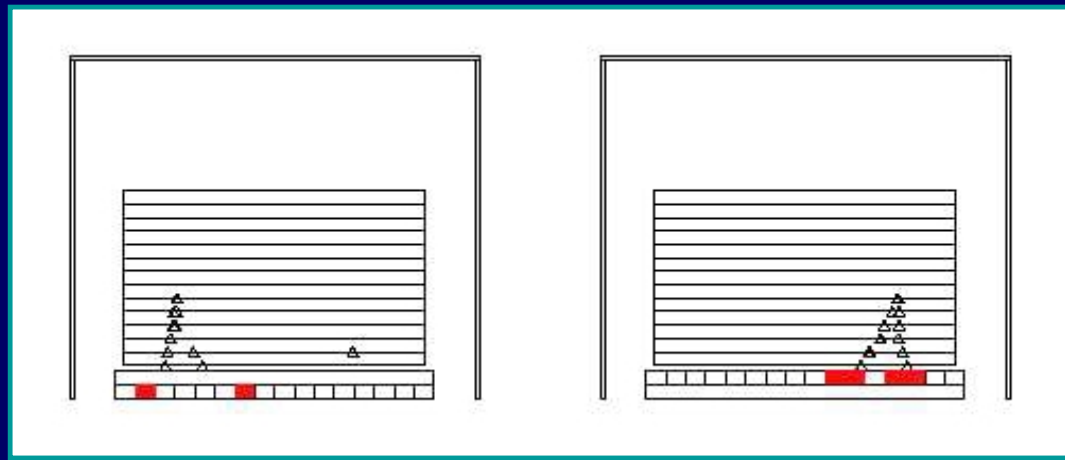
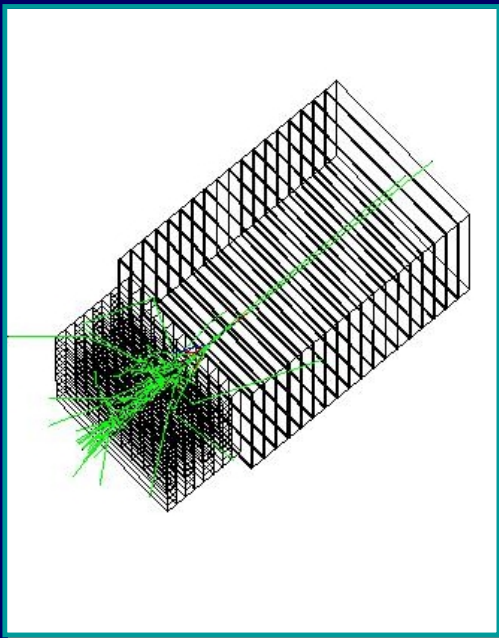
Surprising with the message



- 360 degrees view of a landscape
- Mountains and green valley

THEY DON'T NEED EXPLANATION
THE MESSAGE IS CLEAR BY THE
PHOTOS THEMSELVES

(un)Surprising with the message



- Two dimensional pair-conversion view
- Three dimensional pair-conversion view

THEY NEED EXPLANATION

THE MESSAGE ISN'T CLEAR

only for a small group of scientists these picture are surprisingly a good simulation

Next step in communication



- In the choice of the message the sender wants to surprise his target, for INTERESTING and CREATING A NEED OF KNOWLEDGE
- In the choice of the target the sender has to use the right and much more helpful technical support to REACH HIS PURPOSES.

Next step in communication

WHAT MEANS SURPRISE	TECHNICAL SUPPORT	POSSIBLE TARGET
<ul style="list-style-type: none">Creating interestGiving explanations of physical worldGiving motivations of scientific studies	<ul style="list-style-type: none">MultimediaJournalist productsExpositions	<ul style="list-style-type: none">StudentsScientific communityGeneral public

