

Abstract Object in the World of Data

A Play of Books - Symbolicity of Information as Potential for Architectural Articulation

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We are beyond representation; our abstract objects are symbolic; figures, fuges, faces, masks, atoms, elements, characters, avatars, indexes. It is about infusing, narrating, doping, context, information and masterful articulations. Concepts become spectrums; they live like the memory or traces of things that have been; they are not documents - they are animate. In this context interest of this paper is to see how can an image of book in the world of data be different than Kevin Lynch's systemic image of the city (Lynch 1960). Lynch has abstracted from the physical city. He is representing cities on the level of text, grammars and structures. What if one takes his exercise seriously and starts to play with text on the level on information, data, lists and indexes? What is an image of a book, its character, mood, how many faces does it have? This is a going to be a drama.

Keywords: *information, text, image, abstract object, generic*

PROLOGUE

"A clear and comprehensive image of the entire metropolitan region is a fundamental requirement for the future. If it can be developed, it will raise the experience of a city to a new level, a level commensurate with the contemporary functional unit." (Lynch 1960). In the context of cybernetics and systems theory, capturing complex phenomena on an image is not an unusual gesture. In his book *The Image Of The City*, Lynch is trying to pin down the city on a map by classifying five different elements: paths, edges, districts, nodes and landmarks, and by using two methods - expert opinion and interviews with local people. Lynch finds stability in explicit features of

the city which are described as the most appropriate for the observed kind. A simple question that one might ask Lynch is how could he have been so sure that precisely these five features and these two methods could produce a valid representation of the city? Why not use more or less parameters and methods? Within networks, the representation becomes of a different kind. Relation with the origin becomes just one amongst many. What would happen if one plays with relations on an algebraic level? Is there a way of looking at things without explicating parameters and categories but letting them play like a fugue plays a certain theme? What if a play of books is conceived as a fugue? It can be played as a spectrum.

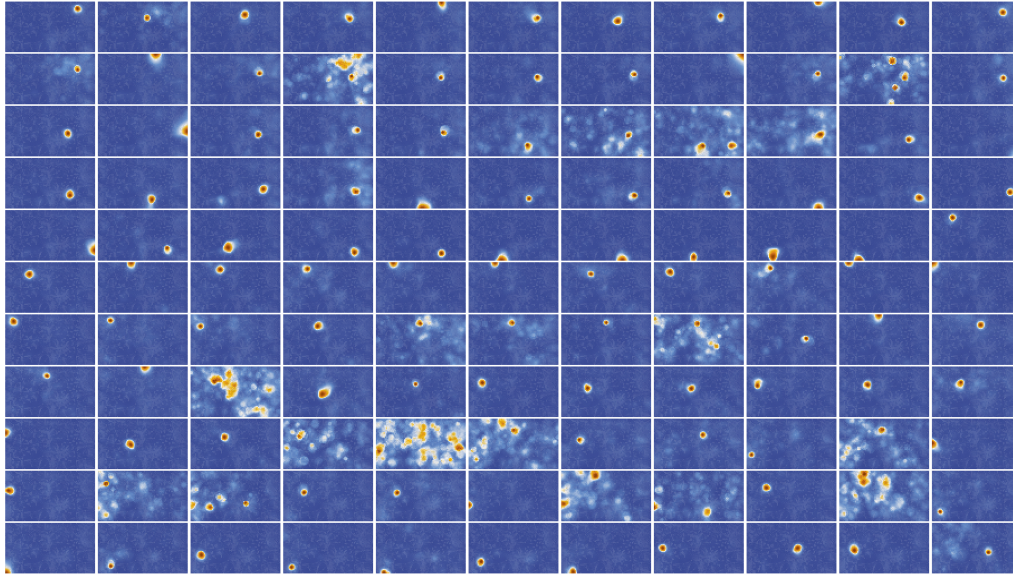


Figure 1
 These are drawings of books, or better to say these are faces of our actors. Each cell is one actor. Each actor wants to distinguish himself by showing his most prominent concepts (red and yellow highlights).

There is a certain objectivity - a theme. This theme is being repeated, always in a slightly different way. It is not mimetically tied to its representation, it is its offspring. A fugue inhabits the algebraic symbolic space. In a similar manner, it would be challenging to see how a figure of a book in the world of data could be different than a systemic Image of the City. As we have already mentioned, Lynch has abstracted from the physical city. He is representing cities on the level of text, grammars and structures. If we take his exercise seriously, as a theme for a fugue, what do we get? What happens if we want to play with text on the level of information, data, lists and indexes? What are figures and fugues of books? What is their character, mood, how many faces do they have?

