

Architects, never eat your maccheroni without a proper sauce!

A macaronic meditation on the anti-Cartesian nature of architectural imagination

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It is widespread knowledge that Monsieur Descartes did not accept as true what his senses communicated to his mind since he had a total mistrust in sensory information. Nevertheless, when sitting at his dinner table, being a good Frenchman, he had to make up his mind about his cook's gastronomic efforts. During his repast, Monsieur Descartes had to put aside his philosophical thinking and consider the Trencher Bread, the Brout d'Alemaigne, the duck pâté and the salad he was eating through a sensorial assessment resulting from the savoring of the meal carefully prepared for him. Monsieur Descartes knew that a good chef cooks food anticipating the multiple sensorial effects and causes of the meal by catering to a combination of different sensory phenomena and evaluations. Listening to the sizzling and cracking of fats, paying attention to the fizzing, murmuring, and gurgling of cold and hot liquids and monitoring the change in color shade during browning, glazing and clarifying cooks make decisions conjecturing the final taste and effect of their work.¹

On a daily basis, Monsieur Descartes, was facing a dilemma; the products of the process of cooking, a process that could be easily recognized as a rational activity as described in recipes and cookbooks, were always subjected to the irrational judgments of a mingling of sensory activities taking place before, during, and after each meal. His solution to this contradiction was the creation of a cloven world: on the one hand, there is the trustworthy mental reality of *res cogitans* and on the other hand the dreamlike physical reality of *res extensa*. *Res cogitans* cannot be eaten, but *res extensa* can be discerningly prepared, appreciated, and assimilated. Consequently, Monsieur Descartes, a very intelligent individual indeed, hired and fired his chef of cuisine on the finding generated by an appreciation and estimation of *res extensa* as embodied in the dish presented on the table rather than on the arid logic of the *res cogitans* as figure out in cooking formulas. He knew the two domains intertwined on a laid table and his cautious philosophy could not be practiced at repast time.

The world of senses begins in the periphery of our

bodies and moves to inner and higher levels of perception and from there, in analogical manner, senses rule the way we wittily act in our world. People working in Artificial Intelligence and “natural stupidity” are aware of this weird and wonderful contradiction of the Cartesian cloven world. They know that is easier to develop a computer processing system that can easily substitute for engineers, lawyers, and physicians, but it is an impossible task, plainly a Sisyphean effort, to develop systems able to substitute for draftspersons, cooks, gardeners, and architects. In other words, since the act of transformation of drawing-stuff into drawings mirrors the transformation of architectural-stuff into architecture and both are analogous to the transformation of foodstuff into food, they can be considered as events based on the non-rational sensorial procedures ruling the human orders of *res extensa*. The ruling force is that of imagination. Engineers, layers and physician are logical individuals whereas draftspersons, gardeners and architects practice imagination. Since the secondary qualities of colors, sounds, temperatures, pressures, spaces-perception, cultural and psychological times, and so forth, are connected with one another in manifold ways, there are associated dispositions of mind, feelings, and volitions that cannot be merely computed. The concept of cognition is associated primarily with “rational” forms of mental activity: reasoning, thinking, conscious manipulation of knowledge, deduction, and computation. Traditional consciousness is divided into three principal functions: cognition, conation and affection. Conation and affection are mental processes associated, respectively, with volition (motivation, purposes) and emotion (moving subjective experiences). The first formal or computer models of cognitive processes were indeed restricted to typically deductive or computational ways of manipulating information, and it is still unclear how to model emotional phenomena with a computer. Nevertheless, emotion and motivation are no longer considered to be outside the scope of cognitive science and they are considered a necessary non-rational presence moving from a modeling based on explicit, controlled, neoclassical deterministic processes of deduction and computation toward a modeling based on implicit,

spontaneous, classical non-deterministic processes of intuition, association and moving experiences.²

Imagination, fantasy, vision, memory, perception, representation are all part of a cognitive cluster and the semantics are so entangled that in comparison the Gordian knot is a simple love knot. The solution to this cognitive tangled cluster is to cut through by giving an ambiguous but operational definition of imagination. Configured as a double-sided coin, imagination, on the one side, is the human faculty that keeps together what has been collected by different and discrete perception. It has the gist of the Aristotelian *koine* aesthesis, also known as *sensus communis*, an internal sense by which the complex configuration of architectural and culinary products makes sense. The *sensus communis* (not our “common sense”) is a combinatory perception, an internal sense coordinating the data perceived by the external senses. It is the clinical eye of pre-statistical medicine able to recognize the always-changing configurations of syndromes. A case of *koine* aesthesis not functioning, because of improperly fed and instructed senses, was illustrated when a group of my students visiting Alberti’s Sant Andrea in Mantua thought that the recently restored Gothic campanile on the left side of the cathedral was new construction because of the pungent smell of the quick lime mortar used for re-pointing the bricks. For them, something smelling new could not be old although the guise was Gothic and the regularity of the brick-courses deformed by the aging process.

The other side of imagination is the virtue by which the sensory images of buildings we have seen and food we have tasted can be transmuted into new buildings and dishes. Imagination cannot only reconstruct something absent, but also can make a re-elaboration of it. We can imagine a man riding a horse as well as a centaur. It is the power by which I can remember grandmother’s roasted chicken but it is also the virtue by which the chef Dunan could serve Bonaparte a *poulet a la Marengo* to celebrate the strategic victory during the Second Campaign in Italy, on June 14 1800.³ Sixty-two, years later, in a lecture, delivered at the School of Military Engineering at Chatham, James Fergusson explained that it was necessary to acquire

the knowledge of the true principle of architecture to study the work of the great chefs of cuisine rather than the work of Pugin and Vitruvius since the process by which a hut to shelter image is refined into a temple or a meeting house into a cathedral is the same by which “a boiled neck of mutton can evolve into cotolettes a l’imperiale and a grilled fowl into poulet a la Marengo.”⁴ This side of imagination works within alchemic modus operandi; Paracelsus, a mercurial alchemist who located the origin of iatrochemistry in quotidian cooking, coined the German word *einbildungskraft*, literally the “craft of image-building,” to translate the Latin *imaginatio*. Imagination is the crafty power of the mind to reproduce the appearances that are ordered in intuition, thereby making latent the relationship of representations under the concepts of understanding. That is, imagination is the indispensable hinge between intuition and understanding and therefore a necessary component of cognitive knowledge. The synthetic, synoptic character of knowledge could not be realized were it not for the reproduction of images, or representations, accomplished by the imagination, and in his alchemic dictionary Martin Roland defines imagination as “*astrum in homine*”⁵