Technical support

MULTIMEDIA

Web site
CD-Rom
Video-conferences

Articles
Brochures
News and Reviews

JOURNALIST PRODUCTS

EXPOSITIONS

Conferences
Lectures
Posters

Possible targets

STUDENTS

SCIENTIFIC COMMUNITY

GENERAL PUBLIC

Features of communication

- Complete
- Simple
- Clear
- Interesting
- Useful knowledge
- Curiosity

Features of motivation

Having the base studies to become a scientist or a technician

Possible targets

STUDENTS

SCIENTIFIC COMMUNITY

GENERAL PUBLIC

Features of communication

- Complete
- Simple
- Clear
- Interesting
- Useful knowledge
- Curiosity

Features of motivation

Following new strategies and ways to resolve problems

Possible targets

STUDENTS

SCIENTIFIC COMMUNITY

GENERAL PUBLIC

Features of communication

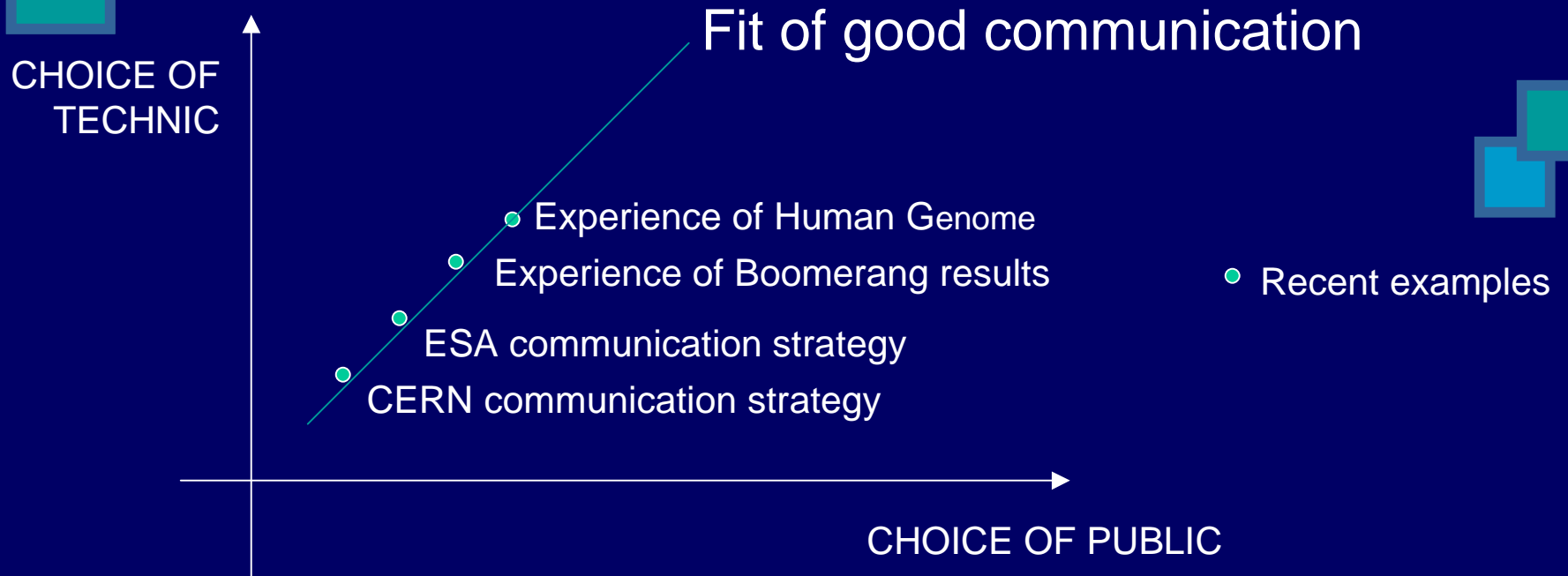
- Complete
- Simple
- Clear
- Interesting
- Useful knowledge
- Curiosity

Features of motivation

Having a contact with science and its experience of examining the world, even for resolving social problems

