COLLAPSE VII

Editorial Introduction

Robin Mackay and Reza Negarestani

Cookery has never been so high on the agenda of Western popular culture. And yet the endlessly-multiplying TV shows, the obsessive interest in the provenance of ingredients, and the celebration of 'radical' experiments in gastronomy, tell us little about the nature of the culinary. Is it possible to develop the philosophical pertinence of cookery without merely appending philosophy to this burgeoning gastroculture? How might the everyday, restricted sense of the culinary be expanded into a *culinary materialism* wherein synthesis, experimentation, and operations of mixing and blending take precedence over analysis, subtraction and axiomatisation? This volume, drawing on resources ranging from anthropology to chemistry,

from hermetic alchemy to contemporary mathematics, undertakes a trans-modal experiment in culinary thinking, excavating the cultural, industrial, physiological, chemical and even cosmic grounds of cookery, and proposing new models of culinary thought for the future.

Proto-scientific thought and experimental practice, particularly in the form of alchemy, was linked to the culinary arts' vital engagement with the transformation of matter. Indeed, how could empirical inquiry into nature, seeking to determine the capacities of matter on the basis of what lay to hand (see Bacon's recipes in the Appendix), be anything other than a culinary endeavour? Yet with the increasing specialisation of the sciences, philosophy has misplaced its will to extend such inquiry into a speculative philosophy whose power resides in its synthetic ambition as well as its analytical prowess.

As observed by IAIN HAMILTON GRANT in the interview which opens the volume, it is chemistry's retention of this synthetic ambition that recommends a 'chemical paradigm' for thinking, providing the opportunity for philosophy to step outside the circle of a 'critical' method according to which the conditions of possibility for a thinking of nature are purely epistemological. In the thought of the nineteenth-century naturephilosophers on which Grant draws, the production of 'nature' qua thought-system cannot itself

be excluded from the chemical syntheses it discerns at work in the inorganic realm; and thought as much as matter must be subjected to an experimental regime.

Human thought, then, does not condition the powers of chemistry; nevertheless, the latter are mobilized in unprecedented fashion by the former. Under the influence of modern chemistry, indissociable from the industrial exigencies that have driven it, synthetic production – in the culinary as in other spheres – proceeds to reprocess the nature that produced it. Augmenting the modest chemical capacities bequeathed to the human animal by its evolutionary history, it has produced a new 'chemical earth' upon which we graze, without having fully encompassed in thought the prospects that its deterritorialization opens up to us.

Exemplary in this respect is **JOHN GERRARD AND MICHAEL A. MORRIS**'s 'Corn Bomb', which traces the implication of nitrogen in the industrialised alimentary regime, and the way in which the ingredients for postwar human culture were prepared and 'cooked' by war and petropolitics, bringing about a new planetary economy whose massive ramifications are yet to be fully comprehended. This story of the entanglement of military force, agricultural expansion and industrial science provides a backstory to Gerrard's portraits of austere, functional structures located in desolated landscapes, symbols of the virtual climate of power

that the industrialisation of the chemosphere has made possible.

Extending Gerrard and Morris's 'local' history of nitrogen, which begins with the human harnessing of chemical powers, into the distant past, we realise that the preparation of food in fact takes place on a planetary and even cosmic scale. The superficial landscape of mass-produced corn and meat that Gerrard and Morris correlate with the contemporary human condition is a non-trivial section of a deeper chemical history: 2.8 billion years ago, cyanobacteria emerged on Earth, able to transform sunlight and atmospheric nitrogen directly to fixate carbon to form organic biochemical compounds. Their production of oxygen as a byproduct led to a catastrophic pollution of the planet, the only survivors of which were the new lifeforms that had adapted to consume oxygen, and which are the origin of the diaspora of biological life as we now know it. The industrial Haber-Bosch process is an anthropogenic augmentation of a subsequent, weird biological symbiosis between legumes and remnants of that earlier bacteriosphere, an evolutionary contingency which allowed those nitrogen-hungry plants to migrate from abundant to relatively inhospitable environments. The advent of artificially-fixed nitrogen intensifies massively the dependency that developed between humans and these hardy deterritorialised plants whose symbiotic adaptation had allowed them

to escape the contingencies of atmospheric nitrogen fixing. It locks in a new symbiosis between human culture, nitrogen, and the petroleum that fuels its artificial preparation to secure the yields demanded by an exploding population.

In line with the ethos of modern chemistry in broadening the range of chemistry's universality, the terrestrial landscape of nitrogen can be traced back yet further to its cosmic provenance: In the early universe, the 'ur-chemical' agency of gravitation (as discussed with Grant) locally breaks the homogeneity of spacetime and leads to a form of regional contraction (rather than spatial extension), creating local discontinuities and making possible the entropic conditions and chemical activities that form the universe as we know it. In the contracted regions, new morphogenetic transformations and condensations of matter begin to take place; stellar nucleosynthesis forms the furnaces in which heavy elements, including stable nitrogen isotopes, will be forged, thus brewing up, out of the undifferentiated continuum, the elements of a properly chemical, differentiated universe in which the terrestrial sphere will emerge.