The uneasy cloven arrangement governing the correlation between *res cogitans* and *res extensa* was the subject of recurring debates between Professore Carlo Scarpa and the court of his assistants at a table of the Trattoria del Gaffaro.⁶ This was a restaurant not far away from the IUAV (istituto universitario architettura venezia) at the Tolentini in Venice, where, during the days devoted to the review of student work for Scarpa’s design courses, the Professore and his assistants enjoyed their lunch.⁷ There was, during the meal, the usual discussion delving into the problems of a view of architecture as a cloven world bounded by design and construction. This was generated by some comment or recollection caused by the tasting or the making of the dish selected for that day for everybody by the Professore. The ensuing move was always a reconstruction of an aphorism coined by the French architect Auguste Perret.⁸ Nobody could ever remember it exactly; it was always necessary to launch a laborious reconstruction of the original lines of the aphorism

by reminiscence and reasoning. The rebuilding of the phrase turned up something like: “You can become an engineer, but you are born architect.” The main step in the reconstruction was the recalling that Perret’s aphorism was an acknowledged paraphrase of another well-known adage coined by Anthelme Brillat-Savarin, a French politician. Brillat-Savarin’s adage states: “You can become a cook but you are born a *rostissier*” (a chef specialized in roasting meat) and it was published in his *Meditations on Transcendental Gastronomy*, a collection of gastronomical ruminations written at the end of the first quarter of the 19th century.⁹ Having reached the restatement of the two aphorisms, Scarpa’s discussion with his assistants lingered in a distillation of the idea embodied in the aphorisms. The wrapping up was a condemning of the reliance of cook-engineers on formulas and recipes belonging to the dry, disciplined realm of the *res cogitans*. In contrast, *rostissier*-architects were eulogized because their design-way of thinking based on the sensuous surrounding of crucial procedures for recognizing when a piece of meat is properly cooked or a building has been properly conceived, a process that was becoming altogether too rare.

The connection between *res cogitans* and *res extensa* is given through the mysterious dominion of memory. The realities of materials and mind interact through emotional traces that generate sensual images. Scarpa and his cohort’s discussion in concert with the related memory exercises condemn the foundations of an artificially transcendental and an impossible unbiased objectivity within a construction of a continual teleological pursuit for subjectivity. They have summoned by their dealing with the *res extensa* unto themselves the entire spectrum of personal experiences of the empirical self based on humor, including the comic ridiculousness derived from the bathetic collision of high and low registers. During dessert, a conclusion was reached by stating that architects who cannot be aware of the sensual and transcendental relationship between gastronomic provisions and gourmet food consumption cannot value and be aware of the quintessential sensual and rational correlations which characterize the undisciplined discipline of architecture. Non-gourmet architects would never be sympathetic

to the epicurean and non-Cartesian connection existing between the arts of living and eating well with the arts of cooking and building well. Destabilizing the false sublimity of objective finitude within the framework of a continual teleological quest for subjective infinity, Scarpa and assistants were natural macaronic thinkers jovially eating maccheroni saltati in padella and mercifully utilizing the tripartite nature of the macaronic art to develop a palatable theory of architecture. They were practicing a labor of macaronic ostensive imagination implying what they meant by “x” by saying “x” when pointing to “n” ingredients, and “not x” when pointing to “m” ingredients.¹⁰

Presupposing a simultaneous and ostensive comprehension of three ingredients: Virgilian Latin, Italian cultivated literature of the fourteenth and fifteenth centuries, and Lower-Po Valley dialect of everyday life, macaronic ostention was and is an intellectual practice creating an extraordinary way of thinking.¹¹ Scarpa and his assistants playing between Italian, Venetian dialect and architectural theory were going after it not only as a technique for a pleasant conversation, but also as a way of reflecting on the makeup of architecture since the macaronic thinkers’ task is a vigilant identification and extirpation of fraud into the bowels of thought. Macaronic thinking is based on the details and those minimal elements, apparently accidental and negligible, become the node of an infinite system of relations, a pretest for divagating between the innumerable possibilities offered from the world of the knowledge. The sagacity of macaronic thinking is based on the knowledge that advanced or inferior levels do not exist, but that there are things to say, traces of a way of life playing a positively imaginative game also when things are merely pedestrian and ordinary rather than particular and outstanding. The interference between ‘high’ and ‘low’ gives voice to a culture, is neither atavistic nor stops to feel a determined inferiority from sectarian and social models. A way that tries transgression, the appalling concept, the upside-down notion or the laugh to catch a glimpse, in transparency, of the “others.” This too much human pulsing is necessary to fight architectural curricula that do not bother to teach any basis for distinguishing between significant content and personal

preference and casually adopts vague collective senses of imagination without inquiring into whether they can possibly have any meaning in fact or practice.

To further understand the nature of macaronic thinking in architecture, a crucial corollary to append to the fundamental analogy between cooking and designing elaborated by Scarpa and his entourage is that, in traveling to see architecture in other places outside of their own region, architects cannot visit buildings without tasting local dishes and wines. If Kenneth Frampton is correct; in advocating critical regionalism in architecture, a supreme circumstance for architects to develop such intelligence is to understand fully the relationship between regional foods and regional buildings.¹² Eating a hamburger in front of Leon Battista Alberti’s Sant Andrea in Mantua precludes the growth of this quintessential intelligence. They are experiencing the wrong synesthesia¹³. In front of such an architecturally rich edifice, architects or future architects who would like to increase their appreciation of the power of *res extensa* in architecture should have a dish of homemade tagliatelle al sugo.¹⁴ Having had such a delectable dish, only then can they fully appreciate the *concinnitas* controlling Alberti’s masterpiece, because now they finally have their “eyes in the belly,” the proper eyes to understand the makeup of *res extensa*.¹⁵

The notion of *concinnitas* is one of the most powerful concepts elaborated by Alberti in his treatise on the art of cooking ... sorry ... building. *Concinnitas* is a powerful tool that architects have for bringing the sensual power of the *res extensa* within the *re aedificatoria*. *Concinnitas* usually has been limited to the realm of *res cogitans*, in particular by some scholars—they cannot help it; euphemistically speaking, they probably live in a country where the local cuisine is not very savory. These researchers have not yet discovered that Alberti, in transferring the concept of *concinnitas* to architecture, has carried on with it the ontological essence of its Latin etymological origin. *Concinnitas* is a quality embodied in the harmony of taste that results in a properly cooked dish in which the different components are carefully calibrated.¹⁶ In his treatise, in defying the power of this architectural quality, Alberti

states that *concinnitas* is “*vim et quasi succum*” (“energy and roughly a sauce”). *Concinnitas* is the sauce in the *tagliatelle al sugo*. Plain cooked pasta is in itself a meaningless gluey construct; it always needs a good sauce (*succum*) to put on the force necessary to enter the realm of the sensuous where architecture and cuisine are at their best.

