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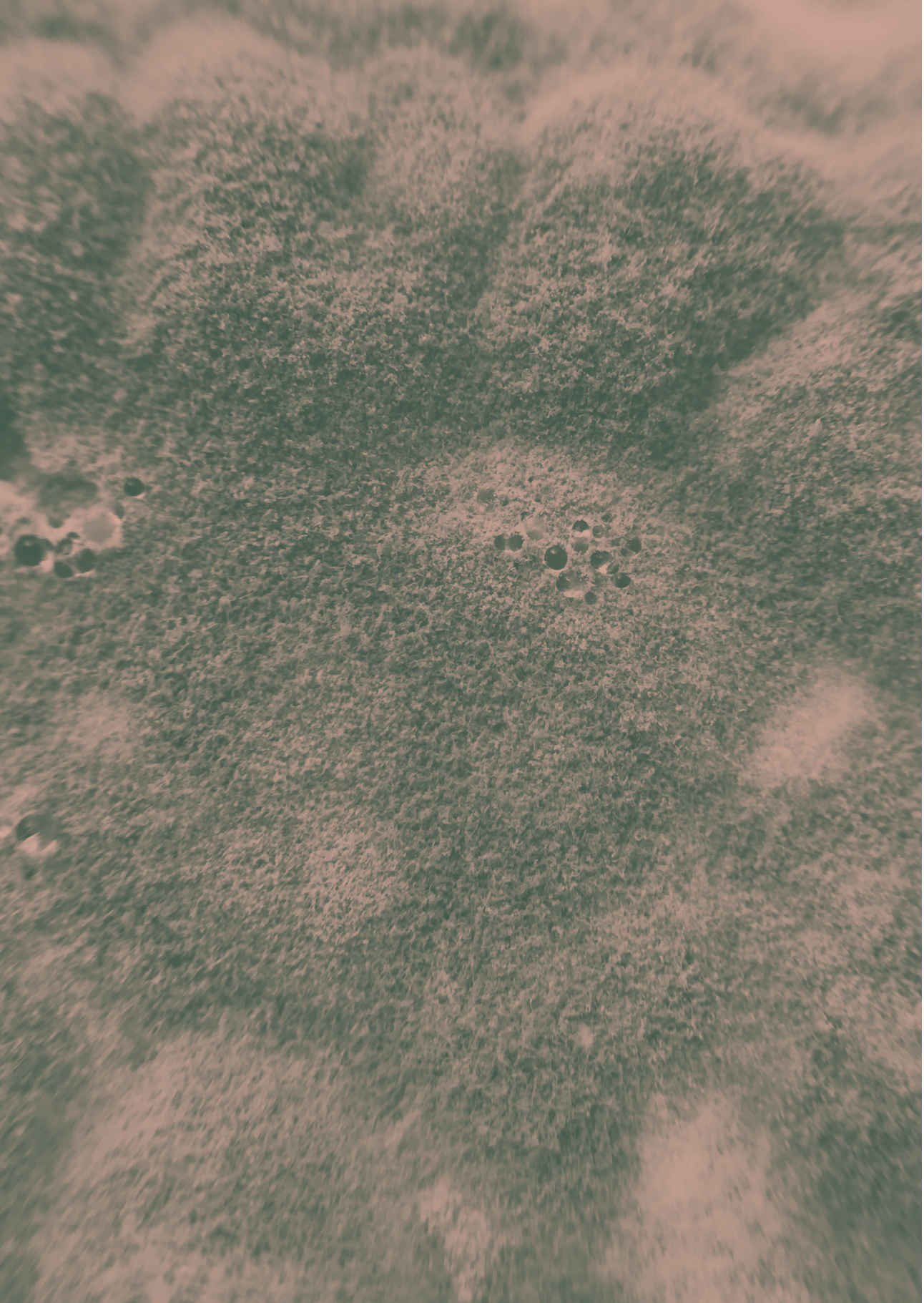


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Chapter 3

Tasting Meaning

A work of art is worth more than a philosophical work;
for what is enveloped in the sign is more
profound than all the implicit signification.¹

“Do you know what is in your food?”
Genomic Gastronomy Investigation

3.1 Contaminant *T* like a Taste of Smog

A dusty, slightly stifling flavour with a bit of sweetness – this is how the smog of Rotterdam tastes. The city in my mouth, swallowed and digested, became yet another element generating my body. The tiny bite of a cookie taken with hesitation and excitement, released the stream of chaotic questions and hesitation: is it safe for my easily upset stomach? Is it healthy to eat smog? What is actually inside the food I am now chewing? Can I really taste the city? Is it possible that we can understand something through taste?

The implications of taking affect seriously, that is, of acknowledging and acting upon the contaminating, transformative nature of relationality of our bodies, forces us to consider all the above questions in an equally serious manner. While chewing the bites of a city, a strange materiality reveals itself in the significance of the cookie named “Rotterdam” and the a-signification of its taste, in the encountered and experienced, but not yet named – will the cookie I am chewing contaminate and transform my body? What would such a transformation mean?

Smog Tasting is part of an investigation cycle by The Center for Genomic Gastronomy (CGG), established in 2011 and run by Zack Denfeld and Catherine Kramer. In the first part of the project titled *Smog Tasting 1.0* [Figure 13] the artists harvested air from polluted cities. It was done by making egg foam within open city spaces: “Egg foams are up to 90 percent air, and whipping the eggs causes particulate matter to be trapped in the batter,” they explain.² The project had a politico-ecological tint. The artists initially wanted to serve

¹ Gilles Deleuze, *Proust and Signs* (London: Continuum, 2008), 20–21.

² “Smog Tasting – The Center for Genomic Gastronomy,” <http://genomicgastronomy.com/work/2011-2/smog-tasting/>, accessed 25 November 2015.

the baked egg foams to politicians and business owners. At the same time, they denied any risks from its consumption, since “One should not worry too much about getting sick from these cookies: we breath this air every day!”³

The second part of the project, *Smog Tasting 2.0*, was a particular simulation of the polluted air. The smog data from cities all over the word were translated through an equation into an edible recipe [Figure 14]. Each pollutant corresponded with an amount of a specific spice. For instance, particulate matter (PM10), the name used to denote a collective of solid or liquid particles of dust, smoke, soot pollen and soil,⁴ was replaced by black pepper. Nitrogen Dioxide (NO2), a reddish-brown gas emitted through the combustion of fossil fuels⁵ was represented by an amount of wasabi powder. Finally, Sulphur Dioxide (SO2), a colourless gas emitted by the combustion of fossil fuels,⁶ was translated as Indian black salt. The recipes were printed in the catalogue handed out at the performance event. Moreover, the participants could taste the cities, cooked according to the recipe, discovering for themselves how the smog might taste [Figure 15].

The third part, *Smog Tasting: Smog Synthesizer* [Figure 16] recreated *Smog Tasting 1.0*, which took place on the street under UV light. “Smog is formed by a mixture of different pollutants reacting together – a reaction that is usually catalysed by baking the chemical mixture in the sun.”⁷ CGG thus wanted to recreate this process in a closed environment that would simulate a smell and flavour of air from any part of the world, once you know the data of its pollution.⁸ The artists have designed a small smog chamber where it is possible to synthetize pollution of particular cities. You can make an egg foam inside the chamber while this polluted air circulates. As CGG explains: “By transforming the largely unconscious process of breathing to the conscious act of eating, the smog-tasting cart creates a visceral, thought-provoking interaction with the air all around us.”⁹

³ Ibid.

⁴ “Particulate Matter — Environmental Terminology Discovery Service — EEA,” <http://glossary.eea.europa.eu/terminology/sitesearch?term=Particulate+Matter+&bgresponse=>, accessed 25 November 2015.

⁵ “Nitrogen Oxides (NOx) Emissions —,” Indicator Specification, <http://www.eea.europa.eu/data-and-maps/indicators/eea-32-nitrogen-oxides-nox-emissions-1>, accessed 25 November 2015.

⁶ “Sulphur Dioxide — Environmental Terminology Discovery Service — EEA,” <http://glossary.eea.europa.eu/terminology/sitesearch?term=Sulphur+dioxide>, accessed 25 November 2015.

⁷ “Smog Tasting: Smog Synthesizer – The Center for Genomic Gastronomy,” <http://genomicgastronomy.com/work/2015-2/smog-synthesizer/>, accessed 25 November 2015.

⁸ The project was a collaboration with Nicola Twilley, the author of the ‘Edible Geography’ blog, and received advice from Professor David Cocker and Mary Kacarab from UC Riverside. For further information see “Edible Geography | Thinking Through Food,” <http://www.ediblegeography.com/>, accessed 24 March 2016.

⁹ “Smog Tasting: Smog Synthesizer – The Center for Genomic Gastronomy.”



Figure 13. The Center for Genomic Gastronomy, *Smog Tasting*, 2011, <http://genomicgastronomy.com/work/2011-2/smog-tasting/>, accessed 17 March 2017.

AIR QUALITY DATA TO SPICE MIX CONVERSION

Smog data point*

$$\frac{\text{Smog data point}^*}{160} \times (\text{number of eggs}) = \text{number of tsp}$$

*Smog data point (PM10, NO2 and SO2) given in one-millionth of a gram per cubic meter air (µg/m3)

Figure 14. The Center For Genomic Gastronomy, *Smog Tasting 2.0 Meringue Recipe*, From Test_Lab Genomic Gastronomy Program.Pdf, 2014, http://v2.nl/files/2014/articles/Test_Lab%20Genomic%20Gastronomy%20Program.pdf/view?searchterm=genomic%20gastronomy, accessed 17 March 2017.



Figure 15. The Center For Genomic Gastronomy, *Smog Tasting 2.0*, From Test_Lab Genomic Gastronomy, [Http://V2.NI/Files/2014/Events/V2-Test-Lab-Genomic-Gastronomy-Dokumentation/Testlab_15.Jpg/View](http://V2.NI/Files/2014/Events/V2-Test-Lab-Genomic-Gastronomy-Dokumentation/Testlab_15.Jpg/View), accessed 17 March 2017.



Figure 16. The Center for Genomic Gastronomy, *The Smog Synthesizer*, 2015, Photo by Jordan Ralph Design, <http://genomicgastronomy.com/work/2015-2/smog-synthesizer/>, accessed 17 March 2017.

In this three-part project, CGG reveals multiple levels of how meaning functions and how it is generated within encounter. It can signify what is referring to the already given information and, at the same time, it can produce something new and unexpected. In their work, CGG confronts us with that which cannot be named, with the experience of an imperceptible body of air. The artists demonstrate the multiple complexities of production and the generation of meaning through taste. Their numerous performances and workshops are focused on the experience of tasting and eating food, which would otherwise remain unnoticed. The lack of transparency and controversies surrounding food production (the actual history and the source of food ingredients) is not necessarily a background to their work, but it is equally important in the close encounter with what you are about to eat. What can be closer and more intimate than the food in your mouth? Thus, CGG acts upon this unique, yet ordinary sense of intimacy that triggers the intensity and actuality of the whole process of eating. They ask: can this intimacy of taste – of a mixture of multiple bodies – produce something new, can it mean something?