DRAMA

This is going to be a play. A fugue is going to be staged almost like an ancient Greek comedy with its actors, a stage and a stage play. This drama does not have a moral. Its actors are computational - their

character is algebraic. Although it is ambiguous what a computational drama actually is, its stage script is about engendering potentials and possibilities of articulating abstract objects in the world of data. It looks promising. In this play, books are going to be abstract objects, finite objects in terms of letters and words, but infinite in any other way: interpretation, reading, meaning, translating, discussing... To be precise, books are going to be our Actors. Let us play with text on the level of information.

Orthography - Actors - Pre-Specific Objects

Book, actors, libraries. Books are our actors. They are getting ready for the stage. They are never alone, they are always a part of some collections, libraries, datasets, ensembles; they are moving in the movement of the others. Actors are not specific - they are of a symbolic kind. One can say that they have an algebraic character which makes them opportunistic to a meaning. Their mood is dependent on the library they inhabit and their face changes when looked at.

Like in quantum physics, "*when electrons (or light) are measured using one kind of apparatus, they are waves; if they are measured in a complementary way, they are particles*" (Barad 2012). Materiality itself becomes undetermined. Double slit experiment challenges the notion of predefined categorizations, which were crucial for the development of Lynch's Image of the City. New space is opened and we can finally pose the question: How to describe an object with as many indexes as one can? With no predefined categories, no key parameters, no explicit grammars, and no rules, one has to learn how to orient himself within the relative. In this constellation, each word or letter becomes an index. There are no more exceptions; every singularity can be seen as a case. By doing so, we are inverting notions of grammars, rules and parameters. Instead of a specific normality, indexes inhabit a probabilistic universe. In this scenario, notions of neighborhood and context become very important; libraries that our actors populate, shelves that accommodate them, their friends and neighbors, all this becomes a part of their moods and manners. Our actors act differently in different environments. The library is the data that informs the faces of our actors. Books are the actors and the library is their "good neighborhood". They are entering the stage.

Scenography - Stage - The Generic Ground

The actors are entering the stage. Their faces are motionless and without expressions. The play has not started yet. In order to perform a play in a digital environment, they need to get dressed, put on their masks, and learn how to articulate their informational faces. The stage is an apparatus, an instrument, a generic machine, a scenography. It is a generic ground that is able to present actors in multiple vector spaces. The stage is equipped with available generic knowledge: *Stanford CoreNLP* - Natural Language Processing software (Manning et al. 2014), *WordNet* - lexical database of English language (Princeton University, n.d.), *RiTa* - toolkit for experiments in natural language and generative literature (Howe 2009), *Self-Organizing Map* - a data process-

ing algorithm (Kohonen 1982), implemented in *Java* programming language. Libraries, books and actors are on one side of the double bind. The stage is its complementary part, the infrastructure for actors; it measures them, curates their behavior, mediates their expressions, provides clothes and lights, sounds and smells. Actors and stage, libraries and the generic machine both serve as a double articulation that presents informational faces of our actors. This is a generic process of populating the stage with differentiated instances of actors. Their faces can express a multiplicity of realities, objectivities and interpretations. They are not scientific, nor humanistic, but computational and symbolic. An informational face is not a map; it is a spectrum of different expressions of the same face. It does not have specific features, but it is indexed by as many indexes as one can find. By doing this, each index relates to the whole library, while each face becomes an expression of a book in a library - a face in its ambient milieu. The subject of the book is never explicitly in the book but in its interplay with other books. Accordingly, a face of the book is never determined, but always a part of a noisy dramatic environment open to negotiations, considerations, talks... In other words an actor can have different informational faces by indexing the text in different ways. These are the main indexing processes:

1. *Curation* is a process of normalization. e.g. tokenization, extraction of words, extraction of letters, etc.
2. *Mediation* is a process of indexing the curated text in multiple measurable ways. e.g. letter frequency, word frequency, bigram frequency, trigram frequency, synonym frequency, antonyms frequency, etc.
3. *Measuring* is a process of counting and relating of mediated indexes. e.g. frequency of a word in a book in relation to all the books in the library.

Here are some extracts taken from the examples of informational faces. They measure how many times a specific index appears in each book. The index is at



Figure 2
Galaxy of concepts - In the background of each character or each face of a book, is the context, vocabulary of all the books. Similar indexes (words) groupe together, they start to form concepts. This is a conceptual alphabet of our library.

the same time a reflection of the whole library and a measure of a specific book:

- Word frequency vector: building 10 24 0 45 82 39 0 609 18 15 21 50 29 60 1 0 85 11 249 40 33 49 16 233 72 53 31 2 0 26 1 75 179 121 1...
- Letter frequency vector: c 64758 86137 23964 10744 33271 26169 41685 32659 32708 27677 49217 18427 57030 21832 6937 6964...
- Bigram frequency vector: new_york 0 84 11 4 0 46 0 5 1 2 21 0 62 6 0 1 3 13 5 2 7 120 1 30 34 218 0 13 0 0 0 176 36 36 0 5 81 0 0 51 0 97...

