

POLITECNICO DI MILANO • FACOLTÀ DEL DESIGN CORSO DI LAUREA MAGISTRALE IN DESIGN DELLA COMUNICAZIONE

# **The Big Picture**

A visual exploration of the reciprocal image of Italy and China observed through the lens of Digital Methods

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Supervisor: Paolo Ciuccarelli Co-Supervisor: Yang Lei

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Front cover:

Image montage of the images collected about China, ordered by hue

Typeface:

Whitney, Hoefler & Frere-Jones

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# Introduction o.o

What kind of insights can we get through the images found in the reciprocal web of Italy and China?

How can we make sense of the reciprocal perceived identities of Italy and China through images?

## O.1\_ Abstract

Starting from my personal experience of living in China for almost one year, the project's aim is to investigate the peculiarities of the narration of the two countries in the other nation's web space.

In a context where the language barrier represent such a big obstacle, the project attempts to investigate through Digital Methods how images take part in this storytelling. Images can be the way and the medium through which we can realize this experiment, taking advantage of both the visual properties and their intrinsic storytelling capabilities.

I see this experiment as an opportunity to frame the big picture we everyday receive about China, as well as a tool to increase the awareness of the way we see and the way we are seen by a culture so radically different. This particular historical moment require us to discover new worlds and require us to understand the best way to communicate ourselves to these worlds. More than ever, becomes important to know how we perceive and how we are perceived by such a different country, particularly interesting both for the peculiarity of culture and the role which is assuming in the international economical and political power balance.

The experiment consists in the collection, categorization and visualization of two thousand four hundred images for both countries, from rigorously selected national domains (image search engines and web portals), considering the digital as a measure of the impact of new technologies on social life but also as a mean used from the real world as a political and social space.

The visual approach and the instrumental nature of these artefacts gives them the role of tools for the user. While the uninitiated will identify a big picture of the topic, the specialist will be able to use this work of art as a tool to test hypotheses and intuitions.

"Identity emerges as a kind of unsettled space, or an unresolved question in that space, between a number of intersecting discourses.

(...) Until recently, we have incorrectly thought that identity is a kind of fixed point of thought and being, a ground of action ... the logic of something like a `true self.' But Identity is a process, identity is split. Identity is not a fixed point but an ambivalent point. Identity is also the relationship of the Other to oneself" 1

### O.2\_Identities

Although being the word identity a common word and playing a very central role in many everyday discussions, it refers to multiple meanings and as a starting point I find useful to clarify on which we will focus. Without being able to completely investigate the notion, I will make some fixed points around which our discussion will start.

The use that we will make of "national identity" will refer to the concept of type identity: labels applied to persons (and in this case nations) who share or are thought to share some characteristics in appearance, behavioural traits, beliefs, attitudes, values, knowledge, opinions, experience, historical commonalities, and so on.

Being the concept of "national identity" also a social category<sup>2</sup>, it is subject to the products of human thinking, discourse, and action. This contributes to make the meaning of "national identity" variable over time and space, historically, and definitely makes the result of our analysis something valid strictly in the moment in which is made and for the place in which is made.

Dialogical processes can serve to determine such identities as communication forms an interaction between nations by giving "others" a method of defining perceived national identity. With this consideration, it can be said that understanding communication as a dialogic process allows us to extract information on both the subjects involved, the perceiver and the perceived.

<sup>1</sup>\_Stuart Hall, "Ethnicity: Identity and Difference", Radical America 23 (1989): 9-20.
2\_James Fearon, "What is Identity (as we now use the word)?", Mimeo, Stanford University (1999): 20.

"The People still come to China, and pay attention to her, because she is part of humankind. Be it in her philosophical significance or in real life, China is becoming a veritable, irrefutable part of the world culture. As the west confronts China, it is also coming to recognize the other side of the world as another potential mode of civilization and humanity. In doing so perhaps it is likewise recognizing the limits and weaknesses of reason and order, and experiencing the happiness that comes from realizing this." <sup>3</sup>

## 0.3\_ China?

China, or better Zhongguo (literally the middle country) has always been a huge empire with an extremely strong cultural identity, historically powered by the heritage of the written tradition. The Chinese culture has developed independently from the west for thousands years. Despite having strong trade relations since a long time we can actually say that it's just since a couple of decades, and to be precise since the reforms carried out under Deng Xiaoping, that China started to be open for the rest of the world. In the last fifty year the country faced changes that most of the countries faced in more than 100 years and continue it's growth, thanks to an high manufacturing power which transformed China in the world's factory. The result of this mixture of ingredients is an incredibly complex society, extremely dynamic and prone to the future which at the same time has a consistent part of the population which lives upon a rural economy. To manage this transitions and all this changes without losing his role the government still keep the control over the media and the web.

The main motivation in starting this work has been for me the simplistic feeling about the way this reality is described in the media. Especially in the italian mainstream media, it has been for me quite clear how the big picture didn't get to show a complex panorama of a complex system but just settled on describing small angles full of stereotypes.

This experiment doesn't aim to fully clarify the relationship between Italy and China through the media, but just aspire to show some of the aspect characterizing this complex relation, reveal the limits of this kind of vision and the possible values of a sincere and deep comparison between the two countries.

Che tipo di considerazioni possiamo trarre dal confronto immagini raccolte nei reciproci spazi online di Italia e Cina?

È possibile, tramite le immagini, dare ur senso senso alle identità percepite di italia e Cina?

## O.1\_ Sinossi

Il progetto, che trae impulso dalla mia esperienza di quasi un anno di vita in Cina, indaga la narrazione italiana sulla Cina e quella cinese sull'Italia nei due rispettivi spazi web. In un contesto dove la barriera linguistica rappresenta un ostacolo più che significativo, il progetto esplora, attraverso l'uso dei Digital Methods, il modo con cui le immagini prendono parte a questa descrizione. Grazie sia alle proprietà visive che alle intrinseche capacità narrative le immagini possono costituire la via ed il mezzo attraverso il quale questo esperimento viene compiuto.

Oltre a vedere questo esperimento come uno strumento per riflettere sull'immagine che tutti i giorni riceviamo della Cina, lo considero un'occasione per aumentare la consapevolezza riguardo al modo in cui vediamo e in cui siamo visti. Spingendoci a scoprire nuovi mondi, questo particolare momento storico, ci richiede di capire a fondo come comunicare e comunicarci nel miglior modo possibile. Diventa così importante essere consapevoli di come percepiamo e siamo percepiti da un Paese così diverso, particolarmente interessante sia per la radicale differenza culturale, sia per il ruolo che sta assumendo nella politica e nell'economia internazionale.

L'esperimento consiste nella raccolta, categorizzazione e visualizzazione di duemilaquattrocento immagini per entrambe le nazioni, da rispettivi domini rigorosamente selezionati (motori di ricerca nazionali e portali web), considerando il digitale come misura dell'impatto delle nuove tecnologie nella vita sociale e sull'utente, ma anche mezzo usato dal mondo reale come spazio politico e sociale<sup>4</sup>.

L'approccio grafico e visivo e la natura strumentale degli artefatti li portano ad assumere il ruolo di strumenti per l'utente: un "non addetto ai lavori" al tema avrà una visione d'insieme delle principali tematiche e delle caratteristiche visive delle due narrazioni, mentre uno specialista, sociologo o esperto di relazioni Italia-Cina sarà in grado di utilizzare questi artefatti come strumenti per verificare ipotesi o intuizioni.

 $<sup>4\</sup>_Esther \ Weltevrede, \ "Thinking \ Nationally \ with \ the \ Web" \ (M.Sc. \ diss., \ University \ of \ Amsterdam, \ 2009).$ 

# Field Research 1.0

## 1.1\_ Image as a link

### 1.1.1 \_ IM-AGE 5

- A representation or likeness of a person or thing
- An optically formed reproduction of an object
- A person or thing that resembles another closely; double or copy
- A mental representation: idea produced by the imagination
- The pattern of light that is focused on to the retina of the eye
- the value of a function, f(x), corresponding to the point x
- The range of a function

Starting from the definition of images we can see how the word "image" has not an univocal meaning. Without being able to fully investigate the historyof this word and the multiplicity of his meanings I will try here to make some fixed points around which our discussion will start.

In particular what such a wide range of definitions returns to us is a distinction between two different "depth of field" of the word image: a first one extremely linked with the concrete representation of an object and a second one more related to a subjective interpretation of this object. Taking advantage of the metaphor that the english dictionary gives us, we can say that image is both what is impressed on the lens and what takes form in our brain.

As a consequence of this statement we can therefore find in the image a link between the object and the observer, something that firmly stand in the middle: connected with both the subject and the the object, without beeing exclusive expression of none of them.

<sup>5</sup> \_ Dictionary.com. Collins English Dictionary - Complete & Unabridged 10th Edition. HarperCollins Publishers. http://dictionary.reference.com/browse/n (accessed: March 17, 2014).

We can also say that an image is therefore not just what we see but what we imagine of a certain object, and this point of view shifts the focus, giving a new life to the images not just as axpression of essence but more as a personal and subjective framing of things.

"As semioticians from Pierce and Saussure onwards have pointed out, words, maps and indeed also pictures do not represent things, but shared ideas of things. Images become then instruments to match a reality to the way in which we imagine it to be."6

The intervention of such schemes, contributes to the creation of the imaginary reference connected to everything. Images help us to understand the world in wich we live and create fixed points in a fluid space. But how do we make sense of this process when images are produced by someone who is not ourselves? As Aumont explains every image exist to be seen from a spectator historically defined, and even the most automated of images, those coming from security cameras for example, are produced in a deliberate and calculated way, in view of specific social effects.

"Can we therefore ask ourselves in advance if in all this the image really has its own part: the image, as a whole, isn't it produced, thought and received as the time of communicative, expressive, artistic or whatever social act?"

This said we can easily start to consider images not just as "possible framing" of the reality, but specific choices of interpretation of a reality. Every image is produced with intrinsic communication capabilities, and a (conscious or unconscious) power of communicate one aspect rather than another. In any case it is part of a cycle in which it must assume a specific role. To understand this specific role and meaning it is of particular interest the explanation made by Panofsky and quoted by Aumont on the meaning of everyday gestures:

- a primary or natural meaning, related to the denotation
- a secondary or conventional meaning, understood thanks to the relations between some elements of the representation and themes and concepts already present in the spectator
- an intrinsic or essential meaning, that you can find thanks to those intern principle which underline the basic attitude of a nation, of an era, of a social class, of a religious or philosophical belief: principles qualified and condesed in a work by an unconscious single personality."<sup>8</sup>

### 1.1.2 \_ From imagination to imagery

Imagination has been therefore associated to disciplines such as sociology and subsequently geography, where it came to have the particular role of connection between the sensitive experience and theoretical thought, among the multiplicity of factors to represent and the unity of thought on them.

"All media are active metaphors in their power to translate experience into new forms." <sup>9</sup>

This happens as a consequence of the power of imagination as a language that rearrange data from sensible experience into mental associations, and as artifact that unites in itself the various degrees of metamorphosis through which the many sensible perceptions come to be known, contextualized, synthesized and remembered as imagery.

<sup>&</sup>quot;Everyday gestures have more than a single meaning:

<sup>6</sup> \_ Boys Davies S., "Mapping the unseen: Making sense of the subjective Image", in *Emotional Cartography*, ed. Christian Nold, http://emotionalcartography.net/EmotionalCartographyLow.pdf (2009),

<sup>7</sup> \_ Jacques Aumont, L'Immagine, (Torino:Lindau, 2007).

<sup>8</sup> \_ Ernst Hans Gombrich, Symbolic Images (London: Phaidon, 1972).
9 Marshall McLuhan, Understandina Media (New York: McGraw-Hill . 1964) p85

### " We look at Google result and we see society, instead of Google" <sup>10</sup>

### 1.2 Methods

The theories regarding the use of a digital search tool to analyse and map a complex aspect of reality and the choice of the visual approach to explore the results are supported, developed and tested within different branches of research. Without the ambition of being completely exhaustive here we will investigate the most meaningful of them together with some recent experiments and some particularly meaningful cases .

### 1.2.1 Digital Methods Initiative

First of all we refer to the "Digital Methods Initiative" whose contribution reflects on the meaning of making research in the digital world: sanctioned the end of the gap between virtual and real, and between cybernetic spaces and real localism, we use the analysis and mechanisms of the web to organize, distribute and display the knowledge as a method of investigative sociological and cultural research.

The difference attested between "digital" and "digitized" is one of the main characteristics of this field of analysis, which contextualizes the approach of the Digital Methods in a different way within the internet research, reflecting on this fundamental ontological contrast: the differences between objects, content, tools, environments born within the medium, the digital, and those who, migrating within it, have been digitized. The distinction is to be extended also to the ways to study them and research them, or the need to apply different mechanisms to analyze and discover new tools to measure their characteristics, by acting in a different way from the transposition of tools and structures typical of non-digital objects into a digitized one.

<sup>10</sup> \_ Richard Rogers et Al, "Mapping Democracy", Global Information Society Watch 2009:49. http://www.giswatch.org/sites/default/files/GISW2009.pdf

"I would argue that the internet is a site of research for far more than online culture and its users. With the end of the virtual/real divide, however useful, the internet may be rethought as a source of data about society and culture. Collecting it and analysing it for social and cultural research requires not only a new outlook about the internet but new methods, too, to ground the findings. Grounding claims in the online is a major shift in the purpose of internet research, in the sense that one is not so much researching the internet, and its users, as studying culture and society with the internet." 11

This therefore involves first of all the interest in the study of the digital mechanisms already existing: order, compose, manage, store the reality in order to extract knowledge, and subsequently, on the basis of their operation, the experimentation in the construction of "machines" suitable to process the products and components of the digital and reprocess them through new specific languages.

"The overall purpose of following the medium is to reorient research to consider the internet as a source of data, method, and technique". <sup>12</sup>

Particularly the attention to the Web as a new area of knowledge building, is confirmed by the definition that is found of it as "... one of the few places where one may encounter between issue (network) politics and informational politics". The web could be the suitable place to find at the same time the encounter between three key players: "issue" (the network and the thematic content analysis) "politics" (politics, in general, over-organization and Government of contents) "information politics" (the politics of information, communication) as well as the place where the collision and competition between official and non-official actors of reality (collision space and reality checker) with the possibility of turning into an anticipatory instrument of future developments, as well as explanatory of a particular situation at present. <sup>13</sup>



1.2.1.i

# This painting is not available in your country

© PAUL MUTANT, 2010

### **1.2.2 \_ Software Studies Initiative**

Also in other places of research is theorized the power of digital as a place to create and reorganize knowledge, particularly through the study of specific software processing, collection and display of data.

"..lf media are "tools for thought" through which we think and communicate the results of our thinking to others, it is logical that we would want to use the tools to let us think verbally, visually, and spatially"  $^{14}$ 

Quoting the "Software Studies Initiative" has been coined the term "Cultural Analitics" to indicate their use of computational methods for the analysis of massive data sets and their flows, using as a paradigm the processing of digital imaging and visualization to analyse large collections of images both still and moving. The term shares much with the science defined as

<sup>11</sup> \_ Richard Rogers, Digital Methods, (Cambridge: The MIT Press, 2013), 38

<sup>12</sup>\_Richard Rogers, Digital Methods, (Cambridge: The MIT Press, 2013), 27

<sup>13</sup> \_ Richard Rogers, Information Politics on the Web, (Cambridge: The MIT Press, 2005)

<sup>14</sup> \_ Lev Manovich, Software Takes Command, (New York: Bloomsbury, 2013), 232  $\,$ 

"visual analytics", the science of analytical reasoning facilitated by interactive visual interfaces, and "visual data analysis", the analysis of visual data possible thanks to the infinite potential in human ability to find patterns and structures even in the most complex situations, precisely made accessible and readable thanks to methods of visualization and representation, preceded by processing methods and computations of the data (visual analytics).

"Turning everything into data, and using algorithms to analyze it changes what it means to know something. It creates new strategies that together make up software epistemology. Epistemology is a branch of philosophy that asks questions such as what is knowledge, how it can be, and to what extent a subject can be known. Digital code, data visualization, GIS, information retrieval, machine learning techniques, constantly increasing speed of processors and decreasing cost of storage, big data analytics technologies, social media, and other parts of the modern techno-social universe introduce new ways of acquiring knowledge, and in the process redefine what knowledge is. For instance it is always possible to invent new algorithms that can analyze the already existing data in ways the previous algorithms could not. As a result, you can extract additional patterns and generate new information from the older, already analyzed data." <sup>15</sup>

The study of the functioning of the medium, its ways of organizing knowledge native of the digital, the way of differentiating itself nationally and linguistically in a different way, the way it stores and preserves the memory of reality, the "link" and their analysis, they may well all become turning points for researching the Internet, moving the new goals and objectives. It was thus considered crucial to find new tools and methods of analysis appropriate for a content that is so radically different, new means which would lead to develop skills to understand what is its functioning as passing from the study of the media to the study of software to understand, analyze and use the media themselves: "software studies". The centrality of the software compared to the medium should be understood as the transition to the study of the medium intended as a set of instrumental techniques (derived from the software) in continuous evolution and development, leading to new properties in addition its specifications, related to the data itself.

### Phototrails.net

VISUALIZATION OF 23,581 PHOTOS TAKEN DURING 24 HOURS IN BROOKLYN AREA. HTTP:// PHOTOTRAILS.NET/INSTAGRAM-CITIES/ "Software has become a universal language, the interface to our imagination and the world. What electricity and the combustion engine were to the early 20th century, software is to the early 21st century. I think of it as a layer that permeates contemporary societies. If we want to understand today's techniques of communication, representation, simulation, analysis, decision making, memory, vision, writing, and interaction, we must understand software." <sup>16</sup>

The analysis of the computer as a "meta-medium" or as a medium container of other media, leads to the distinction (not categorical) between components which already exist in the real world and components subsequently born, without precedent in the past. This distinction applies both to the data / media content, both for the tools / software designed for them. In particular, especially in the latter category, some properties are "attached" to the data to manage / develop / perform conceptual operations (operations such as "search", "find", but also "cut / copy / paste"), thus changing the perception of the same data by the user, not just for its communicational, representative, rhetorical and sensorial features, but also for its usability and manageability through the software, and its way of being, as derived from the way the software has generated, organized and displayed the content.

<sup>10/29/12 9-48</sup>am 10/29/12 4-36am 10/29/12 4-35am

<sup>15</sup> Lev Manovich, Software Takes Command, (New York: Bloomsbury, 2013), 338

<sup>16</sup> Lev Manovich, "The Algorithms of Our Lives", The Chornicle of Higher Education, Dicember 16, 2013 http://chronicle.com/article/The-Algorithms-of-Our-Lives/143557/





### 1.2.3 Selfiecity

In 2013, Nadav Hochman, Lev Manovich, and Jay Chow from the Software studies Initiative analysed and visualized 2.3 million Instagram photos collected in a number of cities across the globe (phototrails.net). Building on this experience, Manovich and Daniel Goddemeyer decided to assemble a larger team to continue work with Instagram photographs. The new team included scholars in media theory and art history, data scientists, and visual designers and programmers. Working from New York, Germany, and California, the team put together a new project that brings together the multiple perspectives of its members: Selfiecity.