3.2 Taste of Affect

For decades, the humanities have prioritized people's linguistic meaning formation – human reflections and textual analyses. While within art history and cultural studies there has been a wide understanding of meaning production, expanded from text to various “new media” – first photography, then film, now digital media – today, particularly in view of bioart's practice, we are faced with the generation of meaning by living media. Till now, humanistic study has considered questions such as what is life and what are living bodies to be purely matters of biological analysis, devoid of any significant socio-cultural meaning.¹⁰

However, if we take everything that makes sense and if we consider the making of what matters to be only a human cognitive endeavour, how are we to consider such phenomena as body modification and manipulation? If everything can be reduced to the human power of making sense, of producing what is significant, why do we need to construct moral codes, ethical rules and laws within biotechnological practice, for instance? Should all those issues and questions relating to the manipulation of bodies fit into the current normative and hierarchical system, according to a shared human cognitive capacity? However, rather than being easy to manipulate, bodies in biotechnology escape control – their agency leaks and affects what we consider to be the given and fixed rules.

Because bodies, from particles to large animals, are not passive, but active agents of change and transformation, human cognition is not the ultimate measure of things. When your own genes can be patented, when vibrant materialities of chemicals and particles can be mutated and used to mutate your own body, the question of meaning and how it is generated must be rethought. We need to ask ourselves: how can we talk about contemporary living bodies while maintaining old analytical tools of prioritization where meaning is solely a product of linguistic reflection? How can we seriously and consequently discuss a non-anthropocentric understanding of bodies given the implications of life commodification and manipulation if we maintain a vision wedded to the linguistic (semiological) construction of meaning?

Catherine Kramer argues that “it is about time that taste as another sense should have same prominence as an art form and the experience of taste how that affect you.”¹¹ The artist seems to argue for the validity of the sensuality of taste. She seems to urge for the opening up of anew field of understanding that, even though it is not based on linguistic systems, it can generate a meaningful experience. The way that the notion of taste is exercised within their cooking-eating performances reveals that, rather than focusing on taste as a valid judgement, we should consider taste as a reciprocal relationality. In their performances, one enters into contaminating relationality through taste and, consequently, it becomes evident how bodies affect and how one is affected by them. However, in order to grasp the

¹⁰ See Rosi Braidotti, *The Posthuman*, 1st edition (Cambridge/Malden, MA: Polity, 2013), 67.

¹¹ CGG centre, *Trailer – Zack and Cat*, 2012, https://www.youtube.com/watch?time_continue=1&v=7o6iQGHW-IE, accessed 17 March 2017.

implications of such a reading and practice of taste in terms of meaning that maintains the dynamic and contaminating characteristic of affect, it is important to distinguish taste from judgement.

CGG's seems to equate taste with Kant's disinterested ability to judge an object. Indeed, it might be a part of an aesthetic judgement, "one that is not influenced by charm or emotion";¹² yet, it "rests on subjective bases, and whose determining basis cannot be a concept."¹³ For these reasons, namely the condition of disinterestedness and the lack of given conceptualization, some contemporary scholars see a link between Kant's description of taste and the definition of affect.¹⁴ For instance, Steven Shaviro considers Kant's aesthetic judgement and the theory of beauty, in particular, to be a theory of affect and singularity. Taste, for Kant, is a relation between object and subject, of how an object is presented to the subject.¹⁵ Shaviro argues that, for Kant, taste neither refers to a concept, nor does it rest in an object in the form of a given property; rather, it is a feeling of disinterestedness. Shaviro explains this disinterestedness in aesthetic judgement in terms of a possibility to experience that which is separated from me, what is not myself and what draws "me out of myself." He argues that, as such:

aesthetic judgment is detached from need. Kant notes that a starving person will eat just about anything; it is 'only when their need has been satisfied', only when they are well fed and assured of remaining so, that people have the leisure to develop and express their taste with regard to food. It's only when I don't need something that my liking for it, my being affected by it, can be 'disinterested and free'.¹⁶

Taste is a capacity to respond to how the object presents itself to the subject, irrespective of what this subject finds important.¹⁷ The singular presentation of taste, in which Shaviro sees the characteristic of affect and which, I suggest, renders CGG work, is described by Kant, however, as the result purely of a harmony between the faculties of the subject, rather than harmony between different bodies. Thus, for Kant, harmony that results in taste is a cognitive process that initiates the ability to judge. Moreover, for Kant, the harmony of cognitive powers that conditions taste:

¹² Immanuel Kant, *Critique of Judgment*, trans. Werner S. Pluhar, 1st edition (Indianapolis, IN: Hackett Publishing Company, 1987), 69.

¹³ *Ibid.*, 74.

¹⁴ See Ridvan Askin et al. (eds), *Speculations V: Aesthetics in the 21st Century*, (Punctum Books, 2014).

¹⁵ Kant, *Critique of Judgment*, 75.

¹⁶ Steven Shaviro, *Without Criteria: Kant, Whitehead, Deleuze, and Aesthetics* (Cambridge, MA: MIT Press, 2012), 5; Kant, *Critique of Judgment*, 52.

¹⁷ Shaviro, *Without Criteria*, 2–3; Kant, *Critique of Judgment*, 63–64.

is unique in kind and provides absolutely no cognition (not even a confused one) of the object; only a logical judgment does that [...] it brings to our notice no characteristic of the object, but only the purposive form in the [way] the presentational powers are determined in their engagement with the object.¹⁸

From this follows that, although it has no cognitive capacity and it is beyond what subject may find important and desirable, for Kant, taste is dependent purely on the subject's ability to judge.

However, as discussed in the previous chapter, while affect as affectus does not originate in either of the bodies in the AAO performance, it is also not only a result of the harmonization of one's faculties. Affectus is the encounter that, if it results in harmony, then it is a harmony of not only cognitive capacities of a human, but of bodies' multiple and varied capacities. At the same time, affect holds the possibility of risk in terms of the encounter between those bodies. In other words, taste, if it is to generate an affective notion of meaning, cannot be considered according to Kant's notion of taste as an aesthetic judgement. Affect causes taste to originate within bodies that are already multiple, in their mutual relationality, and not within a singular body's faculties.

This brief diversion to examine Kant's philosophy of taste, although rudimentary, serves here to sufficiently demonstrate the contrast between the novelty of CGG's notion and use of taste and that of Kant's sense of aesthetic judgement. Although, at first sight, it might seem to share similarities with affect, particularly with its relational understanding,¹⁹ considering the judgement of taste as affect adds more confusion to what the implications of affect might be and why practicing bodies within affect might be important.

By contrast, in their work, CGG exercise a sense of taste that is not only disinterested, but is also a risky encounter. It is a method for investigating contaminations. As such, taste not only allows for encounter with that which is outside myself, but it also allows for external change and transformations of myself. In the CGG performances, taste has a meaningful purpose to construct or change what is given. Such a notion of taste demands a different approach. It is not a harmonious encounter with one's faculties, where all the ingredients melt into a single, unified object, ready for us to consume – to judge. None of the ingredients of the cooked egg foam disappears in the harmonious taste. On the

¹⁸ Kant, *Critique of Judgment*, 75.

¹⁹ See Kojin Karatani's analysis of Kant's philosophy of a subject, where he proposes a different reading of the paradox of Kant's Copernican Turn. While Copernicus marked a shift from geocentrism as ego-centrism to heliocentrism, Kant's proposition to constitute objects by the form of projection by the subject has been stated rather as a shift towards anthropocentrism or subject-centrism. Regardless, however, of post-Kantian interpretations and claims that Kant is a precursor of the philosophy of subject, the author argues for a relational understanding, where Kant maps a subject's cognitive boundaries. The Copernican Turn, according to Karatani, means that in order to understand the subject, we must turn it into an object, things-in-itself, which marks a considerable shift in the way we may think about subjectivity. For further analysis of the argument see Kojin Karatani, *Transcritique: On Kant and Marx*, trans. Sabu Kohso, (Cambridge, MA: MIT Press, 2005).

contrary, taste becomes a way to encounter all the ingredients, seemingly hidden behind the representation of what we believe to be food. In their investigatory performances, the artists of CGG highlight the complex, ambiguous and often uneasy relationality of the food that we eat, or rather, that we become with. This is what Rick Dolphijn characterized as “the immanence of consumption,”²⁰ namely, the complex relationality and the coexistence of places and people, their food and the way of eating, “in how they come together.”²¹ In other words, in CGG’s work, taste becomes an investigation of mutations, of risky and uneasy encounters of bodies within affect.

3.3 Contaminant C like Cobalt-60

The CGG’s project *Cobalt-60 Sauce* (2013) was an investigation into the radiating and mutating capacity of Cobalt 60 – a radioactive by-product of nuclear reactor operations²² [Figure 17]. Cobalt 60 has been extensively used in medicine “as a radiation source to arrest the development of cancer,”²³ but also in the food industry, where radiation is used to cause plant mutation. The artists explain that the practice of selecting the desired mutation has proliferated since the end of World War II.²⁴ Yet, despite this use of mutated plants for over 60 years, the lack of any labelling on food products is common, resulting in a lack of awareness and, consequently, discussion on the nature, role and actual extension of food modification.

Cobalt-60 Sauce is “a barbeque sauce made from mutation-bred ingredients featuring radiation-bred ingredients such as: Rio Red Grapefruit, Milns Golden Promise Barely and Todd’s Mitcham Peppermint.”²⁵ It was served with Doritos at the MU gallery during the exhibition “Matter of Life Growing New Bio Art & Design”, in Eindhoven (28 November 2014 – 1 March 2015) [Figure 18]. When I tasted it, it reminded me of a curry tomato sauce, which only added to the sense of its commonality. I could have eaten it before without even knowing about its mutagenic nature. In this case, then, taste was not used as a moment of aesthetic judgement. Indeed, the sauce was presented as familiar, as something that has been used for decades, although now it stands next to detailed historical information about the origin of its ingredients. The bottle of the sauce, next to the tap that dispensed it, was

²⁰ Rick Dolphijn, *Foodscapes: Towards a Deleuzian Ethics of Consumption* (Delft: Eburon Publishers, Delft, 2005), 7.

²¹ *Ibid.*, 7.

²² “CDC Radiation Emergencies | Radioisotope Brief: Cobalt 60 (Co60),” <http://www.bt.cdc.gov/radiation/isotopes/cobalt.asp>, accessed 16 December 2015.

²³ “Cobalt-60 | Chemical Isotope,” *Encyclopedia Britannica*, <http://www.britannica.com/science/cobalt-60>, accessed 16 December 2015.

²⁴ “Cobalt 60 Sauce – The Center for Genomic Gastronomy,” <http://genomicgastronomy.com/work/2013-2/cobalt-60-sauce/>, accessed 16 December 2015.

²⁵ Tom Howells, *Experimental Eating* (London: Black Dog Publishing, 2015), 13.

standing in front of a large poster visualizing a barbeque party in a suburban garden. The accompanying information about the origin and history did not constitute any ultimate experience, however.



Figure 17. The Center for Genomic Gastronomy, *Cobalt 60 Sauce*, 2013, <http://genomicgastronomy.com/work/2013-2/cobalt-60-sauce/>, accessed 17 March 2017.



Figure 18. *Cobalt 60 Sauce* The Center for Genomic Gastronomy at the MU exhibition “Matter of Life Growing new Bio Art & Design” (28 November 2014 – 1 March 2015). Photo by A. A. Wołodźko.

