



## Theoretical analysis of three research apparatuses about media and information literacy in France<sup>i</sup>

**Jacques Kerneis, PhD**

University Institution for Teacher Education

E-mail: [jacques.kerneis@bretagne.iufm.fr](mailto:jacques.kerneis@bretagne.iufm.fr)

### Abstract

In this article, we compare three projects about mapping digital-, media- and information literacy in France. For this study, we first used the concept of “apparatus” in Foucauldian (1977) and Agambenian sense (2009). After this analysis, we called on Bachelard (1932) and his distinction between *phénoménotechnique* and *phénoménographie*. The first project began in 2006 around a professional association (Fadben: <http://www.fadben.asso.fr/>), with the main goal being to distinguish 64 main concepts in information literacy. This work is now completed, and we can observe it quietly through publications. The second project emanates from a research group (GRCDI: <http://culturedel.info/grcdi/>) that is still active. In 2011, GRCDI produced a status report, including future perspectives, which introduced the idea of transliteracy (media and information culture). The third project (Limin-R: <http://www.iscc.cnrs.fr/spip.php?article1115>) is an open group (media, information, computer science) with support from CNRS. We aim at mapping the web around these concepts, and in all three projects wiki tools have been used, which has been important for the success and limits of the collective action. This paper presents highlights and lessons learned, as well as ideas for further development.

### Outline:

- Necessity of archaeology and architecture of Knowledge
- Project 1: Dictionary and integrators' concepts in information literacy
- Project 2: GRCDI : report on information culture
- Project 3: Limin-R and evolutions: Translit
- Perspectives

### Necessity of archaeology and architecture of Knowledge

This article aims to present to an international public some research on media and information literacy using key concepts. We have chosen to *look at them* through the constructs of *apparatus* and *phénoménologie*. Thus, we will be

able to see the heuristic contribution of this Wittgensteinian analysis (looks like a duck or a rabbit).

The phenomena of Web 2.0 are *phénoménotechniques* (*production of phenomena*) (Bachelard, 1932), and understanding them needs an “archaeology of knowledge”, which is defined as an analytical method that determines the boundaries of thought in a given domain and period (Foucault, 1969). This is the reason why we will present our three research projects in different perspectives.

The first one is to *look* at these projects *as an apparatus* through Foucault, who said:

What I'm trying to pick out with this term is, firstly, a thoroughly heterogeneous ensemble consisting of discourses, institutions, architectural forms, regulatory decisions, laws, administrative measures, scientific statements, philosophical, moral and philanthropic propositions – in short, the said as much as the unsaid. Such are the elements of the apparatus. The apparatus itself is the system of relations that can be established between these elements. Secondly, what I am trying to identify in this apparatus is precisely the nature of the connection that can exist between these heterogeneous elements.” (1977)

We will attempt to show what kind of *apparatus* each project is. We can tell immediately that “dispositif” is a French concept, and if Foucault was translated as “*apparatus*” in English, this choice is not so obvious, while “*dispositif*” is translated differently, even in the same book, as “device”, “machinery”, “apparatus”, “construction” and “deployment”. Agamben’s praxeologic definition of the *apparatus* is the most insightful for us:

I shall call an apparatus literally anything that has in some way the capacity to capture, orient, determine, intercept, model, control, or secure the gestures, behaviors, opinions, or discourses of living beings. Not only, therefore, prisons, madhouses, the panopticon, schools, confession, factories, disciplines, judicial measures, and so forth (whose connection with power is in a certain sense evident), but also the pen, writing, literature, philosophy, agriculture, cigarettes, navigation, computers, cellular telephones and--why not--language itself, which is perhaps the most ancient of apparatuses. (2009, 14)

In other words, our question will be how each project is a “various institutional-, physical- and administrative mechanisms, as well as knowledge structures that enhance and maintain the exercise of power within the social body.”

