INTRODUCTION — GHOSTS OF TRANSPARENCY: SHADOWS CAST AND SHADOWS CAST OUT MICHAEL R. DOYLE, SELENA SAVIĆ, VERA BÜHLMANN

I have heard articulate speech produced by sunlight! I have heard
a ray of the sun laugh and cough and sing
I have been able to hear a shadow, and I have even perceived by
ear the passage of a cloud across the sun's disc.

— Alexander Graham Bell (February 26, 1880).¹

Code. Protocol. Channel. Data. Information. In everyday conversations, these words do not evoke images of buildings or of cities. And yet they have entered the common parlance of an architecture and urbanism looking to computation and quantum physics for inspiration. As the net is cast wider and other disciplines and fields are probed for concepts and theories, new words are gathered and circulated: Entropy. Negentropy. Isotropy. Anisotropy. Spectrum. Manifold. These words are appropriated and articulated into novel constellations of meaningfulness, as well as meaninglessness respectively.

At a certain point, communities form around particular words or groups of words, boundaries are drawn and territories with regard to

¹ Alexander Graham Bell to Alexander Melville Bell, 'Letter from Alexander Graham Bell to Alexander Melville Bell', 26 February 1880 <<http://hdl.loc.gov/loc.mss/magbell.00510307>>.

worth and values are established. Faced with a jargon that has become sedimented, overused and corrupted, scholarship today tends to call for a new and adequate vocabulary for describing a novel common condition. We tend to disagree. With the abundance of words currently circulating in discussions around information and architecture, the challenge is not to supplement or supplant them with neologisms, but rather to engage with them anew, as something ‘strange’, unlikely, and even ‘unknown’. In this edited volume, we want to *meet* with these words, not more and not less. The passage from the implicit to the explicit is not primarily an epistemological one, but, significantly, an architectonic one; and this means it can be not only a path that proceeds logically, and consequentially, but one that needs to cut angles, to proceed cunningly, in short: the passage from implicit to explicit is also always a literary one that draws from rhetorics, poetics, mechanics; it is one of construction, of plotting, of ‘treatments’, we could perhaps say, in the most general sense.

In the first book of *De Architectura*, the Roman architect Vitruvius writes that “architects who have aimed at acquiring manual skill (*fabrica*) without scholarship have never been able to reach a position of authority to correspond to their pains, while those who relied only upon theories (*ratiocinatio*) and scholarship were obviously hunting the shadow, not the substance.”² To think of the shadow in this fashion suggests that *ratiocinatio*—skills in rendering intelligibility, rationalization—that remains disconnected from practical experience seeks hospitality in an immediate luminosity (an ‘enlightening’), and will seek to protect it by hunting and eliminating shadows. *Fabrica*—manual skill or instrumentalization—that seeks no distancing from its workings takes place under a light that is unreasoned, whose source of luminance is taken for granted. In the case of the former, shadows are cast out; in that of the latter, shadows are simply cast. The training of the architect then lies in learning to invent how to treat a paradox³ in the real but ‘impossible’ domain we want to call ‘architectonic’ here, a domain where shadow is constitutive and light can be related to only in diffractive and mediate manners.⁴ Vitruvius’s statement, which is historically so far from the present, seems to resonate with our contemporary thinking. If

- 2 Vitruvius, trans. by M. H. Morgan, *On Architecture*, Book 1, Chapter 1, trans. Morgan, (Cambridge, MA: Harvard University Press, 1914). Latin original: “[A]rchitecti qui sine litteris contenderant ut manibus essent exercitati, non potuerunt efficere ut haberent pro laboribus auctoritatem. Qui autem ratiocinationibus et litteris solis confisi fuerant, umbram non rem persecuti videntur. At qui utrumque perdidicerunt, uti omnibus armis ornati, citius cum auctoritate quod fuit propositum sunt adsecuti” (Vitruvius, trans. by A. Choisy, *De Architectura*, Book 1 Chapter 1, (Paris: Imprimerie-Librairie Lahure, 1909)).
- 3 Bernard Tschumi, ‘The Architectural Paradox’, in *Architecture and Disjunction*, Paperback ed., 5. print (Cambridge, Mass.: MIT Press, 1999) 218–28.
- 4 Vera Bühlmann, Felicity Colman, and Iris Van der Tuin, ‘Introduction to New Materialist Genealogies: New Materialisms, Novel Mentalities, Quantum Literacy’, *The Minnesota Review*, 2017, 47–58.

it is meaningful to speak of architectonics with regard to communication at all, then it must know how to consider and relate to the shadows that are being cast—and cast out.