Fighting what he considered a peregrine idea—the non-separation between intelligible and imaginable—in the *Meditationes de prima philosophia*, Monsieur Descartes states “*differentia inter imaginationem et intellectum clare ostendit*” (“the difference between imagination and intellect is clearly demonstrable”). This demonstration dries up Alberti’s good sauce (*succum*): at the level of sensual perception there are no major difference between a Chiliagon and Myriagon, but at the intellectual level the difference between 1000 and 10000 sides is essential but this intelligible notion really does not help to understand and produce a better architecture since architecture must be measured with both a degree of mathematical precision and with an appreciation of the innate dimensional accuracy of its material form. Stone, metal and brick all possess different capacities to retain a finished dimension, every constructive part of building has its order and measure: masonry, in decimeters; wood carpentry, in centimeters; metal works, in millimeters. In cooking and building every part is exactly approximate.¹⁷ When buildings are measured without such an appreciation of the materiality of architecture the search for *concinnitas* is invariably meaningless. *Concinnitas* is explicitly precise but played in the joints and the density of materials, as my grandmother’s making of her tomato sauce played with the tomato season changes and the other ingredients to make not the same sauce every time but always the best condiment for my *maccheroni*. *Concinnitas* a regulating, unifying category, reconciling opposing or varying forms is based on a notion of ‘aptness for, or adaptation to a purpose’ from *concinnus*, “well put together.”

Colors, sounds, flavors are the essence of a knowledge that cannot distinguish between intelligible

and imaginable. When in Venice, a traveling architect should not fail to visit Scarpa’s Olivetti Store, in Saint Mark’s Square, and he or she should not miss the occasion of tasting the *riso col nero de sepa* (a rice dish in which the sauce is prepared with squid ink) resulting from the combination of *sepe in tecia* (*sauté squids*) with *risotto alla parmigiana*.¹⁸ The critical synesthetic imagination, the magic beyond the resolution of adding the squid ink to the rice, is the same by which Scarpa choose to mix the classical Venetian terrazzo floor of the shop with little stones cast in a mortar paste with monochromatic murrine.¹⁹ Considered by many an imitation mosaic, a phenomenon due to the decline of correct mosaic technique, the Venetian terrazzo is flooring with geometrical patterns or figurative elements created by free and casual composition of marble chips. The ancestors of Venetian terrazzo are the floors of water storages (cisterns, aqueducts); a high-performance finishing obtained by blending crushed and sieved ceramic with lime. The Romans called it *opus signinum*, and when small marble pieces were strewn and dipped into the lime base floor it was called *opus segmentatum*. It was called *opus sectile* when colored marbles were juxtaposed, and the underlying layer could hardly be seen. It was called *opus tasselatum* when the pieces of marble were squares. According to Pliny (*Natural History*, Book 35, 165), this technology was recognized as “one of the most spectacular inventions of mankind.” Terrazzo was laid not only on the ground floor, but also on the upper floors, over beams and planks and the lime base that gave the floor great flexibility and special “warmth.” The lime took a long time to dry, even five or six months, during which the floor had to be recurrently beaten to dip marble chips evenly and to expel the water from the underlying bed. To avoid cracks, terrazzo layers inserted brass blades in the right spots of the floor so that they corresponded to fracture points.²⁰ In Villa Ottolenghi, Scarpa takes advantage of this knowledge to plan the cracks as decoration of the floor.

Culinary and architectural materialities are not (and were never) sub-disciplines. Architects’ and cooks’ critical concerns aim at the *concinnitas* of matter(s), i.e., they focus on material substances or material beings and their

transformations and transubstantiations. In cooking and designing, vital differences exist between what food and buildings are in themselves (their substance) and the perceptible qualities or characteristics (their accidents). The food and building substances underlie all their visible, tangible, measurable qualities. However, these substances are in themselves not evident, materially quantifiable, or measurable because they have no extension in space. The appearances of the cuisine and architecture include all those outward characteristics that can be perceived by the senses of sight, taste, touch, smell and hearing. They are referred to as "accidents," not to be confused with the common meaning of that word. For Aristotle things naturally fall into ten categories. They are Substance, and Nine Accidents: Quantity, Quality, Relation, Action, Passion, Time, Place, Disposition (the arrangement of parts), and Habituation. Architects and cooks through devising construction and cookery make something out of unrelated ingredients. In other words, they are capable of converting what already exists into something that it was not before. They perform a metabolic transubstantiation: foodstuffs and building materials are metabolized into the substances of cuisine and architecture and the "accidents" of the materials and stuff of construction and cooking transmogrify by formal and sensuous blends.²¹ On the one hand, three basic types of accidental rules control these transmogrifications. They are alteration (change with respect to quality), augmentation and diminution (change with respect to quantity), and motion (change with respect to place). All changes with respect to other categories can be traced back to these three rules. On the other hand, four causes—Material, Formal, Efficient, and Final—direct the transmutations. The Material Cause determines the form of the substance incorporated in the building or in the dish, i.e., clay or semolina dough determines the form of a brick building or a pasta dish. The Formal Cause, according to which the building and dish are made, is the perceived idea generated by the cook and the architect as intrinsic, determining cause, embodied in the matter. The Efficient Causes are the agents, i.e., the builders or the chief staff. The Final Cause is that for which the building and dish are made: the desire to

satisfy a patron, to become famous and rich or well fed. Architects and cooks' critical concerns in matter(s), material substances or material beings and their transformations and transubstantiations can be established through a synesthetic view of the process. That is, the stimulation of one sensory modality reliably causes a perception in one or more different senses. Its phenomenology makes clear that synesthesia is not an idea, but an experience. It is a material experience taking place in the brain that clearly distinguishes it from poetic devices, shaded metaphors, literary tropes, sounds symbolism, and deliberate artistic contrivances that sometimes employ the name "synesthesia" to describe their multisensory joining. Nevertheless, commonplace examples of synesthetic metaphors such as "loud colors", "dark sounds", "sweet smells", and "soft voice" employed for descriptions of complex experiences probably antedates formal manipulation of language and may have influenced language development.