The audience was asked to taste the sauce that they were already familiar with, but now in a different way. Through the act of taste, they were invited to enter the sphere of investigation rather than consumption. Although not available at the expo in Eindhoven, in the hand out catalogue for V2(2014)²⁶ CGG published the recipe for the sauce, inviting everyone to view the investigation process: “HACKER is tasked with locating and collecting the hidden mutation bred ingredients that are silently sitting on supermarket shelves, and CHEF decides to combine them together into a barbecue sauce.” Instead of informing and representing their artistic research, they rather embodied a line of research that welcomed the audience into their investigation.

COBALT-60 SAUCE

BBQ SAUCE

INGREDIENTS

Makes about 32 cups

40-60 whole dried milder, smoky chile

4 cups peppermint tea (made with 4-6 teabags)

1 cup Calrose rice

¼ cup cumin

¼ cup coriander

3 tbs cloves

2 cups raw pumpkin seeds

2 ruby red/rio star grapefruits, juiced

8 oranges, juiced

8 limes, juiced

3 bulbs garlic, chopped

10 red onions (1.6 kg)

2 bottles of ketchup (20 oz each)

3 cans of tomatoes (28 fl oz each)

1 bottle of soy sauce (20 oz)

1 bottle of canola oil

1 bottle apple cider vinegar (473 ml)

1 bottle red wine

1 bottle port

2 cups Macallan's scotch whiskey

2 lbs sugar

salt

²⁶ V2_ Institute for the Unstable Media at Rotterdam, “Test_Lab: Genomic Gastronomy,” Event, *V2_Institute for the Unstable Media*, http://v2.nl/events/test_lab-genomic-gastronomy, accessed 24 March 2016.

PREP CHILE

Cut the stems off the chile and slice open to remove seeds and ribs. Set aside.

PREP RICE POWDER

Heat heavy skillet.

Toast rice over medium high till brown and toasted.

Do not burn.

Let cool.

Put in spice grinder or food processor to make a powder.

PREP SPICES

Toast the spices in a small skillet until fragrant.

Let cool.

Grind to fine powder in spice grinder or blender.

RECIPE

1.

Quarter and slice onions. In a pot, add 3 tbs canola oil: heat over medium high.

Add onions.

Stir to coat with oil.

Sweat onions 10 mins till translucent;

reduce heat to med high and stir in 1 cup sugar.

Cook, stir occasionally, until onions have caramelized, about 10 minutes.

Do not burn.

When onions are caramelized,

stir in 3 cups wine, 1½ cups port, 2 cups whiskey, and salt.

Cook off the alcohol for about 10-20 minutes.

Set aside.

2.

Place pumpkin seeds on cookie sheets – distributed evenly.

Toast in low oven until browned.

Do not burn.

Set aside and let cool.

Grind in blender or food processor.

Do not over-grind into nut butter.

3.

Add all ingredients except citrus and apple cider vinegar to a large pot.

Add a couple of handfuls of sugar.

Simmer all ingredients in large pot until tomatoes are sweet (3-4 hours).

4.

Let cool (1-2 hours).

Working in batches (as necessary),

ladle sauce into a food processor/blender and make a smooth puree.

Press each pureed batch through a sieve into a bowl or another large pot.

When this process is complete, add all citrus juice.

Taste.

Add salt and apple cider vinegar to taste.²⁷

CGG initiates spaces where it is possible to search for what is not yet present – for what is named, but not yet encountered. The artists created spaces of tension between what is given, shaping information into processual and material form, material relations. They do not hide ingredients by showing only the results. All of their cooking performances are done in front of and with the audience. Their focus on taste as the encounter with relations has further consequences for opening up thinking about taste as meaning generated in relationality. CGG's work creates spaces of learning but not informing. Taste becomes a sign, but a particular one – a sign that does not signify and yet creates meanings.

3.4 Sign Wars

In order to understand why taste is a relation that escapes signification and yet creates meaning, and therefore why it could be important for our study of bodies within affect, it is first necessary to briefly consider two major schools of semiotics that have, according to the contemporary semiotician John Deely, significantly influenced what we consider as meaning today: in the field of literature, Ferdinand de Saussure's notion of semiology; and in the field of philosophy, Charles Sanders Peirce's semiosis.²⁸ Although it is beyond the scope of this book to explore the vast development and complexity of the debate on the field of semiotics, I will briefly map the main characteristics of De Saussure's and Peirce's understanding. A brief analysis will outline the major distinctions of signs and their implications for a relational understanding of meaning.

²⁷ CGG, "Test_Lab Genomic Gastronomy Program.pdf" File, V2_Institute for the Unstable Media, 9, http://v2.nl/files/2014/articles/Test_Lab%20Genomic%20Gastronomy%20Program.pdf, accessed 3 June 2017.

²⁸ John Deely, *Basics of Semiotics. Advances in Semiotics*, 1st edition (Bloomington, IN: Indiana University Press, 2004), 3–4.

As noted by Deely, De Saussure, the proclaimed founder of semiology, argued that there is a lack of certainty about the validity of science investigating “the nature of signs and the laws governing them.”²⁹ Nevertheless, De Saussure ascribed linguistics a special place in the field of human knowledge – its laws will be the laws of knowledge. According to Wendy Wheeler, this analogical approach to language and what we consider as knowledge means that De Saussure’s model of semiology has not only become the model for linguistic knowledge, but it has also shaped our understanding of the human. The claim of the science of signs, which is mainly focused on text, concerns the metaphysics of the construction of reality. However, if language alone can construct and carry meaning with regard to human intentionality, then this makes humans “most fully comprehended when they are thought of primarily as isolated and monadic self-interested individuals.”³⁰ Moreover, language is considered to have provide schemes for how social and cultural structures are constructed in general.³¹ The profound implication of such mechanisms becomes clearer when we look at the main characteristics of De Saussure’s semiology.

According to De Saussure, a sign has a psychological nature. It is immaterial in the sense that it “is not a link between a thing and a name, but a concept and a sound pattern.”³² The concept is an abstract element that De Saussure calls signification. In addition, sound pattern, unlike sound, which has a physical dimension, is more connected to discourse than to the materiality of the vocal apparatus. As he explains: “Without moving either lips or tongue, we can talk to ourselves or recite silently a piece of verse.”³³ In this way, De Saussure mapped a two-sided understanding of a sign that is based on the relation of negation, always already referring to something that is not. This negative differentiation allows us to grasp the meaning of a sign: “The sound of a word is not in itself important, but the phonetic contrasts which allows us to distinguish that word from any other. That is what carriers the meaning.”³⁴ The difference between signs is actually based on an antagonism: signs “are not different from each other, but only distinct. They are simply in opposition to each other.”³⁵

Consequently, following Wheeler’s argument, the antagonistic and dualist understanding of a sign presupposes humans to be the lonely constructor of meanings independently of bodies, materialities and sounds. In other words, that what we find meaningful is

²⁹ “We shall call it semiology (from the Greek *se-* *meion*, ‘sign’). It would investigate the nature of signs and the laws governing them. Since it does not yet exist, one cannot say for certain that it will exist. But it has a right to exist, a place ready for it in advance. Linguistics is only one branch of this general science. The laws which semiology will discover will be laws applicable in linguistics, and linguistics will thus be assigned to a clearly defined place in the field of human knowledge.” Ferdinand de Saussure, *Course in General Linguistics*, (New York: Bloomsbury Academic, 2013), 18.

³⁰ Wendy Wheeler, *The Whole Creature: Complexity, Biosemiotics and the Evolution of Culture* (London: Lawrence And Wishart Ltd, 2006), 18.

³¹ *Ibid.*, 17–18.

³² De Saussure, *Course in General Linguistics*, 76.

³³ *Ibid.*, 76.

³⁴ *Ibid.*, 138.

³⁵ *Ibid.*, 142.

autonomous from multiple materialities, bodies and their environment. All that makes sense is thus understood and communicated according to the simple rule of opposition: nature/culture, woman/man, human/animal, etc. Such statements on human's linguistic ability, isolation and autonomy when constructing meanings is, however, just a small part of what can be considered as a sign. As Deely argues, alongside semiology, Peirce constructed his notion of semiotique in which "semiosis [is] a broader and much more fundamental process."³⁶

In contrast to De Saussure, the semiotics of Peirce constructs the pragmatic, or as I will call it, existential notion of meaning,³⁷ which allows us to study the action of signs. This existential notion of meaning demands "learning by experience" in contrast to "abstractive observation."³⁸ Such a pragmatic approach to meaning reveals that signs are not independent from materiality. Signs do not stand for something that is not, they are not a construction in the negative understanding of relation. Instead, Peirce argues: "a sign, or representament, is something which stands to somebody for something in some respect or capacity."³⁹ Sign addresses somebody – an interpretant – and it stands for something – its object – "in reference to a sort of idea, which I have [...] called the ground of the representament,"⁴⁰ which is detached and disinterested.

For Peirce, in order for the sign to be realised, there must be a spatio-temporal action. A sign must be "materially embodied" and only then can it pertain to the general understanding of an "active mode of being."⁴¹ This is why Deely, following Peirce's notion of semiosis, characterizes semiotics in a broad sense, including "natural phenomena as well as purely cultural and literary texts."⁴² As Deely further writes: "at the heart of semiotics is the realization that the whole of human experience, without exception, is an interpretive structure mediated and sustained by signs."⁴³

Peirce's presupposition of a pragmatic understanding of signs allows us to understand meaning in a non-analytical and non-linguistic way. It opens up a more processual and existential approach to what we take as meaning. The existential nature of Peirce's semiotics, where the science of signs is purely a process of experience and learning, provides a particular sense of the materiality of meaning.

³⁶ Deely, *Basics of Semiotics. Advances in Semiotics*, 6.

³⁷ João Queiroz and Floyd Merrell, "Semiosis and Pragmatism: Toward a Dynamic Concept of Meaning," *Sign Systems Studies*, no. 1 (2006): 39.

³⁸ Charles Sanders Peirce, *Philosophical Writings of Peirce*, ed. Justus Buchler (Courier Corporation, 1940), 98.

³⁹ *Ibid.*, 99.

⁴⁰ *Ibid.*.

⁴¹ Queiroz and Merrell, "Semiosis and Pragmatism," 41

⁴² Deely, *Basics of Semiotics. Advances in Semiotics*, 2.

⁴³ *Ibid.*, 5.

3.5 The Point of View of Taste

Understanding signs through processes of experience and learning becomes a condition of practicing affect. Moreover, as a condition of practice, the existential notion of signs implies a particular method of practice. This method of practicing signs must have an equally dynamic, relational nature, and thus, it must betray the very characteristic of a method itself. The existential notion of signs demands a method without fixed rules or protocols, yet it does require some kind of recipe. For Deely, such a method without a method would mean taking a point of view rather than applying a given rule. According to Deely, modern philosophy has been obsessed with finding a method, with finding an ultimate and fixed protocol that would allow the truth to be established, and which would help formulate valid statements. This obsession with method, however, he argues, has led to particularization and a lack of adaptability of a theory for a variety of phenomena. Method as a systemic implementation has a narrow capacity. Because of its fixed nature, method allows us to grasp identities, define given states of things and find regularities; yet, anything that is dynamic and changing escapes its scope. For Deely, therefore, it is “semiotics [that] provides not a method first of all but a point of view.”⁴⁴ Taking a point of view as a starting point presupposes two major implications. Firstly, it acknowledges the already ideological position of the semiotician in some way, yet it does not make this ideology an intrinsic part of semiotics. Thus, a point of view is not universal, it does not pertain to the quality of objectivity. Secondly, point of view presupposes partiality. It does not refer to universality, but rather to a multiplicity of connections and possibilities. As with the practice of experimentation, to ensure the practice of signs, not only must the subject of the practice acknowledge her lack of total control and capacity to be affected by other subjects in the relations, but also the method must be partial – it must avoid the tendency of fixation and the universalization of encounters. In this respect, partiality means that which characterizes the partial observer, as discussed in the notion of experimentation in Chapter 2. Consequently, Deely indicates the existential nature of semiotics that acknowledges the processual and relational nature of how our existence and its understanding is constructed and how it is inseparable from our constant reflective relations on how these meanings are formed.⁴⁵

One can now ask whether the way we practice meaning is an affirmation of the point of view. If partiality sets the course of how the search happens, then what is the point of view? How should we sustain a point of view that is not a fixed method? Some indications may be found in the practices of CGG. Indeed, the name of the artistic duo already provides a clue.