In a second step, we will see how these projects contribute to an architecture of knowledge in Salaun’s perspective (2012), who cites Richard Saul Wurman (1976):

Thought “architecture” was a better way of describing what I thought was the direction that more people should look into for information, and I thought the explosion of data needed an architecture, needed a series of systems, needed systemic design, a series of performance criteria to measure it.

In this perspective, our point of view will be the *phénoménotechnique* described by Bachelard. Indeed, “one of the most interesting of his philosophy is the erosion of the boundary between the theoretical and the technical part of science” (Chimisso, 2008, 386). In fact, for Bachelard, scientific phenomena

are today caused by instruments, particularly instruments of inscriptions (Latour and Woolgar, 1979).

However, Bachelard does not impose only approach as stated by Castelaolawless (1995, 58): “Finally, because it accepts that both the study of each science and of each stage of development of science require different types of philosophical and historical analysis, it opens the way of pluralistic models of scientific explanation.”

Finally, Bachelard distinguishes the production of phenomenon (*phénoménoteknique*) and the (high)lighting that he calls *phénoménographie*.

## Project 1: Dictionary and integrators concepts in information literacy

After this section centred on theoretical tools, we presented the three projects in chronological order by relying on the concepts we have defined. The first began in 2006.

Two teachers (Ballarini-Santonocito and Duplessis) with a group of “professeurs-documentalistes” (teacher-librarians), a specificity of the French education system, worked on an online search.

They built a map with the concepts used in this activity. The production *apparatus* is like action research. The *phénoménographique* used a specific instrument of inscription: map minding, like in Figure 1.

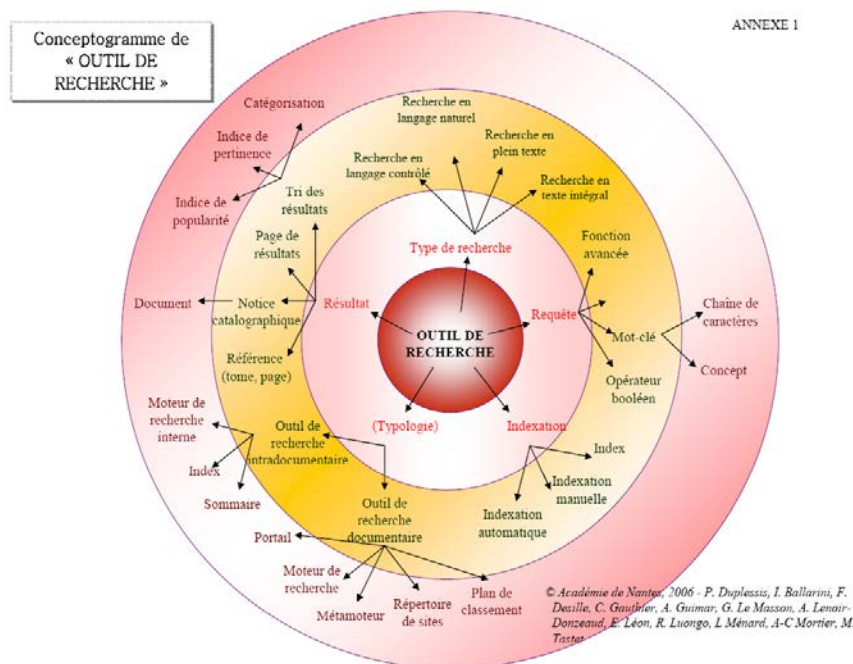


Figure 1: A map of the online search

After that, this small team, including a third researcher (Serres), built a dictionary consisting of a culture of information, especially for “professeurs-documentalistes”. They aimed to overlay the field and spot 133 concepts for a first base of knowledge to teach, which was adapted to the level of education. For this work, the inscriptions were brought forth using a private wiki.