Manovich, a pioneer in the analysis of visual social data, coordinated the project, while Moritz Stefaner, a well trained visualization designers, was responsible for creative direction and visualizations. Selfiecity (www.selfiecity.net) investigates how people photograph themselves with mobile phones in five cities around the world. The project analyses 3,200 Instagram selfie photos shared in New York, Moscow, Berlin, Bangkok, and São Paolo (640 from each city). It combines findings about the demographics of people taking selfies and their poses and expressions; a number of media visualizations (imageplots) that

1.2.3.i

### Selfiexploratory

THE INTERACTIVE INSTRUMENT TO NAVIGATE THE WHOLE SET OF 3200 PHOTOS.

HTTP://SELFIECITY. NET/#SELFIEXPLORATORY 1.2.4.i

# Chinese Calligraphy quilt

HTTP://IMAGEQUILTS.COM/

assemble thousands of photos to reveal the interesting patterns; and an innovative interactive application, Selfiexploratory, that allows visitors to explore the whole set of 3,200 photos, sorting and filtering it to find new patterns.

### 1.2.4 \_ Image Quilts

Another research experiment worth to mention is the work concerning image quilts carried by Edwards Tufte in collaboration with the software engineer Adam Schwartz. The main idea behind their work is that a visual collection of unordered images related to a topic can often lead to a deeper understanding of the matter and to new and unexpected findings. To this mean they developed an extension for Google Chrome which allows you to search a topic on Google Images, and then recompose, sort, and edit those images into a quilt of images dealing with your topic. The resulting quilt is scanned by the viewer, who often learns more about that topic than from conventional search results.



After installing the app, you'll see a new button appear above your image-search results, prompting you to make an ImageQuilt. Clicking on the button jumps you into an intuitive interface that lets you build a collage based on the results of your search. There are lots of customization options: you can change the image size, and order; zoom into images; remove images; and also choose between grayscale, inverted, or full-color displays. After tinkering around with the settings and removing irrelevant images, you're left with a coherent (and hopefully attractive) collage that represents your chosen subject.

ImageQuilts can be considered as an impressive tool to summarize and organize visual data. This concept brings forward the idea of keeping the data as pure as possible, discouraging the use of decorative visuals when displaying it, the real hallmark which characterized tufte's work along the story of data and information visualization.

1.2.4.ii

### **Pablo Picasso Quilt**

HTTP://IMAGEQUILTS.COM/

### The Big Urbans

BEN SHNEIDERMAN

THIS URBAN POPULATION
DATASET FOR THE YEAR 2010 WAS
COLLECTED FROM WORLD BANK'S
WEBSITE. THE VISUALIZATION
SHOWS COUNTRIES WITH 23.3
MILLION OR MORE URBAN
POPULATION. THE BOX SIZES
ARE URBAN POPULATION
COUNT. THE COLOR REPRESENTS
POPULATION DENSITY (PEOPLE
PER SQ. KM OF LAND AREA) WITH
THE HIGHEST BEING GREENISH
YELLOW (BANGLADESH: 1159)
AND THE LOWEST BEING PURPLE
(CANADA: 4).

### \_\_\_\_ 1.2.5 \_ Art a a cognitive method for science

"The aesthetic function is much more than a simple ornament of the surface of the things and of the world. It deeply acts on the life of society and the life of each individual, and contributes as a driver of the relationship both passive and active - of the individual and of the society with the surrounding reality." 17

In many of these projects we can see a common interest in using visualization aesthetics as a primary feature for the displayal of information. One of the latest and more explicit examples is Ben Shneiderman's series of artistic treemaps. Shneiderman, a professor of Computer Science at the University of Maryland, is better known in the visualization community as the author of many relevant academic papers and books on graphics, human-computer interaction, and digital technology in general. Now, he has decided to explore the aesthetics of treemaps — a graphic form that he invented — in a series of algorithmically generated artworks.

<sup>17</sup> \_ Jan Mukarovský, Aesthetic Function, Norm and Value as Social Facts, (Ann Arbor: University of Michigan Press, 1970)

As Bruno Munari points out in his book Design as Art, it's not the first time in history for art to have an explicative function. Since greek art and especially through the middle ages and renaissance, art has had a didactic and cognitive function. With a focus on experimental capacity, due to the new instruments by which it is created, parallel to science, but by different means, tents have become an instrument of knowledge and a stimulation of individual creativity. <sup>18</sup>

The same thing occurs today, and the interest of the world of science towards the artistic field creates new possibilities for the academia: once a closed world starts to become more accessible from the outside, with credit to an aesthetic layer, it becomes more attractive and enjoyable. The artistic feature becomes functional, and makes room for cognitive functions.

1.2.5.ii

# Comparative Geography

MAP OF THE WORLD'S TALLEST MOUNTAINS AND LONGEST RIVERS.

PUBLISHED IN

GENERAL ATLAS OF THE WORLD BY ADAM & CHARLES BLACK, SIDNEY HALL AND WILLIAM HUGHES, 1854



<sup>18</sup> \_ Bruno Munari, Design as Art, (Roma: Universale Laterza, 1971), 13

# 1.3\_ Why digital methods to investigate national identities?

Choosing to start a research on the different relationship established within and between nations, from a dataset that is organized and interpreted by the network, involves a series of observations on the basin of data, but also on localism that distinguish the web itself, even if only about the way it works.

The types of research that choose to analyse cultural and social changes by studying the medium itself through which we observe the phenomenon may be characterized within the framework of "Digital Methods" by the term "online groundedness".

"The Digital Methods program introduces the term «online groundedness» in an effort to conceptualize research that follows the medium, captures its dynamics and makes grounded claims about cultural and societal change." <sup>18</sup>

The possibility of relate geography and cartography production within a digital method is proposed and suggested by the digital itself, as profoundly varied geographically.

"Geography, however, was built in to cyberspace from the beginning, if one considers the locations of the original thirteen root servers, the unequal distributions of traffic flows per country as well as the allotment of IP addresses in ranges, which later enabled the application of geo-IP address location technology to serve advertising and copyright needs. Geo-IP technology as well as other technical means that locate (aka locative technology) also may be put to use for research that takes the Internet as a site of study, and inquires into what may be learned about societal conditions across countries." <sup>19</sup>

<sup>18, 19</sup> \_ Rogers, Richards. The End of the Virtual: Digital Methods. Text prepared for the Inaugural Speech, Chair, New Media & Digital Culture, University of Amsterdam, 8 May 2009.

### 1.3.1 Localism in the web

Initially the web has been described as a world defined as "cyberspace" where the corporeity vanishes transformed into information, where the equality conform and detach the web from the «real world» regional, cultural, and social differences. While some argued that a place referred to as "cyberspace" recreate new spaces beyond reality, others described it like a dissociation of real social life, distinct and disconnected from it. In both cases, whether it is a place "outside of us" or a place conceived as a "internal disruption" of ourselves, what was being described was still a place not informative and non-localizable through to the concrete territoriality. The digital methods place themselves in strong contrast with the ideas listed here, considering instead the digital as a "measure of the impact of new technologies in social life, and more specifically on the user, but also, conversely, as a means used by the real world as political and social space. "

"Virtual methods may be seen as an exercise to measure the new technologies' impact on society and, more specifically, on the user.

By 'visiting the ground' the Web is made comprehensible as an important social and political space" 20

A first element through which to consider the web as deeply territorial is for example the way the nations access to the Web itself. As a matter of fact we speak about "digital divide" to indicate the gap that occurs between the various nations reached in different ways and at different times by the technological revolution building a different distribution and development of the technologies in question. The countries are reconfigured internally also on the basis of the new acquired equipment, expanding the political and social space (and power of control) also thanks to them. In addition to be public space, the web is considered also as a private space, thanks to the relations of different types that a single person establishes online, in different ways, depending on where they live, age, cultural background, the style and the standard of living and countless other variables, but also compared to the relations that the same individual established offline.

TURKEY

HONG KONG

IVORY COAST

**PHILLIPPINES** 

1.3.1.i

ITALY

# The Nationality of Issues. Rights Types

MOLDAVIA

RUSSIA

ROMANIA

AN ATTEMPT TO ANALYZE
GOOGLE RESULTS IN VARIOUS
NATIONAL DOMAIN GOOGLES, IN
ORDER TO FIND OUT TO WHAT
EXTENT LOCAL AND CULTURALLY
SPECIFIC RIGHTS WERE RETURNED
IN THE TOP RESULTS.

VISUALIZATION BY VERA BEKEMA AND ANNE HELMOND, PROJECT OF THE DIGITAL METHODS INITIATIVE SUMMER SCHOOL "Nation is a social construction circumscribed by communication flows, whereas state is a governing system defined by a territory." <sup>21</sup>

Speaking about relationships between individuals you get to reflect on how can also accordingly vary relations between nations, meant as places formed by people who share similar interests / goals / culture and speak the same language. Reconfiguring the boundaries between nations online might be just analysing where the communication within a group of people is dense and how far it will eventually end, due to the absence of language and common elements through which to discuss.

"Space can be studied by measurable communication «flows»." <sup>22</sup>

Another unique element of the web, it is in fact the use of the language, different from country to country and, more deeply, the language in which the structures of the web are designed, or even the different ways in which different nations (speaking different languages) build themselves their own structures in the web. The way they organize, edit and interpret data and the management software of the data itself are symptomatic of the specific technological organization of a nation.

<sup>20</sup> \_ Esther Weltevrede, "Thinking Nationally with the Web" (M.Sc. diss., University of Amsterdam, 2009)

<sup>21</sup>\_Esther Weltevrede, "Thinking Nationally with the Web" (M.Sc. diss., University of Amsterdam, 2009). 22\_Alex Halavais, Measuring National Borders on the World Wide Web (M.Sc. diss University of Washington, 1998)

# 1.4\_ The perceived national identities

"Yet what if identity is conceived not as a boundary to be maintained but as a nexus of relations and transactions actively engaging a subject?"<sup>22</sup>

Talking about national perceived identities as explained before regarding identities in general means to talk about communities thought to share characteristics in appearance, behavioural traits, beliefs, attitudes, values, knowledge, opinions, experience, historical commonalities, and so on.

Being the concept of "national identity" also a social category, it is subject to the products of human thinking, discourse, and action. This contributes to make the meaning of "national identity" variable over time and space, historically, and definitely makes the result of our analysis something valid strictly in the moment in which is made and for the place in which is made.

The main contribution of the use of digital methods in the analysis related to this field is to create nations imagined not as communities that share an image through a medium, but as a technically mediated community on the web, a structure within the communication medium itself, the digital. A construction deeply tied to a place and a nation, valid strictly in the moment in which is made and for the place in which is made.

<sup>22</sup> \_ James Clifford, The Predicament of Culture, (Cambridge: Harvard University Press, 1988).

In referring to this specific approach to the study of this subject becomes interesting to study the architecture of this "web structure" to find, map and investigate the ways in which "moves" an imagined community, the perception of this community and even the way this identity it's communicated.

Taking as an example the work made by Anat Ben-David on the study of the Palestinian web, you can reflect on how the national domain <.Ps> is actually a real space managed through a web technology, and based on specific infrastructures, therefore analysable and mappable as such, while the idea of a Palestinian state is still only imagined.

# 1.5\_ Search engines

"...search engines, a crucial point of entrance of the web, are epistemological machines in the sense that they crawl, index, cache, and ultimately order content. Previously I described the web, and particularly a search-engine-based web, as a potential collision space for alternative accounts of reality." <sup>23</sup>

Having decided to work on the perceived identities of the two nations in each other webspace through images, and keeping the intention to see how this identity was "broadcasted" lead to consider search engines as the first "place" to investigate, being a crucial point of entrance of the web. The first two main sources for the collection of our data has been decided to be the two main image search engines of the two countries. As for Italy it's regarded as established the dominance of Google (and specifically the national structure determined by the domain .it) for what it concerns China at the same way it's clear how it's Baidu the main actor concerning search engine, commanding about two-thirds of the booming Chinese search market.<sup>24</sup>

### 1.5.1 Search engines functioning

The functioning of images search engines is directly related to the functioning through queries (user questions) and tags (properties added to the content and designed to make it detectable according to the query). The huge amount of data (in this case images) related to the question posed to the search engine become available, processed and indexed by sophisticated algorithms that take into account the captions of images, their descriptions, and the context in which they are in the net-

23 \_ Richard Rogers, Digital Methods, (Cambridge: The MIT Press, 2013), 31 24 \_. René Reinsberg, "Baidu" Mit Technology Review (2009) http://www.technologyreview.com/article/416835/baidu/



work. The search engine scans automatically websites to identify the pictures (you cannot personally and directly upload an image to Google Images), moreover, are eliminated duplication and should appear as firsts the images with the best quality.

A second factor to consider is the "non-hierarchy" of the system in organizing the images, an organization that generates, in fact, always new, produced by the user himself in the middle of that search. All types of superstructures that we are used to think of an image on the web just fails. To the question posed to the search engine corresponds an answer coming not from a single subject, but from a set of answers not hierarchized and not even organized according to schemes directly related to their origins or their individual characteristics, but rather indexed according to their relevance to the addressed query and relevance of the image with the whole, breaking any type of pre-existing scheme upon it. Furthermore, thinking about the distance between the time in which the image is created and the time when it appears in the search engine, other features differentiate the use of an image taken in the digital, compared to an image canonical. The process by which from the owner

1.5.1.i

Italy

Google's logo

/ author of the image you get to the presence of it indexed by Google Images, include steps of elaboration of its meaning: the image may be shared, modified, reused, duplicated in multiple copies, reduced or enlarged in contexts, situations and moments so different from each other and for so different purposes to undergo an automatic "natural selection" and gain a "reputation" that can then be considered relevant to one or more endless topics.

A final characteristic of such a basin of data, is related to the moment in which the research was carried out. For the project has been tried to make the search more "neutral" as possible, setting the instrument in a way that makes it as independent as possible from the "machine" used to download images, the type of connection to the network and its location in the territory, to be able to "engage" in a more neutral way the national domain of the two countries involved in the analysis. These in fact are the variables that strongly affects the type of vision that a user can have, depending depending on whether he uses a computer or another, a browser or another, but especially he is located in one state or another. The structures and items available on-line can change (or being "encrypted" voluntarily) from country to country and their variability opens up research opportunities for comparison and analysis of the differences.

Not only locally the results appear in constant metamorphosis, but also temporally. Next to the variability of the physical location from which you research, in fact, the time variable, filter, organize, edit, add, delete, archive results according to rhythms that can not be controlled, directly dependent on the relevance of the data itself for the specific time at which you are looking for

For most web searchers, using Image Search engine is very easy, requesting nothing else than entering your query into the search box and clicking the Search Images button. However, more advanced searches are available through the use of any of Google's specific search operators within the search query. This process allow to fine-tune the image searching through the application of a series of filters that allow to tweak your image search in a number of ways concerning colour,domain file type, size and additional keywords.

### 1.5.2 China and the case of Baidu

As it's common in every discussion about China, also here we need to explain a few differences that makes the Chinese search engine landscape a similar albeit deeply different field. Even Google, the worldwide colossus of search engine, had to rethink his strategy to gain the possibility to have a share of what is now the largest Internet user base in the world: 560 million in China are logged on and spend an average of 20 hours a week online, according to the China Internet Network Information Center. China is not only the world's largest Internet market but also the one that presents the greatest possibility since as many citizens are already online, many, still are waiting to become netizens. Who's leading the market then? Here comes Baidu, the chinese giant of internet search. The name "Baidu" comes from an 800-year-old Chinese poem referring to one man's passionate search for his lover in a festival crowd. Eight hundred years later, that festival crowd represents the 70% of Chinese internet users search engine shares.<sup>25</sup>

To understand its strengths and the reason of the dominance I would like to consider many factor, and before going into more technical features I would like to spend some words regards a more anthropological approach to the matter.

First of all Baidu has a very clear focus on China without caring to be an over national model applicable to various countries. This has meant for the company to grow and develop around the peculiarities of his market. Baidu has a better grasp on the growth and development of the Chinese web simply because the entire company is built upon similar foundations, and thus crawls, indexes, and searches the Chinese webspace better than Google does, and arguably Google will soon do. The Chinese webspace is extremely local (with around the six percent of the Chinese Internet's hyperlinks leave China's webspace X) and this means that the websites that rank highly have to be in Chinese language and hosted inside China. Also, the way most Chinese citizens search for content online differs significantly from the way people source information in the West. The younger demographic and their ever-increasing enthusiasm for mobile technology, especially in areas where it may be difficult to access laptops and PCs, has democratized search for tier two

25 \_ Kurt Wagner, "Baidu: China's search engine" CNN Money (2013) http://money.cnn.com/2013/05/06/technology/baidu-china-search.pr.fortune/



新闻 网页 贴吧 知道 音乐 图片 视频 地图

百度一下

百科 文库 hao123 | 更多>>

1.5.2.i

14 = 1...

# Screenshot from the homepage of Baidu

and three cities. And thanks to users' hunger for information, particularly about branded goods and aspirational lifestyles, their online habits tend toward browsing all the search results on offer, rather than pinpointing specific sites via keyword searches.<sup>26</sup> Because of this, we can state a first difference in what we can call the search engine "personality": while Google aims to find the precise answer to a user's question, baidu tries to help the user to solve the problem itself, and this is done by framing the spectrum of possible answers, in a more business oriented model. Contrasting tendencies in browsing behaviours aside, there's one major difference between search in China and search in the West. While Westerners have a tendency to be suspicious about the honesty of anything that is paid for, the reverse is true in China, were the huge diffusion of fakes pushed to consider more trustable and something worth checking out a brands who's willing to pay for his presence on the front page of a search engine.

Another key significant difference between the two scenarios is apparent in censorship. The Chinese government is pretty restrictive when it comes to what information can be disseminated to the Chinese people. Internet companies operating in

 $<sup>26\</sup>_Jonathan\ Margolis,\ "The\ Chinese\ Google",\ News Statesman\ (2011)\ http://www.newstatesman.com/technology/2011/08/china-chinese-baidu-internet$ 

China are more accustomed than Western firms to dealing with censorship. As has been reported widely in the global press, politically sensitive keywords are banned on Chinese search engines and Baidu's dominance is also the result of the company's capitalizing on the Chinese government's strict censorship regulations. Google on the other hand, has not been too keen on censoring materials, aside from those that are explicitly illegal. Google has clashed more than a couple of times with the Chinese government for control over what Google is allowed to show Chinese users. The long drawn out battle almost ended with Google pulling out of China and moving his servers to Hong Kong, resigning moreover to a much lower browsing speed.<sup>27</sup>

This said we can clearly see how Baidu is nothing else than a product of the environment where he was born. Adopting a business model more focused on entertaining and trade, has been able to capture better both what the Chinese user where looking for and what the government expected as a legitimate behaviour for a company. This two factors helped the company to gain a dominant position in the market, being the trusted and domestic solution for all their needs. The majority of people have no reason to change and use "unstable" (for the chinese context) search engines since Baidu has been working well for their normal search needs, and still provides unique services for the Chinese audience.

This specific research experiment has involved China and Italy.