Synesthesia is a medical term but it is "abnormal" only in being statistically rare. It is a normal brain process revealed to consciousness in a minority of individuals.²² Of course, there are forms of synesthesia that are abnormally obsessive and neurotic, but these are different kinds of synesthesia. They carry the same difference between architectural and culinary imagination and architectural and culinary hallucinations or between poetic metonymies and metaphors and aporias.²³ It is not an anomaly of the mind, but a norm of human psychics engaging in perception, imagination, and creativity. As Bulat Galejev points out, synaesthesia ought not to be seen merely as a psychic abnormality, but as a powerful variety of non-verbal thinking.²⁴ Synesthesia is projected and perceived externally in peri-personal space, the limb-axis space immediately surrounding the body— never at a long distance as in the spatial teloreception of vision or audition — making possible a judgment based on a merging of res extensa and cogitans.

In Joris-Karl (Charles-Marie-Georges) Huysmans' *A Rebours* (Against The Grain), one of the characters identifies musical instruments as different drinks, creating an orchestra of liqueurs.²⁵

Indeed, each liquor corresponded in taste, he fancied,

with the sound of a particular instrument. Dry curaçao, for example, resembled the clarinet in its shrill, velvety tone; kümmel was like the oboe, whose timbre is sonorous and nasal; crème de menthe and anisette were like the flute, sweet and poignant, whining and soft. Then to complete the orchestra come kirsch, blowing a wild trumpet blast; gin and whisky, deafening the palate with their harsh eruptions of cornets and trombones; liqueur brandy, blaring with the overwhelming crash of tubas, while the thundering of cymbals and the big drum, beaten hard, evoked the rakis of Chios and the mastics.²⁶

Synesthesia associates the delight of *res extensa* with the judgment of the *res cogitans* in a new emotive perception by crossing the senses. The color of a number is a much more precise perception than the digit in a computation. The shape of a taste tells if a victual is properly done. This perception of the involuntary joining of the information received by one sense to a perception in another sense is the essence of the gourmet thinking that ought to precede cooking or constructing a building. This additional perception is real, often outside the body, instead of being projected by the mind's eye. A synesthetic individual studied by Richard E. Cytowic, for example, is a college teacher who, on hearing music, also see objects – falling gold balls, shooting lines, metallic waves like oscilloscope tracings – that float on a “screen” six inches from her nose. Her favorite music, she explains: “makes the lines move upward.”²⁷ Intersensory association of synesthesia is emotional valuing that there are things you hear, things you see, and things you touch, but are ineffable and beyond words. Nevertheless, the experiences are accompanied by a sense of certitude (the “this is it” feeling) and a conviction that what is perceived is actual and valid. It is a noetic experience meaning knowledge that is experienced directly, an illumination associated with a feeling of certitude.

Inter-sensory association is the base of the arts of cooking and eating described by Marinetti in his manifesto about futurist cuisine. He advocates synesthetic banquets based on ‘sculpted meals’: flavor enhanced, colorfully scented, and tactile food sculptures that will form perfect simultaneous meals. He calls for the abo-

lition of the knife and fork for eating since they can give misleading prelabial tactile pleasure and to enhance tasting he advises spraying perfumes from the table forcing the direction with the help of electric fans.²⁸ The searched effect is a world in which the senses fuse together; where sounds are seen and words and aromas have color; where the number eleven can be smelt, and gold color has sweet flavor. Futurists promoted a light responsive body, and acutely sensitive to synesthetic experience.²⁹ “White and Black” is a recipe elaborated by the futurist poet Farfa (Vittorio Osvaldo Tommasini):

A one-man-show on the internal walls of the Stomach consisting of free-form arabesques of whipped cream sprinkled with lime-tree charcoal: contra the blackest indigestion and pro the whitest teeth.

Imagining the stomach and the mouth as metabolic surfaces to draw on, not vessels to fill, is the aspiration of Futuristic cuisine. The drawing surface is the essential synesthetic experience of the architectural cooking up of buildings. Investigating the mapping of a structure, originally composed in one medium, onto another structure in another medium is the fundamental undertaking of architectural drawings. To create, view, or interpret an architectural drawing is not usually acknowledged to involve expressions associated with other senses; vision is deemed the exclusive sense necessary and sufficient. Nevertheless architects use drawings to figure out dwellings that are bundles of intertwined sensory perceptions, which determine human thinking.

Architects produce drawings concerned first with the exploring of specific physical events through drawing that create and explore synesthetically all the sensory necessities of a dwelling. Drawings are infused with an “invisible tincture” used by architects to link and to elaborate thoughtful architectural morsels. On the space of paper, architects create rooms for thoughts; meanwhile they plan for order and disorder. Through drafting, architects are able to create the visualization of raw thoughts. They construct or deconstruct through a variety of formal, conceptual, and physical ac-

tions on paper anticipating the yet to come conceptual and physical events in the buildings in a manner analogous to the one by which cooks relate the process taking place in a pot or in the oven with the upcoming experience in the mouth.

To complete this discussion of the cross-modal perceptions and thinking necessary to understand and conceive architecture as reflected in its mirror of gourmet cuisine, I have to return to the Trattoria dell Gaffaro and to Scarpa's teaching and practicing of architecture. The first thing that the architectural students—generally third and fourth year—taking his design studio learned from the grapevine of the school was that a major change had to take place in their design habits. They were not required to present their work traced in china ink on carta da lucido (heavy translucent vellum). That was the favored method elaborated by the architects of Italian rationalism and a *conditio sine qua non* in the profession at that time when the reproductions of drawings were by cyanotype duplication, a blueprint procedure achieving pseudo-professional efficiency. The unspoken requirement of Scarpa's studio was that the drawings were to be traced on Bristol boards or similar material using a range of colored pencils and pens. The results were too often drawings with light blue skies, red bricks, light green glass-panes and gray concrete, black *poché* and terracotta parterre. Unfailingly, those drawings dissatisfied and frustrated Scarpa who, at the Gaffaro lunch, urged his assistants to explain to students that the colors used in the drawings were not to suit a process of materials identification or to give pseudo-effects of tridimensionality. In effect, to make colors transparent to assigned meanings, they had to present architectural ideas as tainted visibility with non-visible phenomena. For Scarpa, drawings were a never-ending alternation between representable and non-representable. Consequently, the drawn surface had to be a glimmering receptacle of architectural desire, instead of being precipitated in a transparency by which the drafted representations were not through or within the drawings but merely frozen mirrors denying any reflection of architectural perceptions.