The difference between *phénoménoteknik* and *phénoménographie* is never easy, on account of goings and comings, but here for this last part of the project, we can identify a particular production: 64 main concepts, including seven core ones (information, document, source, indexation, information space, information search and information exploitation). This *phénoménoteknik* work was published by a professional association (Fadben) in a professional journal called *Mediadoc* (2007). Here, we propose two inscriptions of the core concepts: the concept of source (Figures 2 and 3).

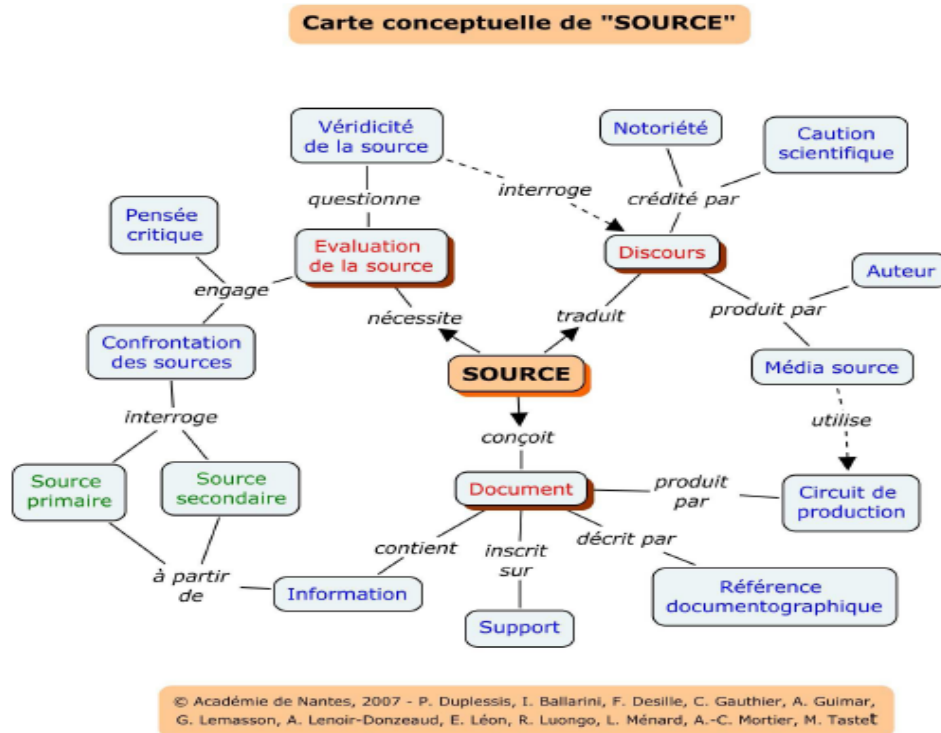


Figure 2: A map of a main concept: Source

## Source

### 1- Caractéristiques

Niveau débutant

- Est à l'origine de l'information
- Produit un type d'information
- Fonde la validité de l'information

Niveau avancé

- Produit un discours
- Procède d'une intention
- Produit de l'information
- Diffuse de l'information

Caractéristiques complémentaires

- Peut être créditée de notoriété
- Peut bénéficier d'une caution intellectuelle

### Notion organisatrice

Regroupe les notions de :

- Auteur
- Bibliographie
- Discours
- Edition
- Nature de la source
- Référence
- Statut de la source
- Validité de la source

### 2- Définitions

**Niveau de formulation débutant :**  
La source est constituée des acteurs (personnes ou organismes) qui sont à l'origine de l'information considérée. Elle permet d'identifier le type d'information (journalistique, scientifique, promotionnelle, etc.) produit et d'estimer sa validité.

**Niveau de formulation avancé :**  
La source renvoie aux acteurs (personnes ou organismes) qui sont à l'origine de l'information considérée. Les intentions, les intérêts qui la motivent et qui la façonnent se perçoivent au travers d'un discours rhétorique à l'œuvre dans la production et la diffusion des informations. Connaître la source permet d'identifier le type d'information (journalistique, scientifique, promotionnelle, etc.) produit et d'estimer sa validité. Interroger la source revient à rendre compte de la *notoriété* et de la *caution intellectuelle* dont bénéficient ses acteurs le cas échéant.