Information and data are not synonyms: data (etymologically, the ‘given’) has to be treated, articulated, read or deciphered in such a way as to contain information. The sheer amount of data today tends to obscure this important difference between data and information: data is entropic, while information is where this entropy is negated; information is negentropic. An emerging political imperative of ‘transparency’ conflates the abundance of data with an increase in information. Unfortunately, the reverse is often the case: The more ‘data’ is rendered available and passed off as ‘information’ or ‘knowledge’, the more opaque the dealings with ‘information’ become. This is perhaps one of the greatest challenges we face with regard to becoming literate in the algorithmic and symbolization processes that organize data in our world today⁵—processes we refer to here as ‘ghosts of transparency’.

What, you may ask, does this have to do with architecture and urbanism? Data and software are thought to reshape the city, while the word ‘architecture’ refers equally often to buildings and to the organization of computer software and hardware components. With this book, we want to cast a projective space that accommodates various *Auseinandersetzungen* (settings, or setting ups, articulated dispositions of grounds that are quarrelsome) with implicit and explicit mixtures of these two domains interpenetrating each other.

Contributions are, we could say, short enough to make a point, yet long enough to glimpse the great variety of ‘scales’ of abstractive contemplation that these points index. In architecture, like in many disciplines today, there is a proliferation of terms coming from information technology and mathematics: data, negentropy, spectrum, manifold, archive, communication, topology, digital, analogue. Our approach was not to seek ‘experts’ to define these words ‘properly’, nor to attempt an exhaustive overview of their uses across multiple disciplines. Nor do we claim that one new, consistent, vocabulary is necessary. The words that circulate in our discourses are themselves packets of energetic potential. In them, information channels energy, words and their usage do have an impact on our world today. We wanted to invite others to speak about these words as they begin to grow into a novel kind of ‘force’—to *project*

- 5 Felicity Colman et al., *Ethics of Coding: A Report on the Algorithmic Condition [EoC]* (Brussels: European Commission, 2018) <https://cordis.europa.eu/project/rcn/207025_en.html>; *Coding as Literacy: Metalithikum IV*, ed. by Vera Bühlmann, Ludger Hovestadt, and Vahid Moosavi, Applied Virtuality Book Series (Basel, Switzerland: Birkhäuser, Part of Walter de Gruyter GmbH, Berlin, 2015); Antoinette Rouvroy, ‘Of Data and Men’: *Fundamental Rights and Freedoms in a World of Big Data* (Strasbourg: Directorate General of Human Rights and Rule of Law (European Council), 11 January 2016), 37.

a corporeality for them that is carefully considered, rich in its articulation, overall generous and accommodating of more. To address them as somehow ‘strange’, as both luminous and shadowy. This is no gesture of embracing obscurantism, it is merely an expressed intent to know more, for instance, about the abstractions that went into the technique of handling codes, sourcing data, devising contracts and channels, the thinking that manifests in existing communication protocols (TCP/IP) and their standardization in the Open Systems Interconnected model (OSI), or in programming interfaces (APIs), the thinking that can be unlocked from the information-processing capacity of crystals, about the form of values, about virtuality, civility and civitas, code’s publicness and privacy, about technique of handling spectrums, about mathematics as a technics of symbolization and an art of learning (mathesis). In indexing these terms, through the contributions of various scholars working more or less closely with them, we hope to familiarize ourselves with domains of abstraction in which they can be understood architectonically—as instruments in the service of a professional (objective) kind of *Können* (the German term for something akin to *being more or less* [rather than bound by an ‘either/or’] *proficient in*, and *capable of*). An intellectual as well as embodied mastership in dealings with ‘communicational contingency’. We ask our contributors and the reader to join us on this adventure.