Thus, just as the artist selects a single location to make a 'portrait' of the megasystem of anthropic terrestrial depredation, the unravelling of the nestedness of 'chemical valencies' within an organism or a culture gives rise to an epic chemophilosophical narrative in every case. It is in this way that a culinary materialism can open up a continuous yet twisted (topologically counterintuitive) depth beneath the surface or the ground: by bringing out the non-trivial relations between the cosmic continuum and its localized regions; by displaying relations between the earth and the regional horizons for thought that belong to it, and an unrestricted and unified conception of the universe.

The examination of the 'new earth' wrought by contemporary industrialised food production through its accessing of chemical powers continues in FIELDCLUB's contribution. Offering an insight into the deranged machinations of laboratory capitalism, their investigation of the changing fortunes of the erstwhile waste product whey implicates humans, agriculturally-adapted animals and advanced chemical processes in an industrially-augmented culinary syntheses: the redistributive function previously fulfilled by the pig is usurped by a new chemically-enhanced human consumer, ready to fulfil the capitalist exigency to full exploitation of the earth.

In line with the general rise of the culinary, recent years have also seen a resurgence of interest in food in the contemporary art world – most emblematically, perhaps, in the work of Rirkrit Tiravanija. The 'relational' paradigm, with its emphasis on the convivial potency of non-object-based art practices, finds a

natural home in the social setting of cooking and eating. This has also occasioned recent revisitations of the work of Gordon Matta-Clark, and the restaurant FOOD which he co-founded in New York in 1971 with **CAROL GOODDEN**, who we interview in this volume. An undecidable, experimental project, FOOD engaged equally the multiple social, economic, convivial and material aspects of cookery and eating. But what was its relation to Matta-Clark's more well-known work, in particular his architectural interventions? In our interview with Goodden, we explore the extent to which the artist's interest in disrupting structure and breaking down closed spaces to produce new forms of communication, can be related to a more general concern with alchemical or culinary transformation, exemplified in early works such as his agar pieces and fried photographs. Here Matta-Clark's work is read as addressing the metabolism of the urban environment, where buildings and cities digest and are digested, as part of a universal culinary process: in the words of one of Matta-Clark's notes, reproduced alongside the interview, 'building materials as nature's food - build to feed the worms an organic eat-a-tecture'...

Recounting the origins of FOOD, Goodden depicts a city that invited an exploratory art practice taking as its 'point of departure' not only 'the whole of human relations and their social context' (Nicolas Bourriaud's aspiration for a relational aesthetics) but ways in which

they are intricated with other (urban, architectural and alimentary) fabrics under this common culinary or alchemical principle. FOOD clearly staged the culinary, but Matta-Clark blended it with practices that make his city a very different territory, in truth, to the cities in which international contemporary art practice stages its convivial events in galleries (ironic exemplars of the 'independent and private spaces' Bourriaud hoped to escape). In exploring transformations beyond the preparation and consumption of food, FOOD pioneered conceptions alternative to the mere preparation and consumption of artworks. As Goodden suggests, for Matta-Clark FOOD was 'a grinding, regurgitating, consuming thing', a work whose ingredients and methods surpassed the restrictedly artistic or culinary.

The collective **AO&** offer another example of how the restricted practice of the culinary can provide a locus for the exploration of broader processes of production, communication and consumption. As we learn in our interview, AO&'s 'perverse' endeavour to fully inhabit the problem of food production operates through a deliberate and painstaking disclosure that makes possible an enhanced perception or phenomenology of the act of cookery. AO&'s meals do not stop at providing striking gastronomic experiences for diners, but operate as carefully-controlled experiments in the communicational potencies of the dinner table.

Crucially, AO&'s practice involves within the ambit of 'food preparation' the personal sourcing and assembly of all 'ingredients', including cooking materials, the preparation of the site, and the forging of connections with a network of producers. Hence they ask, 'Where is the edge of the pot?', preparing the way for a generalised culinarism that reaffirms the centrality of an expanded notion of architecture found in Matta-Clark's work.

AO&'s practice may, indeed, fulfil chef **John Cochran**'s demand for a 'flat cookery' that acknowledges its non-human participants. For Cochran, received practices of cooking – the haute cuisine chef's as much as the fast food burger-flipper's – 'distort ontology', creating an instrumental caricature of the objects they employ. Chefs, like philosophers, therefore, maintain uninterrogated 'ontological commitments' determined by their praxes. An 'object-oriented' approach to cookery, Cochran insists, would recognise that objects have powers that exceed our intentional interactions with them, and open itself up to this continuum of objectal powers.

In his examination of two 'revolutionary' contemporary food movements that claim to liberate themselves from normative models of cookery – Molecular Gastronomy and Slow Food – Cochran finds they fall short of this ideal: Molecular Gastronomy investigates the chemical composition of foods only to manufacture

sensory fireworks, producing professional chefs and professional consumers alike; Slow Food lavishes its sentimental attentions on the social and cultural import of foods only to draw them into a global economy. In both cases supposed radicality supervenes upon an image of culinary thought that plays into the hands of an economically-driven professionalisation of the culinary, at the expense of amateur experimentation. Both are found wanting, missing the insight that 'food continues to translate you, and you continue to translate food, even after swallowing'.