### 3- Exemples :

- Le journal *Le Monde*
- Le site de l'Éducation nationale
- *L'Encyclopédie Universalis*
- La base de données du CDI
- L'UNICEF
- L'agence France Presse
- Philippe Meirieu
- La chaîne de télévision *Arte*

### 4- Contre-exemples :

- Un support documentaire
- Un outil de recherche
- Un genre documentaire
- La télévision

Figure 3: A didactic approach of source

This huge work was necessary in the first place, as quite a few “professeurs-documentalistes” have used it, but not really the institution. It is the production of activists, and they take care to ensure direct links with teaching. We can remark that this work only mentions information culture, and says nothing at all about media culture. However “source” is not the same concept in these two cultures.

Another aspect of this first *apparatus* is the small place for archaeological aspects, and the culture of information is not really positioned relative to information literacy. This work was done by le Deuff, who distinguished among three aspects of literacy (Figure 4) and their main features.

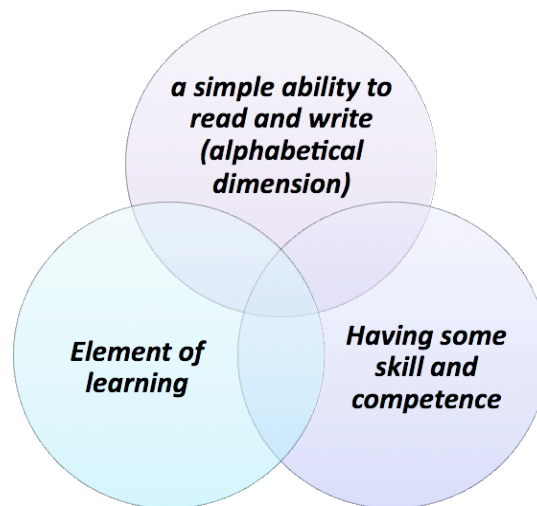


Figure 4: Three aspects of literacy - Olivier Le Deuff

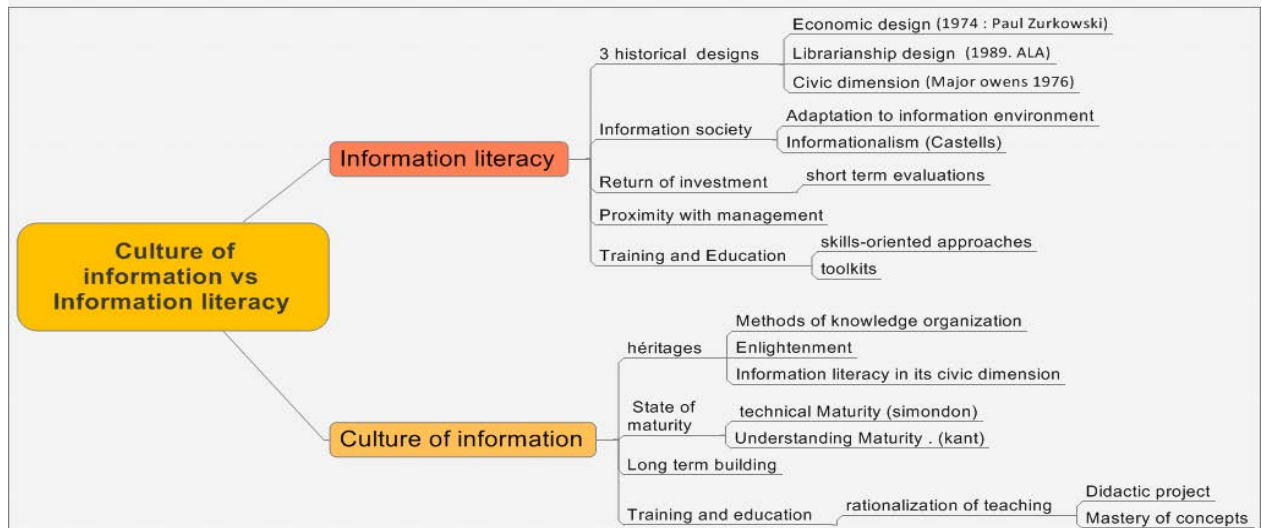


Figure 5: Culture of information vs. Information literacy

An important aspect of these *apparatuses* is to feed the second and the third projects, as we shall proceed to demonstrate.

## Project 2 - GRCDI: Report on information culture

The second project was produced by a research group created in 2007 (GRCDI: Groupe de recherche sur la culture et la didactique de l'information. <http://culturedel.info/grcdi/>) that is still active, and in 2011 we produced an outlook report (media, digital and information culture and education).

Here, the production *apparatus* is different, as the group consisted of researchers and other different types of actors (mostly librarians, but mainly “professeurs-documentalistes” in secondary schools and high schools). The group was not affiliated with a lab, but took part in ERTE, a national research programme during the period from 2006-2009.

At the beginning, the primary aim of this group was to make an archaeology of information culture and didactic reflections. This is why we wrote an important report within a collaborative work, and extracted 12 recommendations (Figure 6).