“Genomic” in The Center for Genomic Gastronomy refers to the scientific discipline of genomics, which, although is a part of genetics that is strictly occupied with the study of genes and their traces, refers to a more relational understanding of interaction between genes

⁴⁴ Ibid., 10.

⁴⁵ Ibid., 12–13.

and environments. Genomics, then, is not focused on the particular sequences of genes, but on the mapping of gene expressions across different species and their environment. While looking at the emerging biotechnologies related to food, the artists take rather a relational approach.

The artists of CGG explain that, in their work, they are not necessarily interested in genes per se, but rather “how an organism relates to the larger world and how all the parts of the organism work together.”⁴⁶ In order to understand bodies in genomics they do not study fixed bodies, but the relations that generate those bodies. In this way, they take a perspective on relations that somehow determines what becomes important. Hence, for example, a relational approach results in their rather open and wide understanding of biotechnologies in food production and food sustainability. However, their relational approach remains partial. As they argue, a great deal of economic and media attention goes to “hi-tech solution, such as GM food and in vitro meat,”⁴⁷ an area in which there are already simple and sustainable solutions widely available. Take, for example, beans. Despite their seemingly old and “natural” place in our cuisine, beans, CGG argues, are the result of a long process of agriculture, breeding and selection. Beans are already manipulated bodies that carry a solution for food sustainability. In their work, CGG thus reimagines and de-familiarizes what we take for granted, by introducing a point of view into their method of relationality, with beans as a starting point for change.

CGG practices biotechnology as a point of view of the relationality of bodies; that is, of their constant change and mutability, which can generate new meanings and determine what is important. The artists are not interested in a universal answer to all the problems that biotechnology may cause. Instead, they are searching for practices that resist universalization. Here, partiality is understood as being outside the authority of institutions, yet within the relationality of already present habits and practices. Their practice of the point of view can also be seen in the “tools” they use in their investigations.

CGG are not focused on the particular methods of “doing science”, dressed in white coats and in the sterile environment of biotechnological labs. For some bioarts, this fascination with the methods of science and its attributes has been the main, if not the only, goal. Instead, CGG artists wear the chef’s whites of a fellow experimenter in a kitchen [Figure 19]. They approach the manipulation of living bodies as an act of brewing, seed saving, cheese making, mutagenesis and transgenesis, i.e. as ways of conducting the search, an apprenticeship in how bodies mutate.⁴⁸ Their mission is not only to imagine but to engage with the senses while thinking about our food habits through the wide practice of body manipulation.

⁴⁶ “Test_Lab: Art Meat Flesh,” Event, *V2_Institute for the Unstable Media*, http://v2.nl/events/test_lab-art_meat_flesh, accessed 11 April 2016.

⁴⁷ The Center for Genomic Gastronomy, *Eat Less, Live More & Pray for Beans*, <http://genomicgastronomy.com/work/2012-2/beans-book/>, accessed 11 April 2016.

⁴⁸ “Test_Lab: Art Meat Flesh.”

Taste's point of view, in CGG's practice, occurs as the capacity to relate, to be involved with all the possible relations that might become important. Taste becomes an encounter in-the-middle, where meanings and the understanding of "what is in your food" can be only grasped by engaging with the embodied relation. This engaged and attentive relation responds to the question: "do you really want to know how your sausage is made?"⁴⁹ Here, the act of eating becomes inseparable from the act of becoming with food. Their performance investigations are a transparent exploration of encounters with the flavours and smells of ingredients – nothing is hidden. They bring all the uncomfortable bodies to the table, exploring complex and dynamic connotations. "Ingredients rot and release aromatics when they are heated. They call attention to themselves through multiple human senses [...] The flavours and smells of food are a direct and immediate language for artists to communicate with."⁵⁰ In their work, the point of view of taste is an encounter with living bodies. As they stipulate, taste becomes the creation of an opportunity "to interact with data,"⁵¹ and to become with that data.



Figure 19. Zack Denfeld (left) and Catherine Kramer (Right), <http://genomicgastronomy.com/about/>, accessed 17 March 2017.

In this way, I argue that, as a mutually tailored encounter, taste fosters not only a different understanding of meaning, but also meaning's different practice and generation. It creates meaning that is not only material, or only discursive, but that somehow combines ingredients and what happens in-between them. We are not only interested in how bodies produce relations, often simultaneously, but also how these relations can be prolonged.

⁴⁹ Howells, *Experimental Eating*, 12.

⁵⁰ Ibid.

⁵¹ Ibid., 18.

Especially in art's practice and experience, meaning becomes something that is integral to, rather than exterior to life and living bodies. Through the work of CGG, we can not only grasp how meaning unfolds within the practice of art, in this case in the actual taste of smog, but mostly it reveals how meaning is something living; that is, we can understand what it means to taste while tasting.

3.6 A Life of Meaning

The semiosphere is a sphere just like the atmosphere, the hydrosphere, and the biosphere. It penetrates to every corner of these other spheres, incorporating all forms of communication: sounds, smells, movements, colors, shapes, electrical fields, thermal radiation, waves of all kinds, chemical signals, touching, and so on. In short, signs of life.⁵²

The contaminants of the CGG investigations explore subtle calls, anxieties and intensities that are produced by living bodies and their multiple encounters and they cannot be quickly defined and categorized according to given norms, whatever they might be. In these artistic encounters, there are meanings generated that evade exclusively artistic and representational interest. But if we hold on to a stubborn belief in the notion of meaning as solely human, due to a logocentric capacity, then we perpetuate the same vicious cycle: of wanting change but not changing.

CGG invites us to encounter sensitivities that are different from what we – humans – know; encounters that escape our given understanding and foster questions, new approaches and thinking. CGG initiates its investigations based on this new sensitivity. Their experimental eating performances, an investigation into the relational happening of food, are made possible through the existential understanding of meaning, where meaning generation is a characteristic of all living systems, giving us clues and signs about how to practice contaminating matters of affect.

While considering meaning to be intrinsic to living bodies may seem unusual within the interests and focus of the humanities, it is not a novel concept. The initial ideas about constructing a discipline that would focus on relations between life and language already emerged with the discovery of the genetic code in the early 1960s.⁵³ Importantly, however, this practice of ascribing meaning and information to living systems was a long way from a dynamic and relational understanding. The belief among scientists that you can map genes and thus possess all the necessary information about a living body reached its apogee in the

⁵² Jesper Hoffmeyer, *Signs of Meaning in the Universe* (Bloomington, IN: Indiana University Press, 1997), vii.

⁵³ See Marcello Barbieri, "What Is Biosemiotics?," *Biosemiotics* 1, no. 1 (13 February 2008): 1–3.

Human Genome Project (HGP) in the 1990s. Scientist working on the HGP presupposed an essentialist vision of what life and communication might be by propagating a belief in a hidden truth, that it is possible to encode the essence of humans and store it on a single storage device.⁵⁴ The consequences of such molecularization and digitalization of living bodies led to the easy commodification and manipulation of bodies that we see today. When living bodies are treated as bits of information that can be owned by companies, the questions of what a living body is and how we can practice its materiality become inseparable. The commodification of data about the body, consequently commodifies the body itself. Each medical and research practice, test, access to working with the body becomes an issue of law and rights, starkly illustrated by the cases of gene patents discussed in Chapter 1 of this book (*Contaminant P*).

However, parallel to an essentialist understanding of how meaning might be part of what we understand as life, a more relational approach has emerged within the biological study of animal communication. Rather than study the molecular level, biological scientists became focused on the vast relations between species and their environment, which presuppose the material notion of meaning that pervades the artistic practices of CGG. In order to understand the relevance that affect has for the materiality of meaning, I need to examine more closely the study of meaning within biology.

Thomas Sebeok has been the most influential scholar in shaping an interdisciplinary and relational understanding of what now is formulated under the name of *biosemiotics*. He outlined the main understanding of semiotics as

the sign process – the fundamental process that carries meaning and in which meaning is created. It is the process – not at all simple – that mediates purpose and causality, living and dead aspects of nature, and makes it possible to see how to overcome a crude dualism of mind and matter, as well as how the dynamics of the actions of signs provides a better approach to living systems than our dichotomies of mental versus physical properties.⁵⁵

The idea that semiosis is an integral part of all living systems challenges not only the independent position of an interpreter of meaning generation, it also presupposes that the living body is already a dynamic interpreter of the many relations it is entangled with. In other words, such an understanding of semiosis breaks with the notion of the transcendental production of meaning. Meaning is not a result of post-reflection, which always presupposes a holistic view of the interpreted object; instead, within biosemiotics, meaning becomes an embedded and dynamic element of being, of life itself.

⁵⁴ Hilary Rose and Steven Rose, *Genes, Cells, and Brains: The Promethean Promises of the New Biology*, (London/New York: Verso, 2014), 25.

⁵⁵ Kalevi Kull, Claus Emmeche and Jesper Hoffmeyer, “Why Biosemiotics? An Introduction to Our View on the Biology of Life Itself,” in *Towards a Semiotic Biology: Life Is the Action of Signs*, (eds) Claus Emmeche and Kalevi Kull, 1st edition (London/Singapore/Hackensack, NJ: Imperial College Press, 2011), 2.

As many scholars noticed, and as Sebeok stipulates, the foundations of biosemiotics were laid by Jakob von Uexküll, “the brilliant neo-Kantian theoretical and experimental biologist.”⁵⁶ While the association of Uexküll with Kant might not be so useful in the light of our previous analysis of taste, a closer look at Uexküll’s theory of meaning will demonstrate how unique his thought was and how relevant it has become for our understanding of the materiality of meaning. After all, it is Uexküll’s notion of affect that was used by Deleuze and Guattari in *A Thousand Plateaus*.⁵⁷ Despite this influence, Uexküll’s theory of meaning, which is deeply material and relational in nature, is still undeveloped within humanistic study, remaining just another anecdote about the influence of biology on humanistic thought.

Uexküll builds his understanding of meaning by taking the consequential position of a biologist who, in order to understand a particular living body, instead of looking at that body’s properties, believes it is crucial to first search for the body’s relations within its environment. He is interested in how the organism behaves and relates with its environment. Mostly, he focuses on how particular relations within the environment of the living organism are constitutive of its existence. He looks at how a living being depends on particular conditions. He argues that only by mapping all these relations can we actually understand the body in question. In his description of a tick (the famous “tick story” borrowed later by Deleuze and Guattari⁵⁸), he elaborates how this small, eyeless animal, which lives on tree branches, waiting to feed on a warm-blooded organism, depends on just three stimuli: “a general sensitivity to light in the skin,”⁵⁹ a sense of smell and a sense of temperature. All three stimuli, which Deleuze and Guattari call affects,⁶⁰ determine what it means to live as and be a tick. By mapping the relations that occur between the living creature and its environment, we can understand the life of a tick.