Cochran's demand to open up the practice of cookery to this extended 'translation' raises the question of how one makes oneself 'a good meal' for the outside, detecting or inviting nonhuman contingencies into cookery. It is perhaps worth pointing out that this is not to be achieved through mere promiscuity or practices of 'openness' based on the aleatory or free expression. Paradoxically, it is AO&'s meticulously controlled culinary regime that, operating in varying settings, quietly affords an insight into what it is to cook and to eat.

In his contribution, MANABRATA GUHA expands upon the notion that sensitivity to the culinary powers of objects can offer egress from a spontaneous 'image of thought' into a wider continuum, an open system whose chemical, military, logical and modal dimensions he unfolds in his essay on 'The Chemistry of

Para-Tactical Engagements'. Guha reports on recent efforts at the weaponization of the massively potent *Bhut Jolokia* chili, finding the military project to harness its non-lethal power to incapacitate and disorient indicative of a strategic shift on the part of a state attempting to contend with a new threat, the 'enemy of all'. Outlining the futile nature of this employment of the *Bhut Jolokia* as a means to enhance an ill-adapted military model, Guha turns instead to the traditional culinary usage of the chili to reveal more fundamental lessons for the transformation of the schema of battlespace and the rise of a new vague and inherently synthetic adversary that renders political reason impotent, globally and locally.

For Guha, the insurrectionary subject is the synthetic distillate of the unbound continuum or 'the open', a singular field through which all chemical fusions and transformations pass. In the figure of the 'enemy of all', war is revealed to be far deeper than the political, the battlefield far broader than any number of discrete spaces that the state or contemporary military theory can envision. Since the synthetic horizon of the continuum is a trans-modal web that smoothly and gradationally blends the question of universal constituency (the open) with the question of tacticity (the opening of discrete fields), the battlefield is always conceived as a gradient that focally reflects the free expression of war and the unbound global battlespace

within regional and discrete battlespaces strategically mapped out by the state according to the legacy of political thought. For this reason, for Guha, drawing on the mathematico-philosophical work of Fernando Zalamea, the battlefield of the insurrectionary subject is a regional approximation of the universal continuum or the open, whose exact boundaries are blurred, logic vague and topos purely synthetic. The insurrectionary subject of the global battlespace does not resist assimilation, but on the contrary, adapts a vague modal geometry so as to soften its particular edges and turn into a 'transplant' capable of inhabiting the state's discrete battlespace as an agent of catalysis, fusing the state's axiomatic structure with the non-axiomatic and unmasterable geometry of the global battlespace.

It is this chemical softening of exact characteristics and recapturing of the open (continuum) within the discrete horizon that Guha finds manifested in the traditional recipe for *Bhut Jolokia* chili pickle, whose vague identity (itself the outcome of the chemical fusion and synthesis of different global-local modalities) makes it a perfect supplement or side-dish that stealthily unpacks a wide range of culinary sensations within the unsuspected consumer, 'a catalysis-engineer that exposes particular and discrete entities to a sensorial continuum'.

Here, as in Gerrard's work, local chemical or culinary phenomena give us to understand how the open

universal continuum reflects into (or experiences) itself through various complex transitions, modal fusions, global-local surgeries and transplantations whereby contingencies, possibilities and actualities are welded together or transplanted within one another: Hence, for Guha, as for Grant, the 'chemical paradigm' marks out a synthetic domain that precedes (without excluding) the chemistry proper of elements, reactions, and so forth.

RICK DOLPHIJN adopts another culinary approach to the contemporary 'state of emergency', analysing how the changing alimentary regime of the military anticipated and accelerated the rise of biopolitical governance through continual intervention. According to Dolphijn, the militarization of the world's diet and the territorialization implicit in dietary programs have resulted in the emergence of a terrestrial dietary/ military continuum whose vague and synthetic elements are 'terroristsoldiers' (Guha's 'enemy of all'). The more the nourishment of the state and the soldier is drawn from the chemical earth, the more they become synthetic in nature, as interior and exterior become blurred; and the harder it becomes to distinguish them as discrete recognizable entities: this 'new continuum' becomes manifest in the terroristsoldier, who is figured in every individual and whose diet is the entire synthetic landscape of the earth. Dolphijn points to current olfactory research as a critical stage in this process

since it involves topologically-'pointless' interventions similar to those involved in the 'self-cooking' of the *Bhut Jolokia* pickle (whose method itself echoes the Baconian experiments and Arabic poisons collected in the Appendix to this volume).

Dolphijn's and Guha's contributions expose the wider stakes of this intrusion of the chemical (continuum) into the political sphere and its discrete battlespaces: For both writers, the exploitation or weaponization of the culinary or the chemical by the state unwittingly exposes the latter's strategic political horizon to an open and contingent expanse that proves detrimental to the strategic and military integrity of the political reason manifested in the architecture of the battlespace or the biopolitical horizon. This highlights, above all, the veritable potency of the culinary: Since all chemical and culinary entities are already open to (and open us to) the rest of the chemical continuum through complex syntheses, interphased spaces and vague boundaries, and since the continuum is a nonaxiomatic landscape, such entities throw the axiomatic structure of politico-strategic reason into incoherency - registered as an expression of a war already-there. As Dolphijn explains, this traumatic incursion, pioneered in the military sphere, has generalised consequences: here, as in the history of nitrogen, 'military intelligence speed[s] up modern life', bringing into play 'wholly other physicochemical, organic and anthropomorphic contours of the earth'.