Here, the *phénoménographique* aspect is based on a blog, presenting more than 150 texts from all the members of GRCDI and completed by a private wiki for writing the report. The *phénoménoteknique* aspect of this group is an annual seminar gathering researchers and teachers.



Figure 6: 12 recommendations published on the blog

This complete *apparatus* aimed to open very quickly to other cultures (digital, computer, media...). Therefore, we can show the overlap of some aspects of these different cultures. So, after Alan Liu in the US (Santa Barbara University) and Sue Thomas in Great Britain (De Montfort University), we have introduced the idea of transliteracy in France. We used the definition of the latter author. “Transliteracy is the ability to read, write and interact across a range of platforms, tools and media from signing and orality through handwriting, print, TV, radio and film, to digital social networks. (Thomas, 2007)

This topic was on the menu of the 5<sup>th</sup> seminar of GRCDI in September 2012, and this idea was further developed by another group, Limin-R, which was created in 2010 to focus on this issue.

### Project 3 - Limin-R and evolutions: Translit

We discussed the Limin-R project<sup>ii</sup> (2010-11), “Literacies: medias, information and digital studies”, in the previous section, which is explicitly connected with a previous project: The ERTE: Technological Research in Education Task Force: “Information Literacy and curriculum in documentation” (2006-2010), and finished with an International symposium: Information Literacy Education (October 16-18, 2008) at the University Charles de Gaulle Lille 3.

This *apparatus* was funded by CNRS (PIR) for the period from 2010-2011, and operated by various research laboratories or groups: CREW, PREFics GRCDI, STEF, GERIICO- ISCC and IMS. This objective was to operate a prior census of academic works on the concept of “information” related to media, information and computer literacies, and to produce an interdisciplinary research restructuring of the three separate fields (overlapping concepts, methodologies and finalities).

The *phénoménotechnique* of this project is based on a platform (Figure 7) and a glossary. As in the first project, the first word put to work was “source”, but here in various senses.