Importantly, the process of mapping relations starts from the presupposition that what we map is the subject with its environment. Uexküll calls this environment a bubble, an *Umwelt*, and in *A Theory of Meaning*, he explains that: “every animal, no matter how free in its movements, is bound to a certain dwelling-world, and it is one task of ecologist to research its limits.”⁶¹ Brett Buchanan argues that Uexküll reveals his ethology as a “dimension of framing the being and becoming of the animal. The animal body is interrelated with its environment through the process of behaviours, so it becomes a question of how to engage

⁵⁶ Thomas Sebeok, *Signs: An Introduction to Semiotics*, 2nd edition (Toronto/Buffalo, NY: University of Toronto Press, Scholarly Publishing Division, 2001), 92.

⁵⁷ See Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia* (London [etc.]: Continuum, 2004).

⁵⁸ *Ibid.*, 283.

⁵⁹ Jakob von Uexküll, *A Foray into the Worlds of Animals and Humans: With a Theory of Meaning*, trans. Joseph D. O’Neil (Minneapolis, MN: University of Minnesota Press, 2010), 45.

⁶⁰ Deleuze and Guattari, *A Thousand Plateaus*, 283.

⁶¹ Uexküll, *A Foray into the Worlds of Animals and Humans*, 139

the ontological dimension of this relation.”⁶² Since organisms, rather than being seen as machines or objects, are subjects or agents that actively create what is significant within their environment, Buchanan argues that this assumes an “interpretative account on the part of the organism.”⁶³ What is created and what we eventually map in order to understand the organism, is the semiotic relations, meaningful relations that already are emerging between the organism and its environment. What we understand to be a tick is thus the significant relations between a particular body and its environment.

For Uexküll, meaning is not given and it is not a product of reflection, but rather meaning is a product of action: “every action impresses its meaning on a meaningless object and makes it thereby into subject-related carrier of meaning in each respective environment.”⁶⁴ In a sense, it is a phenomenological and correlationist understanding. Meaning seems to be dependent on the action of a subject that impresses itself on the object. Meaning, here, is thus something that does not emerge from matter, but is passed on to it. However, Uexküll seems to break with such intentionality of meaning through a particular understanding of a subject. For Uexküll, a subject is not a centred one, the subject does not construct meaning through her act of intention. It is an action that happens between encountering objects, which, in turn, become meaning generating subjects. In other words, meaning is not subject-centred or object-centred. The distinction between subject and object loses its relevance when faced with meaning that is action-centred; or, to put it differently, relation-centred.

Uexküll understands action as a relation that produces perception and which, in turn, gives the impression of an effect that generates meaning. He calls it “a functional cycle [...] which connects the carrier of meaning [action] with the subject.”⁶⁵ From this, it follows that it is not the subject that constitutes action and meaning, but the action; that is, a relation – what Peirce would call a sign and what I call affect – that constitutes subject and meaning. Action becomes “a vital functioning of animal subjects”;⁶⁶ it generates and conditions them while revealing their equally creative and meaning-forming capacities. In other words, action is a relation, an affect that has epistemological and ontological dimensions for how the meaning of bodies is generated.

Uexküll further argues that “meaning bridges the gap between physical and nonphysical process, just as it did between the sheet music and the melody.”⁶⁷ Importantly, his notion of action does not have the characteristic of an interaction, a kind of causal chain of action and response. For him, the linear notion of causality is merely a mechanical description,

⁶² Brett Buchanan, *Onto-Ethologies: The Animal Environments of Uexküll, Heidegger, Merleau-Ponty, and Deleuze* (Albany, NY: State University of New York Press, 2009), 4.

⁶³ *Ibid.*, 32.

⁶⁴ Uexküll, *A Foray into the Worlds of Animals and Humans*, 145.

⁶⁵ *Ibid.*

⁶⁶ *Ibid.*, 201.

⁶⁷ *Ibid.*, 157.

something that is more characteristic of a physiologist than a biologist. Why such an emphasis on the non-mechanical and non-linear understanding of action when thinking about the meaning? Although Uexküll did not draw this conclusion, I argue that the mechanical understanding of bodies that is intrinsic to lineal causality perpetuates dualism and renders it impossible to grasp the relational, material meaning.

As Jesper Hoffmeyer, a philosopher and biosemiotician, explains, the mechanistic vision of the body and a dualistic division between biology and psychology remains an ongoing practice in science today. In the face of the relational interdependence between one's thought and the reaction of a body's organs, contemporary medicine postulates explaining psychology according to biology, i.e. as a mechanical occurrence:

Because biology, like all other sciences, is based on Descartes' old dualism, which does not allow any inner link between the spiritual and the physical sides. So when medicine and biology decide to take psychological phenomena seriously, this can only be done by reducing said psychological phenomena to mechanical occurrences.⁶⁸

Significantly, the mechanical interdependence explanation of the relation between one's thoughts and bodily reaction presupposes a dualistic view of the mind and body, i.e. that meaning is something added after the body has a reaction. As Hoffmeyer argues, within the body there are also semiotic processes. In other words, the materiality of the body already generates and produces the field of meaningful relationality: "inside the body, too, processes are in fact occurring which can best be understood semiotically, processes which make it possible to understand how the body can become "minded" and how the mind can become physical."⁶⁹ The acknowledgment of the non-linguistic generation of meaning implies a realization that meaning happens not only in a body as a result of an action by another body, but in encounters between and within bodies as an integral and constitutive element of living systems. It thus only makes sense to consider taste as an encounter in relationality when affirming that meaning is generated by the encountering bodies and their capacities as signs. In the case of the works by CGG, for the taste to be an encounter in relations, the body's materiality must already have a semiotic character – it must already produce and be produced by signs.

This material and relational character of meaning belongs not only to what, as a result of a dualistic division, is taken as conscious minds, but also to what is understood as passive matter. A material, relational notion of meaning allows us to think about the materiality of the body not as a passive mechanistic chunk, but as generative agency, rendering the body/mind dualism not only politically, socially and culturally obsolete, but simply logically contradictory. To understand such a notion of materiality, it is not enough to count bodies'

⁶⁸ Hoffmeyer, *Signs of Meaning in the Universe*, 69.

⁶⁹ *Ibid.*, 69.

internal and external relations. Similarly, to understand bodies' function, it is not enough to track linear causal relations and interdependences between those bodies. We need to have some insights into "the practical principle" or "inner logic" of how it works; that is, how these bodies are shaped at the semiotic level.⁷⁰ As in Uexküll's description of a tick, we need to know what stimuli are actually important for a tick's life. Uexküll described this importance of stimuli as the "vital functioning" of a living being.⁷¹ This vital functioning is what later behaviourists called significance and what I argue becomes a particular understanding of materiality of meaning as a condition of practicing bodies within affect.

3.7 Relations of Significance

When Uexküll mapped three stimuli that drive a tick's life, he is not querying the tick's causal relations, which depend on a purely mechanistic view of action and response (a particular actor-network scheme). He does not determine his understanding of the tick based on the relations of causes, as if he had clear and given knowledge about why a tick waits, smells and drinks – why it simply does what it does. Instead, Uexküll focuses on the relations of significance, on how important particular stimuli are for the living body. In his study of a tick, Uexküll asks what is important for the creature to be able to function and regenerate. This existential notion of meaning is quite different from mechanistic and semiological understanding. Such an existential approach demands a direct connection of meaning with value and life and with what is important for a body to continue to live. Here, rather than working on the level of logical denotation and correlation, meaning works on the level of what becomes important for a body to live. In this way, the material notion of meaning that affect implies demands another condition for its practice, namely the search for significance and not signification.

Interestingly, such an existential approach to meaning is nothing new or limited to biological endeavour. Charles Morris, a semiotician, noticed that the two levels of functioning of the word meaning, logical and existential – the level of signification and the level of what is significant – are present in many languages: "Thus if we ask, what is the meaning of life, we may be asking a question about the signification of the term 'life', or asking a question about the value or significance of living – or both."⁷² Morris calls the existential notion of meaning expressive. This expressiveness involves the signification of an object not only referring to the object's properties, but, equally, it is inseparable from the interpreter's

⁷⁰ Ibid., 80.

⁷¹ Uexküll, *A Foray into the Worlds of Animals and Humans*, 201.

⁷² Charles Morris, *Signification and Significance: A Study of the Relations of Signs and Values*, 3rd edition (Cambridge, MA: MIT Press, 1968), vii. Recently, the same differentiation of the word meaning was mentioned by Manuel DeLanda in his lecture on "Material Affectivity" given at PennDesign (The University of Pennsylvania School of Design). See the video recording: "Manuel DeLanda, *Material Affectivity* at PennDesign, September 17, 2014 on Vimeo," <https://vimeo.com/107274730>, accessed 7 April 2016.

dispositions. Meaning concerns values; however, these values are understood in a relational and dynamic, rather than a universal and fixed, way. As he stipulates, “value situation [...] is inherently relational, involving an action of (positive or negative) preferential behaviour by some agent to something or other.”⁷³ Moreover, he argues for the values to be objectively relative. This means that the value of something, i.e. what one believes is important, does not belong solely to the property of an object or to its interpreter’s preferences. Rather, what becomes significant is a contingent composition of relations between an object and its interpreter that does not exhaust the number of possible relations. In other words, you can find a meaning of life once you set a particular goal, but it does not mean that you cannot find a new meaning of life, once the goal is fulfilled or changed.

Meaning as significance, as value or that which is important, is not an abstract idea. It is not something fixed or given, but rather it is a relation that happens within a particular situation. Although sign carries many characteristics of living beings, Morris nevertheless argues that it cannot be equivalent with it. Sign is an action, but always directed at a particular goal.⁷⁴ Since Morris believes that life extends sign’s capacity, within contemporary biosemiotics this means that sign and life are considered equal, and thus the notion of meaning acquires profound consequences.

Hoffmeyer explains this material understanding of meaning using an analogy between a city and a living cell. Imagine that cars driving in a city are DNA in a cell. A full mechanical description of a car does not provide an explanation and understanding of the car’s movements through the city or the logic behind it. Equally, detailed knowledge about the structure of DNA is not very useful. You need to have an understanding of all of the traffic, how people use it and how the city works in order to be able to come close to understanding what drives particular movements, what is important for each element of traffic and its flows and relationality,⁷⁵ or what each sequence of DNA does and how it is important for other parts of the whole chain and for their expressions.

We can view the food encounters that CGG practice in a similar vein. It is not enough to know what the ingredients of a particular dish are, or what their history, biological structure or social use is. It is also not enough to simply cook those ingredients and eat them in order to understand them. You need to create a space of encounter to enter their internal logic, to enter their relationality in order to generate the meaning of food. In the process of encounter, all the relations that the bodies are entangled with start to work, exercising what for the bodies becomes significant. This means that the system of significance actually emerges during the process of decision-making and interpretation. The interpretation here, however, has the character of a search that works as an encounter and is not a post-action presupposing the transcendental interpreter and a holistic vision of an object. Interpretation

⁷³ Morris, *Signification and Significance*, 9.