The book begins with a contribution by Roberto Bottazzi (Bartlett School of Architecture), *Cryptoarchitecture: Notes on Machine Learning and Design*, which looks at cryptography as a technics of opacity with regard to computational techniques in architecture that tend to uncritically embrace transparency. Bottazzi asks how a cryptoarchitecture, one that goes beyond the biologically inspired top-down or bottom-up logics of parametricism or cellular automata, could employ ciphers in order to constantly rewrite the whole of the architectural object. Such an approach would challenge the presumption that signs should have a stable relationship to meaning, or that syntax should be coupled with semantics.

Nikola Marinčić (ETH Zurich) presents the Self-Organizing Map (SOM) algorithm of Teuvo Kohonen as the key component in addressing communication as not merely ‘social’ but ‘natural’ in a more general sense. His chapter, *An Instrument for Communication: The Self-Organizing Model*, describes the workings of an instrument that would allow us to set into communication nearly any form of coded data, with neither needing to determine the nature of their relationships nor imposing a common language. Marinčić thereby offers a potential application of the SOM that differs from its common use as a clustering or analytical tool, to instead one that can partition spectra in ways that embrace contemporary mathematical conceptions of categorization (category theory) rather than classification (set theory).

In *Formal Creatures: Gilles Châtelet's Metaphors*, Ben Woodard (Leuphana University) examines how domains that would otherwise be seemingly unrelated can be bridged through metaphor. He invites us to see metaphor not as something merely hermeneutic or wedded to a Heideggerian *Dasein*, but rather as something material, that leaves traces. The metaphor can become energetic, conducting energies, encapsulating and transmitting forces. Their contents, however, are not always perfectly explicit but like Trojan horses, can carry something implicit as well.

Miro Roman's (ETH Zurich) contribution, *Voids, Brands, Characters and How to Deal with Lots*, takes the reader through a climatic, noisy mixture of millions of images scraped from the popular ArchDaily and Dezeen architecture and design blogs. Without interrogating their semantic content, he shows us both figuratively and algorithmically how he is able to navigate these 'visual mixtures,' introducing us to avatars and personas that are partially found, partially invented. Several of our contributors are experimenting with the SOM algorithm and Roman demonstrates how one may begin to project from the topological space to the geometrical in a playful and yet 'precisely crafted' manner.

Ambiguity and Information in the Context of "Natural Communication": An Obstacle-Oriented Galoisian Standpoint, by Elias Zafiris (University of Athens / University of Budapest) challenges commonsensical understandings of the simple and the complex. Rather than treat that which cannot easily be grasped as a problem to be solved, he invites us to see such a condition as an obstacle to be 'embraced', where *metaphora* can join in communication the domains whose connections cannot be exhaustively determined. Myths, narratives and mathematical theorems share more than one might think, Zafiris demonstrates, and he discusses these connections by examining the work of mathematician Galois and Hesiod's account of the birth of Aphrodite.

Elie Ayache (ITO 33) approaches the financial market as a world that is constantly written. In *From the Bit to the Pit: Poetics of the Financial Market*, he reminds us that the paradigm of communication based on the Markov chain relies on past instances in setting up probabilistic future states. In contrast, the financial market is not regressive, but forward-looking, based not on previously identified finite states but entities that emerge, carved out into discrete states, through market exchanges. By picking up on its implicit nature, Ayache provides an alternative view of money as a medium of contingency, one not lending to abstraction but rather to the fundamentally concrete.

In *The Art of Exaggeration*, Alexi Kukuljevic (University of Applied Arts, Vienna) reads closely Thomas Bernhard's 1986 novel, *Extinction*—a book whose main character seeks to write a novel capable of extinguishing its very subject. Picking up the book's references to Jacques Lacan, Kukuljevic examines the role of exaggeration in this endeavour of extinction, where a drive towards excess combines with

over and understatement, allowing for substitutions, for absent presences and an art of exaggeration that challenges the act itself of writing more so than that which is written. How is one to write when that which is written must, in fact, be extinguished?

In *Architecture, an Artificial Intelligence*, Kristian Faschingeder (TU, Vienna) examines the autonomy of architectural representation and the architectural artefact enabled by the emergence of geometry in antiquity. A project like Le Corbusier's Saint-Pierre in Firminy operates, he says, as a "cosmic instrument," independent of the architect who died before it was built. Not only the plans, but also the building, act as "intelligent artefacts." The ruler, compass or framing square, function "like an artificial memory or an automaton." The turn from the plan to the elevation, made possible by the principle of homothesis as dramatized through the story of Thales's measurement of the Egyptian pyramids, permits, Faschingeder observes, a mathematical ruse, that turns the hierarchical plan, the view from above, to the point of any observer. Architecture, he continues, becomes "quasi-invisible" in the plan, whereas the elevation allows it to become representational. The difference in the gestures of the plan and elevation share a reference point that relies on an authority that is both intellectual but also situated in space. The autonomy of the tools of representation is not, he argues, to be suppressed, but rather transgressed, less towards the economical, than towards exuberance and excess.