The use and the observation of the search engine itself, its operations, its characteristics and outcomes, has led to the hypothesis that the issues related to the single nation could have been found within the same nation researched in a specific place in the web.

Asking the search engine to show the countries as they are, seen from the point of view of a heterogeneous sample, disorganized, uneven and not hierarchical as the population of the web, would certainly bring out the issues relevant to both the time, the place and the topic, thanks to the intrinsic characteristics of the medium itself.

### 1.6.1 News outlets

The first choice that has been made to add a different level of meaning to the research has been, after a first research in the open web, to narrow the basin in which to retrieve our data. Thanks to the use of the google advanced search instruments the basin of the data has been tighten according to a series of domain related to specific news websites particularly meaningful for the two countries.

<sup>1.6</sup>\_ Online News Sources

<sup>27</sup> \_. René Reinsberg, "Baidu" Mit Technology Review (2009) http://www.technologyreview.com/article/416835/baidu/

FIELD RESEARCH FIELD RESEARCH

If a search in the open web is useful to see what are the results according to the search engine algorithm and what in a certain way comes from a technological filter (of course mediated through the human intervention, but not in a such direct way) from a more specific and filtered research we can actually see which is the big picture that the different media sources (in this case different news websites) paint about the country in question, and the differences between the visions.

For this specific limited query has been used Google Images for both the states, since Images Baidu does not allow to search within a specific domain.

Here are the specific urls investigated:

| Italy  | China  |
|--|--|
| http://www.corriere.it<br>http://www.repubblica.it<br>http://www.ilsole24ore.com<br>http://www.ilpost.it | http://www.xinhuanet.com/<br>http://www.globaltimes.cn/<br>http://www.people.com.cn/<br>http://www.caijing.com.cn/ |
| http://www.ilfatto.it  | http://www.sina.com.cn/  |

The coice has been made according to the peculiarities of each "media landscape" in an attempt to find as many different news sources with as many different vocation as possible. For this reason in both cases has been taken in consideration difference sources. Here I will try to make an explanation of the two different context and what made each entry worth of attention.

### 1.6.2 Italian online journalism

We enter this discussion in a very specific historical moment. It's not yet passed much time since the advent of the digital technologies in journalism, and the Italian scene is steel in a process of shape definition. The panorama that the crisis of the publishing industry left behind is something still very messy and full of compromises, which is still subject to laws often conceived for a different context<sup>29</sup>. Even if it is a process which just started, is determining a radical transformation on the mainstream media sources. The movement is toward the web, with a transmediality which builds and deconstruct the informations in an attempt to find its proper new shape. This said it is useful to briefly investigate how the main Italian news source and their competitors managed the shift to the web and their new competitors.

The two main leaders are easily identified as II Corriere della Sera and La Repubblica. The delay of several national newspapers (and regional) in pursuing a strong digital strategy, has allowed the two major newspapers to impose themselves in the market without any real strong rival and to consolidate a duopoly. Repubblica and Corriere have their homepage divided in a similar way, keeping on the left column (the term was transported from paper to digital of course) the "serious" journalism" and on the right column the "click-catcher" content, also called by emphasizing the different characteristics, "mixed fried", "morbid-box", "strange-but-true". Basically the online structure of the paper is strongly forced by the concessions that the the generalist quality journalism does to the web to get more pageviews and therefore (according to the interpretation favoured) more and better opportunities for advertising. Most of the time we talk about creatures not specifically born for digital platform, but instead grown in layers for progressive additions of content blocks and perhaps without a graphic and editorial project strong and rigorous as that of the paper. Thanks also to the fact that the Italian journalism has never had a division comparable to the English market, where are clearly distinguishable "serious newspapers" like the Times and the Guardian (broadsheet) and "tabloid " such as Daily Mail and the Sun, and just for an apparent paradox our press, traditionally

<sup>28</sup> \_ Alessandro Gazoia, Il Web e l'Arte della Manutenzione della Notizia (Roma: Minimum Fax, 2013)













considered elitist for audience and content, has always mixed the high and low.

"Outside from a few rare exceptions, there is no difference between quality newspapers and tabloid, in contrast to what happens in the United Kingdom or the United States. We have only one type of paper. A paper purporting to be of good quality despite the shouted headlines, and sensationalist pathos and the rumours from the concierge. A newspaper conquered by "tabloidization", with little authority, poor reliability. We are the country of Satyricon, not the Pulitzer."<sup>29</sup>

This trend, which Christian Rocca clearly pointed out, joined with the "click-catching" strategy, led to what we can call the phenomenon of the right column. The Italians papers tried with this expedient to intercept the large audience of the big portals, in an attempt to increase the number of pageviews, the fundamental parameter in an economy still largely based on sales of advertising with the model of cost per thousand page views.

1.6.2.i

# Click catching content

SCREENSHOTS FROM

Italian journalism, which always lived upon grants (advertisements and public funding) finds himself in a strongly mutated situation: the advertising turned out to be in serious decline on paper and despite any growth in volumes, not very profitable for the digital. This forced the offer to be even more levelled to the low, with galleries and "ad-hoc" part of the site exclusively built to catch the reader's curiosity.

In this panorama it's interesting to investigate not just the main actors of the market but also some "outsiders" which made a difference with a different approach.

The first of the so-called outsiders is II Sole 24 Ore, an Italian national daily business newspaper owned by Confindustria, the Italian employers' federation. It reports on business, politics, developments in commercial and labour law, corporate news and features. Other than the more serious approach by which the paper is known, what makes this paper worth investigating it's his commitment to digital. The paper demonstrated a strong sensibility in giving a chance to new trends of journalism historically uncrowded in Italy: for few examples are the creation of one of the first national DataBlog, new channels such as for tablets and the production of ebooks focused on "hot topics" and on specialized guides (that have always characterized the paper).

A second meaningful example it's II Fatto Quotidiano. The paper was born 23 September 2009. Its success was immediate and not so unexpected and de facto insert a new piece in the puzzle of the italian news. The decision of Antonio Padellaro, the executive editor of this newspaper, to be inspired just by the Italian constitution has been perceived by the audience as a totally new element and contributed to it's placement in the market share:

"Our independence let us gain in Italy a role of real opposition. Not a preconceived or political opposition but a vision that is against the dominant vision in the media. Our editorial line is based on the Italian Constitution. It may seem rhetoric [...] but we put on the suit about the freedom of the press that is made by the article 21 of the Italian Constitution" X.

<sup>29</sup> \_ Christian Rocca, "Perché in Italia l'Huffington Post non può sfondare" Il Sole 24 Ore, 2012 http://www.ilsole24ore.com/art/cultura/2012-07-09/perche-italia-huffington-post-112431.shtml?uuid=AbYb054F

 $<sup>29\</sup>_Michele\ Caracciolo\ di\ Brienza, "Seven\ reasons\ II\ Fatto\ Quotidiano\ has\ been\ successful"\ EJC\ 2013\ http://ejc.net/magazine/article/seven-reasons-the-italian-newspaper-il-fatto-quotidiano-has-been-succes#.UORt361_uaE$ 

The position of the paper as said has been clearly recognised by it's public, and the paper serves now a growing niche of readers and in so doing has attracted a dedicated readership. This has been possible along with the previous statement by two others successful choices: the great propension towards the social media and the less complicated computerized system for managing the content.

The last Italian online daily newspaper taken into consideration is II Post. Edited the first time in 2010, has been directed since then by Luca Sofri. Supported by a company of entrepreneurs has it's business model based on inserctionists, since the access to the news it's free and without paywall. The model recall in the contents Huffington Post and the style of U.S. online newspapers such as The Daily Beast and Slate. Sofri presented the project as "An elite product for majorities: in the end we refer always to the facts and opinions, even if there is no separation: the facts together with opinions," and he indicated as an innovator because "half-aggregator, half editor of the blog". The site is therefore particular in it's content, with a big quantity of images and galleries, most of the times presenting images of high quality and dimensions.

### 1.6.3 \_ Foreign Affairs in Italian Journalism

On a general level should be mentioned a discussion on the foreign affairs journalism which happened on the blog minimaetmoralia.it after the publishing of the book "II Web e l'arte di manutenzione della notizia" between Simone Pieranni from the editorial agency China Files and the author of the book Alessandro Gazoia.

"I'm not sure if this news it's a fact, strange event, a very well processed news or simply a lie. The problem to me seems to go beyond the content of truth of that agency: from China we read and know mostly this kind of things - tibetan mastiff, house in the middle of the highway, intestinal dildos, no matter if they are true or false." 30

As stated in a colourful way by Pieranni when it comes to treat the topic China, the discussion most of the times regards



1.6.4.i

#### Tiananmen sunrise

DOZENS OF ONLINE NEWS
MEDIA PUBLISHED THIS
PHOTO CONCERNING TO
BEIJING RESIDENTS FLOCKING
TO GIANT TV SCREENS TO SEE
FAKE SUNRISES DURING HEAVY
POLLUTION DAYS. IN TRUTH, THA
SUNRISE WAS ON THE SCREEN
FOR LESS THAN 10 SECONDS AT
A TIME, AS IT WAS PART OF AN
AD FOR TOURISM IN CHINA'S
SHANDONG PROVINCE.

bizarre and strange topics, without often treating the most important topics related to main happenings of the political life of the country. Taking into consideration not just the case of China but the whole branch of journalism which in Italy deals with foreign affairs we can still consider this as an effect of the editorial crisis. Due to the lack of revenues the main newspaper started to invest less and less in this branch, often even with the removal of the role of the correspondent (an exception should be made for some newspapers in which the role remained, but just as prize for longtime journalist, even if totally estrange with the context in which they are sent to work). In an attempt to explain this trend Gazoia takes in consideration also other factors, like the necessary simplification in explaining events so distant from the everyday life of the reader:

"It's almost unavoidable that the news about and from other nations are strongly simplified: the reader often is very far (for physical distance, education, living conditions, etc..) from the context of the news and do not have the resources (time, culture, desire) to fully rebuild it. This simplification, however, can be conducted in a positive form by a journalism that should aim to mediate the complexity for

 $<sup>30\</sup>_Gazoia\ Alessandro,\ "Esteri\ a\ un\ bivio"\ Minimaetmoralia.it, 2013.\ My\ Translation\ http://www.minimaetmoralia.it/wp/giornalismo-esteri/$ 

<sup>31</sup>\_Pieranni, Simone, "Manutenzione della notizia e decadimento degli esteri" China Files, 2013. http://www.china-files.com/it/link/26679/manutenzione-della-notizia-e-decadimento-degli-esteri

his reader, then taking in the long run the rewards of a challenging cultural operation (and hence the main reference, even for publishing success, is International), or may be merely a dumbing down, a trivialization that moves without hesitation to the most banning stereotypes, negative and positive (corresponding to the "superiority complexes \ inferiority" who daily contribute to power)." 31

### 1.6.4 Chinese online Journalism

Take a stock of the situation about the Chinese online Journalism is not as easy as it could be for the Italian scene. As we already said more then once it's always very difficult to make sense and deeply explain the dynamics of things happening in China, both for the huge cultural distance and for the difficulty of generalizing a trend in such a diversified panorama.

Talking generally, the situation has some points in common with the rest of the world and some drastic breaking points. One of this drastic breaking points is that "The communist party has long striven to control freedom of speech in China. Hundreds of thousand of websites from around the world are blocked inside China. Major Social media, such as Facebook, Twitter, Wikipedia and Linkedin cannot be accessed, and advanced software is used to search and destroy "sensitive" words on the Internet."<sup>32</sup>

We cannot deny how strongly this factor conditions the Chinese web: as we said for Baidu, also the Chinese Journalistic landscape is pretty much closed on itself. Both for political reasons and both for behavioural trends we can easily stand that the main news sources available for chinese people are Chinese.

As Hu Yong made clear in his essay for the Nieman Reports, in the last ten years most of the Chinese papers faced two diverging trends. The first one started around the 2003, within the escalation to the power of Hu Jintao which in response to the SARS pandemic launched new laws and new accountability systems, igniting hopes for responsible and transparent governance.



People's Daily Online

SCREENSHOT FROM THE PEOPLE'S DAILY CHINESE WEBSITE

"The market-oriented media and new private online ventures opened up an alternative space where people could express their opinions outside official discourse." <sup>33</sup>

Ten years later with Xi Jinping now president, both a political and economical pressure are increasing and the situation is turning for the worse. With the transition towards the digital, for most of the market-oriented media, cost cutting and declining advertising revenues have contributed to a lack of newsroom protection and a drop in professionalism and ethical standard while Communist party outlets will continue to receive founds from the party itself. <sup>34</sup>

We can therefore briefly summarize that in this panorama the strong distinction to be made is the difference between governative news sources and market-oriented ones. This strong presence of the government mainly assume two different roles: outside from the censoring position which can affect our

33 \_ Hu, Yong. "Under Pressure", Nieman Reports 68 ( winter 2014). http://www.nieman.harvard.edu/reports/issue/100080/Winter-2014.aspx 34 \_ Scotton, James. New Media for a New China. Chichester: Blackwell Publishing,2010.

<sup>32</sup> \_ Mooney, Paul. "Command and Control", Nieman Reports 68 (winter 2014). http://www.nieman.harvard.edu/reports/issue/100080/Winter-2014.aspx

choices just in a passive way we will focus our attention on the active position of the governmental institution in the media landscape. This means taking in considerations the government press agency and the newspaper belonging to the communist party.

The first media source worth to mention in this brief analysis is Xinhua (新华通讯社), the government press agency. After being founded in 1931, plays now a role similar to an hypotetical Chinese Reuters. It keeps a regulatory function of the sector at national level. For specific events provide the "right" version of the facts that all the other media have to respect. As we said, state press agency is not the only governmental player, since also many of the papers belong to the government.

According to this another key player of the field is the main newspaper belonging to the party: the People's Daily (人民日报). The newspaper of the central committee of the chinese communist party is the national voice of the PCC and the principal coalitions within it. For this reason it is carefully read especially by those who want to understand what is happening inside Zhongnanhai, the headquarters of the party. Despite attempts to rejuvenation its online version it's equally rigid and institutional.<sup>35</sup>

Another paper belonging to the same category and worth to take into consideration is the Global Times (环球时报), a daily Chinese tabloid under the auspices of the People's Daily newspaper, focusing on international issues. The Global Times differentiates itself from other Chinese newspapers in part through its more populist approach to journalism, coupled with a tendency to court controversy. Established as a Chinese language publication in 1993, an English language version was launched on the 20 April 2009 as part of a Chinese campaign costing 45 billion yuan (\$6.6 billion) to compete with overseas media. <sup>36</sup>

The other side of the coin is so represented by the marketoriented publications which thanks to the technical and economical approach are allowed to talk of a broader range of topics and are often allowed to be more critic and have a much more sharp coverage towards corruption cases. In particular is worth to mention Caijing (财经), the web portal of the Financial magazine. Founded in June 1998 by Hu Shuli, a former reporter and editor of the Chinese paper Worker's Daily, as a month-end edition of Capital Week (a weekly specializing in China's capital market), the magazine is a pioneer in its field in China. Known and estimated nationally and internationally for the transparency to the political-financial scandals and openness to social problems. Its unique perspective and sharp writing have led to it receiving enthusiastic responses from financial industry experts and casual individual investors alike. The Wall Street Journal called Caijing "The Leading Finance Publication in China".

The last chapter of this brief analysis is about a more casual news source. Sina.com is the largest Chinese-language infotainment web portal and despite not being explicitly a journalistic portal is often used and it often works as one. Sina.com provides a lot of feature news as the focus of the lead story or the main photo. On the other hand its domestic political news is sourced from The People's Daily or Xinhua News Agency. Compared to conventional medium for news distribution, Sina. com is a platform for news articles from the traditional media. That means, according to its CEO, Wang Zhidong, Sina.com would never hire journalists (Xin, 2000). Run by Sina Corporation (新浪公司), a Chinese online media company for Chinese communities around the world it operates four major business lines: Sina Weibo, Sina Mobile, Sina Online, and Sina.net. It has over 100 million registered users worldwide and was recognized by Southern Weekend as the "Chinese Language Media of the Year" for 2003.37

37 \_Sina Official Media Kit http://mediakit.sina.com/

<sup>35</sup> \_ Lupano Emma. Ho servito il popolo cinese. (Milano: Francesco Brioschi, 2012).
36 \_ Branigan, Tania. "China defies media cuts and closures with new newspaper launch", The
Guardian, 20 April 2009

# Metaproject 2.0

# 2.1 Methodological Choices

### 2.1.1 Research Experiment

The experiment has required the collection of 2400 images obtained looking for the name of the other nation in their respective web space in a certain number of sources; We have tried to build a representation as possible "vernacular" of nations taking advantage of the differences between the localism on the web: research has in fact been carried out in specific deifferent places in the web, and of course in the official language of the country in question. Through numerous visual experiments, we tried to tell the relationship of knowledge that is established between Italy and China.

The collection of images was carried out starting from 01-15/02/2013 for the images regarding China, and between 01-15/03/2013 for the images regarding Italy.. The period in question is fundamental for the analysis of the contents, where the collective memory is added to the everyday narration, but also the peculiarities of a day, a sampling of different moments, seasons, amplifications and contractions of time, for as they appeared at moment in which it was harvested.

### **2.1.2** Visualization Experiment

The method of manipulation of the content has lead to the creation of visualizations made with intent analog albeit through digital software. They are imaginable as the experimental attempts that have followed step by step the process of content analysis, and express its development through visual representations constructed by composing, decomposing, weighing, sorting, eliminating, integrating, deforming<sup>38</sup> the factors taken

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into consideration, depending on the point of view, of the cut, the zoom that from time to time has been chosen and, secondly, depending on the possibility that from time to time emerged, talking both to available instrumentation, that the depth of the analysis itself. The experiments represent as the stage of "setting" and "testing" of the possibilities and limits of possible new processing tools through visual images.

### 2.1.3 Method Definition

Starting from the pictures, we tried to develop a process that would lead to that particular occasion, that unexpected situation which asks to be represented.

From the images to an imaginary?
From the images in a network of images?
From the images to a sequence of images?

A first intuition and research question has led to a crossroads: in order to compare different types of images should we have done it through a time or space comparison?

Taking advantage of the variable of time would have meant to analyze the change of an image for a certain period, which recalls to other fundamental problems, related to the representation of historical objects. In fact, they have their own precise moment of happening / becoming, belonging to a new cycle, with its own history and exists (or will exist) a precise moment in which it will be interesting to talk about them. They have moreover also times now gone which now are cold, to avoid, as well as unimaginable future moments, where the design challenge would be to assume through the use of artifice and fiction, a productive future potential. Or we could have choose the way of analyzing a single moment, the present, through images, by which to make comparisons to today. The comparison between images may be finding a common language for comparison, the same field on which to play through a "calculation" that draws the different weights between them. It has been hypothesized thus to find the same theme to look through the pictures: (ecology, natural resource management, supply, import and export of a specific food, politics, differences between the various policies, communication in politics, what to communicate to the public the various policies of the web ...) the issues that could be relevant for a certain type of analysis were found to be in reality everyone and anyone.