According to Grant, the fundamental tenet of the 'chemical paradigm' demands we accept that no chemical process is identified and 'made available' without chemical intervention, 'regardless of whether that's done by chemists or by nature'. Dolphijn and Guha's texts show us that, indeed, it is always the continuum 'itself' that opens up the chemical horizon, allowing its local exploitation to 'take place', but that its unmasterable synthetic power always threatens to exceed and overwhelm this instrumentalisation.

In accord with this discovery that human cookery takes place within a prior (in Guha, even 'preontological') complex that is already 'culinary', in his contribution RICHARD WRANGHAM deepens the notion that 'it is cooking that makes us human' - his thesis being that the advent of cookery is one of the major drivers behind the development of the human brain. In identifying the consumption of cooked food as an *evolutionary commitment* and thus a *dependency* – a 'decision' made for us and that determines our destiny - Wrangham reveals how the human culture of cooking belongs to nature's chemical and physiological horizon. For this reason, cookery must be seen in the wider context of a culinary continuum that includes the contingencies that formed the human as such, in advance of the cultural machinations that then become

necessary to fulfil the energy acquisition requirements of an exploding population (Gerrard, FIELDCLUB). From a human point of view, cooking may be a cultural phenomenon; but from the point of view of nature, as Grant points out, this distinction cannot be made; we are cooked as well as cooks (for years I thought I was cooking all this up, but nature was telling me what was on the menu ...).

Perhaps the voluntarist, preferentialist nature of gastronomic consumerism may be disturbed by Wrangham's demonstration that we do not (as a species) have a choice about whether or not to cook; there is therefore indeed 'reason in the roasting of eggs', but it also follows that reason and its emergence is (as Nietzsche argued) of a piece with other (intestinal and colonic, for example) peculiarities that revolutionised the human metabolism and ultimately provided the conditions for both gastronomy and alloplastic chemistry. As Grant states, 'nature can be produced by thought precisely because thought cannot be produced outside of nature. But this alters what "thinking nature" means'. It also, we may add, alters, or even reverses, what a 'thinking of cookery' may mean – 'coquo, ergo cogito'.

In 'Theorizing Cuisine from Medieval to Modern Times', Vanina Leschziner and Andrew Dakin chart the epistemic shifts implicated in the movement from a medicinal to a hedonic model of eating. Their contribution demonstrates how the norms of developed

gastronomy harbour complexities occluded by their omnipresence and apparent transparency. Prevailing gastrological norms (in Leschziner and Dakin's example, the separation of sweet from non-sweet) exist at the intersection of many influences, where emergent sociological, institutional and epistemic conditions drive the exploration of alternative conceptual articulations of the 'phase-space' of possibilities provided by basic chemical, physiological, nutritional and adaptive factors. Thus, a culinary object such as sugar, with its basic chemical valence for human physiology, provides a kind of pivot around which, historically, differing conceptual structures are articulated – its 'endo-relational powers' (Cochran) exceeding the 'exo-relations' which any one of those ordering structures assigns it.

We should of course recall here FIELDCLUB's demonstration of how this plasticity with regard to what is 'edible' is augmented – to the point of reversibility (the transformation of whey from waste to ingredient) by the advent of ever more sophisticated commercial chemistry and constant innovation in markets. This plasticity opens the way to an experimental gastrological practice that could be related both to the exploratory 'flat cookery' recommended by Cochran and to the naturephilosophical experimentalism recommended by Grant: A cookery that addressed gastronomy in such a way would not rest with exhibitionist displays that inverted or recombined cultural norms (thus

Leschziner and Dakin's judgment on Molecular Gastronomy), but that would map out the landscape formed by zones of interference between 'objects' of different types (chemical, physiological, hedonic, institutional...) so as to discover new routes within it.

A curious demonstration of the possible scope of such a discipline comes in the form of the 'synaesthetic cooking' proposed by SEAN DAY. Day introduces us to the complexities of various types of synaesthetes' experience of flavour in relation to colour and language, demonstrating how the synaesthete's peculiar talents extend the culinary palette into a trans-sensory 'synthesaurus' that is at once polyphonic, polychromatic and trans-modal. Molecular Gastronomy has, famously, experimented with the integration of different senses (not only olfactory but visual and aural) into dishes. Day's synaesthesia prompts him to call for culinary practice to engage further, not only with the sciences that are able to analyse and synthesise its materials, but also more fully with neuroscientific research that could inform a more systematic approach to the interaction of different sensory components. This expanded form of multi-sensory cookery would transmodulate gustatory sensation; but, as Day observes, since synaesthesiae are often cemented in contingent individual associations, it could result also in culinary events - such as the 'phoneme-to-flavour' and 'flavour-to-colour' recipes he and James Wannerton propose – whose gastronomic appeal extends to only one person.