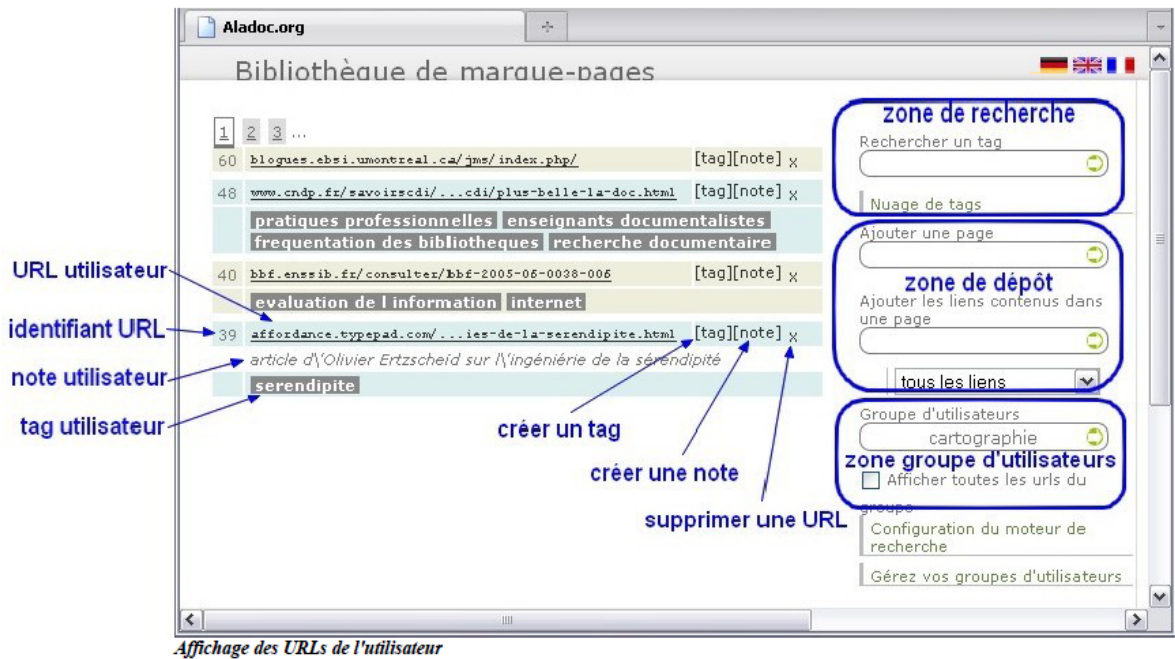


Figure 7: A private platform website: Aladoc

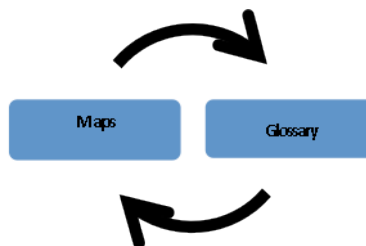


Figure 8: Turn and return

The main interest of this work is based on the turn and return shuttle process between these two inscription instruments (Figure 8).

Here, we only propose two maps produced by the research team (Figures 9 and 10).

POURQUOI?

-Des KW hiérarchisés (ici grosseur des nœuds et couleur virant au rouge pour les plus utilisés

-Des regroupements thématiques manifestes / D'où un travail à faire : donner des titres aux différentes « régions » du graphes

-Moins évident à deviner mais notable pour un habitué des graphes : il apparaît maintenant des liens entre les clusters, ce qui veut dire qu'il y a bien des concepts (ou des KW) qui jouent le rôle de « concepts passeurs », donc nous avons affaire à une géographie riche de relations latérales (ce n'est pas une arborescence).

Ces 3 propriétés ne sont issues seulement d'une interprétation de ma part : elles sont toutes les 3 calculables avec GEPHI.