A second hypothesis was made on the variable of the space and then geography, the diversity of cultures, countries, languages and different places: as two nations, try to explain the network of relationships, the type and quality of the links between them. In particular, we reflected on how the countries, again hypothetically, could have turned out to be "similar" to a certain type of topic / theme, but not actually "connected", or rather distant. At this point the idea was to find a set of topics to which the countries could be pretty much related and thus build the connection and similarity network. But which method to define the issues? Is it correct to decide a priori categories within which situate the objects of analysis? Could there be the risk of being reductive, approximate? Eliminate the peculiarities, the richness and complexity of an object whose actors and connections are still rising, proliferation, movement and change? What does it mean to define visual imaginary divided by themes?

It goes without saying that these questions soon came out to be rhetorical. The issues to be discussed would have to arise from the data itself, in continuous evolution, mutation, metamorphosis, not applied to it as a wrap constricting and stiff shell.

The solution to this first doubt was found in the digital method itself. The observation of the search engine itself, its operation, its characteristics and its results led to the hypothesis that the issues related to the single nationality could have been found within the same nationality researched on the web. By asking to the search engine to show how countries are seen from the point of view of a heterogeneous sample (disorganized, inconsistent and anarchist / a-hierarchical as the population of the web) would have made certainly led to relevant themes for the time, for the placeand even for the by topic. All this just thanks to the intrinsic characteristics of the medium itself.

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### 2.1.4 \_ Data Management

"Whatever else may be said of these modes of organization, they are not «found in the world» but built into a world. Ordering, as well as composition and decomposition and weighting of wholes and kinds, participates in worldmaking."38

The management and the sequencing of the database followed well-defined rules and verifiable as:

#### COMPOSITION AND DECOMPOSITION

Much but by no means all worldmaking consists of taking apart and putting together, often conjointly: on the one hand, of dividing wholes into parts and partitioning kinds into subspecies, analyzing complexes into component features, drawing distinctions; on the other hand, of composing wholes and kinds out of parts and members and subclasses, combining features into complexes, and making connections. These operations are then made easier to be categorized as "labels" such as names, predicates, adjectives, through which the parties can be classified into entities and genres. The crucial point of this kind of "way" refers to the situation where an entity can belong to multiple genres together, and then have multiple identities. The identity (the concept which match the question "is the same / not the same"), also known as the invariance of a world "means with respect to what is within that world as organized.<sup>40</sup>

Therefore is thus possible to say that "heterogeneous entities that trim each other in complex configurations may very well be part of the same world." In addition to identification also repetition can be found as a part the composition / decomposition method, even if the repetition is meant as encompassing diversity (a repetition of an experiment is never equal to itself, it is one of the many examples of the theory that we want to evaluate). It can be said, rather, that an element is homogeneous and is repeated, but compared to a relevant feature for us (in the case of science then becomes the "theory" that is sought).

#### WEIGHTING

According to the concept of relevance, a second method of acting fundamental to take into consideration is the analysis respect to the weight and importance of the elements in their entirety. Imagining that in all the sets may be present in power all the elements, then only some would be visible and would assume corporeity, based on the weight that they have compared to the precise slant you want to give to the collection itself. To the changing views and the changing of interests, entities that are part of a set assume importance or insignificance, depending from set to set, with the possibility that if one of them is as irrelevant among the components of an ensemble, then it could also becomes the most relevant from a different point of view.

"Emphasis or weighting is not always binary as is a sorting into relevant and irrelevant kinds or into important and unimportant features. Ratings of relevance, importance, utility, value often yield hierarchies rather than dichotomies. Such weightings are also instances of a particular type of ordering."<sup>41</sup>

#### ORDERING

In orderings the difficulty lies in deciding what comes first and what comes next, because it is never an absolute order. An order in fact contemplates the concept of regularity and proximity: characteristics that vary according to the circumstances and objectives. For example the modules perceived within a twelvetone scale are completely different from those perceived with the traditional tonal scale, and rhythms, for example, depend on the separation into measures.

Radical reordering of another sort occurs in costructing a static image from the input on scanning a picture, or in building a unified and comprehensive image of an object or a city from temporally and spatially and qualitatively heterogeneous observations and other item of information. <sup>42</sup>

#### **DELETION AND SUPPLEMENTION**

In the painful experience of proofreading and the more pleasurable one of watching a skilled magician, incurably miss something that is there and see something taht is not there. Even within what we do perceive and remmber, we dismiss as illusory

<sup>39, 40</sup> \_ Nelson Goodman, Ways of Worldmaking, (Indinapolis: Hackett Publishing, 1978).

<sup>41</sup> \_ Nelson Goodman, Ways of Worldmaking, (Indinapolis: Hackett Publishing, 1978).
42 \_ Kevin Lynch, The Image of the City. (Cambridge: Technology Press, 1960).

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or negligible what cannot be fitted into the architecture of the world we are building. The making of one world out of another usually involves some extensive weeding out and filling -actual excision of some old and supply of some new material.

"That we find what we are prepared to find (what we look for or what forcefully affronts our expectations), and that we are likely to be blind to what neither helps nor hinders our pursuits are commonplaces of everyday life and amply attested in the psycological laboratory"<sup>43</sup>

#### **DEFORMATION**

A final example of a method corresponds to reshape or distort the set of entities and identities, depending on the point of view but also according to the grain / resolution chosen as the scale of representation.

"..This classification is not offered as comprehensive or clearout or mandatory. Not only do the processes illustrated often occur in combination but the examples chosen sometimes fit equally well under more than one heading; ... While a tighter systematization could surely be developed, none can be ultimate; for as remarked earlier, there is no more a unique world of worlds than there is a unique world."44

### 2.1.5 Data Collection

During this part of the process has been necessary to chose the way to collect the all the images for my research. Since the origin of the images was double (google.images.com and http://image.baidu.com/) and I didn't find a common strategy I had to follow two different procedures.

For Google.images has been possible to download the images thanks to an online plugin for Google Chrome called Bulk download images. This plugin allowed to download a .CSV file with url of the images, which processed through a small python script made possible to automate the download of all the images. For the images from images.Baidu.com I had to proceed manually since I didn't find a proper way to automate the download. The website architecture didn't allow to run any of

the plug in and program that I found on the web. This also made impossible to keep track of all the images source link.

During this part of data collection has been needed to follow some tricks to keep the research of the images as neutral as possible and try at best to keep the distance between it and the personal use of the search engine on the computer from which you would then download the images.

#### Followed rules:

- Log out from any Google service
- Delete all the services of customization and localization related to social networks and the history of the browser
- Empty the cache of the search engine

Moreover for the queries sent to the search engine has been followed the following rules:

- Use the local domain without any translation
- Set the maximum results options
- No safety filter
- Visualize all the results, from any language, in any date

All the queries were also typed with the name of the nation between quotation marks, to get the results as specific as possible.

Since the collection of the data from the Chinese web has been done from mainland China it has not been necessary to use proxy or others software to simulate the queries from a different place. Each queries has been done exactly from the place of the specific domain.

The collection of images has been carried out between 01-15/02/2013 for the images regarding China, and between 01-15/03/2013 for the images regarding Italy. The period in question is fundamental for the analysis of the contents. The every day news are added to the collective memory, in a sampling of different times, seasons, temporal contractions and amplifications, according to the time in which the research has been carried out.

<sup>43, 44</sup> \_ Nelson Goodman, Ways of Worldmaking, (Indinapolis: Hackett Publishing, 1978).

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#### 2.1.6 \_ Categoryzing the Images

To give a qualitative sense to the research has been necessary to develop a system of categorization able to represent all the peculiarities of each image and at the same able to show the main clusters of the discussion.

In this operation has been very important to find a way to be the most accurate possible in describing each image. The starting idea was to use a certain number of specific and unique categories, so that at the end we would have been able to count each category and easily spot out every cluster of topics. This appearently simple task can become an hard job, especially with images from newspaper which often are not such deeply characterized and aim just to express a mood. In many occasion has been very difficult to find the topic of the image, and has been necessary to develop a taxonomy and a way to catogorize the images which could work out even according with this limits. The problem has been solved through the use of a tagging sistem, which allowed to give as many keywords as necessary to every image, in an attemp to grasp as many particular and as many possible connotation. A single hiearchic subdivision has been made between the tags, giving to every subkeyword a main keyword of reference to determine the field of reference of the tag. The choice of having just one level of hierarchic subdivision has been necessary since not all the subkeywords could have had the same multiple levels and this solution was suitable for every tag. The process of building this taxonomy (and the decision of which specific keywords and subkeywords to use) has lasted for a large amount of time. To get more refined results as been necessary to scrape more than once all the images and refine the taxonomy to be able to grasp the main thematic clusters.

At the end of this process we ended up with around 100 subkeywords suitable for the images belonging to 8 main categories common for the two countries. The division in upper categories has been useful mainly to make the source comprable and to give a dimension to this different areas of interest. Here are the categories and all the keywords for each category:

**ARCHITECTURE**: Images where the architectural element plays a central role in the image.

CHINA: construction, dam, demolition1, forbidden city, Great

Wall infrastructures, lijiang, modern architecture, skyscraper, tian an men,traditional architechture ITALY: England, Florence, France, infrastructures, Milan, modern architecture, monument, other country, padiglione italia, Pisa, Puglia, Rome, traditional architecture. Venice

**DISASTER REPORT**: Images reporting about disasters and all kind of disruptive events.

CHINA: air, coal, drought, earthquake, flood, flu, landslide, polluted water, pollution, road collapse ITALY: concordia, crime news, flood, prostitution

**ECONOMICS:** Images about economical sphere and about companies in general, where the economical factor plays a central role

CHINA: money ITALY: company selling italian stuff, italian company, italy pavillon

**NATURE:** Images where the natural element plays a central role in the image.

CHINA: animals, dead animals, dogs, flowers, mistreated animals, natural landscapes, natural phenomena, poultry, rare animals, seeweed, snow ITALY: animals, countryside, flowers, lake, mountain, seaside, vulcano

**NON PHOTOS:** Other kind of graphic productions, not specifically photographies.

CHINA: advertisement, book cover, drawing, graph, map, other non photo ITALY: advertising, book cover, graph, map, satellite view

**POLITICS:** Images about politicians and images reporting about issues related to the political sphere.

CHINA: ai wei wei, american politicians, chen guancheng, chinese politicians, congress, dalai lama, demonstration, diayou, dictators, dissidents, hong kong and macao, huigurs, human rights, italian politician, liu xiaobo, minorities, politicians meeting, protest, scanda, tibet ITALY: Berlusconi, chinese politicians, dictators, europe, immigrants, italian politician, protest, scandal, terrorist

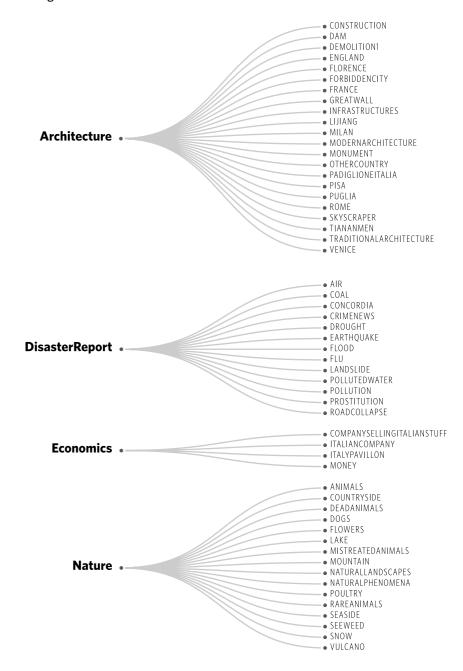
**SPORT:** Images related to sports happenings and sports news in general.

CHINA: basketball, chinese teams, football, formula 1, gymnastics, other sport, swimming ITALY: bike, football, formula, italian national team, other sport

**SOCIETY:** Images where the attention is focused on an object or a defined event or trend which is particularly meaningful in respect of customs and tradition of the country. This category in particular is exceptionally wide and defined by the trends found along the tagging phase.

CHINA: apple, army, art, beauty, bike, boat, car, chinese tourism, chipao, civil guard, clothing, communist icons, computers, costume, dragon, factory workers, fashion, few clothes, flag, food, food shop, hammer and sickle, harbin ice festival, history, lantern, luxury, marriage, mask, painting, party, people cooking, people eating, phones, plane, police, religion, science, strange food, students, technology, tibetan clothes, tradition1, traditional clothing, traditional food, traditional objects, train, uniform, western food, wine ITALY: army, art, beauty, boat, bread, car, carnival, chinese food, cinema, coffee, concordia, cruise, design, dessert, family, fashion, ferrari, flag, gondola, historical picture, luxury, luxury location, man, marriage, modern art, mosaic, movie, music, other food, painting, pasta, pizza, plane, school, science, street art, technology, tile, traditional costume, tram uniform wine, woman

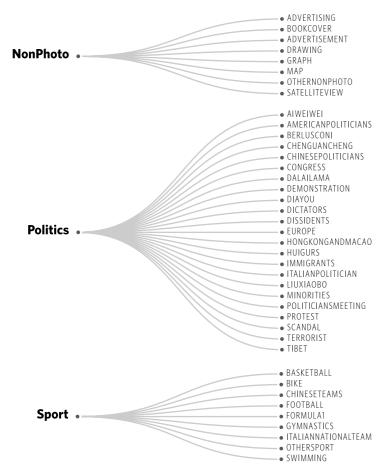
#### Categories



2.1.6.c

2.1.6.b

Categories



- ARMY \_ • ART — ● BEAUTY Categories — ● BIKE — ■ BOAT - BREAD \_ • CAR - CARNIVAL - CHINESEFOOD - CHINESETOURISM — ◆ CHIPAO - • CINEMA — ● CIVILGUARD — ◆ CLOTHING ■ COFFEE COMMUNISTICONS • COMPUTERS • CONCORDIA — ◆ COSTUME — ◆ CRUISE — ● DESIGN - DESSERT - DRAGON - • FACTORYWORKERS — ● FAMILY — ◆ FASHION - • FERRARI • FEWCLOTHES -• FLAG -• FOOD - FOODSHOP — ● GONDOLA - • HAMMERANDSICKLE - HARBINICEFESTIVAL HISTORICALPICTURE
 LANTERN - ● LUXURY Society •-• LUXURYLOCATION - MAN - • MARRIAGE • MASK MODERNART - MOSAIC • MOVIE - MUSIC - OTHERFOOD - PAINTING • PARTY - • PASTA - PEOPLECOOKING - • PEOPLEEATING - PHONES - PIZZA - PLANE - ● POLICE - • RELIGION • SCHOOL - SCIENCE - • STRANGEFOOD - • STREETART STUDENTS
 TECHNOLOGY - TIBETANCLOTHES → TILE - • TRADITION1 - TRADITIONALCLOTHING

- ◆ APPLE

TRADITIONALCOSTUME
TRADITIONALFOOD
TRADITIONALOBJECTS

TRAIN
TRAM
UNIFORM
WESTERNFOOD
WINEARMY
WOMAN

#### **2.1.7** Labels

At the same time through the use of four specific labels has been given another level of categorization to some particular images. This level represented a specific connotation and in this case has been chosen not to be overlappable. In particular the idea behind this label was to make visible specific connotation patterns, often not recognizable through the content of the images.

**CRITIC:** Images reporting caracteristics of the cultures badly considered, or just looked through a critical filter. Are part of this group also human rights violation, specific government abuse or alleged practices and traditions of the country. With this label have been categorized also images with a strong iconography representing sort of hellscapes (eg. pollution).

**FUNNY:** Images representing bizarre events or facts, focusing on the ironical or strange connotation of the fact (strange but true). This label has been necessary since the huge number of this kind of pictures in the italian news websites.

**ITALY/CHINA RELATED:** Images where the other country appearence is just due to a national interest. In this pictures the other country appear as the setting of this happening, and it's reported mainly because of a matter of interest for the country of origin of the source.

**TOURISTIC:** Images with a clear intent of presenting the "touristical aspect" of the country, showing particular attractions or particular ceremony. In particular images shot with an accurate and photographic setting.

Previously, there was another label concerning nationalist pictures. This label hads been deleted along the process due to the difficulty of determine principles according to which images should have end up in this category. Where does politics end and where does nationalism start?

2.1.7.i

China

# Example of negative image

PEOPLE SLEEPING EVERYWHERE IN A LONG DISTANCE TRAIN



2.1.7.ii

China

# Example of funny image

PEOPLE PLAYING A STRANGE INSTRUMENT REALIZED WITH VEGETABLES

2.1.7.iii

China

#### Example of Italy/China related image

PRESENTATION OF THE NEW FERRARI ITALIA IN CHINA

# Example of touristic image

VIEW OF THE GREAT WALL



2.1.7.iv

#### 2.2 Tools

An organized and essential list of the tools used to analyse, categorize, manage and display the database of images collected.

#### **2.2.1 Image J**

The analysis of the measurable properties such Hue Saturation and Brightness has been performed by the software Image J, through the use of the ImageMeasure.txt macro which allows to do this operations for a selected batch of images. The disposal of the images in montages has also been performed by Image J throught the use of the ImageMontage.txt macro. The latter macro allows to dispose WHATEVER number of images in a specific order determined by a CSV file positioned in the same folder of the images. It is possible to control the size of the canvas as well as the height of the images.

#### **2.2.2** \_ Bridge

The operations of tagging of the images has been carried out through the use of the software Adobe Bridge which allows to prepare a taxonomy to apply to the images and to give both univocal and non univocal labels to the images. This labels and keywords have been then exported in CSV form through the use of a plug in which allows to batch extract the metadata of the images.

#### 2.2.3 Open Refine

To manage the merged files of the images with tags and characteristics has been used Open Refine, which allowed in a fast way to clean the data and giving to each image for keywords a "parent" keywords. This operation has been necessary since it was difficult to directly give and extract hierarchical keywords from Adobe Bridge.

#### 2.2.3 \_ Raw

All the final Visualizations have been carried as draft by RAW and then finalised in Adobe Illustrator.

# Visualizations 3.0

### 3.1 A view from afar

The first intention was to take a step back and try to visualize together all the images of the two dataset: respectively 2400 images about Italy and 2400 images about China. By exploring large image sets in relation to multiple visual dimensions (brightness, saturation and hue) using high resolution visualizations, Cultural Analytics approach allow us to detect patterns which are not visible with standard interfaces for media viewing. In contrast to standard media visualizations which represents data as points, lines, and other graphical primitives, Cultural Analytics visualizations show all images in a collection. In particular we used two of this techniques: ImageMontage and ImageSlice.

In particular the two techniques have been used to explore the visual dimensions of brightness, saturation and hue:

- The brightness represent the "attribute of a visual sensation according to which an area appears to emit more or less light". For these measurements color images are internally converted in a greyscale form using this formula: gray=(red+green+blue)/3.
- The saturation represent the purity of color for each pixel in an image or in other words the colorfulness of a color relative to its own brightness.
- The hue represent the "attribute of a visual sensation according to which an area appears to be similar to one of the perceived colors. Normally hue values are represented as degrees of a circle (they range from 0 to 360). In this case the values measured by ImageMeasure.txt macro are represented on a 0-255 scale.

Referring about the medians of these features means that the actual values for each image refers to the average for every pixel in the image.