Following Day's recipe for 'Light Cyan', **JEREMY MILLAR**'s 'Black Cake', in an edition produced especially for this volume, is based on a recipe passed on by Emily Dickinson in an 1883 letter. We know, from contemporary accounts, of Dickinson's culinary skills; which are matched, of course, by the strong sense of the domestic in her poetry. But while the poetry can feel somewhat fragile, the same could not be said of her cake, which promises to be substantial indeed, and somewhat ill-suited to the taking of tea in an Amherst townhouse. Millar's rendering of the recipe allows us to think of the poetry differently, once more: beneath the fragile and hesitant procedures of the everyday and domestic, lurks the black earth [al-chem] of substantial transformation.

As we know from Claude Lévi-Strauss – a constant reference throughout this volume – we eat not just physical food, but also symbols. In his contribution to the volume, **EDUARDO VIVEIROS DE CASTRO** examines the extreme point at which the culinary meets the symbolic – cannibalism. An excerpt from his recent *Cannibal Metaphysics*,¹ the text reflects the reconsideration of anthropological perspectivism advocated in the book: Where anthropologists have sought to see 'from the native's point of view', Viveiros de Castro

^{1.} Métaphysiques Cannibales (Paris: PUF, 2009).

argues that their attempts to do so, paradoxically, have been limited by a very culturally-specific form of perspectivism. He proposes that within cannibalism, we can discover another remarkable example of a developed and socially-functional form of perspectivism: 'anthropophagy as anthropology'.

Refusing an account of cannibalistic 'sacrifice' as divine expiation, Viveiros de Castro examines the ways in which the devouring of captives also amounts to an inhabiting of 'the enemy's point of view' on the self, with consumption of the other playing a central role in the social construction of identity. In this 'movement of reciprocal determination' by the enemy's point of view, Viveiros de Castro sees a 'mechanism for the ritual production of collective temporality': the "interiority" of the social body is integrally constituted by the capture of the symbolic resources of the "exterior".

In recounting the determining events for his reconsideration of sacrifice, and his consequent proposal to expand the field by 'structuralising' the thinking of sacrifice as a thinking of forces rather than forms, Viveiros de Castro prepares for further developments in *Cannibal Metaphysics*, where he advocates Deleuzian Becoming as a more favourable conceptual resource than Lévi-Straussian sacrifice for asking 'what [it] is [...] that is devoured' when one human eats another. (Reading of Viveiros de Castro's contribution should be supplemented with Aparecida Vilaça's account (in the

Appendix) of the 'gustative pleasures' of cannibalism and 'ingestion [as] a fundamental classificatory operator [...] intrinsically bound to the notion of predation'.)

EUGENE THACKER offers another perspective on cannibalism: Agreeing with Viveiros de Castro that the crucial point is whether the eaten body is a 'thing' or not - since in order to become food, corpses must be symbolically rendered into objects - Thacker relates the cannibalism theme to Anaxagoras' examination of the paradoxes of corporeal resurrection. How can the virtual integrity of the resurrectable material body be squared with the corpse's evident reprocessing through the anonymous continuity of material transformation (Matta-Clark's 'primeval cannibal chaos')? For if the body persists as resurrectable and thus as individual throughout its trituration and consumption by other organisms, throughout the 'culinary transformation of matter' through which 'the very materiality of the world is continually "cooked" (and eaten)', this would ultimately render every act of eating cannibalistic. Thacker finds Athenagoras' problem echoed in Bataille's notion of the discontinuous human's thwarted attempts to access 'divine' continuity - an access which, for Bataille, is approached in our relation both to food and to the corpse (here, as in Guha's argument, eating is associated with a threat to 'somatic integrity').

Thacker resists the temptation to expand a restricted notion of cooking to a generalised

culinarism-as-anonymous-transformation, turning instead – via his reading of Bataille's theory of religion – to the notion of a 'desolate cookery' rooted in a negative concept of life and which (in an oblique departure from Cochran's credo) calls for an 'abject-oriented ontology'.

As Cochran points out, an expanded, acute sensitivity to the culinary situation is a necessity rather than an option for those medically constrained to intentionally regulate their metabolism. Constrained to exercise such 'mangé management' (to appropriate Matta-Clark's phrase), they have the same keen sense of the 'alchemy' involved in food preparation and digestion that Goodden indicates as having instigated Matta-Clark's inquiries. More extreme forms of discipline, and concomitantly acute levels of bodily awareness, are the subject of Dorothée Legrand's contribution. The self-administered regimes of anorectics, she argues, sensitise us to the fact that eating is always a locus for the administration of the self. Introducing a move toward a deep (intra-subjective) phenomenology of consumption (in general) and eating disorders (in particular), her contribution emphasises how identity is produced through dietary discipline: diets are not simply eating programmes or schedules, but rather sets of procedures or recipes for the production of identity. As Legrand demonstrates, this relation between the diet and (self-)production is manifestly highlighted in anorexia, where 'eating nothing' translates into a series of complex semiotic, phenomenological and cognitive procedures for the subject with regard to the production of identity – ideally of an integrated identity that would be a miraculous 'victory over digestion' (Thacker).