Kinds of metrics one can apply to a text depend on the richness of the stage. There are many of these and they do not have to belong to the same kind. Since informational faces are algebraic, they can be transformed from words and letters, to synonyms and antonyms, to *Kindle* and *Google* ratings, to taste and moods of any intensity. Our probability space is relative to that. It changes according to the libraries we would like to read from, and according to the way

we read them. Knowledge and information become relative to the way we look at them, just like in quantum physics. Contradicting pictures do not exclude each other anymore. On the contrary, they develop a different picture all together (Barad 2012). We are beyond objective and subjective, practical and poetic. As Eco would say, we are lost in the infinity of lists, but we are ready for our stage play.

Ichnography - Play - Articulation

Act 1 - Abstraction 1a - Concepts. Actors are on the stage. A play begins. What is happening on the stage is not straightforward and intuitive. As Serres would put it: *"Objects, in the distance, change their skins, they send one another kisses."* (Serres 2000). There is one process that appears consistent even from a distance: similar indexes attract each other; similar indexes group together. The whole library is in motion; concepts are negotiating and being negotiated. Self-Organizing Map is an algorithm that articulates this interplay of indexes. This stage play is a double ar-

ticulation of actors and the stage, libraries and the generic machine, data and models. This drama is a comedy of appearances, and while images that we are taking are snapshots of facial expressions of actors in an intense play (Figure 1). They are articulating themselves by forming concepts - new abstract letters of an alphabet - a cypher (Figure 2). How many letters this alphabet has, what its resolution ends up to be, is entirely up to us. Its consistency is provided by the stage play. The newly formed letters are temporal and can express any quality or concept whatsoever. This quality is never explicit and predetermined; it is always a void in a cloud of indexes. On the other hand, each letter has a specific explicit numerical value for a given galaxy. It is a number and a letter, a wave and a particle. So, what are the letters from our library that are concerned with images and text? If we look at the Concept 1160, we will notice that it acquires the same interest (Figure 3). Let us look at its Indexical cloud:

Figure 3
Zoom to concept 1160. To get a subtle notion of what this concept might be about, one has to get to know its neighbouring concepts. It is an image in a poetic context.

0109464E: 0132327	0105640E: 0174063	0109464E: 0017340	01074503: 0000214	01094130: 0000273
literature, clarity, fascination, allegory, narration, limitless, neutrally, scandalous	deepen, germ	fragment, geometrical, inflection, alert, nostalgia, adherence	surface, page, translation, vision, guidance, writings, calculation, stem, learned, clarity, rhetoric, Alfred, metaphorical, apex, erudition, cataloging	today, suggest, translate, intellectual, unlike, inspiration, quotation, corpus, surprisingly, envisage, unchanging
0110640E: 0017014	01106230: 12368	01106130: 1107231	0110160E: 1001093	01102410: 0001079
solitude, intimacy, unweildy	poetic, shell, nest, phenomenological, cellar, daydream, miniature, boulevard, immensity, recapture, bachelor, psychoanalyst, nuance, exaggerated, phenomenologist.	image, imagination, intimate, psychologist, commonplace, cit., exaggeration, forward, underline, boredom, manor, psychologically, smallness	memory, immemorial, pedagogical	appeal, usage, vocabulary, label, tense, prescription, narrowly, contra, inspired, relate, anaxagoras
0102541E: 0011075	0102541E: 0000020	0102441E: 0011945	0102540E: 1001046	0102440E: 1004093
sentimental	rife	poem	Greek, poet	preface, platonic, encyclopaedia, organise, apology, philosophical, civilisation, heracitus
0109407E: 0000040	01074100: 1001037		0109400E: 1002093	01094030: 1000204

- 1160e13_image, imagination, intimate, psychologist, commonplace, exaggeration, forward, underline, boredom, manor, psychologically, smallness

and numerical vector:

- 0.0, 7.706139E-4, 2.568714E-4, 0.00480554, 5.137426194E-4, 0.00256304, 0.0, 0.0066784, 0.0048055... (one dimension for each book)

To get a subtle notion of what this concept might be about, one has to get to know its neighbouring concepts which are indexed by:

- 1159e23_poetic, shell, nest, phenomenological, daydream..., 1224e1_poem, 1225e2_greek, poet, 1161e3_memory, immemorial, pedagogical, 1096e6_fragment, geometrical, inflection..., 1097e16_surface, page, translation, vision...

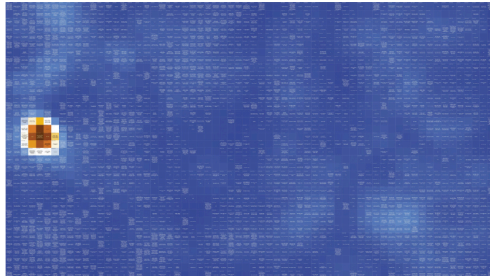
Not far away from poetry but far enough, there is a different mood for the notion of text indexed by:

- 771e13_text, signify, metaphor, articulation, mute, structuralism, semiology... 707e8_origin, trace, criticize, detour, factual, ferdinand, semiological..., 708e7_language, sign, indispensable, rigorous, genealogy..., 834e10_linguistics, script, logo, efface, anthropologist...