#### China Montages



brightness median value





3.1.1.b \_ ImageMontage of the collected images about China. ordered upon the measured saturation median value



3.1.1.c \_ ImageMontage of the collected images about China. ordered upon the measured hue median value

#### **Italy Montages**



3.1.1.d \_ ImageMontage of the collected images about Italy, ordered upon the measured brightness median value



3.1.1.e \_ ImageMontage of the collected images about Italy, ordered upon the measured saturation median value



3.1.1.f \_ ImageMontage of the collected images about Italy, ordered upon the measured hue median value

#### 3.1.1 | Image Montages

The ImageMontage is a 2D grid of images arranged according to their metadata, in this specific case the value of median brightness median saturation and median hue. This first attempt to make a comparison between the two databases of images allow us already to see some of the diffeences. Althought not being able to quantify this difference we are already able to perceive it along the features of brighness, saturation and in particular hue: the quantity of red images, and particularly saturated is clearly visible in the database about China database and missin in the database about Italy.









# ImageSlices Side by Side Comparison

THE FOLLOWING COMPARISONS SHOW THE MONTAGES MADE WITH THE IMAGES ABOUT CHINA ON THE LEFT AND THE MONTAGES MADE WITH THE IMAGES ABOUT ITALY ON THE RIGHT

#### 3.1.2 \_ Image Slices

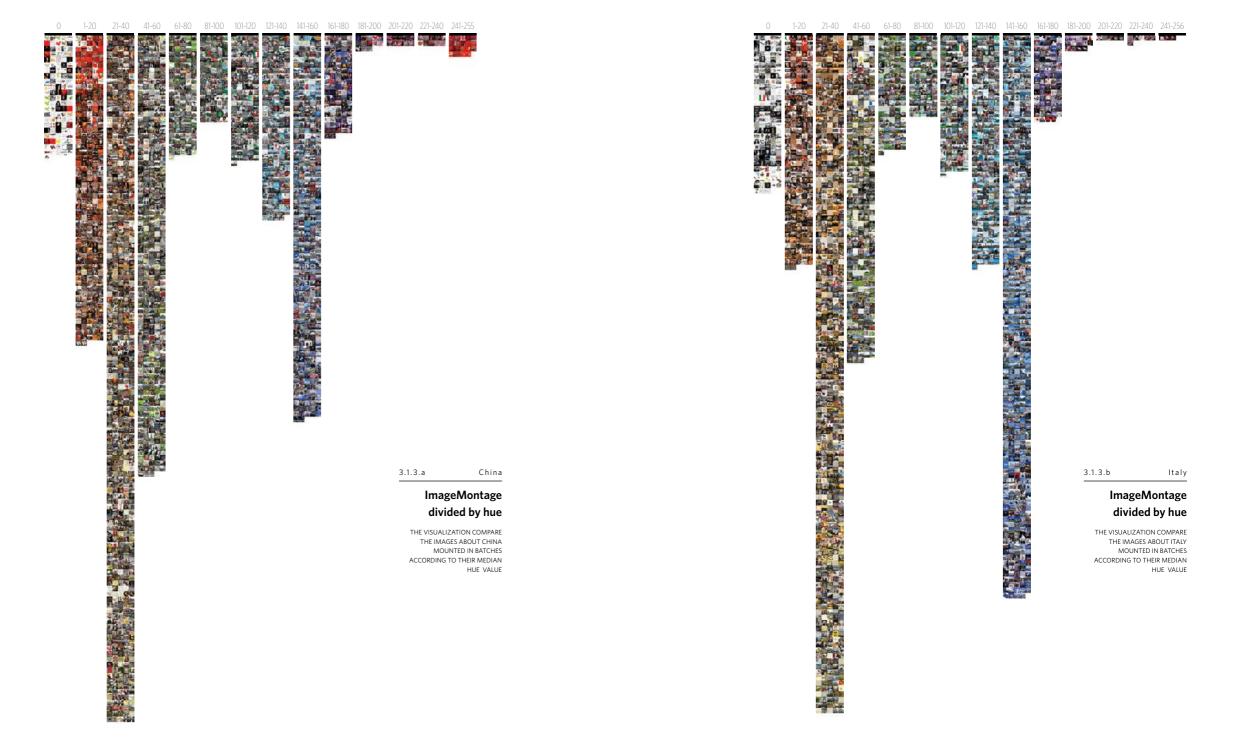
An ImageSlice is a sequence of parts of the images, such an horizontal or vertical column of pixels, arranged according to metadata.

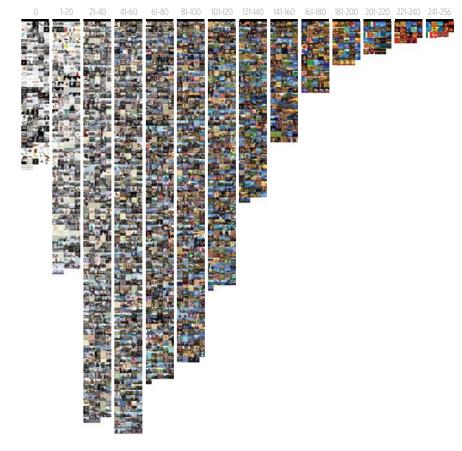
This second attempt to visualize the differences in the two databases of images although allowing us to see even better some of the differences does not allow quantify this difference. Our sense perceive the variation in the hue in the two visual encoding of the two countries but we are not able to define how much is this variation and where exactly is happening.

#### **3.1.3** \_ Selective ImageMontages

To quantify this variation we decide to try by the construction of selective ImageMontages. If the value of the hue can vary between 0 and 255 we decided to make ImageMontages of the pictures for every range of 20 units in this scale. This expedient allow us to identify fourteen different averagely defined colour groups and quantify how many picture belong to each group.

Other than showing the particular spectrum of each database the value of this representation is the power to quantify this features thereby making it possible to compare different databases.

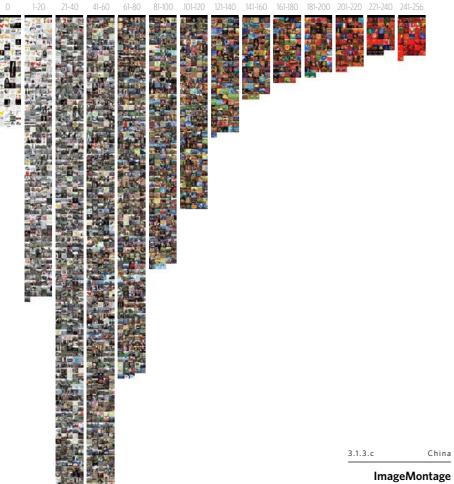




3.1.3.d Italy

#### ImageMontage divided by saturation

THE VISUALIZATION COMPARE
THE IMAGES ABOUT ITALY
MOUNTED IN BATCHES
ACCORDING TO THEIR MEDIAN
SATURATION VALUE



ImageMontage divided by saturation

THE VISUALIZATION COMPARE
THE IMAGES ABOUT CHINA
MOUNTED IN BATCHES
ACCORDING TO THEIR MEDIAN
SATURATION VALUE



1-20 21-40 41-60 61-80 81-100 101-120 121-140 141-160 161-180 181-200 201-220 221-240 241-256

3.1.3.f

ImageMontage divided by brighness

Italy

THE VISUALIZATION COMPARE
THE IMAGES ABOUT ITALY
MOUNTED IN BATCHES
ACCORDING TO THEIR MEDIAN
BRIGHTNESS VALUE

3.1.3.e China

#### ImageMontage divided by brighness

THE VISUALIZATION COMPARE
THE IMAGES ABOUT CHINA
MOUNTED IN BATCHES
ACCORDING TO THEIR MEDIAN
BRIGHTNESS VALUE

# 3.2\_ Category Filter

The next step on trying to visualize the differences between the two datasets has been an analysis of the same quantitative parameters, but divided into categories, so that it was possible both to visualize the differences between the two datasets and also the differences between the different categories into the same datasets.

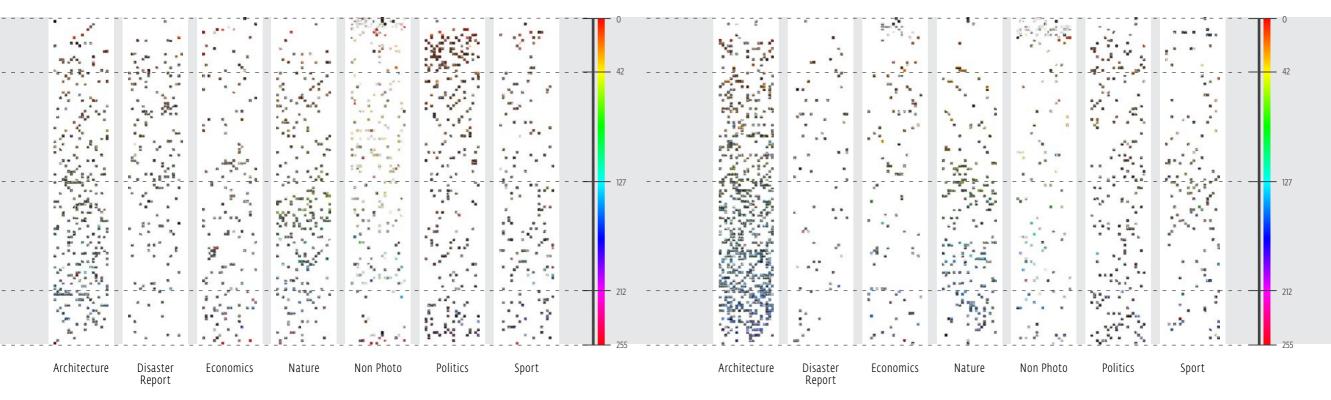
#### 3.2.1 \_ Hue comparison

From the comparison of the hue we can gain some general insight. We see that for example in the field of politics the picture

Comparison
between the hues of
the categories

Comparison
between the hues of
the categories

about China assume a more red tone, while images about Italy are more heterogeneous, with a very slightly abundance of blue images. Nature images, which in the database about China are mainly around the green shades, are definitely more blue in the Italian database due to the high presence of the sea. Sport, in the Italian database also assume green shades, probably due to the high quantity of football fields in the images.



#### **3.2.2 Saturation comparison**

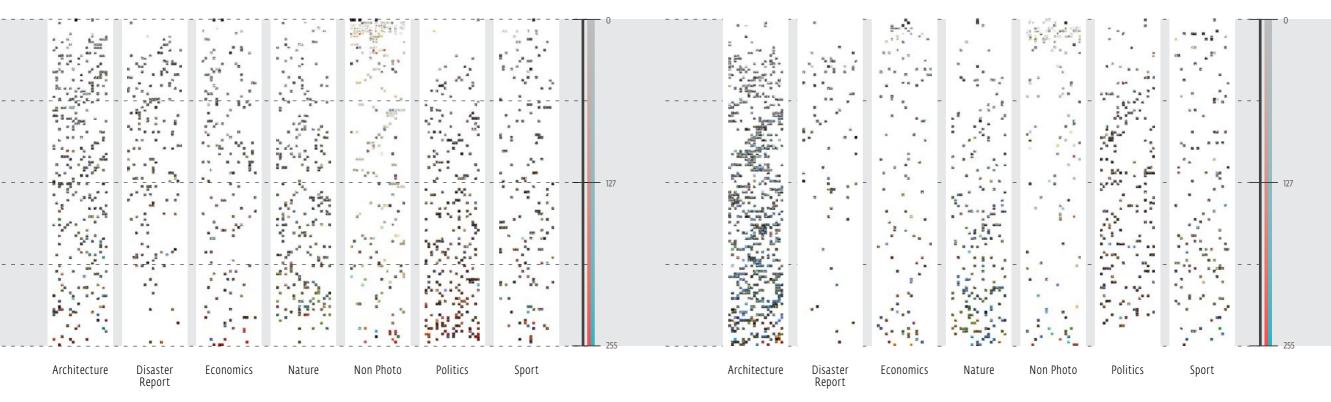
From the comparison between the hue we can gain some general insight. The most saturated images of the database about China and Italy are respectively Politics and Nature-Architecture.

Comparison
between the
saturation of the
categories

Comparison between the saturation of the categories

Italy

3.2.2.b



#### 3.2.3 \_ Brightness comparison

From the comparison about brightness we can see get really few insights. The only things that we notice from a quick overview are the analogy in two dataset for the Non Photos category as the lightest and the politics as the darkest.

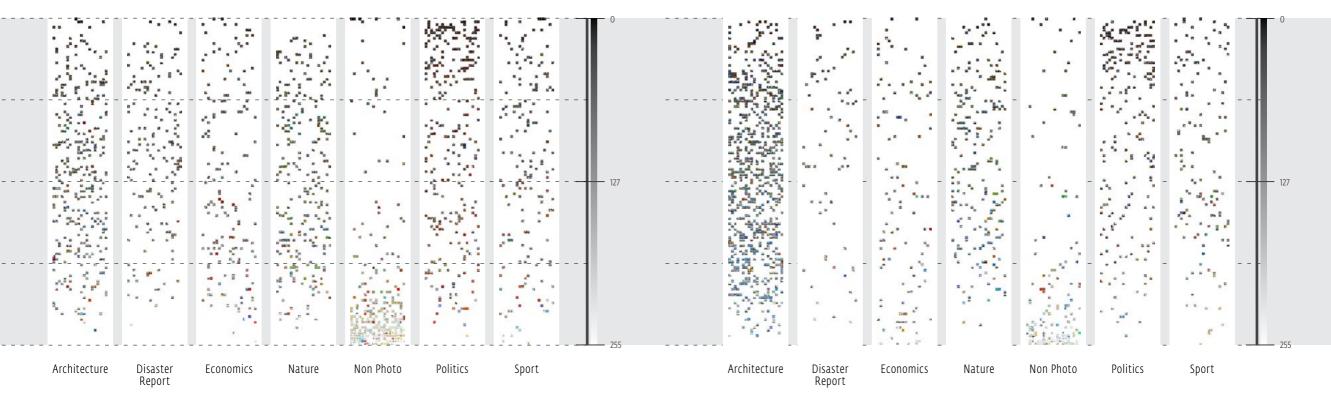
3.2.3.a China Comparison between the brightness of the categories

Comparison

Italy

3.2.3.b

Must be also said that between all this comparison, the one **between the** about brightness is the most misleading, since the white back**brightness of the** ground tent to confuse with all the light images, making less categories legible the media visualization.



# 3.3\_ Sub-Categories and Labels

#### 3.3.1 The visual model

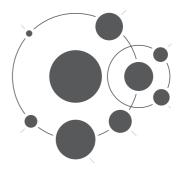
The visual model shows the main category as the central bubble around which the subkeywords are disposed in circles which identifies related issues. The dimension of each bubble is proportional to the number of the images tagged with the keyword and subkeyword. Each image could be tagged with one or more of the presented keywords.

The visual model doesn't allow to see which keywords have images in common but fits very well the comparison between the amounts of the different keywords along the whole database and between the two countries.

3.3.1.a

Clustering sample for categories and keywords

SAMPLE OF VISUALIZATION



3.3.1.b

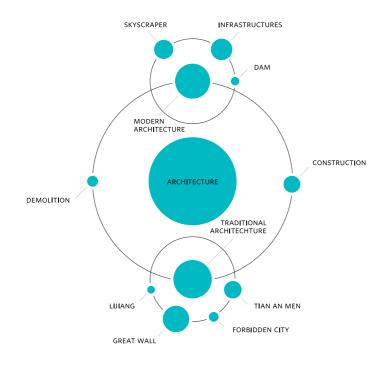


Legend of sizes and colors



SPORT

#### 3.3.2 \_ Architecture

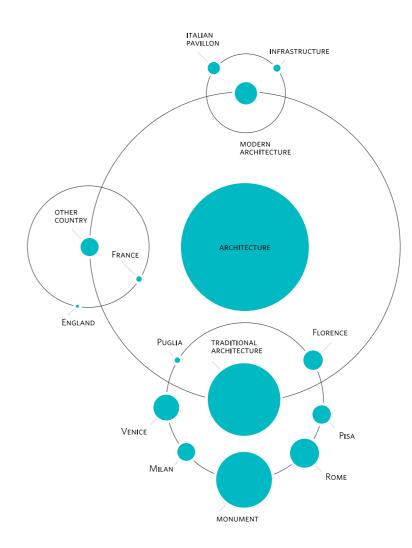




Bubble Packing of Architecture's subcategory

China

THE VISUALIZATION COMPARE
THE NUMBER OF PICTURES
FOR EACH SUBGROUP OF
"ARCHITECTURE"



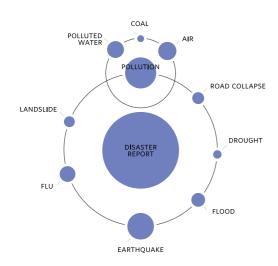


3.3.2.b

#### Bubble Packing of Architecture's subcategories

THE VISUALIZATION COMPARE
THE NUMBER OF PICTURES
FOR EACH SUBGROUP OF
"ARCHITECTURE"

#### 3.3.3 Disaster Report



3.3.3.a China

#### **Bubble Packing of Disaster Report** subcategories

THE VISUALIZATION COMPARE THE NUMBER OF PICTURES FOR EACH SUBGROUP OF "DISASTER REPORT"

#### 3.3.4 \_ Economics



3.3.4.a China

#### **Bubble Packing** of economics subcategories

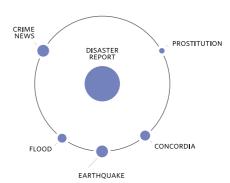
THE VISUALIZATION COMPARE
THE NUMBER OF PICTURES
FOR EACH SUBGROUP OF
"ECONOMICS"

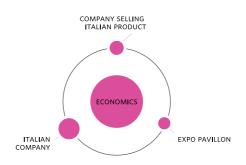
3.3.3.b

Italy

#### **Bubble Packing of Disaster Report** subcategories

THE VISUALIZATION COMPARE THE NUMBER OF PICTURES FOR EACH SUBGROUP OF "DISASTER REPORT"





3.3.4.b

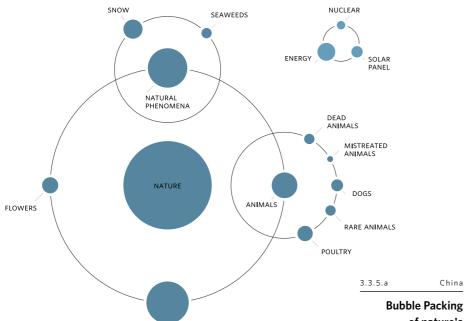
Italy

#### **Bubble Packing** of economics subcategories

THE VISUALIZATION COMPARE
THE NUMBER OF PICTURES
FOR EACH SUBGROUP OF
"ECONOMICS"



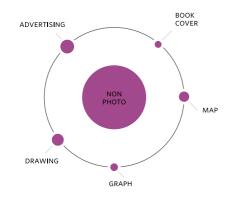
#### **3.3.5 Nature**



#### Bubble Packing of nature's subcategories

THE VISUALIZATION COMPARE THE NUMBER OF PICTURES FOR EACH SUBGROUP OF "NATURE"