⁷⁴ See Susan Petrilli, “Charles Morris’s Biosemiotics,” *Semiotica* 127 (1999): 67,72.

⁷⁵ Hoffmeyer, *Signs of Meaning in the Universe*, 85.

happens while eating, who or what interprets in the moment of encounter is blurred here. As Deleuze explains,

Interpreting has no other unity than a transversal one; interpreting alone is the divinity of which each thing is a fragment, but its 'divine form' neither collects nor unites the fragments, it carries them on the contrary to the highest, most acute state, preventing them from forming a whole.⁷⁶

A consequence of the relational character of a sign is that once the search of meaning is fulfilled, and the sign producing meaning disappears as a sign, it can again become meaningless, depending on a new relation. As such, sign has no fixed state or goal, its existential nature renders it dynamic and constantly desiring new relations. This chaos of relations is organized by the relations of importance and signification. Thus, it is not the eater or food alone that does the thinking, but the processual, temporal and spatial relationality between and within bodies.

Moreover, thinking in terms of the relations of significance that construct our bodies within affect, in addition to biological and behavioural theories, is particularly vivid in art philosophical analysis. John Dewey's study of aesthetic experience in *Art as Experience*, for example, allows us to grasp what actually happens between bodies in an encounter. Dewey's understanding of experience has served a rather humanistic revitalization of the human body as a valid tool for the phenomenological grasp on knowledge.⁷⁷

However, his relational understanding of experience has rather more crucial implications for our study of material notion of meaning as significance. Dewey's notion of experience, when viewed through affect, gains new importance – Dewey has shaped how can we understand not only why art is important, but primarily how art generates importance.⁷⁸

⁷⁶ Hoffmeyer, *Signs of Meaning in the Universe*, 85.

⁷⁷ Richard Shusterman actualizes Dewey's notion of experience in his Somaesthetics (see, for instance, Richard Shusterman, *Body Consciousness: A Philosophy of Mindfulness and Somaesthetics*, 1st edition (Cambridge/ New York: Cambridge University Press, 2008)), yet his understanding of experience diverges greatly from Dewey. Shusterman focuses mainly on human bodily perception and its revitalization for a better human cognition and life. His understanding of the body, despite a philosophical tradition of the body's inferiority and passivity, is focused on the human body's individual capacity and mastery that perpetuates the dualism that Shusterman claims to overcome: "If we wish to improve our lives (and not only by improving the arts and aesthetic experience that enrich our lives), then one important way to do so would be to improve our understanding and mastery of our bodies – the fundamental, indispensable instrument or medium through which we perceive, act, and live this life on earth" in Richard Shusterman, *Thinking Through the Body: Essays in Somaesthetics* (Cambridge: Cambridge University Press, 2012), x.

⁷⁸ Although Dewey's use of the word of affect (which he introduces elsewhere, see John Dewey, "Affective Thought," in *The Later Works, 1925-1953*. Vol. 2: 1925-1927 (Carbondale, CO [etc.]: Southern Illinois University Press, 1984), 104-110), has a rather psychological tradition that is far from the Spinozian understanding of affect as affectus, he wrote about experience in line with what can be read as happening of relations of significance. In his work, he takes a "back door" approach that reveals how the encounter of bodies, regardless of their aesthetic or non-aesthetic character, brings about a complex and dynamic sense of relations. As he explains: "In order to understand the meaning of artistic products, we have to forget them for a time, to turn aside from them and have recourse to the ordinary forces and conditions of experience that we do not usually regard as esthetic," in John Dewey, *Art as Experience* (New York: TarcherPerigee, 2005), 2.

For Dewey, relations within experience are risky as they produce tension and resistance between bodies in an encounter. Like Spinoza, he argues that relations happen in a rhythmic movement, which, in order for it to lead to change and alteration, cannot be an uninterrupted interaction. The clash of bodies in an encounter does not happen in a dialectical manner, where the production of the new happens at the expense of one's destruction. In a Spinozian spirit, Dewey writes about the intensity that is discharged at a moment of encounter. This intensity is "the power to move and stir, to calm and tranquillize."⁷⁹ This can be compared to what the philosopher and literary scholar Hans Ulrich Gumbrecht described as "moments of intensity." In terms of experience, meaning materializes before any cognition takes place. This event of encounter has a dynamic pre-reflexive character, which Gumbrecht separates from any form of preconscious needs and desires.⁸⁰ Thus, the existential character of meaning generating in such an understanding of encounter should not be regarded as a psychological category, but rather should be viewed in terms of the ontological drives of bodies, of how something becomes important for bodies' existence.

According to Dewey, meaning unfolds and emerges within experience. I would frame it that meaning occurs within the happening of affect. For Dewey, the experience is an encounter that is an "interpenetration" of bodies, of self and the environments, of objects and events.⁸¹ Such a notion of a dynamic and relational sense of experience is possible for Dewey, since every experience happens through impulsions. Impulsions are drives and forces, reminiscent of what Spinoza described as *conatus*. They are not simple, automatic body impulses, but rather existential desires that move bodies towards others. Their purpose is to sustain the body, to fulfil its needs. Unlike the mechanic movement of a tongue and swallowing when eating, for instance, impulsion is the craving for food, it is "a movement outward and forward of the whole organism to which special impulses are auxiliary."⁸² Most importantly, since it is a movement that is by no means automatic, it expresses the significance of the dependency with the environment: "The need that is manifest in the urgent impulsions that demand completion through what the environment – and it alone – can supply, is a dynamic acknowledgment of this dependence of the self for wholeness upon its surroundings."⁸³ In this way, for Dewey, impulsions not only initiate an experience, they also make it "[...] clothed with meaning."⁸⁴

Dewey's notion of meaning, similarly as in biosemiotics, is that of significance. Meaning is what is important, what drives the body and makes it co-related with the environment.

⁷⁹ John Dewey, *Art as Experience*, 191.

⁸⁰ Hans Gumbrecht, *Production of Presence: What Meaning Cannot Convey*, 1st edition (Stanford, CA: Stanford University Press, 2003), 99–100; Agnieszka Anna Wołodźko, "Materiality of Affect: How Art Can Reveal the More Subtle Realities of an Encounter" in *This Deleuzian Century: Art, Activism, Life*, (eds) Rick Dolphijn and Rosi Braidotti (Leiden/Boston, MA: Brill, 2015), 175–176.

⁸¹ Dewey, *Art as Experience*, 18.

⁸² *Ibid.*, 60.

⁸³ *Ibid.*, 61.

⁸⁴ *Ibid.*, 62.

The question of significance or importance thus opens up the possibility of thinking in a relational way. It introduces the way that affect foregrounds the relational or expressive nature of an object. The urgent question now is: how are we to transform the level of signification, which even this book relies upon, into affective, relational knowledge of significance? In other words, how can we avoid the hypocrisy of criticizing the dominion of the systems of signification through the signification of these very words?

Considering again *The Smog Tasting*, highlights a particular dilemma. The assumptions and design of the smog performance investigation seem to presuppose given database containing pollution statistics. After all, they first had to collect data that signified pollution in order to translate them into a specific dish. How can such a reliance on signification be considered as practicing material semiotics? How can such a transfer of data create new material experiences?

When we enter the online database of the European Environment Agency,⁸⁵ where we can read about smog data, we will find exact numbers, measures, statistics, graphs and definitions of individual chemicals, according to the area. We are able to study statistics regarding casualties of pollution, usual side effects of particular substances and their impact with regard to the exact degree of exposure. Finally, we will read about the newest regulations, policy measures and interventions. What we will not find there, however, is how to live with the smog, what our daily encounters with the smog are, or how are bodies co-relate with their environment in order to live within the smog.

I argue that the two meanings that Morris distinguished, namely signification and significance, although different, do not oppose each other, they do not perpetuate the dialectic logic of De Saussure's semiology. Instead, they complement each other. In this way, signification and significance seem to be at work in CGG's performances. The relation of signification and significance reveal the dynamic dimension of meaning. Rather than focusing on what is there, solely on what is already given, CGG's investigations teach us how to inquire about what might be significant once we multiply, shift or change the scale of relations with contaminants.

Stacy Alaimo, a literature and environmental scholar, would describe CGG's approach in terms of "material significations"; that is, a metonymic slide where body and environment construct a "trans-corporeal space." As she explains: "Such a body (or mind) cannot be distinguished from that which surrounds it, since various substances may provoke pain, illness, disability, confusion, and fatigue."⁸⁶ In trans-corporeal spaces, a body and environment are already interchangeable, are already continuous in their permeability – they are within affect. "Bodies are not self-contained,"⁸⁷ she argues. In order to grasp their

⁸⁵ "European Environment Agency's Home Page — European Environment Agency," Folder, 2017, <https://www.eea.europa.eu>, accessed 3 June 2017.

⁸⁶ Stacy Alaimo, *Bodily Natures: Science, Environment, and the Material Self* (Bloomington, IN: Indiana University Press, 2010), 115.

⁸⁷ *Ibid.*, 135.

meaning, to understand them, in addition to asking questions about data – who, how many and what – we must recognize the importance and necessity of the question “how does this person manage to live?”⁸⁸

In this way, CGG not only invites speculation on how life might be once the smog becomes part of us, within us, as intimately as food in our mouths, but it also generates the importance of that investigation. Thinking and practicing significance becomes a condition and implication of affect – of the relation of transformation that we live in. Moreover, as CGG argues: “As artists, we don’t claim to discover Truth. We see value in speculating widely, creating novel experiences and teasing out assumptions we have about the world.”⁸⁹ Using this speculative approach, transforming what is given by multiplying relations of what is possible, they signal what is at stake when we practice the relations of significance, namely, the search for truth.

3.8 The Truth of Significance

Meaning is wider in scope as well as more precious in value than is truth, and philosophy is occupied with meaning rather than with truth.⁹⁰

The urge for meaning rather than truth seems to be a necessary consequence of affect that constructs living bodies. If not obvious for philosophical endeavours, the search for meaning, for that what becomes significant, is much more vivid in artistic ones. In art’s practice, the encounters between bodies are continuously re-created, exercising the necessities that drive encounters. Through art, we can grasp the existential dimension of meaning, yet this meaning holds much darker implications than we are used to when thinking about the truth. When bodies’ meanings are driven by dynamic and changing relations of importance, how can we understand them? If there are no given rules for practicing the materiality of meaning, how can we share and further practice that knowledge in respect of bodies? Does knowledge accumulation within affect make sense, or are we prone to a never-ending investigation of what bodies can do and mean?

In the quotation that opens this section, Dewey is not suggesting that the truth is irrelevant, rather, he indicates that only the judgements regarding what is true or false are not significant. These judgments may be of great importance, yet they occupy a tiny fraction of the scope of what we understand as meaning. “Meanings are generated and in

⁸⁸ Ibid., 120.

⁸⁹ The Center for Genomic Gastronomy, “Eat Less, Live More & Pray for Beans.”

⁹⁰ The Center for Genomic Gastronomy, “Eat Less, Live More & Pray for Beans.”

some degree sustained by existence. Hence they cannot be wholly irrelevant to the world of existence.”⁹¹

The quotation from Deleuze’s “Proust and Signs” that initiates this chapter seems to directly follow Dewey’s thought: “A work of art is worth more than a philosophical work; for what is enveloped in the sign is more profound than all the implicit signification.”⁹² Deleuze signals not only the profound inspiration he finds in art, which allows him to engage in his pursuit to overcome the priority of signification. He also indicates that the notion of significance is simply more important than the search for truth. By writing that “art is worth more,” he suggests a different line of thinking that prioritizes values and importance before any aspiration for truth.