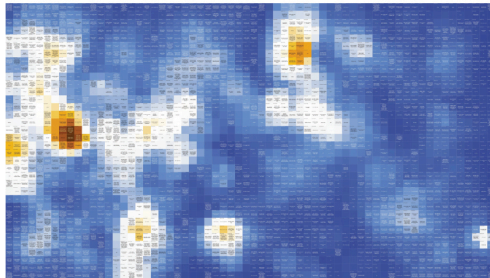
All this is a mood of a concept where image and poetry mix in a delicate way. It is interesting that there was no predefined explicit grammar, no structure, no rules or parameters, and these indexes grouped together and formed differentiated refined notions of text and images. There are many moods that can be inhabited by text. If we change the instrument of looking, we can get a different spectrum.

Images and texts, paintings and poems, maps and linguistics. If one looks at this specific constellation of concepts and tries to find actors or books whose faces are articulated by the same concepts, one finds himself immersed in an amusing discussion. There are three actors that distinguish themselves by their interest in this particular constellation (Figure 4). Each one comes with its own attitude. Let us give them space and listen to what they have to say: Blanchot's *The Book to Come* is opening up the scene with some personal concerns: *"This first of all: that there is no longer a limit of reference. The world and the book eternally and infinitely send back their reflected images. This indefinite power of mirroring, this sparkling and limitless multiplication - which is the labyrinth of light and nothing else besides - will then*

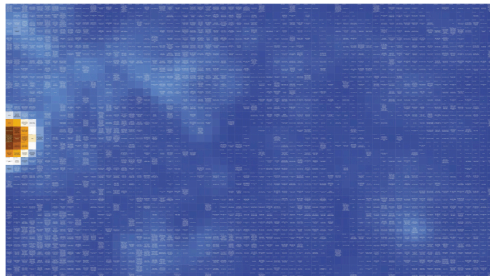
be all that we will find, dizzily, at the bottom of our desire to understand." (Blanchot 1959).



Blanchot_The Book to Come



Cache_Earth Moves The Furnishing Of Territories



Deleuze_Difference And Repetition

Cache's Earth Moves The Furnishing Of Territories replies by seeing Blanchot's concerns of limitless referencing of continuous transformations as a main strength of his Objectile: *"Just as Leibniz had conceived it, texts, information, images, and sounds are now all the object of numerical manipulation, so much*

so that the electronic parts that make up the functional core of the modern object no longer have anything to do with the visual or auditory restitution that realizes their concrete function." (Cache 1995). Deleuze's Difference And Repetition circles around the stage several times in smaller and greater distances from the three while trying to make sense of Blanchot's concerns: *"More profoundly, however, the true Platonic distinction lies elsewhere: it is of another nature, not between the original and the image but between two kinds of images [idoles], of which copies [icones] are only the first kind, the other being simulacra [phantasmes]. The model copy distinction is there only in order to found and apply the copy simulacra distinction, since the copies are selected, justified and saved in the name of the identity of the model and owing to their internal resemblance to this ideal model."* (Deleuze 1968). Curtain goes down but the discussion continues... These are the faces, their expressions, highlights, differences in colors (Figure 4). Each actor wants to distinguish himself by showing his most prominent concepts. Staged in this artificial way, they provide interesting insights in the relation between text and images. But there is a trick. We can easily influence this discussion. If a book is added or removed, the whole galaxy changes. If we change the instrument of looking, or tune our generic machine in a different way, the galaxy finds itself in a new constellation and the actors change their mood. Their faces become different, and we are always taking new and different snapshots of them. We slowly learn how they behave.

Act 2 - Abstraction 1b - Spectrums. Alongside with negotiation between concepts, as the other part of the double bind, actors themselves start to gather and form galaxies of discourses. Since each actor presents himself in a multiplicity of ways, he is a part of multiple discourse galaxies. The same process and same algorithm (SOM) are being used, yet in an inverted manner. Mathematicians would say it is a transposed matrix. Instead of indexing words by books (Abstraction 1A), one is indexing books with newly developed concepts (Abstraction 1B).

- Abstraction 1A (word; book1, book2,

Figure 4
Faces of three books concerned with notions of image and text. Their main focus is almost at the same spot, but it is articulated in a different manner.

book3...) morphem 0.0078349, 0.0069416, 0.001685852, 8.92502979E-4, 0.0086275...
 • Abstraction 1B (book; concept1, concept2, concept3...) Blanchot_The Book to Come 3.182003E-4, 3.08664844E-4, 4.848412E-4...