Following from Thacker's observation that 'to eat is always to [...] incorporat[e] oneself into the realm of anonymous [...] processes', and Guha's insistence that the culinary continuum harbours a 'threat to somatic integrity', Legrand demonstrates that in the act of eating, the multidimensionality of bodily self-consciousness is foregrounded; we experience ourselves not only as subject but simultaneously as object and as anonymous material. As she meticulously sets out, this daily reminder that 'each of us does nothing but carry a corpse about' (thus Thacker's epigraph, from Philo) can precipitate precarious existential experiments whose aim is to fully integrate the self through a process of 'constitutive self-negation' - a building of identity through an 'infinitesimal' process of subtracting self-as-object from self-as-subject. Such 'intimate projects' of 'controlled transformation' involve a culinary ascesis, but one that is based in a tortuously acute sense that eating involves the maintenance of the self qua constitutive tension between self-object and self-subject; or - in Bataille's terms, as discussed by Thacker - between continuity and discontinuity.

As Legrand argues, the anorectic in a certain sense presents us with the truth of food, potently distilling the problem of 'the demonstration of one's existence' in the face of the 'narcissistic wound' inflicted by the knowledge that one must incorporate the anonymous in order to pursue the subject-self's ideal of integrity.

For Hegel, the externality of the food and its objective exactness provided the digesting subject with a dialectical opportunity to reclaim its identity on behalf of the subject.² But for Legrand, as for Guha and Thacker, food enforces a form of exteriority that cannot claim such exactness. The subject is vague and already-indistinguishable, and here it is food that becomes a 'mirror' in which one sees oneself 'from the enemy's point of view'. Legrand finally suggests that anorexia may emerge as symbolic process from the frustrated intersubjective demand that food be given, not as need-fulfilling object, but as a gift that feeds desire. Here, perhaps, is the fundamental function and ploy of gastronomy and its cultural overvaluation – the cultural exacerbation in discourse and culture of a necessary obfuscation of our relation to food, obscuring the anonymous, objectal dimension of subjectivity to which eating exposes us.

As in the martial alimentary regimes described by Dolphijn, for Legrand, consumption itself becomes

^{2.} See G.W.F. Hegel, *Hegel's Philosophy of Nature*, ed. M.J. Petry (London: Allen and Unwin, 1970), vol. 3, 162-4.

a form of production (of identity) from the inside out, in '(non-)eating projects representative of one's subjecthood, and thereby constitutive of it'. Food produces the subject-as-object, and a 'new people for a new earth'. Legrand's understanding of consumption also recalls Ferenczi's account of assimilation as 'alien transplant', recalled by Guha in his 'exegesis' 'Serving the Open' (in the Appendix). For Ferenczi, eating and consumption create a polyvalent or nested chemical/ culinary structure: Food is a foreign body that cannot be wholly identified in terms of its capacity for absorption (food simply as nutrient that is wholly reintegrated within the system) or for wastage (food as something which distinguishes the object from the subject, where all that is wasted is no longer part of the subject). While for Hegel eating ends with the overcoming, through digestion, of the foreign body that entered the sphere of the living being, and results in the dialectical reclamation of the individuality and being-for-self of the animal, Guha, Ferenczi and Legrand identify digestion as an interiorization of xeno-economical relations, wherein the subject - far from reclaiming its subjectivity - is chemically transformed by an object that resists full assimilation. In this sense, all food, no matter how well-cooked, is poisonous. Awareness of this xeno-economical space of extra-subjective chemistry, of which the subject is now seen to be a product, fully schizophrenizes the culinary cogito 'I am what I eat',

just as the powers of its continuum vex the cookiecutter battlespaces of the state. The dialectical valence of food for the subject, in its attempt to conclude its reality and self-relatedness, is challenged by this new model of assimilation in which food, the interiorized object, can no longer be distinguished as a discrete or exact body that can be either fully assimilated or conveniently ejected. Food, the agent of repletion, is instead vague (Guha) or ambivalent (Legrand), suggesting an economy of consumption in which the digesting subject cannot bring its relation to its food to any conclusive resolution. The identity that the consumer or the subject produces for itself through digestion is the result of devouring the object or food; but also the result of being internally devoured by it (Ferenczi) - as the terroristsoldier is consumed by the new chemical earth he is put to work on. In this sense, thinking in terms of a philosophy of nature, we might revisit the recapitulation thesis - characterised by Grant as a 'dynamics of the totality of nature' – as a process of 'eating the ancestors' (Ferenczi), a process in which digestion is never complete, in which traces - alien insiders - remain within, encrypted pathways into the labyrinth of the chemical continuum: this would be a 'chemophilosophy in the recapitulationist sense' (Grant) in which 'the discrete and the particular is always infiltrated by 'the open' (Guha).

Here we return to the theme of our previous volume; for it becomes clear that a culinary materialism opens up new vistas for geophilosophy. Nietzsche demanded that thought be 'true to the earth', extending the genealogical method so as to ground culture and thought in the stomach and on the terrain to which it is adapted (an aspiration satisfied in a different way by Wrangham's thesis). But Nietzschean genealogies only chart the history – after all, a restricted, localized history – of the surface; it will demand a further 'Copernican' effort to extirpate from philosophical thought the last vestiges of the human's spontaneous image of its dwelling place.