Deleuze approaches signs as things that do not signify, that do not refer to something else, but as things that materialize when generating what matters. He analyses such a notion of signs with regard to learning process: “Learning is essentially concerned with signs. Signs are the object of temporal apprenticeship, not of an abstract knowledge.”⁹³ Deleuze thus understands signs in terms of processual and careful learning about all the relations involved. It is a process of apprenticeship, in which there is no given point or method of observation. One must first build up the sensitivity, appreciation and attachment for the sign to be able to decipher and interpret it. As Deleuze explains, “one becomes a carpenter only by becoming sensitive to the signs of wood, a physician by becoming sensitive to the signs of disease [...] Everything that teaches us something emits signs; every act of learning is an interpretation of signs or hieroglyphs.”⁹⁴

In his book on Proust, written before his study on Spinoza, Deleuze outlines an understanding of signs as being existential. Later, in his “Spinoza and the Three ‘Ethics’” text, he will explicitly equalize sign and affect, characterizing them as vectorial, i.e. they “are passages, becomings, rises and falls, continuous variations of power.”⁹⁵ However, there are already many indicators in Deleuze’s earlier writings that he sees signs as affect. By understanding signs in this way, Deleuze strengthens the radical shift in thinking, namely, that meaning and what we take as knowledge within humanities has not only a linguistic structure, but also a material one. Deleuze transforms the notion of signs, extracting them from analytical philosophy and endowing them with an existential function.⁹⁶ However,

⁹¹ Ibid., 82.

⁹² Deleuze, *Proust and Signs*, 20–21.

⁹³ Ibid., 4.

⁹⁴ Ibid.

⁹⁵ Deleuze, *Essays Critical and Clinical*, trans. Daniel W. Smith and Michael A. Greco, (Minneapolis, MN: University of Minnesota Press, 1997), 139.

⁹⁶ As noticed by Christopher M. Drohan, this existential understanding of signs shares some similarities with Heidegger’s understanding of epistemology through ontology; see Christopher M. Drohan, *Deleuze and the Sign*, (New York: Atropos Press, 2009), 9–10. For Heidegger, to know “what is” can be fulfilled only by relating to it, by becoming with it: “We shall never learn what “is called” swimming, for example, or what it “calls for” by reading a treatise on swimming. Only the leap into the river tells us what is called swimming,” in Martin Heidegger, *What Is Called Thinking?* (New York: Harper & Row, 1968), 21. Inna Semetsky also shows this imperative of experience

what is important for our discussion on materiality of meaning is the question of how to practice such material, existential knowledge. What does materiality mean here, next to relationality? What does this material notion of meaning actually entail once we establish how to practice it?

Deleuze already gives us some clues in his way of thinking about signs, which is rooted in Peirce's theory of signs analysed briefly earlier in this chapter. Firstly, Deleuze borrows Peirce's understanding of signs as a search that insists on an engaged relation where "One does not think and one does not act, but one makes signs."⁹⁷ Secondly, the engagement of making signs is expressed by a demand for a trained sensitivity, as we have already discussed: "One becomes a carpenter only by becoming sensitive to the signs of wood, a physician by becoming sensitive to the signs of disease. Vocation is always predestination with regard to signs."⁹⁸ Deleuze then argues that signs generate the search for knowledge in this engaged relation. Since, for Peirce, "a sign is something by knowing which we know something more,"⁹⁹ Deleuze argues that the search "is in fact a search for truth."¹⁰⁰

Deleuze's understanding of truth is not then based, as we may already predict, on the classical definition of correspondence of reality with judgements about this reality. Such a notion of truth would only be a product of logic and the result of arbitrariness. As such, the truth presupposes no risk and no novelty in the encounter, demanding a given number of already known results: "They [the philosophers of analytical truth] remain gratuitous because they are born of the intelligence that accords them only a possibility and not of violence or of an encounter that would guarantee their authenticity."¹⁰¹ Similarly, like Deely, Deleuze sees a presupposition of and pursuit of a method in such a philosophical approach to truth. The image of thought, characteristic of philosophy, that is concentrated on the corresponding notion of truth presupposes the intrinsic love for truth. In your first year studying philosophy, you will learn: that the love for truth is the most "natural" and specific point of departure for all thought – philosophy, from the Greek φιλοσοφία: *phileo* denotes *to love*, *sophia* denotes *wisdom*.¹⁰² The love for truth, for wisdom, constitutes a friendship inscribed in philosophy – and it is exactly this idea of philosopher as friend that Deleuze distrusts.

as "becoming with" into knowledge formation in Deleuze's thought through Dewey's influence. She positions Deleuze and Dewey on the same line of thinking about experience, where what we take as knowledge is actualized and generated by the experimental and experiential processes of learning; see Inna Semetsky, "Deleuze's New Image of Thought, or Dewey Revisited," *Educational Philosophy and Theory*, 35, no. 1 (2012): 17–29.

⁹⁷ Deleuze, *Proust and Signs*, 5.

⁹⁸ *Ibid.*, 4.

⁹⁹ Peirce, *The Collected Papers*, CP 8.332.

¹⁰⁰ Deleuze, *Proust and Signs*, 11.

¹⁰¹ *Ibid.*

¹⁰² "Philosophy, N.," *OED Online* (Oxford University Press), <http://www.oed.com.ezproxy.leidenuniv.nl:2048/view/Entry/142505>, accessed 3 June 2017.

The notion of a friend in the mindset of philosophers relies on the universalization of communication, on reaching an agreement and confirming one's position:

Friends are, in relation to one another, like minds of goodwill who are in agreement as to the signification of things and words; they communicate under the effect of a mutual goodwill. Philosophy is like the expression of a Universal Mind that is in agreement with itself in order to determine explicit and communicable significations.¹⁰³

However, exposing philosophy in this way does not lead Deleuze to an abandonment of truth. Rather, with Guattari, he sets a different course, a “different than a friend” persona for philosophy. He argues that it is not what is true, but what is important that continuously inspires new, genuine thought:

Philosophy does not consist in knowing and is not inspired by truth. Rather, it is categories like Interesting, Remarkable, or Important that determine success or failure. Now, this cannot be known before being constructed. We will not say of many books of philosophy that they are false, for that is to say nothing, but rather that they lack importance or interest, precisely because they do not create any concept or contribute an image of thought or beget a persona worth the effort.¹⁰⁴

Deleuze adopts the position of one who is uncomfortable and problematic, who has been neither a friend, nor an enemy of philosophy, yet is someone who shadows all new thoughts. One that is driven not by the need for acceptance and confirmation, but by a need and necessity, by that what is important. Such a persona is prone to violence. However, this violence is not based on a negation of the one who disagrees, since, here, a notion such as agreement has no meaning. Rather, the violence is fed by multiplication, by a continuous adding rather than rejecting of what is significant. The driving force of what can generate truth is thus violent encounters of different necessities and importance. This comes close to what Deleuze described as Nature, namely a force that “is not attributive, but rather conjunctive: it expresses itself through “and,” and not through “is.” This *and* that – alternations and entwinings, resemblances and differences, attractions and distractions, nuance and abruptness.”¹⁰⁵

How, then, should we communicate when there are no friends of signification? How is communication possible when there is “too much difference,” as Deleuze puts it?¹⁰⁶ How

¹⁰³ Deleuze, *Proust and Signs*, 60.

¹⁰⁴ Gilles Deleuze, Félix Guattari, *What Is Philosophy?* (London: Verso, 1994), 82–83.

¹⁰⁵ Gilles Deleuze, *The Logic of Sense*, (London, New York: Continuum, 2004), 304.

¹⁰⁶ Gilles Deleuze, *Difference and Repetition*, trans. Paul Patton (New York: Columbia University Press, 1995), 119.

does the violence of many trigger the need for search? If, in this multiplicity, the truth is born from the dissensus, “the dark regions in which are elaborated the effective forces that act on thought, the determinations that force us to think,”¹⁰⁷ how can this be done without falling into the dialectic negation. In other words, how can we maintain the forces of multiplication?

Deleuze points to a condition, a persona that replaces the friend. It is “an invisible, imperceptible dark precursor.”¹⁰⁸ It bears a resemblance to a larval subject that is still in an embryonic state – it is a force of movement that guarantees communication between that which cannot communicate without falling into negation.¹⁰⁹ “The dark precursor is not a friend”¹¹⁰ since it does not just carry meanings that ensure confirmation and communication.¹¹¹ It rather transforms and metamorphoses while communicating. It is not a transcendent but an immanent pre-subjective force of search for contamination.

The dark precursor as a persona of search leads to novelty and creativity. The dissensus emerges in the accident of encounter, when we are forced to search for more relations of transformations: “We search for truth only when we are determined to do so in terms of a concrete situation, when we undergo a kind of violence that impels us to such a search.”¹¹² In this way, truth, according to Deleuze, is not grounded in affinity, correspondence and signification. The kind of truth Deleuze is writing about is not based on communication or comparison to some “objective content.” Deleuze’s truth is of entering the relation of signs that he understands in a very pragmatic way – as learning by “doing with someone” and not as “doing like someone.” Once again this is reminiscent of Peirce’s definition of signs as “learning by experience.” Yet, Deleuze points out the necessity of experience and encounter when searching for truth. The pursuit of a non-corresponding understanding of truth implies that Deleuze is arguing for a quest for novelty, and primarily, for an inquiry into how new knowledge emerges.

Meanings emerge from an encounter that disrupts, poses questions and demands further search. This is a dark precursor indeed, something never fulfilled, constantly demanding and mapping new relations and conditions of significance. As a result of the material notion of meaning, that is, through the focus on relations of significance, we must continuously practice the search – the investigation of mutations. This search, unlike any logocentric

¹⁰⁷ Deleuze, *Proust and Signs*, 2008, 61.

¹⁰⁸ Deleuze, *Difference and Repetition*, 119.

¹⁰⁹ *Ibid.*, 118.

¹¹⁰ *Ibid.*, 145.

¹¹¹ “Philosophy, like friendship, is ignorant of the dark regions in which are elaborated the effective forces that act on thought, the determinations that force us to think; a friend is not enough for us to approach the truth. Minds communicate to each other only the conventional; the mind engenders only the possible. The truths of philosophy are lacking in necessity and the mark of necessity. As a matter of fact, the truth is not revealed, it is betrayed; it is not communicated, it is interpreted; it is not willed, it is involuntary.” Deleuze, *The Logic of Sense*, 61.

¹¹² Deleuze, *Proust and Signs*, 11.

path that focuses on discovering what is there, is grounded in material semiotics and, as such, concerns what becomes important, what demands to be the truth of significance.

However, the final acknowledgment of the equally generating sense of what is significant for a being to exist within its environment creates a new set of problems that call to be tackled in a new kind of way. Significance, after all, is not something that is universally given, in the same way that a moral law or value is. For Uexküll, significance is what belongs to a being in its own *Umwelt*. In order to learn, to know, you have to map all the relations that become important for the being to exist. This means that what the body finds significant, actually constructs this body and therefore has material implications for body's becoming.