Figure 5

Library arranged in spectrum. If one just scans through this list, there is a consistency in the way books inhabit the line. Only by counting the words and using a generic algorithm, we have arranged the library. It is articulated in its own terms.

0_Russel_ Principia Mathematica
 14 Feynman_ Quantum Electrodynamics
 20 Badiou_ Number And Numbers
 31 Popper_ The Logic Of Scientific Discovery
 41 Blanche_ Axiomatics
 46 Zalamea_ Synthetic Philosophy of Contemporary Mathematics
 50 Serres_ The Birth of Physics
 61 Hofstadter_ Godel Escher Bach
 70 Monod_Jacques_Chance_and_Necessity
 78 Einstein_ Relativity
 81 Wiener_ cybernetics
 86 Devlin_ Goodbye Descartes
 90 Chomsky_ Syntactic Structures
 99 Eco_ A Theory Of Semiotics
 102_Hjelmslev_ Prolegomena To A Theory Of Language
 115_Derrida_ Of Grammatology
 124_Batty_ Fractal Cities
 130_Hillier_ The Social Logic of Space
 151_Cache_ Objectile
 171_Stiegler_ Technics And Time1
 180_Foucault_ The Order Of Things
 184_Foucault_ Archaeology Of Knowledge
 191_Blanchot_The Book to Come
 191_Deleuze_ Difference And Repetition
 200_Deleuze_ A Thousand Plateaus
 208_Flusser_Towards a Philosophy of photography
 209_Ranciere_ Aisthesis
 215_Ernst_ Digital Memory And The Archive
 217_Kittler_ Gramophone Film Typewriter
 222_McLuhan_ The Gutenberg Galaxy
 227_McLuhan_ Understanding Media
 234_Carpo_ The Alphabet And The Algorithm
 236_Cache_ Projectiles
 238_Terzidis_ Algorithmic Architecture
 243_Hovestadt_EigenArchitecture
 243_Luhmann_ Introduction to System Theory
 249_Cache_ Earth Moves The Furnishing Of Territories
 251_Lyotard_ The Postmodern Condition
 253_Gevers_ Yes Naturally
 253_Haraway_ A Cyborg Manifesto
 255_Winter_ Architectures Of Time
 258_Auge_ Non Places
 260_Latour_ We Have Never Been Modern
 264_Baudrillard_ Simulacra And Simulation
 267_Zizek_ Less Than Nothing
 274_Harman_ Towards Speculative Realism
 276_Harman_ Belles And Whistles
 290_Mullarkey_ Post Continental Philosophy
 295_Dolphijn_Van der Tuin_ New Materialism
 310_Moletsane M S_ Dress Identity Materiality
 321_Negri_ Empire
 322_Hardt_ Empire
 333_Lefebvre_ State Space World
 333_Marx_ Communist Manifesto
 342_Fukuyama_ The End Of History And The Last Man
 353_Castells_ The Rise Of The Network Society
 364_Zimmermann_ Resilient Cities
 373_Diamandis_Kotler_ Abundance
 380_HovestadtBuhlmann_ Genius Planet
 381_Schmitt_ Information Cities
 387_Mitchell_ Me
 392_Lynch_ The Image Of The City
 402_Shane_ Recombinant Urbanism
 413_Cairns_Jacobs_ Buildings Must Die
 413_Obrist_ A Brief History of Curating
 418_Koolhaas_SMLXL
 421_Rossi_ The Architecture Of The City
 421_Rowe_ Collage City
 426_Tafuri_ Architecture and Utopia
 433_Schumacher_ The Autopoiesis Of Architecture
 437_Banham_ Theory And Design In First Machine Age
 447_Aureli_ The Possibility Of An Absolute Architecture
 451_Eisenman_ Inside Out
 455_Eisenman_written into the void
 461_Venturi_ complexity And Contradiction In Architecture
 468_Alexander_ A Pattern Language
 479_Alberti_ 10 books Of Architecture
 484_Vitruvius_ The Ten Books On Architecture
 490_Semper_ The Four Elements Of Architecture

Instead of words, books are those who are grouping; they are trying to find their place in the library. This time they are arranged in a line in which the library becomes a spectrum (Figure 5).

Act 3 - Abstraction 2a - Characters. Spectrums provided a new ground. This is a new level of abstraction. Actors can now abstract from concepts and frequencies of indexes, given that their new faces are composed out of multiple analyses. Each analysis is a specific view on the library - a spectrum. By relating spectrums, we are composing more abstract informational faces. Instead of describing a book by 15000 values of word frequencies, we are describing it with a combination of any chosen number of values provided by the analysis. The way we look and how many instruments we use is not arbitrary, it is up to us to decide.

- antonymsFrequency, antonymsFrequency, bigramFrequency, holonymsFrequency, hypernomsFrequency, hypernomsFrequency, hyponymsFrequency, letterFrequency, synonymsFrequency, wordFrequency, wordFrequency, wordFrequency

Books are not vectors of concepts anymore, but vectors of analysis.