#### **3.3.6 Non Photo**



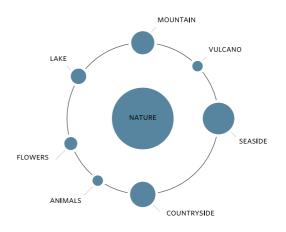
3.3.6.a China

1 5 10 20 40 80 160 320

NATURAL LANDSCAPES

Bubble Packing of not photo's subcategories

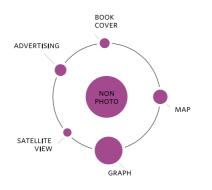
THE VISUALIZATION COMPARE
THE NUMBER OF PICTURES
FOR EACH SUBGROUP OF "NOT



3.3.5.b Italy

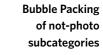
# Bubble Packing of nature's subcategories

THE VISUALIZATION COMPARE THE NUMBER OF PICTURES FOR EACH SUBGROUP OF "NATURE"



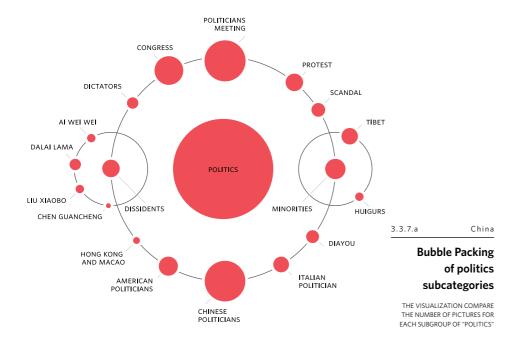
3.3.6.b

Italy

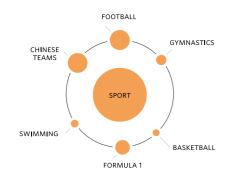


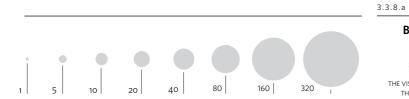
THE VISUALIZATION COMPARE
THE NUMBER OF PICTURES FOR
EACH SUBGROUP OF "NOTPHOTO"

#### **3.3.7 Politics**



#### 3.3.8 \_ Sport

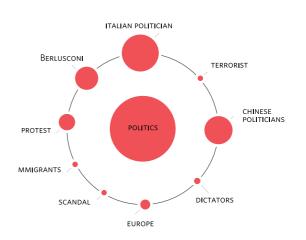




Bubble Packing of "sport" subcategories

China

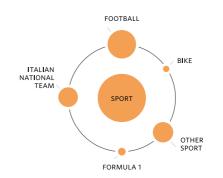
THE VISUALIZATION COMPARE
THE NUMBER OF PICTURES
FOR EACH SUBGROUP OF
"ECONOMICS"



3.3.7.b Italy

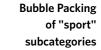
#### Bubble Packing of politics subcategories

THE VISUALIZATION COMPARE THE NUMBER OF PICTURES FOR EACH SUBGROUP OF "POLITICS"

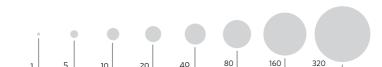


3.3.8.b

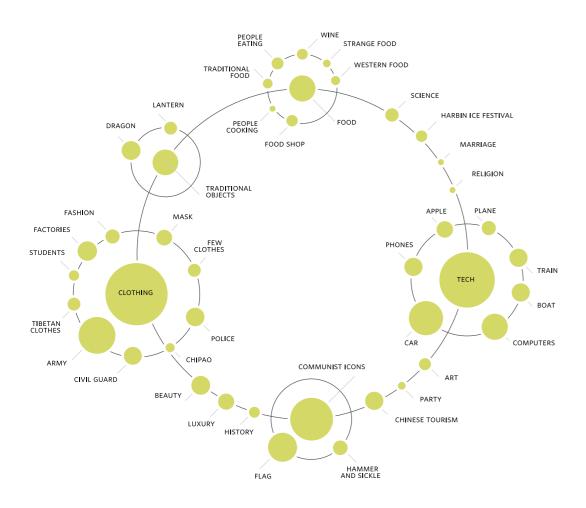
Italy

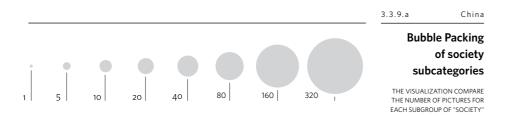


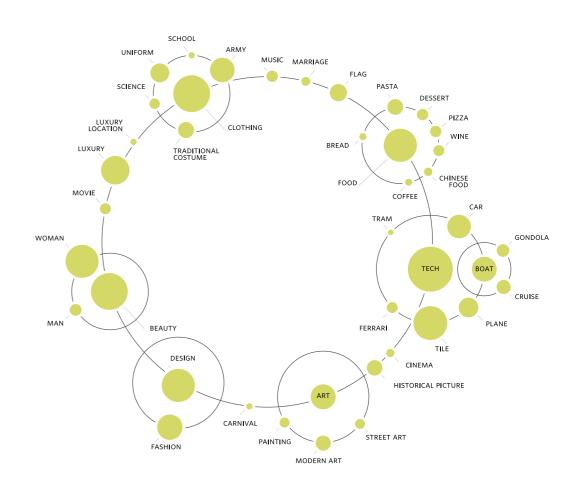
THE VISUALIZATION COMPARE
THE NUMBER OF PICTURES FOR
EACH SUBGROUP OF "SPORT"

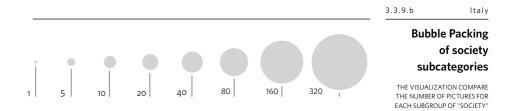


#### **3.3.9** \_ **Society**









## 3.4 \_ Labels

#### **3.4.1 Amount**

The visual model doesn0t allow to see which keywords have images in common but fits very well the comparison between the amounts of the differents keywords along the whole database and between the two countries.

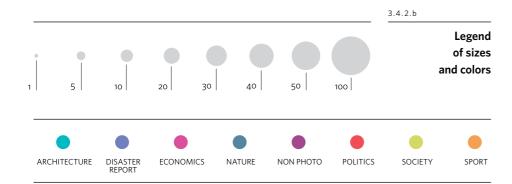
#### 3.4.2 \_ The Visual model

The visual model shows the main category as the central bubble around which the subkeywords are disposed in circles which identifies related issues. The dimension of each bubble is proportional to the number of the images tagged with the keyword and subkeyword. Each image could be tagged with one or more of the presented keywords.



Clustering sample for the categories of each label

3.4.2.a

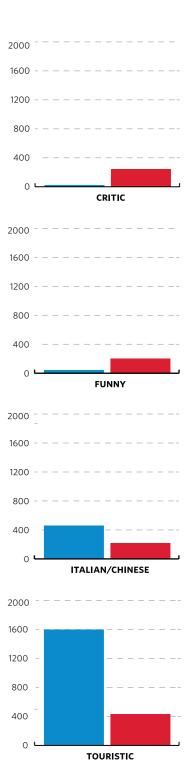


Total number of pictures for each label

THE VISUALIZATION COMPARE THE NUMBER OF EACH LABEL FOR THE TWO COUNTRIES

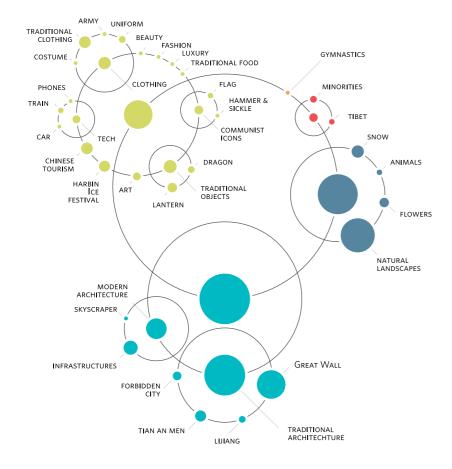
China

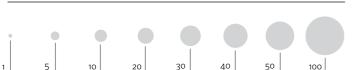
3.4.2.c



#### 3.4.3 \_ Touristic







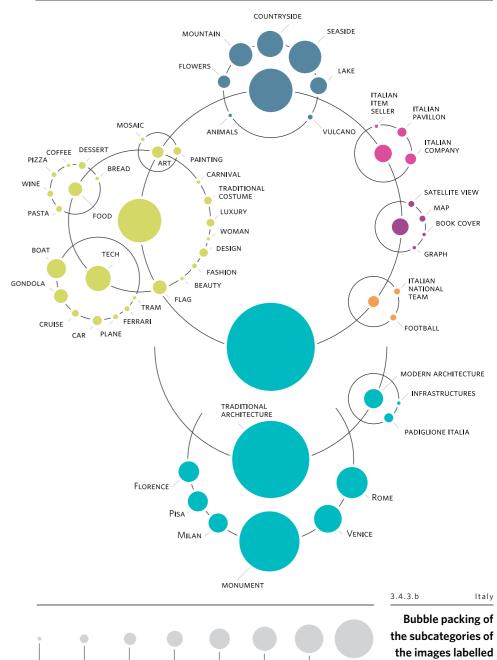
**Bubble packing of** the subcategories of the images labelled as "turistic"

China

3.4.3.a

THE VISUALIZATION CLUSTERS THE TAGS ASSOCIATED TO THE IMAGES LABELLED AS TOURISTIC



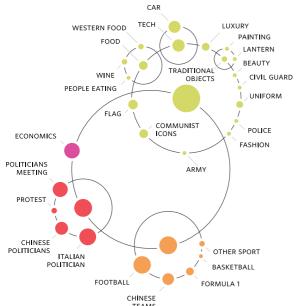


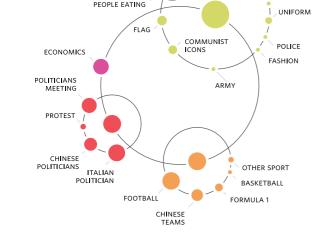
the subcategories of the images labelled as "turistical"

THE VISUALIZATION CLUSTERS THE TAGS ASSOCIATED TO THE IMAGES LABELLED AS TOURISTIC

#### 3.4.4 \_ Italian-Chinese







**Bubble packing of** the subcategories of the images labelled

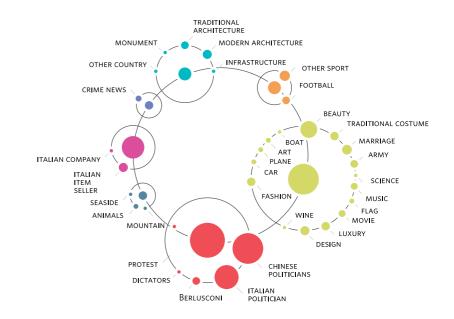
China

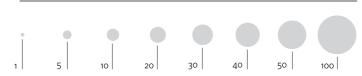
3.4.4.a

THE VISUALIZATION CLUSTERS THE TAGS ASSOCIATED TO THE IMAGES LABELLED AS TOURISTIC

as "italian"







Bubble packing of the subcategories of the images labelled

Italy

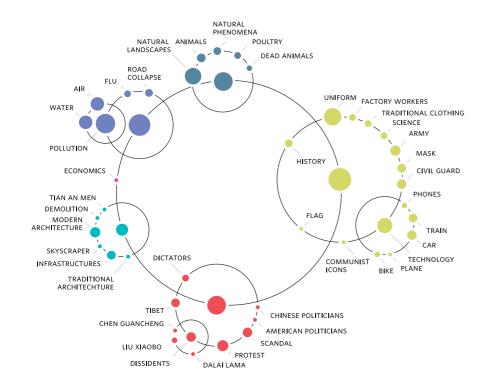
3.4.4.b

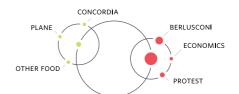
THE VISUALIZATION CLUSTERS THE TAGS ASSOCIATED TO THE IMAGES LABELLED AS TOURISTIC

as "chinese"

#### 3.4.5 \_ Critic







DISASTER REPORT **ECONOMICS** 

NATURE

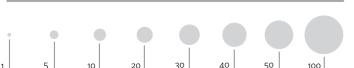
NON PHOTO

POLITICS

SOCIETY

SPORT

ARCHITECTURE



Bubble packing of the subcategories of the images labelled as "critic"

China

3.4.5.a

THE VISUALIZATION CLUSTERS
THE TAGS ASSOCIATED TO THE
IMAGES LABELLED AS TOURISTIC



Bubble packing of the subcategories of the images labelled as "critic"

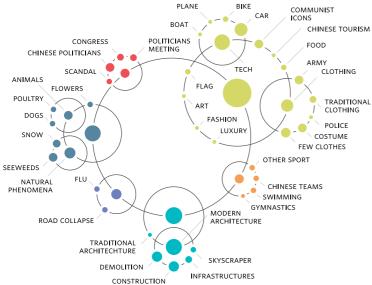
Italy

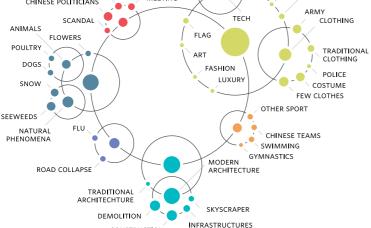
3.4.5.b

THE VISUALIZATION CLUSTERS THE TAGS ASSOCIATED TO THE IMAGES LABELLED AS TOURISTIC

#### **3.4.6** \_ Funny







TRADITIONAL MONUMENT ARCHITECTURE Rоме VENICE OTHER COUNTRY PAINTING , PIZZA , CAR OTHER SPORT SCIENCE

ANIMALS

BERLUSCONI

PROTEST /

NATURE

NON PHOTO

ITALIAN

EUROPE

POLITICIAN

POLITICS

BEAUTY

DESIGN

PASTA

SOCIETY

SPORT

DISASTER REPORT

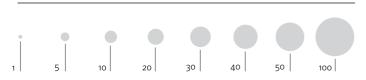
**ECONOMICS** 

ARCHITECTURE

3.4.6.b Italy

Bubble packing of the subcategories of the images labelled as "funny"

THE VISUALIZATION CLUSTERS THE TAGS ASSOCIATED TO THE IMAGES LABELLED AS TOURISTIC



**Bubble packing of** the subcategories of the images labelled as "funny"

3.4.6.a

THE VISUALIZATION CLUSTERS THE TAGS ASSOCIATED TO THE IMAGES LABELLED AS TOURISTIC

China

## 3.5\_ Search Engines

After the analysis of the all database of images it was time to start making differences inside the database and taking each group of images based on his source. In this way we started to work with the sub-dataset of the pictures coming from the Image Search Engines.

#### 3.5.1 \_ ImageMontage

As first we started analyzind the dataset in the same way we did with the bigger one, by making two big comparable Image-Montages.

We must say that due to the intrinsic properties of the media visualization a book like this is probably not the best format to present it, making it difficult to see at the same time the big picture and singular picture, but as the number of images becomes fewer this operation becomes easier.



3.5.1.a China

#### ImageMontage of Google Images

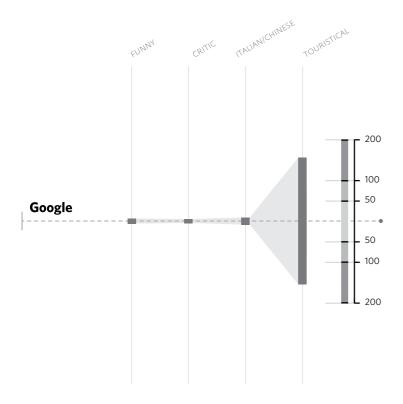
THE VISUALIZATION SHOW THE 900 IMAGES ABOUT CHINA FOUND IN GOOGLE ORDERED BY MEDIAN HUE VALUE 3.5.1.b

#### ImageMontage of Baidu Images

THE VISUALIZATION SHOW THE 900 IMAGES ABOUT CHINA FOUND IN GOOGLE ORDERED BY MEDIAN HUE VALUE



#### 3.5.2 Label comparison



Baidu

CONTIC TRAUMAN/CHIMESE
TOURISTICAL

The sub-dataset of the images coming from the search engines can be also analyzed throught the comparison between the amount of images tagged with each label.

Through this operation we see the highly commercial vocation of Google and Baidu: both the image search engines presents a large amount of turistical images.

3.5.2.a

# Comparison between categories

China

THE MAKE IT EASIER THE COMPARISON, THE DATA DISPLAYED REFERS TO 300 IMAGES (NUMBERS HAVE BEEN DIVIDED BY 3) 3.5.2.b Chi

# Comparison between categories

THE MAKE IT EASIER THE COMPARISON, THE DATA DISPLAYED REFERS TO 300 IMAGES (NUMBERS HAVE BEEN DIVIDED BY 3) Must be said that the Chinese search engines have a stronger take on this, with an higher number of such images.

Trying to make sense of the ranking based on the labels of the images help us to understand the connotation of the search engines itself and, in a sense, about what the two countries are looking for about the other country.

#### 3.5.3 Ordered Dot Plots

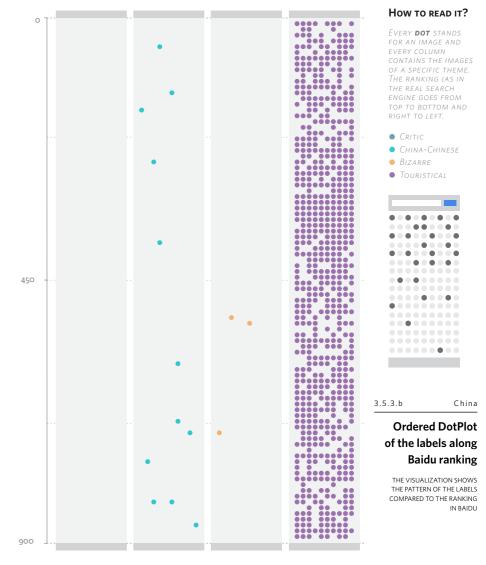
The sub-dataset of the images coming from the search engines can be also analysed through the relation between the images and their ranking.

This operation could be particularly interesting to see if the few images not belonging to the turistic label, appear in a particular position. The following representation illustrate the disposal of the different labels along the ranking: each column represent a different label and the order is from left to right and top to bot-

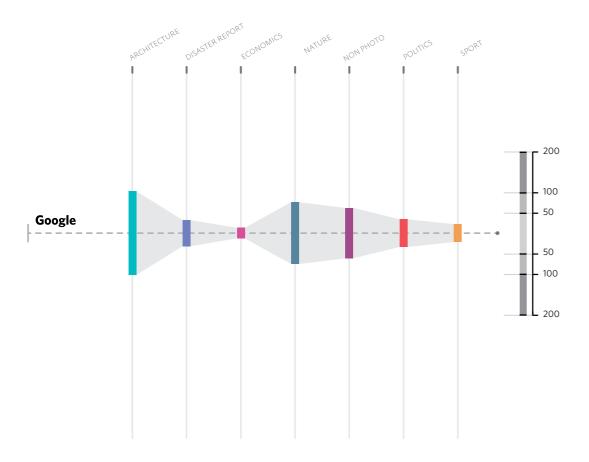


tom. We can clearly see how this doesn't happen meaning that there is no strong relation between the labels and the positioning of the images in the ranking.

In doing this operation we must keep in mind how also the already examined "identity" of the search engine determine this results.