One of Scarpa's assistants at the Gaffaro table, Sergio Los, tried to explain Scarpa's architectural design

approach by weaving it within the Procrustean loom of Konrad Fiedler's theory of pure visibility.³⁰ However, a fecund account of Scarpa's request for factual lines and non-factual coloring is that architects, in tracing colored lines on paper, are not giving transparent images but synesthetic notations. Carlo Scarpa's drawings are the best instance of an image-gourmand carrying out of drafting since they are always the result of a contraposition of sweet and sour lines, fast and slow-cooked color surfaces, ranging from design drawing done for dining-in to construction drawing for carrying-out.

If I want to see things, I do not trust anything else. I put them in front of me, here on paper, to be able to see them. I want to see, and for this I draw. I can see an image only if I draw it.³¹

In drafting, the elicited sensations perceived by architects are emotional and noetic, and the result is achieved when the lines rest in an emotional balance. As long as the searched for result is not achieved, the drawing cannot rest; lines and colors are changed until the intended synesthetic perception is achieved. Its reality and vividness are what make architectural synesthesia so motivating in its violation of conventional perception of what a building looks like. Architectural drawings then become metaphors, not in the literal meaning, but factually they are a *metaphorein*, a carry over, a moving of sensory information from one modality to another modality, from one emotion to another emotion. Conventionally rendered drawings—non-synesthetic drafting—are merely stylistic deceptions. These drawings are analogous to the phony cakes on bakery shelves or the plastic fish and rice displayed in the windows of many sushi bars. They look good to a non-synesthetic eye, but there is no way for us to know if they project any valid quality of the real ones since the rules of cutting, baking, or cooking are not transubstantiated in the casting and coloring of plastic. In the end, they waste everyone's resources, as, in time, they should be replaced by procedural representations conveying the past, dealing with the present and casting the future.

In architectural and culinary imagination there no dead ends, but rather a continuous set of connections,

and if an anticipated or perceived percept gets in the connective system, it flows through different sensorial paths and the crossing over generates interferences and interfacings which make the devising of new buildings and new dishes possible by using parallel sensorial realms. A careful investigation of the relationship between of the art of cooking well and the art of eating well is the Ariadne's clue that can help architects in their negotiating the labyrinth of architecture. The potential for escaping the labyrinth is established by the interweaving of the art of living well with the art of building well and depends on setting a macaronic correlation of the delight of *res extensa* and the judgment of the *res cogitans*. The ostention between cuisine and architecture can be additionally fostered by recognizing that the relation between natural elements and artifacts in the transformation of foodstuffs into gourmet food is a mirror of the process of the transubstantiation of construction material into architecture. In Italian, at the end of a set of architectural specifications there is always a sentence stating that the specified artifact ought to be put together "a regola d'arte" ("following the art rule"). To appraise the excellent quality of a great dish, gastronomes recognize that it has been prepared "a regola d'arte." In cuisine, it is reasonable to suppose that the art comes with the culture and the personal ability of the chef, but the problem is to define what makes the rule. An easy answer is the suggestions of quantities and procedures given in the prescribing recipe. They are unquestionably correct but deficient, because the chef, author of the recipe, does not describe the phenomenological and mysterious alchemies at the base of the transmutation of foodstuffs into food. The synesthetic experience of eating and cooking cannot be put merely on a piece of paper, but it results from and becomes a demonstration. Recipes, like conventional construction drawings, describe merely a succession of dependable steps of controlled actions of assembly that do not let us know the mental and physical nature of the corporeal deed and the signs necessary to interpret and produce a particular virtual or a specific architectural presence. In culinary ability, every corporeal deed and sign possess intrinsic justification by bringing about determined

chemical and physical transmutations obeying precise hygienic and dietetic norms for alimentation, but they also their own inner sense. This signification is supported by an exquisite gastronomical scope, ranging from the strong correlation among the selected ingredients, the adoption of an established technique of cooking, the employment of an exacting aromatic combination, and the final visual effect on the plate. The culinary cognitions that a chef possesses constitute the foundation without which cuisine results are inexplicable and based on fortuitous advances originating in accidental action. From the moment the need for nourishment has been imposed on us, we have boiled, baked, sautéed, roasted, grilled, fried, seasoned, salted, and spiced foodstuffs in the best of ways, with prudence, sagacity, measure and delight. Following the ground rules of circumstance and culinary curiosity, cuisine chefs recognize that it does not matter how small a result in food tectonics they have achieved if it is one more step toward the essential appetitive goal to achieve and preserve our spiritual and bodily well-being through a happy repast.³² Rediscovering the presence and the edifying role of tectonics in everyday life, architects can bring into being civically conceived and built edifices for a *vita beata* (a blissful life). In architecture, a design a *regola d'arte* grows out of the same combination of special abilities and procedural perceptions aiming toward the essential goal for the maximum appeal for a dwelling, i.e. fostering a *vita beata*. *Vita beata* results from an architectural landscape designed for a "happy existence."

Complicated as it is, to critically disentangle the purposes of architecture and cooking is a clear demonstration of the efficacy and elegance of human conceiving since we very easily understand these different functions when we experience them in context. In dealing with the *res cogitans*, we purely think, but in our sensual transacting with the *res extensa* we guess, suppose, surmise, assume, and speculate; that is, we form an opinion based on inconclusive evidence and suggesting a subtle but important difference in the relationship of evidence to opinion, which is a fast boil of ideas. To deal with the *res extensa*, in a slow simmer, we contemplate, ruminant, reflect, and ponder. These

are forms of slow and deep cerebration, yet each carries its own distinct gourmet or metaphorical cooking sense.

The eye, the nostrils, the tongue, ears and skin are the vital gates through which human beings receive the nourishment of otherness and through them take place the amazing process of architectural thinking. Both cuisine and architecture are powerful expressions of a philosophy in the flesh that is dealing with the role of the embodied mind. "Acquiring ideas is eating." The set analogy is between "a body that needs the right kind of food—healthful, nutritious and appetizing" and "the mind that needs the right kind of ideas, ideas that are true, helpful interesting."³³ The insatiable curiosity of the macaronic architect is not only for raw facts but also for elaborated translations of thoughts in matter and matter in thoughts.

The basic concepts of this investigation in the esthetic world of macaronic art — an art where aesthesis is understood in the original meaning indicating the human faculty perceiving in its entirety without distinction among the sensuous, the spiritual and the structural — will be restated in a short fable, an apo-

logue. In a conversation, Gullaume Jullian de la Fuente (J.) and Amedeo Petrilli (A.) recall a fabulous moment of the life of Le Corbusier that is clearly a powerful demonstration of the macaronic way of thinking. It is the story of a repast shared between Le Corbusier and Pier Luigi Nervi in a famous restaurant in Rome during the spring of 1960.