- Abstraction 2 (book; Analysis1, Analysis2, Analysis3, etc.) Blanchot_The_Book_to_Come 0.285 0.349 0.243 0.862 0.221 0.194 0.498 0.662 0.248 0.222 0.218 0.441 0.228 0.521

The same process repeats, yet it becomes more abstract. Actors are choosing shelves according to their mood; it is almost comparable to "making friends" while agreeing on finding a specific place in the library - the one that suits them best. Now books, their facial expressions, are indexing shelves. Each shelf contains many books. The shelf is the new actor. So how many shelves do we need for our current library of 148 books? Not too many, not too few. Let us answer 12 and detect what happens. Who are the new

actors? The aforementioned 12 actors describe and index themselves according to the books they like to read. It is a spectrum that goes from Swift and Asimov, through Aureli and Cache, to Eco and Zlamea. Nevertheless, we need to keep in mind that this is not

0 Swift Gulliver's Travels, Stein Tender Buttons, Cervantes Don Quijote, Poe Works of EA Poe, Hall Beowulf, Nietzsche Thus Spoke Zarathustra	6 Asimov I Robot, Beckett Waiting for Godot, Voltaire Candide, Austen Pride and Prejudice, Shakespeare Romeo And Juliet, Shelly Frankenstein, Wells The War Of The Worlds, Tolstoy Anna Karenina, Dickens Oliver Twist, Hugo Les Miserables, Tolstoy War And Piece, Wolf Night And Day, Kafka The Trial, Sartre Nausea, Joyce Ulysses, Orwell 1984, Dickens A Tale Of Two Cities
1 Durer Journey to Venice, Machiavelli The Prince, Smith The Wealth Of Nations, Spinoza The Ethics, Leibnitz Theodicy, Hobbes Leviathan, The Vedas, Darwin On The Origin Of Species, Calvino Invisible Cities, Hovestadt Quantum City, Serres The Parasite	7 Plato The Republic, Augustine The City of God, The King James Bible, Confucius Analects, The Holy Quran, Homer Iliad, Dante The Divine Comedy
2 Bacon Novum Organum, Nietzsche Beyond Good And Evil, LeCorbusier Towards A New Architecture, Descartes A Discourse On Method, Plato Timaeus, Vitruvius The Ten Books On Architecture, Innis Empire And Communications, Alberti 10 books of Architecture, Semper The Four Elements Of Architecture, Fuller Operating Manual For Space, Alexander A Pattern	8 Mumford The City In History, Leibniz Discourse On Metaphysics, Obrist A Brief History of Curating, Newton The Mathematical Principles Of Natural Philosophy
3 Auge Non Places, McLuhan Understanding Media, Bachelard The Poetics Of Space, Sedlacek Economics Of Good And Evil, Ranciere Aesthesis, Havelock Preface To Plato, Serres The Natural Contract, Marx Communist Manifesto, Freud A General Introduction To Psychoanalysis	9 Aureli The Possibility Of An Absolute Architecture, Venturi complexity And Contradiction In Architecture, Schmitt Information Cities, Calrns Jacobs Buildings Must Die, Lynch The Image Of The City, Zimmermann Resilient Cities, Rossi The Architecture Of The City, Mitchell He, Koolhaas SMLXL, Carpo Architecture in the Age of Printing, Banham Theory
4 Cache Earth Moves The Furnishing Of Territories, Zizek Less Than Nothing, Kwinter Architectures Of Time, Einstein Relativity, Barthes Mythologies, Deleuze A Thousand Plateaus, Baudrillard Simulacra And Simulation, Blanchot The Book To Come, Hegel Phenomenology Spirit, Cache Projectiles, Wittgenstein Philosophical Investigations, Flusser Towards a Philosophy of Language	10 Schumacher The Autopoiesis Of Architecture, Haraway A Cyborg Manifesto, Lyotard The Postmodern Condition, Rowe Collage City, Tafuri Architecture and Utopia, Eisenman written into the void, Batty Fractal Cities, Fukuyama The End Of History And The Last Man, Latour We Have Never Been Modern, Hardt Empire, Negri Empire, Eisenman Inside Out, Lefebvre State Space World,
5 Eco A Theory Of Semiotics, Russel Principia Mathematica, Chomsky Syntactic Structures, Blanche Axiomatics, Mullarkey Post Continental Philosophy, Kant The Critique Of Pure Reason, Popper The Logic Of Scientific Discovery, Devlin Goodbye Descartes, Serres The Birth Of Physics, Deleuze Difference And Repetition, Badiou Number And Number, Derrida Of Grammatology,	11 Hovestadt EigenArchitecture, Feynman Quantum Electrodynamics, Zlamea Synthetic Philosophy of Contemporary Mathematics, Luhmann Introduction to System Theory, Honod Jacques Chance and Necessity, Wiener cybernetics, Harman Belles And Whistles, Harman Towards Speculative Realism, Hillier The Social Logic of Space, Terzidis Algorithmic Architecture, Dolphijn Van