#### 3.5.4 \_ Categories comparison



Baidu

Ba

The sub-dataset can be also analysed through the comparison between the amount of images tagged with each keywords.

We still can see the highly commercial vocation of Google and Baidu: both the image search engines presents a large amount of natural and architectural images.

3.5.4.a

China

# Comparison between categories

THE MAKE IT EASIER THE COMPARISON, THE DATA DISPLAYED REFERS TO 300 IMAGES (NUMBERS HAVE BEEN DIVIDED BY 3) 3.5.4.b C

# Comparison between categories

THE MAKE IT EASIER THE COMPARISON, THE DATA DISPLAYED REFERS TO 300 IMAGES (NUMBERS HAVE BEEN DIVIDED BY 3) Of particular interest can be how Baidu presents a much larger amount of architectural images, while Google is more levelled, presenting an high number of non photo, suggesting ( since we already saw that most of the images refer to tourism) a presents of announces and touristic offers and advertisements. Must also be noted how Baidu doesn't present almost any political image.

# 3.6\_ Onine News Websites

After having analysed the images coming from the search engines itself we passed to analyse the images retrieved by the search engines from actual news websites.

Therefore following the same method have been analised the fisical properties of the images and at a later stage the number of images for each categories and label for each news source.









Repubblica

II Sole 24 Ore

## 3.6.1 \_ Italian Websites

Between all this visualization we can see a general coherence in the proportions between the different colours. Although there are some variations and peculiarities for each newspaper we can easily recognise the presence of red as the main features of this aggregations.





Il Fatto Quotidiano







Il Sole 24 Ore

3.6.1.a

**ImageSlices** of the images collected in the different news websites

THE VISUALIZATION SHOW THE 900 IMAGES ABOUT CHINA FOUND IN GOOGLE ORDERED BY MEDIAN HUE VALUE 3.6.1.b

**ImageMontages** of the images collected in the different news websites

THE VISUALIZATION SHOW THE 900 IMAGES ABOUT CHINA FOUND IN GOOGLE ORDERED BY MEDIAN HUE VALUE

# Caijin





Sina



#### 3.6.2 \_ Chinese Websites

Also in the visualization about the chinese news sources we can observe a general coherence. Although there are some variations and peculiarities for each newspaper we can easily recognise the presence of the blue as the main features of this aggregations. We can also observe a slightly higher presence of black and white images.









**ImageMontages** of the images collected in the different news websites

THE VISUALIZATION SHOW THE FOUND IN GOOGLE ORDERED BY



Xinhua

3.6.2.a

ImageSlices of the images collected in the different news websites

THE VISUALIZATION SHOW THE FOUND IN GOOGLE ORDERED BY

136 137

3.6.2.b

Italy

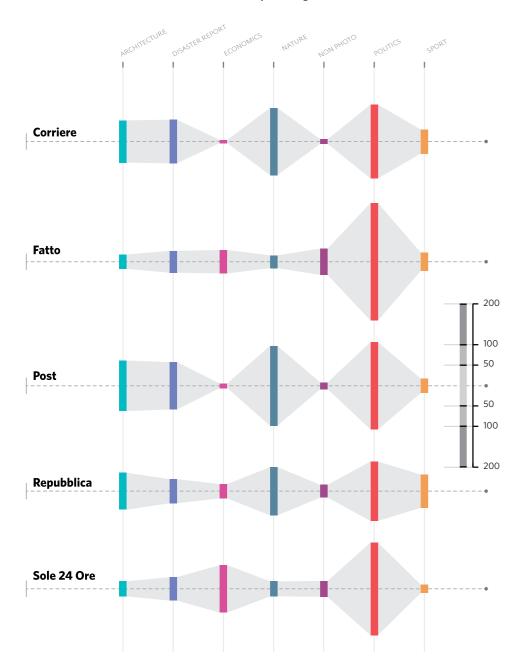
#### 3.6.3 \_ Categories Comparison

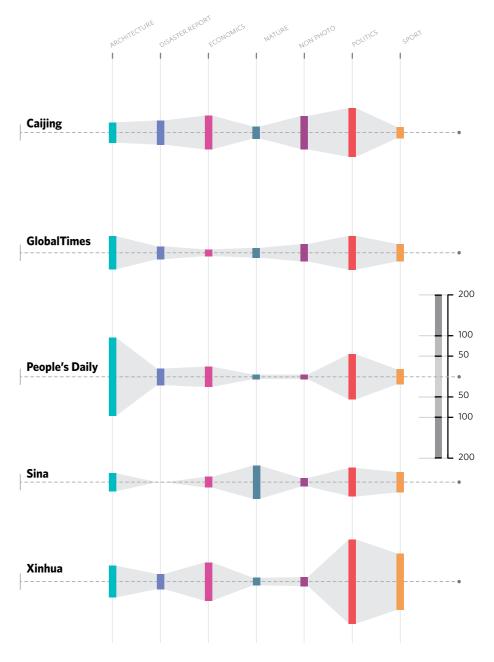
By analyzing the amount of each keywords for each source we can clearly see that politics plays the main role on the scene. At the same time we can also try to observe the "vocation" of each website. This visual model makes it easier by building a real

3.6.3.a Italy

Comparison between the number of images for each category 3.6.3.b Chir
Comparison

Comparison between the number of images for each category shape and making the sources more easily comparable. On the italian side it's interesting to note how the two main newspaper are also the two less powerful on politics, however with a strong take on disaster report. On the chinese side is interesting to note how the party's paper website is the strongest about architecture, and state owned media agency is the strongest in sport.





#### 3.6.4 Labels Comparison

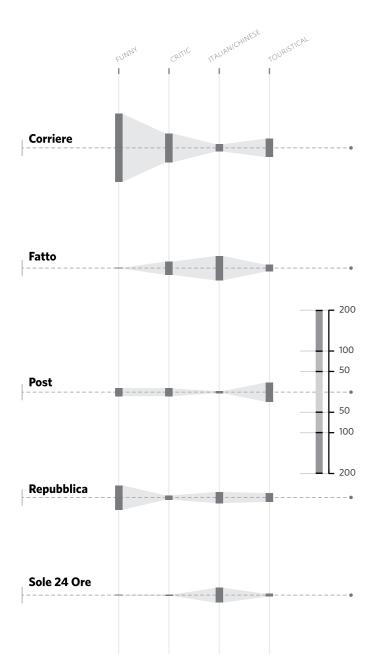
For what it concerns the labels we still see il Corriere and Repubblica highlighted, this time thanks to high number of funny images in the stream. On the other side we can observe a strong pattern through all the chinese sources with a lot of images in

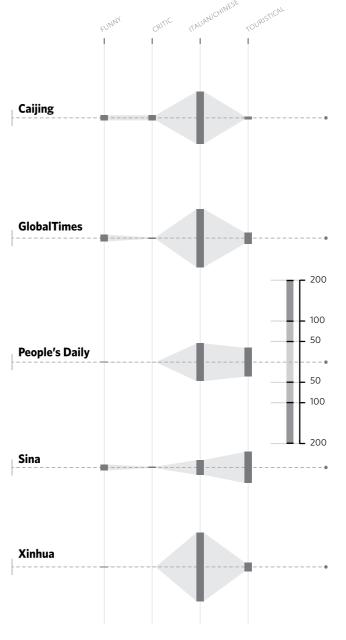
3.6.4.a Italy

Comparison between the number of images for each label Comparison

between the number of images for each label

the narration where Italy appears only as the background setting of some happening related to china or chinese persons. We also see a strange connection between Sina and the People's Daily, with a high number of touristical images.

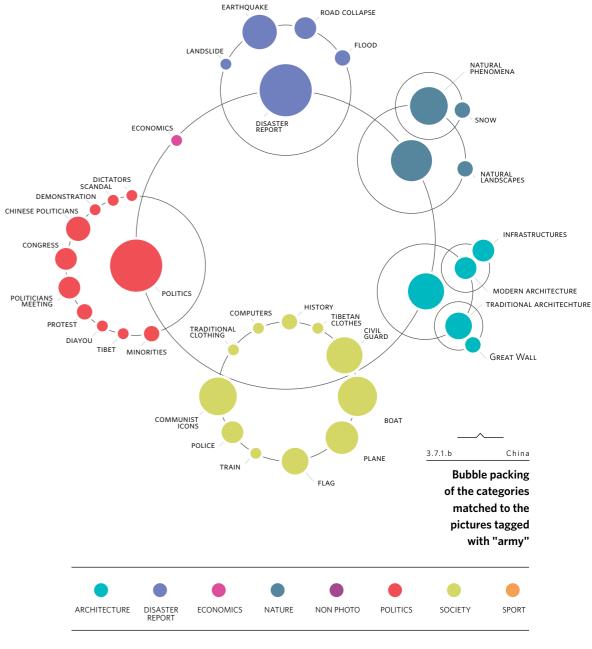




# 3.7\_ Case Studies

After the analysis of the whole dataset and the dataset divided by sources here is a zoom on the pictures about six topics of particular interest for each nature.





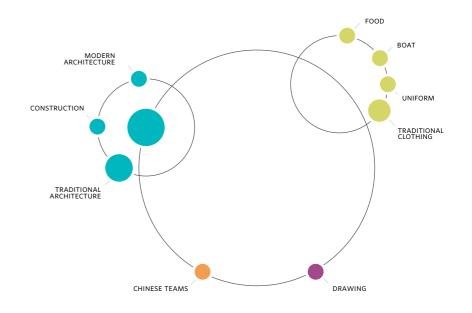
China 3.7.1 \_ Army

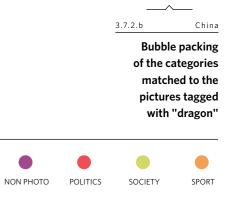
ImageMontage of the pictures tagged with "army"

3.7.1.a

One of the bigger clusters (117 pictures) between the images about China tagged with "society" was army. It's interesting to see how it regards both politics (with the specifically the congress and chinese politicians) and disaster report, where the army intervene as help.







3.7.2.a China

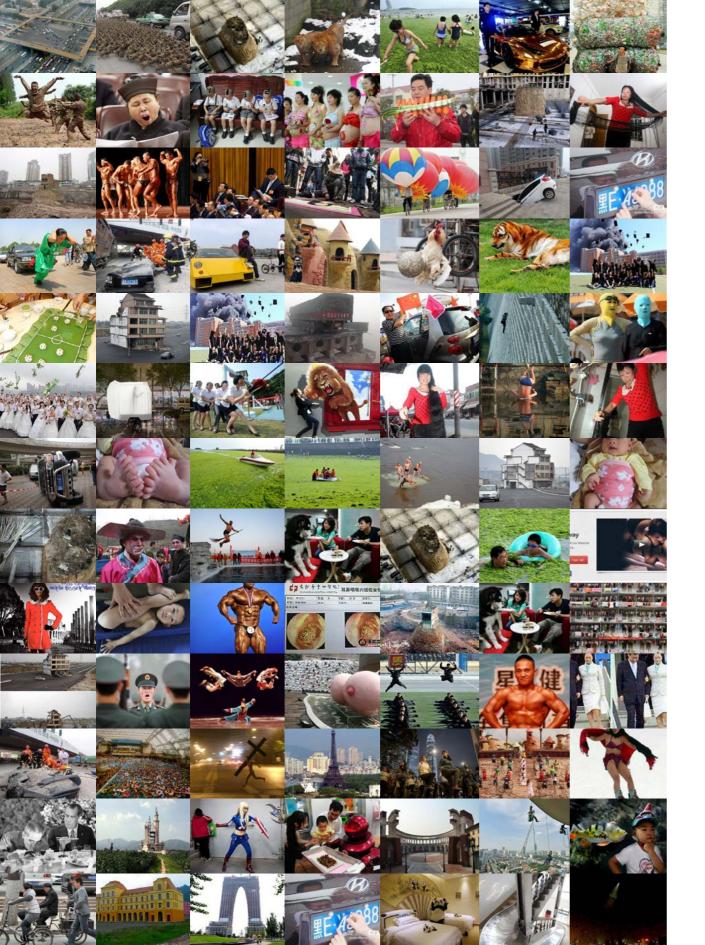
ARCHITECTURE DISASTER REPORT

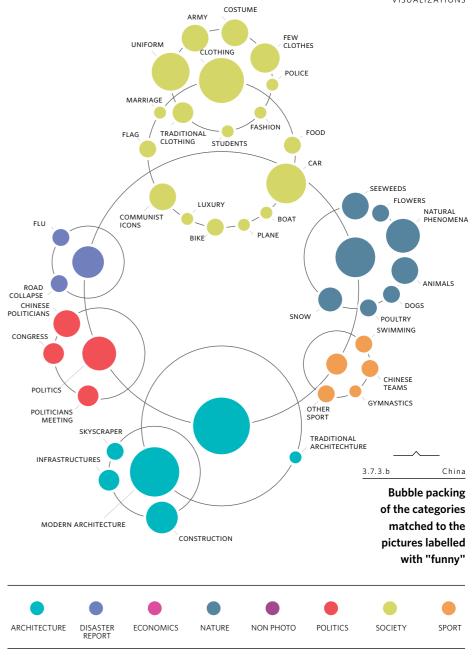
3.7.2 Dragons

ImageMontage of the pictures tagged with "dragon"

With 30 images tagged, "dragon" is the most present traditional symbol between the pictures. Chinese dragons are legendary creatures in Chinese mythology and Chinese folklore. The Dragon (simplified Chinese: 龙; pinyin: lòng ) is one of the 12-year cycle of animals which appear in the Chinese zodiac related to the Chinese calendar.

NATURE

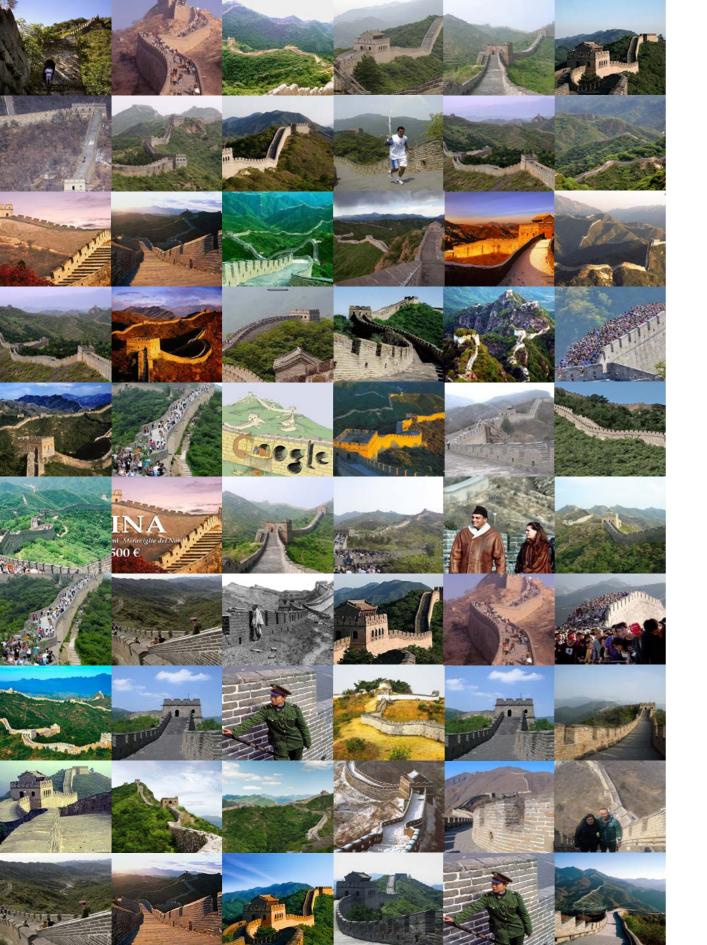


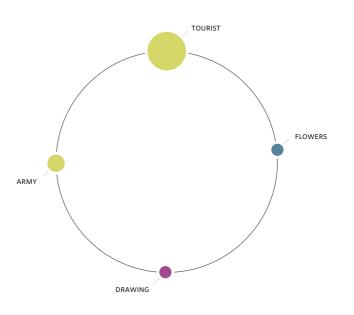


# 3.7.3 \_ Funny

3.7.3.a China

ImageMontage of the pictures labelled with "funny" The 203 images, belonging expecially on Italian websites, and more specifically on the website of the two main national papers.the fact can be explained in relation to the transition of the newspaper to the digital, with a big loss for the main player which now stuggle to monetize and without a paywall the online versions are in an extreme need of "clicks" to make a revenue.





3.7.4.b China **Bubble packing** of the categories matched to the pictures tagged with "Great Wall"

ARCHITECTURE DISASTER REPORT

NATURE

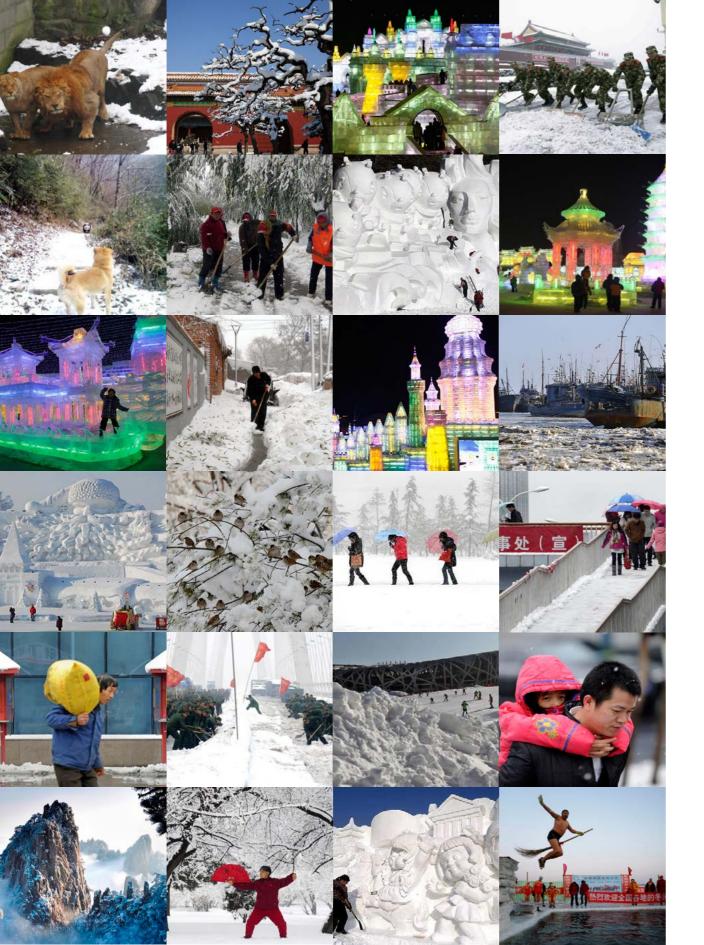
NON PHOTO

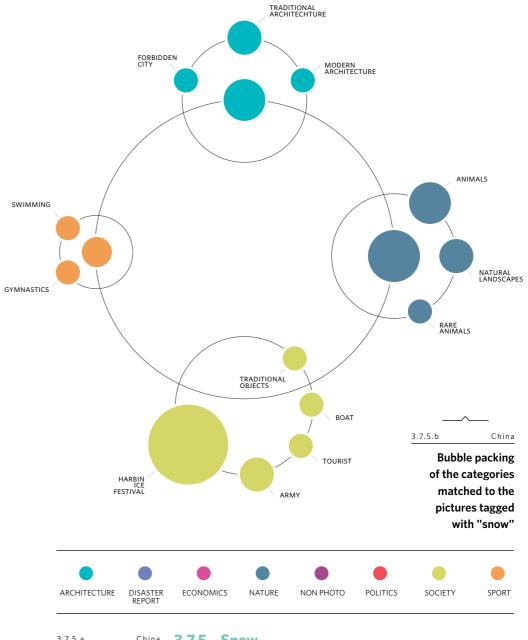
POLITICS

China 3.7.4 Great Wall

ImageMontage of the pictures tagged with "Great Wall"

Although it's not true that you can see it from the moon, with 60 representations (53 from Google) we can definitely say that you can see it from the engines. Also in this research the Great wall take on as the main attraction and symbol of China. The lack of connected tags tells also us that most of the times compear as the only object of the pictures in which it is represented.