J. ...Then, they had to decide what to eat and they selected the chicken after a long debate. When the plates arrived, Corbu said to Nervi that he would teach him how to eat a chicken ... a poulet He took it with both hands and tore it in many pieces, adding that this was the right way, because all the senses begin to work all together.

A. Sight, touch, smells ...

J. Definitely... and then Nervi said: "Excuse me, old friend, it is not done in this way. He took up knife and fork and, in a moment, he divided his chicken in four perfect pieces, working on delicate structural points ... You know, I do not want to make complicated architectural theories, but for me that was a fantastic lesson, because I was in front of different points of view, both equally deep: two knowledgeable approaches... At the same time,



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to see these two characters make this thing... And if memory does not fail me, when Nervi had finished cutting his chicken, with high regard Corbu said to him: "...chapeau!"

A. ... And ... how did it end?

J. As always these stories end up ... we ate our chicken...³⁴

Macaronic architects with their graphic dreams do not open the door for the spirit to enter everyday life. On the contrary, they raise the everyday to an imaginal world, releasing the imaginal content of physical reality. In macaronic designs, architects invent traditions to respond to novel situations that take the form of reference to old situations and establish their own past by quasi-obligatory repetition. Macaronic thinkers surpass tenets and canons because of their ironic perceptions of political, religious, and visual beliefs grounded in customs and institutions ruled by prejudiced and vitiated cultures. The stylistic and diachronic interference among the various elements of their intellectual appropriations take humor to the extreme of absurdity, informed by an open-ended and cynical universal negation. The mockery of macaronic thinkers is in the end incompatible with a reordering of the world based on the *res cogitans*. They are not revolutionaries but the purveyors of a permanent contestation, one that goes beyond any specific political, religious, or moral polemic to lay siege to the foundations of our comprehension and representation of the world. The macaronic pulverizes and dissolves into nothingness every abuse made of reason through the words of fraud. This epistemic-stance functions characterizing the relationship of thought to fact is the primeval substance of a visual understanding. The union of dream and solid stuff in tectonic events rises to an expression of pleasure, a subjective presence rather than an objective procedure with which both user and architect must be engaged. The details and the fabricated devices become playful demonstrations of cosmologically constructed events in an edifice. Rejecting the pseudo-completeness and cacotechnics of many contemporary design techniques that cannot perform the fundamental act of establishing the indispensable cosmological relationship between material

order and cultural order, macaronic procedures are the essential verve to make these inaugurations successful. This macaronic vision is launched by the intuition of sensations combined with the predilections embodied in our cooking up of the world. Architectural and culinary thinking brings macaronic thinking alive by shaping and regulating conceptual development by considering the necessary and positive interchanges that take place between impressions of subjective and objective qualities. The functioning of an architectural mind can and must be conceived in bodily terms analogously related to those of proper thought about cooking. The macaronic interchange between the impressions of body behaviors, together with the sensuous nature of subjective qualities and the measure of objective qualities such as size, shape, temperature and weight, is essential for any ending artifact to be successful in terms of a plurality of approaches which challenges authoritative categories.

To end this meditation, I should recall an epigram by François La Rochefoucauld: "To eat is a necessity, but to eat intelligently is an art."³⁵ To it, I would add a remark put forward by Filarete in his treatise, an architectural storytelling that begins with a discussion around a dinner table: "It is an obligation of man to eat and to build."³⁶ Remembering how Claude Lévi-Strauss used cooking as a metaphor for the way the 'raw' images of nature are 'cooked' in culture so that they may be used as part of a symbolic system I've here made a biscuit (cooked twice) using two aphorisms. Consequently, to build and to cook are a necessity. However, to build and to cook intelligently is the chief obligation of architecture and cuisine.

Notes

1. An unremitting subtraction of weight in search of a sound architectural theory, this piece of writing is part of a larger project on the teaching of architectural imagination entitled "The pasticchio of architecture."
2. Ilya Prigogine *From Being to Becoming: Time and Complexity in the Natural Sciences*, (Freeman, San Francisco 1980). Ilya Prigogine (The End of Certainty, Time, Chaos and the New Laws of Nature (with I. Stengers) The Free Press, New York 1997) Heylighen F. (1986): Towards a General Framework for Modeling Representation Changes, in: Proceedings of the 11th International Congress on Cy-