a library of all the books. It is the library of personal interests and current preoccupations. Since this paper is about images and text in the context of architecture, we will kindly ask the four literary actors from the library top - shelves 0, 1, 6, 7 to withdraw and take their books with them, but to leave Shakespeare's books since this is a play and his books might come in handy (Figure 6). Four actors have left the stage, but four new ones have entered it. There are 27 books less. The library is challenged each time a book is added or removed from it. The whole vocabulary changes, concepts shift, indexes rearrange. New actors replace the old ones, which results in a more intense and focused atmosphere. This is the appropriate moment to ask questions and set the stage. Here is a simple question:

- Which shelf offers a temporary home for this alien text?

It is a fiction, an avatar, an alien book in the library. The question serves as an index, as a brief book. The moment we ask this question, the whole library rearranges according to it. So what is the new milieu? How have our actors arranged themselves? The shelf two is its temporary home (Figure 7):

- 2 Cache Projectiles, Innis Empire And Communications, Blanchot The Book to Come, Play of Books, McLuhan The Gutenberg Galaxy

These kinds of explorations become more like a masterful playing of a violin than an objective analysis. This is a self-referential process. Both the persona and its neighbors look familiar. This constellation is by all means a comfortable and challenging one. McLuhan and Innis are pointing to the shifts in literacy while anticipating coding as a new kind of literacy (McLuhan 1962, Innis 1950). Blanchot is an enigmatic driver of the discussion: *"But the essence of literature is precisely to escape any essential determination, any assertion that stabilizes it or even realizes it: it is never already there, it always has to be rediscovered or reinvented."* (Blanchot 1959), and Cache is the one who relates the whole story back to the generic

Figure 6
Library organized in shelves. The shelf is the new actor.

ground: "And this is how the new digital montages are created: no longer is a given sound coupled to a given image, as in the good old days of cinematography; instead, sounds are visualized or images heard in a chiasmus of perceptions." (Cache 2011).

Figure 7
Which shelf offers a temporary home for this alien text (A Play of Books)? The shelf two is its temporary home for this alien text.