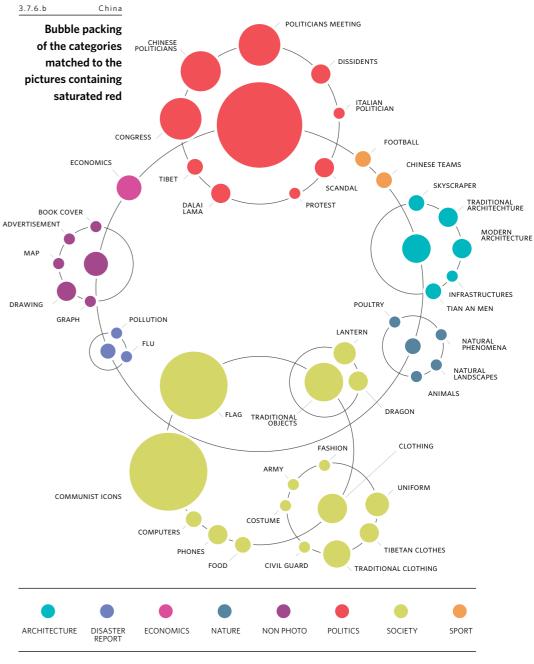


China 3.7.5 \_ Snow

ImageMontage of the pictures tagged with "snow"

Strange but true, between the natural phenomena stands out the tag "snow" with 31 images tagged. With a main cluster related to the annual Harbin International Ice and Snow Sculpture Festival. Other images are just related to winter urban and natural landscapes.



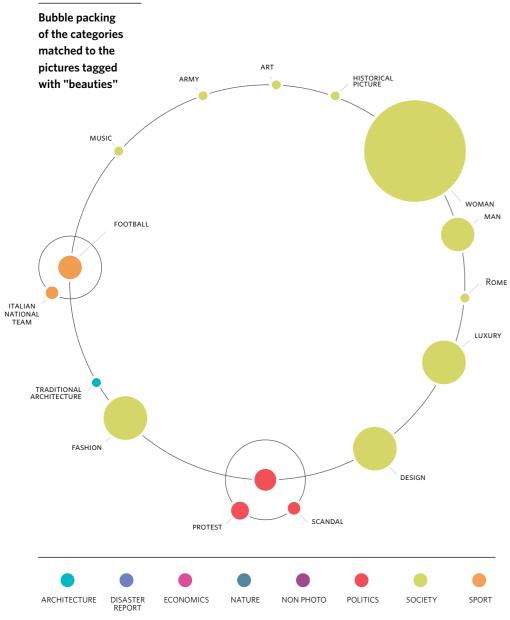


7.6.a China **3.7.6** Red

ImageMontage of the pictures containing saturated red

As we saw from the ImageMontages at page 80 and 90, the "unique" colour in the narration of China it's the saturated red. Although a big cluster of flag images it's also strongly related to the traditional culture and traditional objects.

3.7.7.a China

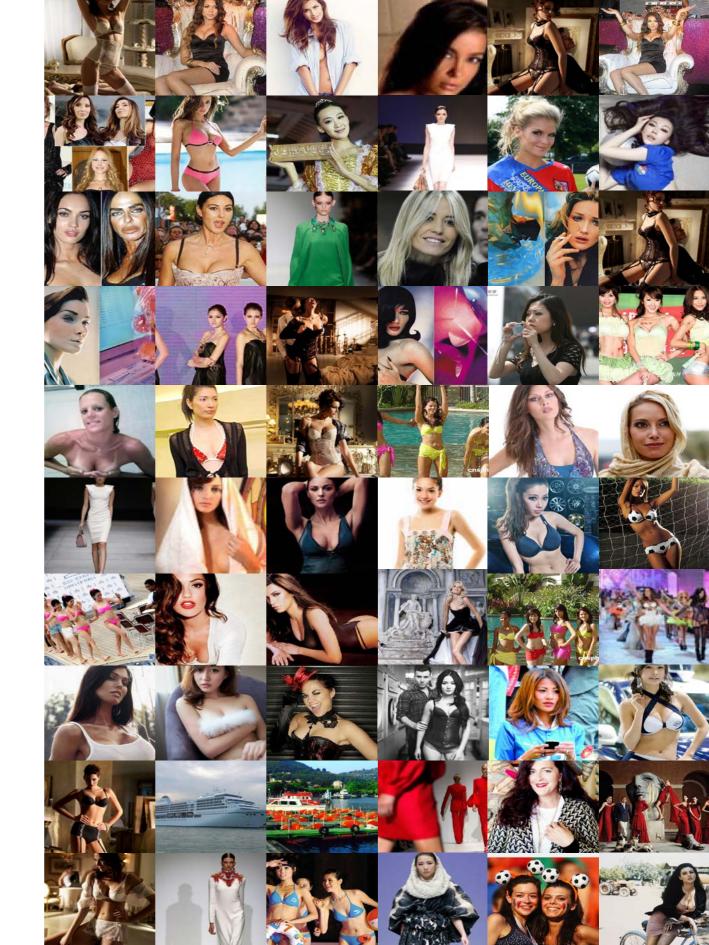


## **3.7.7 \_ Beauties**

A strong costant (with 137 pictures) between the images about Italy was the presence womens and mens with a focus on their phisical aspect. From the graphs we see how this was often related to fashion design or luxury. Must also be said that many of the womens (27) were actually asian.

3.7.7.b China

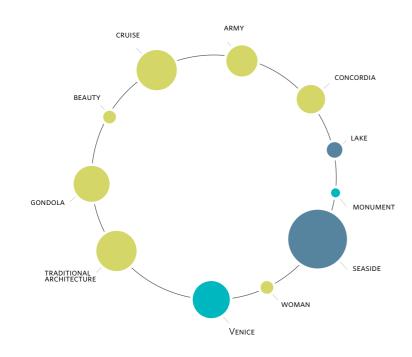
ImageMontage of the pictures tagged with "beauties"



3.7.8.a

China

Bubble packing of the categories matched to the images tagged with "boat"



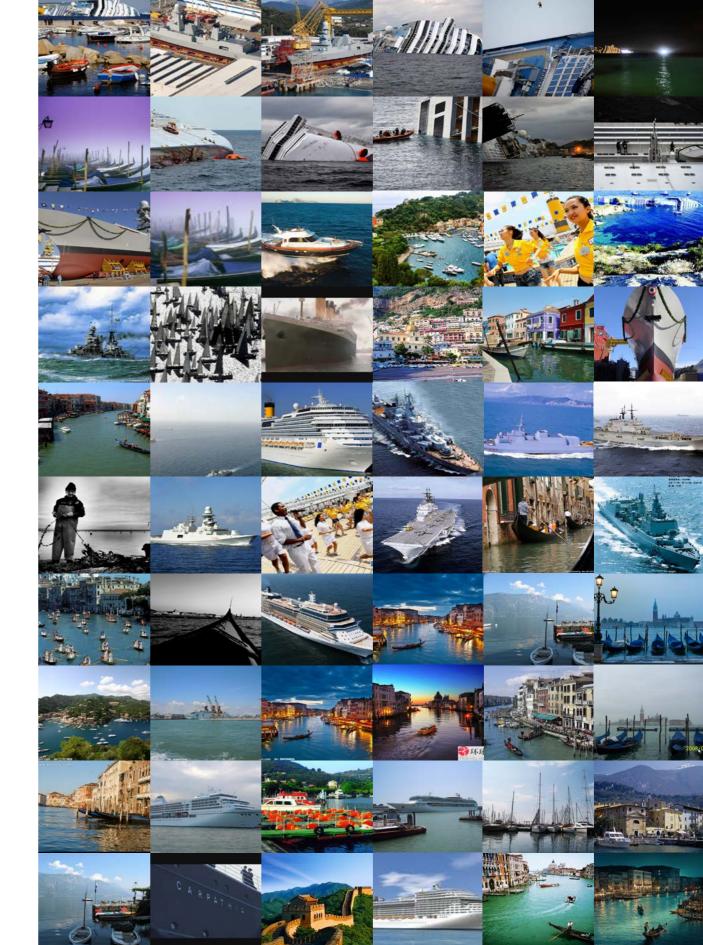


# 3.7.8 \_ Boat

The image of italians as seafaring people seems to not fade. In the dataset there are 62 pictures representing boats. The fact is also due to the concordia's sinking a short time before the image collection. Other boats belong to the army and to Venice (gondola).

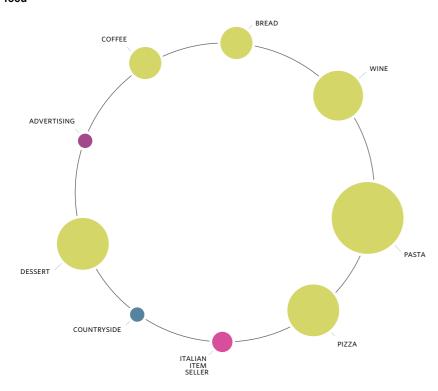
3.7.8.b China

ImageMontage of the pictures tagged with "boat"



3.7.9.a China

Bubble packing of the categories matched to the images tagged with "food"





3.7.9 **Food** 

3.7.9.b

China

With 97 entries also the food has a main role in the Italian identity in the Chinese web. Pasta, pizza, wine and dessert are the biggest subcategories in the group.

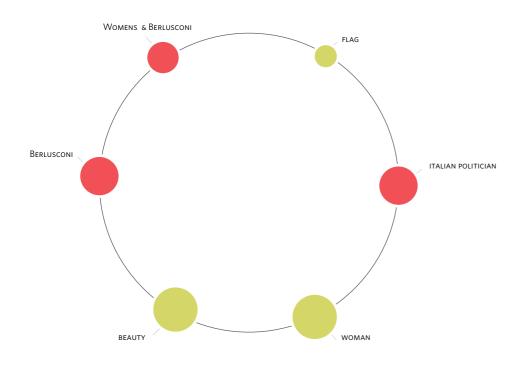
ImageMontage of the pictures tagged with "food"



3.7.10.a

China

ImageMontage of the pictures tagged with "protest"





## **3.7.10 Protest**

With 30 entries the tag "protest" (subcategory of politics) plays an interesting role. Not present in the database of images about China, here is mainly connected to the ex prime minister Silvio Berlusconi. Interesting also to see how women is often the active subject of this protests.

3.7.10.b

ImageMontage of the pictures tagged with "protest"

China



# **3.7.11** \_ Tiles

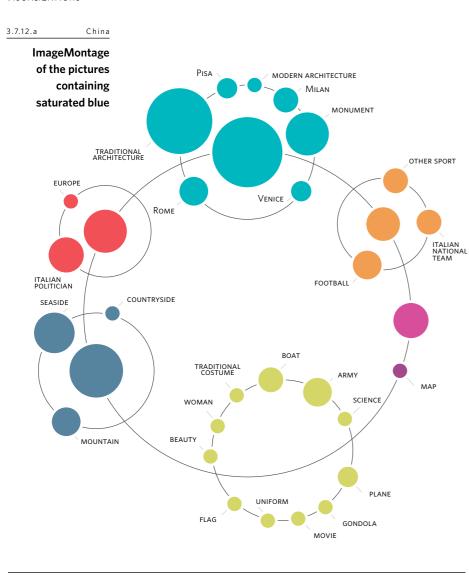
With 116 entries the "Italian wood stone tiles" (意大利木纹石) is one of the main clusters outside from the turistical images coming form Baidu. This is mainly due to the presence of the Chinese translation for Italy used as query for the search (意大利) inside the name of this specific kind of tile.

3.7.11.a

China

ImageMontage of the pictures tagged with "tile"





## **3.7.12** \_ Blue

ARCHITECTURE DISASTER REPORT

As we saw from the ImageMontages at page 80 and 90, the "unique" colour in the narration of Italy it's the saturated blue. The color comes mostly from the blue sky present in the background of natural and architectural pictures as well as from the see. It's also interesting to note also the two subgroups of sport (where comes from the tshirts of the players) and economics (where the blue is the color of the background panel).

ECONOMICS

NATURE

NON PHOTO

POLITICS

ImageMontage
of the pictures
containing
saturated blue

SOCIETY

SPORT



# Conclusions 4.0

# 4.1 Outcomes

### 4.1.1 \_ Selected findings

Through this long work of research and analysis, many are the insight that we can get and which comes directly out form the data. Every singular visualization shows various aspects and views of the differences between the two nation's approach to each other, and between the two nations perceived identities.

#### Red and blue

The narration of the two countries through pictures presents two pretty different colour palette. The trivial assumption that the colour of China is red and the colour of Italy is blue is here matched by the facts: the two colours represents the two peculiarities an the main difference between the two databases of images. Moreover we can also find pretty consistents colour and saturation an brightness trends also inside each category.

#### **Commercial engines**

The research shows in a clear way the highly commercial vocation of Google and Baidu. Through the images found in the search engines we see a "postcard version" of the countries where nature and architecture plays the main role. Even if both the image search engines presents a large number of turistical images must be said that the Chinese search engines have a much more strong take on this, with an incredibly higher number of such images.

#### Funny news

Although one would expect search engines to contain much more funny and bizarre pictures than actual online news platforms the research reveal the opposite trends. We find, especially on Italian websites, and more specifically on the webCONCLUSIONS

site of the two main national papers a huge number of funny images. We can explain this fact in relation to the transition of the newspaper to the digital, with a big loss for the main player which now stuggle to make money and without a paywall to monetize the online versions are in an extreme need of "clicks", which clearly condition the quality of the information.

#### Clothes (don't) make the man

As we see from the clustering of pictures tagged with the society category, one of the main clusters about china represents people wearing particular clothes and often uniforms. Starting from the army to the factory wprkers and even for traditional clothes, the omologation of induments though uniforms is often used as a strong iconography to represent China.

#### Tradition and Modernity

Culturally speaking, in both the narrations, the tradition plays a big role.

For what it concerns the representation of Italy we see a pretty well fragmented representation, with traditional architecture from basically everywhere in the country, and natural lanscapes from the sea to the mountain passing through the lakes. What is missed is the representation of the modernity, even if not as consisten as in China almost never appear in the representation in the Chinese online webspace.

For what it concerns the representation of China we see a very narrow range of attractions gathering the attention of the media. An insane attention towards the Great Wall (which is mostly represented in the same spot) makes it almost the only traditional construction worth to note as a turistical attractions. Differently from Italy often here the attention is towards the modern architecture, with many view of skyscrapers and infrastructures constructions, even if sometimes with an very cynical and ironic disposition.

### 4.1.2 \_ Acknowledgement on the method

Without being able to fully address here every specific issue, I will try to make more of a general point on the sense of instruments of research like this thesis.

As we already said, identity can be conceived not as a fixed point, but as an unresolved question between a number of intersecting discourses, a nexus of relations and transactions actively engaging a subject. <sup>45</sup>

The result of this experiments more than representing a final answer on the topic is a set of tool to explore this nexus of relations, and in this context diagram are considered as operating devices able to describe and unveil also nested and latent connections of a system. <sup>46</sup>

The visual approach and the instrumental nature of these artefacts gives them the role of tools for the user. While the uninitiated will identify a big picture of the topic, the specialist will be able to use this work of art as a tool to test hypotheses and intuitions. <sup>47</sup>

## 4.1.3 \_ Limitations and developments

It should be noted that the method used to conduct this analysis has some inner limit that here I'll try to argue.

First of all, there are many variables that influences the result of such an operation: the observer, the place from which he observe, the moment in which he observe, the duration of the observation, the "focusing", the distance between the observer and the observed. All this considerations can also be referred to reality: if we would ask to an heterogeneous group of people to describe a certain place, we would end up with as many subjective descriptions of the reality.

This said, the categorization of 4800 images has been carried out manually. Even if it has been done just by one person, and checked more than one time it could present errors: not only the

<sup>45</sup> \_ James Clifford, The Predicament of Culture, (Cambridge: Harvard University Press, 1988).
46 \_ Donato, Ricci, Seeing what they are Saying, diagrams for socio-technical controversies, PhD. diss. Politecnico di Milano, 2010.
47 \_ Alberto Cairo, The Functional Art, (Berkeley: New Riders, 2012).

CONCLUSIONS

possibility of mis-tagging images but also the possibility of a change in the parameters of the categorization.

"...we find what we are prepared to find (what we look for or what forcefully affronts our expectations), and that we are likely to be blind to what neither helps nor hinders our pursuits are commonplaces of everyday life and amply attested in the psychological laboratory" <sup>47</sup>

As Nelson Goodman here is explaining, even if I try my best to remain as neutral as possible towards the categorization I will hardly be completely neutral along the whole process of categorization. There is therefore the possibility during the process of not having seen patterns or having missed noticing some particularity along the data. A possible future improvement of the project regarding to this problem, could be the use of a technology of automated content analysis. A computerization and automatization of the categorizing in the analysis, could make this tagging process more neutral, even if this case would be missing the human ability of seeing outside the box and identifying even cluster that are not a priori expected or calculated.

A second possible improvement of the work would be taking into account also the world of social media. Especially in an attempt like this of seeing the perception of another country, would be of immense value to be able to grasp what is like the image coming from the actual people. This option would also add to the research a lot of possibilities, thanks to the metadata already attached to the images, and retrievable from the social networks API's.

A third annotation on possible connected works regard the possibility of conducting this same experiment on a much larger database already categorized and which actually already exists. Any of the newspaper archive would be an immense source of insight on this field and would lead to very different analysis but still very interesting in the perspective of analysing the relations perceived identity of anther country.

A last annotation must be done on what this project could become in the future. I am actually already considering the possibilities of transforming this research in something else, to make it even more open to the public, and transform it in a more easy and interactive platform, maybe a visual atlas, maybe a website and maybe a temporary exhibition.

I strongly believe in the value of opening the results of research to the society: making this set of tools and visualizations more easily accessible and more easily understandable by people without a specific background would be a nice step in this direction, and would definitely help in the goal of a better reciprocal understanding of the two cultures and the way each cultures face the diversity.

<sup>47.</sup> Nelson Goodman, Ways of Worldmaking, (Indinapolis: Hackett Publishing, 1978).

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