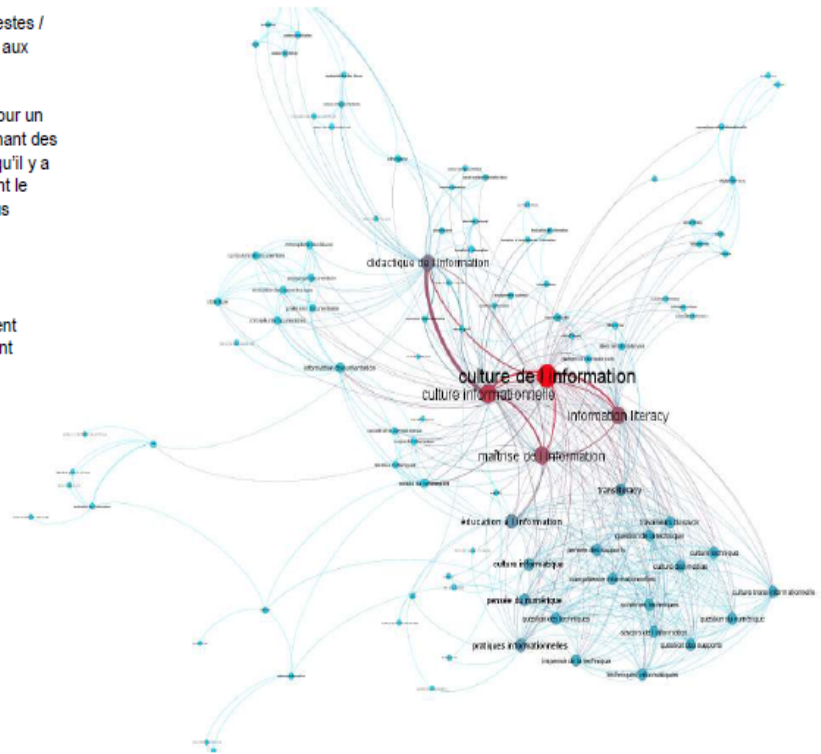


Figure 9: Keyword map of experts



## Graphe de co-occurrences (carte thématique)

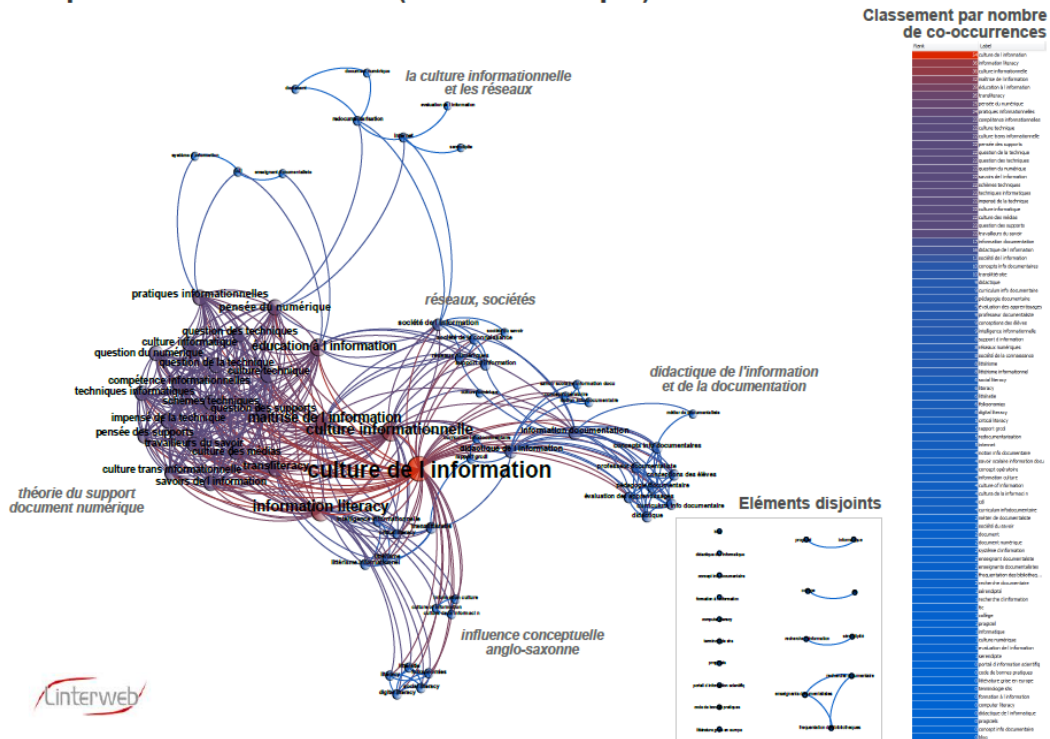


Figure 10: Co-occurrences between “information” and other words on the web

The insertion in academic circuits has consequences at the level of the involvement of people who are not researchers. It is also the reason why this group, which is directed by the main professors: Divina Frau-Meigs (media), Eric Delamotte (information & knowledge literacy and Eric Bruillard (computer literacy), aims to create an association and review for the *phénoménographie* aspects.

Hence, we can already find a first publication on the INA site (*Institut National de l’Audiovisuel*) called “*l’éducation aux cultures de l’information*”<sup>iii</sup> that lays the emphasis on “translittératie” (à la French), which is open to numeracy and visual cultures.

Currently, an ANR (French National Research Agency) project takes over for four years (2013-2016), though only with researchers from four labs: CREW, STEF, GERIICO and IMS, but with a convention that will allow all the other partners of LIMIN\_R to be involved. The project aims at continuing the various trends of investigation already described.

## Perspectives

Three research questions are proposed by this reconstructed group:

1 - What new sharing of competences between these three disciplinary fields do these uses of transliteracy generate?

Through an analysis of the old and new forms of engagement with information evinced by young people, the purpose is to check and qualify their viability and their finalities.

2 - What are the new collective dynamics, on the scale of the school and of the territory, that may be set up with the development of the transliteracy in learning events with varied configurations?

The purpose is to explore the new issues that may arise at the articulation between the individual and the collective, and in the digital space as much as in the geographical space.

3 - What are the political and educational options that might appear to reach a fully-fledged transliteracy?