- bernetics (Symposium "Styles and Types of Knowledge Manipulation"), (Association Internationale de Cybernétique, Namur), p. 29–34. Hamilton V. (1983): *The Cognitive Structures and Processes of Human Motivation and Personality*, (Wiley, London).
3. André Castelot, *l'Histoire à table, "si la cuisine m'était contée..."* (Paris: Plon 1972)
 4. Peter Collins, in 'Changing Ideal in Modern Architecture (London: Faber and Faber, 1965), sets four analogies to discuss the concept of Functionalism, namely the Biological, Mechanical, Gastronomic and Linguistic. Collins's biological, mechanical, and linguistic analogies have been analyzed and used in every possible way for examining architecture. However, the gastronomic analogy—probably because of an erroneously perceived inherent lightness—has been mostly forgotten. The Fergusson's story is told at the beginning of the Chapter devoted to the Gastronomic Analogy (p. 167). This chapter together with an article by Joseph Rykwert has been the brass tacks holding the plan of my strategy of architectural thinking, a plan which began with an article on the peculiar nature of architectural imagination and in its educational and professional forms, entitled "Semiotica ab Edendo," presented at the 1984 meeting of the Semiotic Society of America, published in the Proceedings. An enlarged version was published in *The Journal Of Architectural Education*, Fall 1986.
 5. Paracelsus (Aurelius Philipus Theophrastus Bombast von Hohenheim,) an alchemic cook that founded the school of Iatro-chemistry, or medical chemistry, Paracelsus, *Selected Writings*, trans. Norman Guterman, ed. Jolande Jacobi (London: Routledge and Kegan Paul, 1951) 165 Paracelsus, *The Hermetic and Alchemical Writings of Paracelsus*, ed. Arthur Edward Waite, 2 vols. (London: James Elliott, 1894) 2:151; I. Betschart: *Der Begriff "Imagination" bei Paracelsus*. *Nova Acta Parac.* 6, 1952, pp. 52–67. Martin Roland *Lexicon alchemiæ sive dictionarium alchemisticum, cum obscuriorum verborum, et rerum Hermeticarum, tum Theophrast-Paracelsicarum phrasium, planam explicationem continens*, Frankfurt, 1612.
 6. Carlo Scarpa (1906–1975), a Venetian architect, was a controversial master of modern architectural design. His departure from traditional modern design is evident in the idiosyncratic yet powerful presence of his architectural works. He is perhaps best known for his works such as the Brion Cemetery in Vito d'Altivole and the Museum of Castelvecchio and the Banca Popolare in Verona which illustrate his unique ability to weave built fragments of the past, into contemporary expressions of architecture and design. He taught architectural design studios (*Architettura degli Interni*) at the IUAV, of which he was also the director for few years.
 7. I was at the lowest level in Scarpa's cohort; I was merely an *addetto alle esercitazioni* and the delightfully educational lunches at the Gaffaro took up a substantial amount of my meager salary.
 8. A French engineer, Auguste Perret, 1874–1954, was a pioneer in the use of reinforced concrete, notably in the church of Le Raincy, near Paris (1922–23). Perret with his brothers ran a very innovative contracting and engineering practice, specializing in reinforced concrete, with a belief in the permanent value of "classical" principles. He built warehouses, factories, residences, and theaters. He saw gothic cathedrals as models of rational building from his study of Notre Dame, recorded in a surviving notebook, which is exclusively concerned with the visual effects of construction details and stained glass. Auguste Perret *Contribution à une théorie de l'architecture*, (Paris: Cercle d'...tudes Architecturales Chez A. Wahl, 1952) see also: Karla Britton, *Auguste Perret*, (London; New York: Phaidon, 2001).
 9. An influential French politician and a highly refined dilettante of the gastronomic art, Anthelme Brillat-Savarin, (1755–1826), held office under the Directory and the Consulate. Brillat-Savarin wrote works on political economy, law, and dueling, but his acknowledged masterpiece is *Physiologie du goût, ou Méditation de gastronomie transcendante, ouvrage théorique, historique et à l'ordre du jour*, 8 vol. ("The Physiology of Taste, or Meditation on Transcendent Gastronomy, a Work Theoretical, Historical, and Today") (1825). The book is less an exposition on cuisine or culinary arts and more a witty compendium of considerations, precepts, anecdotes and observations of every kind that might enhance the pleasures of the table—with only an occasional recipe being offered. The book went through several editions during the 19th century and it was translated into English 59 years later: Brillat Savarin, *A handbook of gastronomy*, (London: Nimmo and Bain, 1884.)
 10. Ostention is one of four categories of physical labor necessary to produce signification, namely: recognition, ostention, replica and invention. Umberto Eco, *Theory of Semiotics*, (Bloomington: Indiana University Press 1975).
 11. Macaronic derives from the Italian word *macaroni* (from which macaroon also comes). According to Teo-filo Folengo: "This poetic art is called 'macaronic' from macarones, which are a certain dough made up of flour, cheese, and butter, thick, coarse, and rustic. Thus, macaronic poems must have nothing but fat, coarseness, and gross words in them. The macaronic in its purest form is a northern Italian creation with its precedents in medieval burlesque, goliardic verse and sacred parodies, and

with extra-Italian continuators and resonance in various European countries and in Rabelais. Its origins lie in the late fifteenth-century Benedictine athenaeum of Padua and specifically in the linguistic experimentalism of Tifi Odasi, whose poem *Macaronea* defines the genre. Its fame was assured in the first half of the following century by Odasi's Mantuan pupil and emulator Teofilo Folengo (pseudonym Merlin Cocai). Folengo's *Baldus* (four editions: 1517, 1521, 1534–35, and posthumously in 1552) is a mock-epic poem of giants and farfetched chivalric adventures including the discovery of the mouth of the Nile and a final descent into Hell. *Baldus* is the genre's acknowledged masterpiece, and it enjoyed a notable popularity in the 1500s with over a dozen editions and reprints. It was not without influence on Rabelais' *Gargantua and Pantagruel*, in which it is cited more than once. Such was the perceived connection that the first French translation of Folengo's works in 1606 bore the title *Histoire macaronique de Merlin Coccaie*, prototype de Rablais. See: C. Cordié (ed.), *Opere di Teofilo Folengo* (Milan: Ricciardi, 1977), xii–xiii; M. Tetel, *Rabelais and Folengo, Comparative Literature*, 15 (Fall 1963): 357–64; I. Paccagnella, *Plurilinguismo letterario: lingue, dialetti, linguaggi*, in *Letteratura italiana. II. Produzione e consumo*, Roberto Antonelli ed. (Turin: Einaudi, 1983), 103–67 (141).

12. Kenneth Frampton, "Towards a Critical Regionalism: Six Points for an Architecture of Resistance," *The Anti-Aesthetic*, ed. Hal Foster (Port Townsend, Washington: Bay Press, 1983), Kenneth Frampton, "Prospects for a Critical Regionalism," *Perspecta* 20 (New Haven: Yale Architectural Journal, 1983), p. 162
13. A medical expression, synesthesia (Greek, syn = together + aisthesis = perception) labels involuntary physical experiences of cross-modal associations. There are synesthetic combinations involving combination among vision, hearing taste, touch, scent, and other modalities. Theoretically, synesthesia could occur from associations between any two or any number of the physical senses. The first references to synesthesia can be found in manuscripts of Pythagoras (6th century B.C.) and Aristotle (4th century B.C.).
Medicine has known synesthesia for more than 300 years. In the late 1800's, synesthesia generated a wave of scientific and popular interest especially in art cliques. Russian composer Alexander Scriabin, a synesthete, featured an organ that produced multihued light beams in his symphony *Prometheus, the Poem of Fire*. To many fin de siècle Romantics, synesthetes appeared to be humanity's spiritual vanguard, closer to God than the sense-segregated masses. "Such highly sensitive people," wrote Wassily Kandinsky, the Russian abstract artist,
14. Tagliatelle are homemade noodles and in Mantova, they are called *fojade*.
15. An Old Italian adage states: first, you devour the food with the eyes and then with the belly, and mothers forewarn children before a Festive meal not to have eyes bigger than their tummy.
16. Monteil, Pierre. *Beau et laid en Latin, étude de vocabulaire*, (Paris: C.Klincksieck, 1964).
17. For a discussion on tectonic precision see: Frascari, Marco and Livio Volpi Ghirardini. "Contra Divinam Proportio-nem," *Nexus II: Architecture and Mathematics*, Kim Williams, ed. (Fucecchio, Florence: Edizioni Dell'Erba, 1998), 65–66.
18. The comparison between risotto and terrazzo floor is not only a accidental formal analogy, but also a technological correspondence: Amy Tan, in *The Kitchen God's Wife*, (Ivy Book, New York 1992) tells how in local pisé construction, a soup of egg-whites and mud is spilled on the floor for three consecutive days to make a rammed-earth floor dust free and shiny-hard as porcelain and how crumbling pisé walls can be made clean and insect free by spreading a sticky porridge of rice and mud on the interior of the walls (pp.245–246).
19. Murrine are sliced pieces of layered Murano glass mostly known for their use as internal ornamentation of millefiori glass-paperweights.