To be truly terrestrial, one must renounce the superficiality of the encrusted model of geophilosophy. Culinary materialism sets against *geophilosophy* as the philosophy of or for the earth – a thought that is 'true-to-the-earth' – *chemophilosophy* as a universal philosophy – a thought whose *topos* is an earth that is 'true-to-the-universe' (that is, an earth synthetically envisioned within the full spectrum of the open continuum). It is only this universalist earth that can serve as the veritable plane of thought upon which a chemophilosophy – a philosophy that opens up the earth to the continuum – is conceived. Chemophilosophy therefore marks the transition from geophilosophy to a philosophy whose earth belongs to a unified and open continuum whose regions are vague,

gradationally open to various spectra that lie beyond the manifest surface and body of the planet. Within the continuous environment of the continuum, earth is then understood analytically and synthetically. If, for pre-Copernican alchemy, the earth was the foundation of all elements and the mother of all, containing within herself the seed of everything mineral, vegetable and animal, the chemical revolution – still in progress under the auspices of astrobiology and neurochemistry - subverted the centrality of earth to chemistry. By establishing that compounds can be synthesized across different domains, and subsequently by emphatically linking the particulate to the chemical, biological and psychological, the chemical revolution rediscovered the earth, not as mother of life or receptacle of celestial rays, but as a fuzzy and synthetic region of the chemical continuum, the outcome of a local 'recipe' that enjoys no synthetic or analytical privilege over the space beyond it. We can thus understand this volume on 'Culinary Materialism' not only in terms of a radicalisation of 'Geo/Philosophy' (COLLAPSE VI) but also as a continuation of the legacy of the 'Copernican Imperative' (COLLAPSE V) - that orbital subversion which also shatters the alchemical parental hegemony of sol and luna over the earth. The cardinal ingredients of this subversion can be read in Newton's recipe (in the Appendix): the homogenization of nature as one (continuum), combined with orbital humiliation (gravity),

puts the earth into a new culinary relationship with itself: The gravity of the unanchored earth becomes at once a means to extend the chemical continuum of the earth and its compounds to the culinary landscape and the realm of taste and sensation, and a mortification of the earth by its own natural compounds and elements – earth literally cooked to death.

It is this decentralism that loosens the earth to the extent that the unheard-of syntheses discussed by Gerrard, FIELDCLUB, Dolphijn and Guha become possible; and as for the gastronomic products of the kitchen, the same kitchen that provided the conditions – historical (Grant) and pre-historical (Wrangham) – for scientific experiment and enquiry, their savour (as Grant anticipates) can and must now be understood in the very terms of the *activity* of the continuum revealed by that enquiry.

Dan Meliamphy and Nandita Biswas Meliamphy develop such a post-geophilosophy, rethinking planetary 'ecology' as an 'ec[h]ology' wherein the thinker is 'translated back into nature' as its echo, and where the planet 'feasts upon itself'. Connecting the ourobouric or ovoid figure of this autophagy to the Nietzschean will-to-power, this ec[h]ology escries the *al-chem*, the black earth, as a *stomachos* or 'pit of blackness' – what Guha describes as the 'self-churning' continuum. It is also a vermicular thinking: as the worm translates all things back into black earth (see Darwin's recipe,

in the Appendix), Nietzsche suggests that to be true to the earth is to be retranslated and to retranslate back into the 'terrible ground-text of *homo natura*' – a '*hideous gnosis*' that, once again, involves the poisonous contemplation of one's incorporation into/as anonymous process.

Mellamphy and Mellamphy's demonstration of the persistence and continued pertinence of alchemical thought sets the stage for our concluding contributions, which both advocate the compositional (perhaps even synaesthetic) kernel of philosophical thinking expressed and explored most resolutely in the hermetic tradition of alchemy, a tradition that bridged astronomy, medicine, gastronomy, mathematics, optics and art, and was conceived in the philosophical and proto-scientific furnace of such figures as Jabir ibn Hayyan, Arnaldus de Villa Nova, Ramon Llull and Nicole Oresme.

Although in the transition from proto-science to modern science and with the birth of modern chemistry, the alchemical ladder of nature (*scala naturae*) was effectively toppled and the hermetic tradition dislodged from the centre of philosophical inquiry to the margins, philosophy's compositional kernel and its culinary ability to globally combine analytical loci of thought and coalesce incommensurable ingredients so as to mediate the universal experience of a bottomless nature was never fully abandoned. The compositional

ambition of philosophy and its engagement with synthetic environments, mixtures, synoptic perspectives, spectra of knowledge and modal transits (contingency, potentiality, possibility, necessity ...) across the continuum of nature, has been reappropriated and extended by Novalis, Schelling, Peirce, and most recently by Fernando Zalamea and Gabriel Catren. In the alchemical tradition, the synthetic and compositional valence of elements or local fibres was tested by a process known as tinging, whereby metals were introduced to fire in order to reveal their transmutational hierarchy (tints or tones) and synthetic powers on the basis of a projection of the spirit or redness of fire or the Sun. For these latter traditions, philosophy's synoptic and compositional kernel systematically unfolds the synthetic threshold and compositional valence of all local fields of thought and the universe according to how the omnipresent and open universal continuum flows through them and comes into 'focus'. Therefore, philosophy becomes an 'alchemical paradigm' in itself that 'tinctures all thought and nature', 3 and in doing so, deepens the reflexive and trans-modal self-experience of the open universal continuum, bottomless nature, or 'b[l]ackground' (Mellamphy and Mellamphy).