Giorgios Tsagdis (University of Westminster) in his contribution, *The Aural: Heidegger and Fundamental Oto-cheiro-logy II*, reflects upon the importance of the ear, of hearing, with regard to thinking time via a notion of trace that is to "complicate and transform the metaphysical logic of concealment." By relating the *epochality* of time to the *mediality* provided by the ear, such that a self can "witness itself as a record," Tsagdis is interested in a notion of the trace that reaches beyond signification. The trace becomes a sign "which might or might not signify," establishing a "non-exclusive relation between two possibilities." The ear thereby delineates a field of mediality, it is maintained in this article, from which "the author is altogether elided." It is here that a particular im-possibility of asking about the meaning of a 'we' resides—a 'we' that manifests itself as the subject of an epoch. Self (*auto*) and ear (*oto*) are always asked together, this article argues.

In *Reflections of an Imaginary Object on a Silurian Lake*, Gregg Lambert (Syracuse University) picks up the French philosopher and psychoanalyst Jacques Lacan's question of whether, in the absence of an observing human subject, the reflection of an object mirrored in a lake still exists. Lacan's answer is affirmative because to him, the reflection on the lake manifests "the phenomenon of consciousness itself," even if, as Lambert points out, such consciousness, the recording of images, can be conducted '*automatically*,' even without the presence of a human ego. At stake in this article is an interest in what could be called 'objective time'.

This is important for Lambert in examining Quentin Meillassoux's concept of the arche-fossil. The arche-fossil posits an ancestrality that would be decoupled from the human witnessing of its trace, raising questions regarding the philosophical complexity that pertains to thinking 'time itself' in relation to its 'givenness,' as it manifests in the form of 'data'.

Jorge Orozco (ETH Zurich) works with the plenty 'of what a community circulates in communication,' to articulate and demonstrate models of communication where "the third party" is reduced "to a 'grain of sand'." In *Pentecost—A Model of Communication for 21st Century Architecture* he writes about his work with programmatically sourcing information circulated around different online communities. With his application, *The Swiss Architects and Elliot Alderson* he provides an objective and poly-scalar space in which different concepts can "talk to each other" as if without intermediaries. Picking up on Michel Serres' account of the parasite, Orozco is not trying to translate between languages so as to make people understand each other. He is interested in how circuits of information facilitate recognizing, without externally referential mediation, the rare from the norm, information from data, order from disorder, negentropy from entropy. The communication which he is interested in modelling is a kind of talk about architecture that needs no mediation by an interpreter, and that orients on no authoritative articulation of its relevant or irrelevant content.

Jonathan Powers (Concordia University), in *Between Disegno & Design Thinking*, looks at how drawing and designing are parts of a technical, intellectual and experiential practice. If the Renaissance term *disegno* is often translated into English as *drawing*, the two, Powers highlights, have important differences. Design produces artefacts that "point beyond themselves," which suggests a kinship to writing. The design process is pushed forward by an intellectual and imaginative process, not only by technical constraints. If Renaissance artisans saw drawing by the hand as a way to practise drawing in the mind, then *disegno* is also a form of cognition and a mental capacity that can be cultivated. Looking at the work of contemporary drawing reference for architects, D. K. Ching, Powers remarks a tendency to emphasize the visual aspect of drawing, whereas *disegno* is "communicative and conjectural, not strictly 'visual thinking'." Drawings stand in for what could be or might never be seen, becoming in part a substitute for experience. This brings drawing close to prototyping, opening up *disegno* to a broader contemporary conception of "design thinking" that may help initiate a larger conversation around the intellectual and technical skills developed by the act of designing.