How to communicate

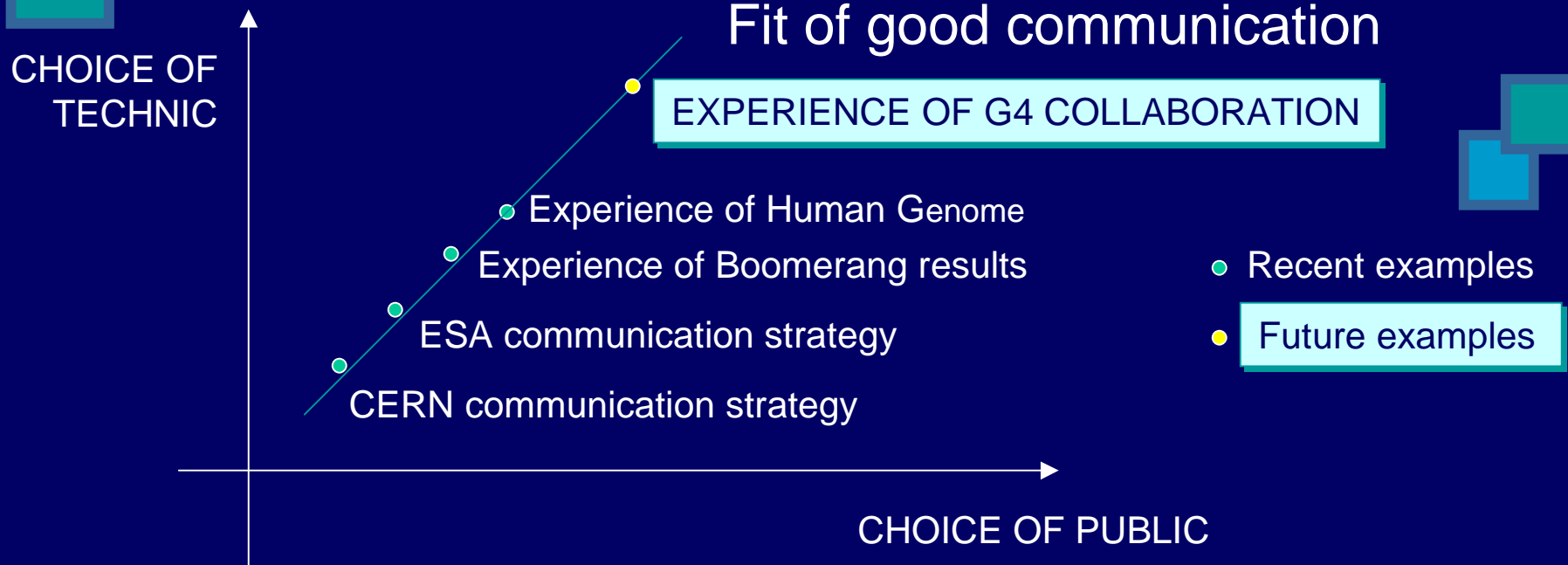
- How to fit all of those needs in communication?



(the graphic is purely representative and not real. It shows examples without making differences)


How to communicate

- How to fit all of those needs in communication?





G4 for a public outreach project

- G4 presents a lot of features for communicating a message:
 1. The different fields of applications (high energy physics and nuclear experiments, medical, accelerator and space physics studies)
 2. The extensibility of the toolkit to simulate different problems
 3. The use of high technological knowledge that could be transfer in various human activities (from research to industry, and teaching world)
 - The main targets of G4 public outreach program are:
 1. Scientific communities
 2. High level students
 - The principal technical supports that G4 could use
 1. Journalism → in the form of brochures
 2. Internet → in the form of Web-site, with interactive simulations and trial resolving problem
 - G4 communicators:
 1. A good representation of the collaboration together with science communicator specialist
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Methods and program activity

Brochure

Requested Time:
6 months

SCIENTIFIC
COMMUNITY

■ Collecting:

1. A presentation of the toolkit
2. An overview in the current fields of application
3. A description of the other possibilities of application
4. The basic software technical information



Conclusions

- We are in a new era of science communication
 - The scientist and the communicators have the role of communicate their results towards different targets
 - They have to choose the right surprising message
 - ...and the correct way to tell the things
 - G4 has the requirements to participate in the mechanism of science communication
 - G4 could have a first program of public outreach by which it could communicate its works and achievements to a larger community of scientists
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