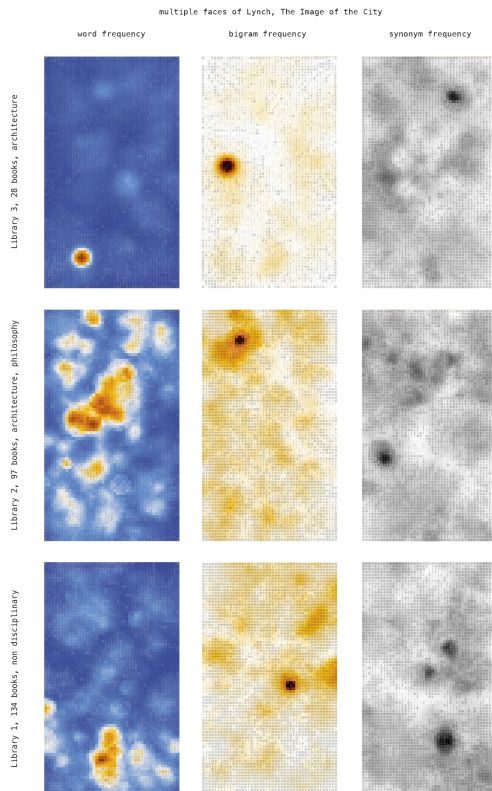
<p>0 Alberti 10 books Of Architecture, Vitruvius The Ten Books On Architecture, Smith The Wealth Of Nations, Darwin On The Origin Of Species, The Vedas, Hobbes Leviathan, Machiavelli The Prince, Nietzsche Beyond Good And Evil, Confucius Analects</p>	<p>6 Sartre Nausea, Serres The Parasitic, Leibnitz Theodicy, Nietzsche Thus Spoke Zarathustra, Plato The Republic, Leibnitz Discourse On Metaphysics, The Holy Quran, Descartes A Discourse On Method, Plato Timaeus, Spinoza The Ethics, Shakespeare Romeo And Juliet, Shakespeare Hamlet, Hall Bowdler, The King James Bible</p>
<p>1 Mumford The City In History, Alexander A Pattern Language, Hovestadt Quantum City, Havelock Preface To Plato, Semper The Four Elements Of Architecture, Marx Capital Vols, Wittgenstein Philosophical Investigations, Voegelin Israel and Revelation, Sedlacek Economics Of Good And Evil, Voegelin The</p>	<p>7 Bachelard The Poetics Of Space, Calvino Invisible Cities, Serres The Natural Contract, Bacon Novum Organum, Freud A General Introduction To Psychoanalysis, Newton The Mathematical Principles Of Natural Philosophy</p>
<p>2 Cache Projectiles, Innis Empire And Communications, Blanchot The Book To Come, A Play Of Books, McLuhan The Gutenberg Galaxy</p>	<p>8 Obrist A Brief History Of Curating, Fuller Operating Manual For Space, Wittgenstein Philosophical Investigations, Hovestadt/Hubmann Genius Planet, Havelock Preface To Plato</p>
<p>3 Hillier The Social Logic Of Space, Russell Principia Mathematica, Badiou Number And Numbers, Monod Jacques Chance and Necessity, Harman Towards Speculative Realism, Deleuze A Thousand Plateaus, Terzidis Algorithmic Architecture, Harman Belles And Whistles, Zizek Less Than Nothing, Baudrillard Simulacra And Simulation, Cache Earth</p>	<p>9 Feynman Quantum Electrodynamics, Popper The Logic Of Scientific Discovery, Blanche Axiomatics, Hjelmslev Prolegomena To A Theory Of Language, Chomsky Syntactic Structures, Eco A Theory Of Semiotics, Stiegler Technics And Time, Hofstadter Godel Escher Bach, Foucault Archaeology Of Knowledge, Devlin</p>
<p>4 Hovestadt EigenArchitecture, Zalama Synthetic Philosophy of Contemporary Mathematics, Eisenman written into the void, Mullarkey Post Continental Philosophy, Ernst Digital Memory And The Archive, Lubmann Introduction to System Theory, Rowe Collage City, Lyotard The Postmodern Condition, Ranciere Aisthesis,</p>	<p>10 Carpo The Alphabet And The Algorithm, Auge Non Places, Haraway A Cyborg Manifesto, Wiener cybernetics, Batty Fractal Cities</p>
<p>5 Tafuri Architecture and Utopia, LeCorbusier Towards A New Architecture, Venturi complexity And Contradiction In Architecture, Schumacher The Autopoiesis Of Architecture, Carpo Architecture in the Age of Printing, Eisenman Inside Out, Hardt Empire, Lynch The Image Of The City</p>	<p>11 Shane Recombinant Urbanism, Obrist A Brief History Of Curating, Cairns Jacobs Buildings Must Die, Hovestadt/Hubmann Genius Planet, Mitchell Me, Aurell The Possibility Of An Absolute Architecture, Castells The Rise Of The Network Society, Fukuyama The End Of History And The Last Man, Diamandis Kotler Abundance, Gevers</p>

The stage play does not provide one objective perspective; its semantics are not explicit, grammars not visible; it is beyond dichotomies such as subjective - objective, nature - culture, art - technology. It is any library and any method. It is up to the one that is using the library and his world-views to choose. It is a symbolic compression to temporary atom-letters, an endless process of articulations, motivated, personal, yet operational. It is an operational stance on Eco's lists: a double articulation between a process and a system, content and expression, books and instruments. Instead of providing a solution or a generic projection of certain data, one might be closer to a personal algebraic projection of a certain discourse.

EPILOGUE

Coding as literacy. We are beyond representation; our abstract objects are symbolic; figures, fables, faces, masks, atoms, elements, characters, avatars, indexes. It is about infusing, narrating, doping, context, information and masterful articulations. Concepts become spectrums; they live like the memory or traces of things that have been; they are not documents - they are animate. They do not have individual faces - they define zones of probability. It is a multiplicity of ciphering that makes them possible in every sense and direction (Deleuze and Guattari 1980). Similar examples can be found all around our world. Brands inhabit symbolical spaces of myths; simulacra are expressing a different environment populated by differences which are not copies of a model (Massumi 1987). They do not merely represent, they have lives of their own. Mathematics, especially algebra, does not emphasize representation but rather the symbolization of abstract concepts. It is not natural, but a part of a specific nature. Programming languages show us a nature different from natural languages. This novel language is a language of noise and entropy. It has left the archive and dwells on the Internet. The question is not anymore how to classify the archive, but how to articulate the generic notion of the web. Noise and entropy are not peripheral any more, they are the generic ground. We have once again inverted

the world. Instead of trying to find the basic laws of nature, we are on a quest to discover pockets of life in the entropic, that is, how to articulate out of the white noise when it is observed to have a flat spectrum over the range of probabilities relevant to the context. We are in a search of most universal and abstract ingredients in a given situation. We are not comparing or deconstructing in the entropic, since everything is on its way towards achieving a balance. In a world where everything is connected, in which each actor has many roles and can be rendered in many ways (Figure 8), we are left with the question how to find stability, how to make masterful articulations?



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Figure 8
Multiple faces of Kevin Lynch's The Image of the City. Same book in the context of multiple libraries, staged (measured) in multiple ways shows us many different facial expressions.