The purpose is to identify and qualify the practices and the uses of transliteracy currently in development, as they could lead to new reconfigurations of the three scientific domains involved to unheard of processes of regulation, as well as to shifts in the borders between private and public uses.

These three questions lead to four tasks:

T1: Mapping “information” in the three fields considered, via a dedicated search engine;

T2: Observing transliteracy situations in both semi-formal and non-formal settings;

T3: Processing the collected data to identify strategies for transliteracy in “information cultures”;

T4: Modelling conceptual relations linking transliteracy, knowledge building and e-learning.

This attractive programme shows that the research *apparatus* became more structured and more related with empirical fields by dint of cooperative design. The balance between *phénoménotechnique* and *phénoménographique* seems to be a good way to ensure that.

Beyond this chronological presentation, it is clear that these three types of *apparatus* must continue together, and that it is primordial at best to articulate these two inseparable Bachelardian dimensions of research. In conclusion, we can write that this particular manner of describing these three projects allows a focus on important aspects, but at the same time prevents us from seeing other aspects of projects, such as, for example, their social value.

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## **Biography**

Teacher at the IUFM (University Institution for Teacher Education) located in Brittany

Email: [jacques.kerneis@bretagne.iufm.fr](mailto:jacques.kerneis@bretagne.iufm.fr)

Webpage: <http://cread.bretagne.iufm.fr/spip.php?article445>

### **Post-school qualifications:**

PhD in Didactics and Communication (Université Rennes 2) (2009)

CAPES (Teacher Certificate for Secondary Education) of documentation (1995).

### **Positions held:**

IUFM de Bretagne: Teacher trainer (2007/2013)

Secondary lower schools in Fouesnant and Quimper Teacher of documentation (1995/2007)

Primary schools in Brest and Quimper (1985/1995)

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<sup>ii</sup> <http://www.iscc.cnrs.fr/spip.php?article1115>

<sup>iii</sup> <http://www.ina-sup.com/ressources/dossiers-de-laudiovisuel/les-e-dossiers-de-laudiovisuel/e-dossier-leducation-aux-cultures>