In *Crystal of Things*, Poltak Pandjaitan (ETH Zurich) works from state-of-the-art knowledge on crystallography and foregrounds the increasing relevance of crystals for contemporary communication and information technologies. Crystals as emergent growing structures

are interesting because, quite counter-intuitively perhaps, “they have specific properties that are otherwise not found as such in nature”: you will never find highly arranged crystal lattices evenly spread in all directions, he explains. Real crystals always have “some defects in the lattice or impurities in the atomic composition.” Of special interest to Pandjaitan are quasicrystals, which lack any pattern of symmetry. Their aperiodic structure “acts as a language and a code” he maintains, and they can only be described by a non-perspectival geometry of parallel projections: What he calls “the crystal code” is not apparent through central perspective, rather “it keeps the information under its noisy appearance.” Pandajaitan discusses an example of his own work as an architect where the crystal is approached as an algebraic language that “never makes a statement, but only translates and communicates”—a work that illustrates how to him, “communication is not the linkage of two fixed states or positions, but the interlinking of possibilities.”

“The only way to look at the sun is through a ‘lunar’ kind of translucency,” Riccardo Villa (TU, Vienna) maintains in his contribution entitled *Architecture of the Diaphanous*. In order to think the contemporary as ‘modern’ we need to reserve what could be called ‘a locus of moderation’: We need to keep space and time from being considered as coinciding with each other. We need to ‘bury’ modernity as a tradition, he suggests, by devising a conception of the diaphanous architectonically: The diaphanous counts to him as a ‘transparent medium’ through which it is possible to theorize what he calls ‘lunar translucency’. Villa’s contribution makes suggestions of how to reactivate, to this end, key notions of optics (reflection), harmonics (canon) and metrics (ruler). He describes as an interplay between these a notion of spectrality that comes to act as an impersonal kind of agency proper to Averroes’s notion of a material intellect. Along such lines, it is to be possible to invent an architecture in which the space of dwelling can be dispositioned such as to receive the reflection of its own picturesque (realistic) representation, while at the same time being capable of living up to the classical canons that inevitably inform such picturing.

“A clock is clearly a product of human synthesis; but could genetically modified bacteria be said to be a product of human synthesis?” Martyn Dade-Robertson (Newcastle University) asks in his article *The Designs of the Natural*. He picks up the current trend to see discourses on digital technology dominated, especially in architecture and design, by the discourses around synthetic biology. But the blurry distinction between things resulting from “nature’s own agencies,” and things designed entirely synthetically, is neither novel nor the most significant distinction for thinking about digital technology, he maintains. Rather, profiling the two against each other, in whichever attempt to keep them strictly apart, keeps us from focusing on what Dade-Robertson foregrounds as an interesting and under-theorized kind of ‘self-synthesizing’

that must count as natural as well as artificial: The scandalous thought is not so much that a modified bacteria might be considered the work of human synthesis, but rather that a clock may well be seen as being a result of “nature’s own agencies.” This article points attention to an unsuspected role of mimesis, the key practice at work in culture, present even in the most advanced biotechnological achievements of today’s science, where we are “not creating life, only mimicking it.”

Like many of the articles in this book, the contribution by Adam Nocek (Arizona State University) entitled *Mythic Noise: Architectures of Geological Communication* takes issue with the currently predominant positivist account of data. But it does so in a manner that maintains a certain proximity to the intellectual concerns within which positivism actually emerged, with Auguste Comte in the 19th century. It is in a retroactive fashion that Nocek folds back, what to Comte was progressing lines of science, upon themselves. Nocek exposes how a certain theory of transitive communication—communication that transmits messages and idealizes its own workings as transparent—is always already at work when we handle the kind of facticity that rests on an evidence given by data. He argues that such a paradigm is inappropriate for attending to geo-communication technology that attends to planetary systems at various different scales, as is at stake in contemporary earth science. He proposes a properly planetary point of view too, but one that is not totalizing, summing up, and committed to a global perspective. It is a view that recognizes that “the Earth has no face,” and figures out how to address it locally, how to “feel the world differently,” and “how to feel and think environments” with a precision—a finesse—that is not communicative; this, he proposes to call “a mytho-praxis of geomythology.”