20. Like all the other Venetian craftsmen the terrazzo- layers (terrazieri) had a scuola (confraternity), a banner and a patron saint: St Florian; precise rules settled apprenticeship and presided over the admittance of new members to the Arte Nostra de' Terrazzieri (our guild of terrazzo-layers). A terraziere, Giandomenico Facchina from Sequals is buried in Paris at the Père Lachaise, cemetery as recognition of the beautiful masterpieces he created for the floors of the Opera, working with the architect Charles Garnier. The first illustration of the fabrication of a terrazzo floor is found in one of the xylographies by Giovanni Antonio Rusconi in *Del architettura di Gio Antonio Rusconi ... Con Centosessanta Figure Dissegnate dal Medesimo, Secondo I Precetti di Vitruvio, e con chiarezza, e brevità dichiarate Libri Dieci.* (Venice: Giolito, 1590).
21. Transubstantiation, known as the doctrine of the real presence, is a Christian theological term indicating the process whereby the bread and wine offered up at the communion service has its substance changed to that of the body, blood, soul and divinity of Jesus Christ while its accidents appear to be that of bread and wine. What looks like, tastes like, etc., bread and wine is actually another substance altogether. How this happens is a central mystery of the Catholic faith. However, the term is defined by the Scholastic Fathers using Aristotelian categories and I am using it in this connection rather than the theological understanding.
22. A internet site to visit to have a good overview of synesthesia is <http://www.doctorhugo.org/synaesthesia/>
23. The paradigmatic (or "associative") relations, and the syntagmatic relations, also known as the axes of substitution and selection, were identified by Jakobson (1942) by distinguishing two kinds of aphasia, as they resulted from an impairment of metaphoric or metonymic aspects of the language capacity. Roman Jakobson, *Studies on Child Language and Aphasia*, Mouton de Gruyter, 1971.
24. Bulat M. Galejev, "What is Synaesthesia: Myths and Reality," *Leonardo Electronic Almanac*, Volume 7
25. In 1884, at the climax of decadence literature a tale entitled "A Rebour" emerged as a verbal atlas of morbid requests, written by Joris-Karl Huysmans. The fiction is a myopic study of the monstrous psyche of the decadent Baron Des Esseintes, a man whose inquisitive senses and restless imagination has led him to taste every forbidden fruit, each time reminded that the taste is sweet for a short time and then bitter and nauseating, hidden below the exterior signs of sublime aesthetics. Decadence, in Baron Des Esseintes' world, is an aesthetic and not a moral conception. The absence of moralizing arguments proves that is not the problem to deliver an intense synesthetic exaltation of the senses to a craving hyper-aesthetic mind.
26. Joris-Karl Huysmans, *Against nature = A rebours*; translated by Margaret Mauldon; edited with an introduction and notes by Nicholas White. (Oxford: Oxford University Press, 1998) 123.
27. R.E. Cytowic, *The man who tasted shapes*, New York: Warner Books, 1993. R.E Cytowic, *Synesthesia: A union of the senses*, New York: Springer-Verlag, 1989; see also K. T. Dann, *Bright colors falsely seen: Synesthesia and the search for transcendental knowledge*, London: Yale University Press, 1998.
28. During the early thirties of the twenty century, F. T. Marinetti, the founder of Futurist poetry and painting, published his *Manifesto of Futurist Cuisine*, which called for a ban on all pasta (It.: pasta asciutta) on the grounds that pasta was responsible for "the weakness, pessimism, inactivity, nostalgia, and neutralism" he saw all around him. Italians, who should be thin, the better to ride in "ultra light aluminum trains," should eat only rice as a starch. Macaroni was a "symbol of oppressive dullness, plodding deliberation, and fat-bellied conceit." F.T. Marinetti e Fillia, *La cucina futurista*, (Milano: Longanesi, 1986). Marinetti, Filippo Tommaso, *The futurist cookbook*, translated by Suzanne Brill; edited with an introduction by Lesley Chamberlain, San Francisco: Bedford Arts, 1989; Claudia Salaris, *Cibo futurista: dalla cucina nell'arte all'arte in cucina.* (Roma: Stampa alternativa, 2000).
29. Laughter was the laxative of the Futurist body, a body trying to discover new senses. See Lorenzo Mango, *Alla scoperta di nuovi sensi: il tattilismo futurista* (Napoli: La città del sole: Istituto italiano per gli studi filosofici, 2001)
30. Sergio Los, Carlo Scarpa architetto Poeta, (Venice: CLUVA, 1969).
31. Quoted in Sergio Los "Introduction" in *Manfredo Massironi, Vedere col Disegno* (Padova; Marsilio 1966:17.)
32. At the end of a good meal, Italian eaters state that they are beati e contenti (blissful and content) to admit they have really enjoyed the meal.
33. George Lakoff and Mark Johnson, *Philosophy in the flesh: the embodied mind and its challenge to Western thought*, (New York: Basic Books, 1999, 241).
34. "Conversazione tra Gullaume Jullian de la Fuente e Amedeo Petrilli," in *Le Corbusier: Il Programma Liturgico*, eds. Giuliano & Glauco Gresleri, (Bologna: Editrice Compositori, 2001).
35. From *The "Maxims" of La Rochefoucauld*, (Harmondsworth: Penguin, 1959), Translated by Leonard Tancock (The original *Maximes* first appeared in 1665).
36. Filarete Antonio, *Treatise on architecture*, edited by J.R. Spencer, (New Haven: Yale University Press 1965); Filarete Antonio, *Trattato di architettura*, Firenze, Biblioteca Nazionale, ms. Codex Magliabechianus (M), II, I, 140, text edited by A.M. Finoli and L. Grassi, introduction and notes by L. Grassi, 2 vols, (Milan: Il Ponfilo 1972).