In line with his study of an open or non-Cantorian continuum built on Peirce's late logical thought,

^{3.} F. Zalamea, *Peirce's Continuum: A Methodological and Mathematical Approach*, available at: http://files.acervopeirceano.webnode.es/200000068-48c2649bc4/Zalamea-Peirces-Continuum.pdf, 61.

involving topics such as the continuum, the topological basis of logical distribution, modal geometry and synthetic thought, FERNANDO ZALAMEA has in recent years pursued a mathematico-philosophical project committed to a de-rigidification of thought. For Zalamea this de-rigidification cannot be properly undertaken without having a systematic mathematical account of the unbound continuum. Absent any observation of the mathematical universe and the labyrinth of the continuum, philosophy's ontological and epistemological claims tend to lean toward one aspect or regional partition of the continuum, and accordingly rigidify the continuum in one way or another. Philosophy in this way becomes a myopic discipline that sways either toward realism or idealism, synthesis or analysis, integration or difference, thus becoming incapable of radically thinking compositions, mixtures, contaminations, decompositions, transitions of nature to culture, cultural fusions and transits - in short, the full chemical spectrum or culinary constitution of the universe. In other words, without maps and compasses to explore and survey the landscape of the continuum, philosophy ultimately fails to develop a synoptic view constituted of both analysis and synthesis4 - it falls prey to the same kinds of distortions that Cochran describes as being at work in Molecular Gastronomy, that recent

^{4.} For a view, both detailed and panoramic, of cultural mixtures and compositions in relation to contemporary mathematics and its transmodernist implications, see F. Zalamea, *Ariadne and Penelope: Webs and Mixtures in Contemporary World* (Oviedo: Ediciones Nobel, 2004).

return to the ancient bond between science and the culinary whose overanalytical jellies tend to disappoint; or worse, like fusion cuisine, it succeeds only in ineffectually aping the trans-regionality that is its vocation. As is the case with 'rigidified' philosophies, failure to achieve a deep and synoptic scope consigns such efforts to cultural myopia: dabbling in or 'applying' science or cultural difference, they remain unable to deepen their cultural and gastronomic aspects in relation to a universalist chemical horizon capable of giving rise to culture or cultural experiment.

The recipes Zalamea contributes to our volume (to be taken with a pinch of salt) examine, firstly, the failed recipe for thought that aims only at an astringent clarity; and secondly, the *villageoise* constitution of a transmodernism fit to counter such *petit cuisines philosophiques*.

In Zalamea's recipe for a transmodern thought, so in **Gabriel Catren**'s 'alchimirical' instructions for baking a philosopher's stone. In instructing us in the contemporary procedure, Catren presents philosophy in terms of the alchemical *tinctura universalis* discussed above. The result is as much a polychromatic and polyphonic – that is, broadly universal and non-trivial – unfolding of the real as it is a synaesthetic, even psychedelic, experience of the culinary. In an epistemic exacerbation of the deregulation of the sensory faculties advocated by Day, Catren proposes

that the transmodern vocation for philosophy consists in a 'true-to-the-universe' regime counteracting the 'spectral decomposition of experience' prismatically produced by various modes of thought; his black earth is a concretion effected by the 'polychromatic mediators' of a 'philosophical synthesizer'.

It is evident that the various alchemical operations, absorbed into the mundane activity of cookery, can then become metaphorical tools for a generalized culinarism; yet to satisfy oneself with this metaphorical transport is to fail to realise the more fundamental pertinence the latter could achieve. In Catren's alchimirical cauldron as in Zalamea's transmodern tatin, the procedures indicated to operationalise and concretise regional echoes of the universal culinary spectrum are stripped of all metaphorical reference to the restricted practice of cookery. Instead they invoke the abstract operations that contemporary mathematics uses to synthesise its complex variety of confections and recipes (Freyd's allegories, sheaves, fiber bundles, etc.) from the elemental materials of the continuum. This points the way toward a refinement of a transcendental 'chemical paradigm', a culinary materialism that not only escapes the 'reductionism [of the] culinary [...] analogous to anthropism' (Thacker), but entirely renounces dependence on any empirical model.

This volume, together with the Appendix of recipes, should be taken as a preliminary exploratory exercise

– to be continued by the reader – in the mathematicophilosophical vista of culinarism revealed and brought into focus here. A prospect that certainly answers to the original recipe for this volume (from which, however, the editors have not resisted straying); but which, thanks to the transmodern spirit of our contributors, surpasses it, suggesting not only a culinary thematics for philosophy outside bourgeois gastroculture, and a variety of new perspectives on cookery itself, but a true 'proliferation of *possibilia*' (Guha); a taster menu for the unheard-of philosophical feasts, bouillabaises and concoctions heralded by a chemophilosophy, alchimery, or culinary materialism.

Robin Mackay and Reza Negarestani Vienna and Seremban, June 2011.