“There is no longer any need for the moral imperative of D. Hilbert (‘we must know’) to affirm that ‘we will know’,” Philippe Morel (ENSA Paris-Malaquais) maintains in his article *Photonic Communication*. He exposes a certain anthropocentrism in the science of photonics, which to him counts as “the physical science of light (photon) generation, detection, and manipulation through emission, transmission, modulation, signal processing, switching, amplification, and detection/sensing.” Morel criticizes photonic science for taking too little distance from ‘the desire for meaning’. Such pre-concern keeps science from recognizing conceptual and formal horizons that are opening up through photonic technology and that deserve, according to Morel, to be traced beyond questions of predictability and determinism. These novel horizons ought to provide for the semiotic action of what he calls “photonic communication.” We can seek now a concrete apprehension of “the nature of the world as algorithmic,” he urges. Acknowledging this novel manner of conceiving nature (as algorithmic) would foreground that in communication, all we ever do is ‘interweaving algorithms’ that are, for themselves, deterministic (by definition). The photonic communication Morel advocates here calls for

a novel kind of storytelling, perhaps—a storytelling whose pre-concern is no longer narrative, but the copious scripting of a natural kind of realism.

In *Softness, Hardness: Contemplating Architectonic Circuits of Mediacy and Immediacy*, Michael R. Doyle (Laval University) reflects on the conceptions in architecture and urbanism of the ‘soft’ and the ‘hard’. Their opposition, he observes, “appears to mirror that of the sciences and humanities and seems to fuel debates on the primacy of experience over reason, immediacy over mediacy.” Thinking about Michel Serres’ conception of the mutual implication of the soft and the hard, he proposes a fourfold setup of softness and hardness, examining how ‘data’ and ‘information’ can be understood ‘massively’ as constituted by softness and hardness. He asks what this means for the architectural project today, where a transparentism and explicitness seem to haunt both the analytical paradigm as well as the techniques of projection. Who is the architect to be, he asks, if not the servant of a logical system, the administrator of a semantic ontology? If architecture is “an inventive act of placing into communication that which otherwise would not resonate,” then the gesture to explore is perhaps less one of building ontological systems than one of doping circuits of mediacy and immediacy.

The article by Gilles Dowek (ENS Paris-Saclay) collects excerpts from his book entitled *To Live, to Love, to Vote Online, and other Chronicles of the Digital*. In a surprising manner, Dowek speaks of a reality that is strangely familiar, yet novel, in which the digital challenges us, like the role of indexes in the legal constitution of our identities, or the thought patterns induced by writing customs. It has been largely forgotten today, over the habit of contemplating the relation between time and numbers as one of rational linearization and progressing serialization, that the numerical and the temporally cyclical have long already maintained interrelations. Dowek discusses key challenges raised by the digitalization through placing them in cyclical re-currencies in the fashion of colloquially told anecdotes drawn from a collectively shared cultural past. That the dominion of the numerical itself actually had earlier precedents before the rise of the computer is, perhaps, the healthy and sober ‘news’ of this kind of ‘digital journalism’ in which Dowek is so proficient, and gently informing.

“Concepts facilitate a kind of tourism,” on a planet of resonating concepts, “where arguments cast shadows.” With an interest in thinking about computability architectonically as well as architecture computationally, Selena Savić (FHNW, Basel) discusses the way local terminology informs distant domains of thinking. In *Travelling on Planets of Resonating Concepts*, she asks how might we identify and document the conditions for coming in and going out of discourses, move between disciplines, and establish this space as an *organized* space, and as a *public* space? She proposes to imagine a planet on which concepts, always coming from somewhere, resonate. A planet, in her thinking, refers to an architectonic articulation of abundant information on directionality

of words, and also to a manner of thinking about architecture computationally. Picking up on Serres' discussion on message-bearing, she articulates a proposal for a 'tourist agency' on the planet of concepts that is able to suggest itineraries for different adventures, based on self-organized vectors of meaning and indexes of similarity. This is a way to be interested in concepts, and stay friendly to different discourses, without taking part in one particular community. Concepts always come from somewhere, her article appreciates, like the wind.

In *An Essay on the Glossomatic Process of Communicating Communications and other Words*, Jessica Foley (Maynooth University) presents a report from a conversation with "labyrinths and statues and architectural philosophers" at the ATTP Vienna. She takes the (plasticity of) language of telecommunications engineering as a point of departure, and works with words as choreographic objects, teasing meaning out of technical language. These glossomatic processes push and pull against the constraints of separating intellectual endeavours onto the scientific and humanistic, the creative and analytical. With her conversational experiments, including the one that she reports about, Foley introduces a notion of potentiality to be more precise with words, to create patterns of meaning.

Matt Cohen (University of Nebraska-Lincoln) in his essay *When Others Passing by Behold: Media Studies and Archives across Cultures* envisions a way of doing digital archives informed by non-textual, Indigenous archival practices. Preservation of knowledge would be a responsibility and ability of everyone *passing by*. If a digital archive is publicly available, then the sociality of the archive cannot be subsumed to the authority of right of access or contribution. Cohen puts the democracy of access in Western media against the sociality, repetition and responsibility of his particular case and discusses the Wampanoag memory media in order to articulate an electronic archive practice that would combine the benefits of the two.

Yasmine Abbas (Pennsylvania State University) talks about flows, mixing intentionally the fluidity of matter and information. *Fluid Spaces, Enchanted Forests* are spaces of contemporary magic, brought about by contemporary telecommunications. Building such spaces that accommodate magical moments requires spatial trickstery. She proposes designing for 'wayfounding': orienting and anchoring ourselves in the world by means of chance encounters, and by mastering techniques for composing climatic architecture with data, guiding the fluid arrangement of forms. Blurring the distinction between different materialities, Abbas puts focus on atmosphere, on forming conditions for communication and changing the properties of the milieu.

Dario Negueruela del Castillo (EPFL) approaches communication and architecture from an interest in the way the spatial dimension influences communicative process, through which sense-making

is enacted in the city. In the essay *Space as Collective Affective Sense-Making Capacity*, he demonstrates how social collective spatial meaning is built on the substrate of socio-spatial practices. He proposes an understanding of space as a capacity, a potential enacted through our actions, but which influences our actions at the same time. Interested in affective enactment of meaning, Negueruela asserts that space is the resulting materiality of our co-presence, coexistence in it, while coincidentally being at the origin of our emotive and affective processes.

As if directing our minds to remain open, Anne-Francoise Schmid (MINES ParisTech) documents in her article entitled *A Few Protocol Sentences on: Non-Synthesis, the Voluminous Form of Ideas, Temporalities of Creation, Hypercompatibility* a veritable wealth of ideas regarding her quest for *generic* epistemologies. Schmid speaks of science as being silenced when without disciplines; she speaks of “objects produced by the present” and of “ideas as being in need of hospitality and accommodation by a notion of time” that is to be thought of as “thick, energetic and tempered”—a time for which memory appears to be “a dynamic hole”; it is as if anamnesis turns into something that needs to be facilitated by a kind of stubbornness that “can only be ‘empirical,’” at least if it is to conduct a novel sense of intimacy that “is collective.” So (or also quite differently), the protocol sentences by Schmid invite us, each individually, to encounter and weave a tangle of threads that can, so she promises, lead us to a world depicted by a kind of writing that could be called ‘generic’.

In her article *The Digital, a Continent? Anarchic Citizenship within the Object-Space of Cunning Reason*, Vera Bühlmann (TU Vienna) explores how a particularly “active and restless interplay of ‘reasoning’” could be thought of as facilitating a civic domain of ‘common places’. We need to alienate the digital from its Cartesian paradigm of a stasis that is to rest in a coordinated point of origin, she maintains, and instead recognize the digital as a versatile and logarithmic, projective and multi-scalar domain, where formality must count as mathematical *and* rhetorical, and hence as always inevitably *cosmetic* (*encrypted and contingent*), rather than ‘pure’, ‘simple’ or ‘immediate’. Cunning, like reasoning, works with clocked happenings, Bühlmann maintains; both involve objective and non-territorial ‘time pieces’ (reasoning and cunning are ultimately *gnomonic*) that not only quantify, measure and articulate, but also qualify, characterize and temper the ‘chronicles’ they render decipherable. The Digital as a Continent is imagined as a civic domain that is real and yet entirely ‘unlikely’, one to which no one is, originally, native. It is the territory of a reason that, counterintuitively, does not turn exclusive and scarce from being the object of rationalization, but rather grows the more it is being reasoned—in both its extent of territoriality, as well as its capacity. It is a cornucopian domain of copiousness and finesse, where perfection aims at reasoning and rationalizing nature—not in order to dominate it, but *in order to let it be*.