Uexküll's study of a tick seems ethically unchallenged – in order to know what a tick does to live, you just have to map its affects. However, if the notion of significance, that what is important for a body, is a driving and generating force, how can we responsibly co-construct meanings? If meaning is not added, is not something that might be transferred unnoticed, and instead is something changeable and open, yet leaves the actual imprint of change on a body, how can we make any cultural and legal decisions? As a result of the constant alterations we cannot know what will be relevant, what will be significant for a body. It thus seems that we must change our attitudes and lose the given criteria of judgement in order to encounter what is yet unknown but remains significant. As Shaviro argues:

Genetics and biotechnology are even more perplexing, since they are less about understanding the external world than they are about experimenting on – and thereby altering – ourselves. We are on the verge of developing the ability to clone ourselves, to tweak our genetic makeup, to hybridize ourselves through gene splicing, to incorporate silicon chips into our brains, to interface machinery directly with our nervous systems, and to reset our neurotransmitter and hormone levels at will. Such practices are inherently risky and unpredictable. How can we come to terms with forms of “knowledge” whose very effect is to change who “we” are? How do we judge these disciplines, when they undermine, or render irrelevant, the very norms and criteria that we use to ground our judgments? What will we do when advances in these practices force us to redefine, ever more radically, what we mean by such basic notions as self, life, humanity, and nature? The new biology, as much as any new work of art, requires us to abandon everything we think we know, and make singular judgments that cannot be subsumed under preexisting criteria. Aesthetics precedes cognition in such cases, because we are dealing with practices that can only be comprehended through the new categories that they themselves create. The question we should be asking, therefore, is not: How can we establish valid criteria and critical standards?

but rather: How can we get away from such criteria and standards, which work only to block innovation and change?¹¹³

We must lose those criteria that have worked for what we believe to be known, and instead start to imagine methods of practice without them. How can we search for that which is unknown yet which might be significant? It is a pragmatic approach indeed, one that focuses on what is important, and primarily, what might be important. Paradoxically, we already have all the knowledge to do this – we have already developed an understanding of how the relations of significance work, how existential meanings emerge and why these relations are important. We have an experience with art's constant re-shifting of criteria, we are used to experiences without judgements. All that remains is to learn how to use this knowledge.

3.9 *Contaminant M* like a Meat Lab

In the work *Eat Less, Live More – and Pray for Beans*, which won Zack Denfeld and Catherine Kramer the “Designers and Artists 4 Genomics Award” in 2012, the artists visualize future scenarios of Dutch food culture and what might be relevant as the climate and global trade changes. In the animated video, *Community Meat Lab Amsterdam* [Figure 20], which formed part of the project, the artists narrate a story of what food culture will be like when mutagen meat becomes an everyday reality.

Community Meat Lab is a sort of future collective of DIY biologists, scientists, and meat lovers, but also those in search of company in their life. All these different people gathered in the Lab to share what their love of eating meant to them and to practice the growing of meat, and cooking and eating it together. In this short animation, CGG exposes how our eating habits might change once we start to think in terms of different configurations of what sustainable food might be. Within this project, the artists imagined how the habits of production and consumption of meat might be, once we stop thinking in industrial terms and chasing profits and start to speculate on new ways of living with innovative biotechnological possibilities and the environmental restrictions these possibilities enable. This is a speculative approach that, like the practice of a biologist, puts the actions of relations that may generate new scenarios central, new relations that are driven by what might turn out to be significant.

¹¹³ Shaviro, *Without Criteria*, 15–16.



Figure 20. The Center for Genomic Gastronomy, *Community Meat Lab Amsterdam*, Vimeo, <https://vimeo.com/50204650>, accessed 6 April 2016.

Community Meat Lab Amsterdam (video transcript)

Mrs. de Wolff is a retired nurse and a proud member of the Community Meat Lab, Amsterdam (CMLA). After her husband died she was quite lonely for a while, but now she gets a visit from a member of Community Meat Lab almost every day. Today it's Sophie's turn to donate blood. Having grown up after animal-meat was outlawed in the Netherlands, she has only ever tasted lab meat. Sophie loves food and she joined the CMLA so at least she knows where her meat comes from. After the blood letting is over, they enjoy tea and cake while discussing what to bring for this week's feast.

Joris is in his cleanroom, starting a new batch of cells. Last week he tried using a line of porcupine cells he got from Manchester, but those didn't turn out so well. This week he is sticking to the tried-and-tested goldfish cell line provided to him by his friends in the Community Meat Lab, Houston.

On Sunday everyone is gathered in Joost's living room for supper. Sophie brought a potato salad, and Mrs. de Wolff brought a cake, but nobody will start eating before Julia brings out the meat dish. Finally she enters from the kitchen holding a large platter of Spaghetti Bolognese and says: "Sorry I'm running a little late. The meat was a little tricky to cook this week." Joost nervously pipes in: "Yeah, sorry guys. The power cuts on Friday were killing me! I had to get out the bicycle generator to make sure the gold fish cells got enough exercise!"

Mrs de Wolff is not worried and adds: "Well, thankfully Julia is a marvellous cook. I'm sure it will be delicious as always."

Once everyone is served and people start eating, a content silence spreads across the table, save for the banging of cutlery on plates and the sound of chewing.¹¹⁴

In the above transcript of a 2.5-minute animation, CGG imagines, in a humorous and light hearted, yet honest way, what it might be like when animal meat will be banned as a result of easy access to growing meat from cells. Perhaps this ban on animal meat will be for environmental reasons and a result of animal rights laws. The video does not elaborate on this, yet what the artists suggest is a scenario in which our fixed desires induce new habits once the relations of significance change. Driven by the dark precursor of dissensus, of the commons that do not fit into today's reality, CGG touches these new relations of significance. What new relations, habits and practices might be created if our love for meat generates new communities of self-eaters? Once we cannot eat animals, shall we start to eat ourselves?

CGG feeds on what is given and yet the artists twist it to unravel what is not yet there, what might be, and what does not fit. Can a non-anthropocentrism only start with cannibalism? Can a human become a posthuman, egalitarian only when sharing an equal place on the plate? The thought of bodies being sustained through the consumption of our own bodies, albeit on a singular, non-massive production scale, gives philosophical tickles. It opens up weirding spaces and the sense of what bodies and communities might be like. CGG works between the plateaus of meanings, but, unlike Uexküll's bridges, they do not try to connect the various logocentric and material meanings into a single story. Rather, they explore the tensions between them, making them more alive and vibrant as a result of initiating new relations of significance.

3.10 An Affect Apprenticeship

While CGG's contaminants narrate curious tastes and ways of eating from challenging recipes, they also prepare their audience and invite them to embrace discourses and materialities of what food is today, but also what it might be. They not only work as apprentices themselves, but they induct the audience into an apprenticeship too. CGG's apprenticeship requires learning about the food first, about each singular history of the body before the act of eating. Ultimately, the 'apprentices' are invited to experiment, to follow and cook the recipes.

Dolphijn stipulates that such an apprenticeship in food tasting has nothing to do with any kind of universality, as ascribed to the notion of taste, and that only the actual

¹¹⁴ The Center for Genomic Gastronomy, "Community Meat Lab Amsterdam," Vimeo, <https://vimeo.com/50204650>, accessed 6 April 2016.

encounter causes all the relations to happen.¹¹⁵ He further argues: “what matters is in what way the connection take place.”¹¹⁶ In other words, what is important is focussing on how the relations happen and how they generate meanings. We are not interested in defining what food is and what the actual ingredients of what we are about to eat are, but rather we are concentrating on taste in terms of entering the multiple relationality that is about to happen. To define what food is, is the most politically absolute and hierarchical act, “It brutally splits up the world into what consumes and what is consumed, construction and destruction.”¹¹⁷ In terms of CGG’s practice, determining what becomes food happens in the encounter, it is produced in the taste event in the form of a sign, as a risky search for novelty.

An important question arises when we acknowledge the materiality of meaning and start to induce it in our practice: if art already practices the relations of significance, revealing materiality of meaning as equally valid as the signification of truth, what, then, is left for philosophy, for the theoretical and critical thinking about meaning that goes beyond post-experience reflection? How can theory, the words that fill this book, become something material, something living? How should we act within thought to implement such an understanding of meaning? For many who have come before me, the answer lay in overcoming the disciplinary and methodological lacuna between metaphysics and epistemology – something that, philosophy in particular, has failed to do: “in so far as metaphysics is the domain of philosophy, it is largely a failure of philosophy that is has not done more to provide the natural sciences with more adequate conceptual framework with which to study life.”¹¹⁸

Speculation, however, as explored through the contaminants featured in this book, might generate new encounters that lead to production of new meanings regarding what might be important once the configuration of relations changes or new bodies emerge. The understanding that the knowledge about bodies is generated by the way we deal with and practice those bodies is vividly present in art’s practice. Nevertheless, while we can experience how such material understanding works through the long-neglected methods of speculation, this does not mean that philosophy has been in the dark all along. As we have analysed with respect to the notion of affect, the consideration of the onto-epistemological nature of our bodies developed long before any of the hard sciences emerged. Today is no different. All the projects that revitalize Spinozian understanding of *affectus* when thinking about and understanding living bodies are still marginalized because they do not fit into the status quo. It is too easy to blame philosophy, as if there is something essentially wrong and fixed in it. Bodies within affect force us to think in terms of relations of significance where meanings are acknowledged as not only being a product of signification, but also

¹¹⁵ Dolphijn, *Foodscapes*, 13.

¹¹⁶ *Ibid.*, 15.

¹¹⁷ *Ibid.*, 17.

¹¹⁸ Adam C. Scarfe, “Introduction. On a Life-Blind Spot in Neo-Darwinism’s Mechanistic Metaphysical Lens,” in *Beyond Mechanism: Putting Life Back into Biology*, (eds) Brian Henning and Adam Scarfe, (Lanham, MD: Lexington Books, 2015), 41.

of significance. Affect implies that it is a matter of what happens to be important and how we practice this that has actual productive potential. Speculation becomes a way of experimenting with the production of affect. Through speculation in art and philosophy, we create a dynamic relation, also between each other, allowing for relations of significance to be shaped. Through investigation of and search for relations of transformation, we create and are created by the relations of significance.

Importantly, significance works in both ways. As an ethological concept that is present, for instance, in biology, it shows the inscribed relationality and material forms of the generation of living bodies; but it is also as axiological – it allows us to acknowledge views already set according to hierarchical evaluation. It now becomes evident that significance, like the sphere of semiotics, is not only an existential field, but also political – it concerns and implies the organization of relations according to a particular state of bodies, however fluid and temporal they might be.

Meaning formation is not just an epistemological, reflexive activity detached from living bodies. It is a generative, ontological and speculative event. Such comprehension of meaning as significance not only has the capacity to change the internal organization of what we take as knowledge, it primarily reshapes the very ways we produce knowledge and its role. Since meaning is something that not only emerges between bodies, but also changes those bodies, it has much more power than we would like to think. The materiality of meaning may generate new ideas and concepts, helping to acknowledge equally important speculative capacities of thought as already creative and generative. Thus, philosophy and art become intertwined in their material practice of speculation. Nevertheless, the existential meaning that affect generates implies that, depending on what becomes significant, relations can equally destroy, stiffen and fix those bodies – living within affect demands a different way of organizing the practice of the relations of contamination.

Significance within affect opens up the existential character of signs, where meaning is a dynamic and violent result of an encounter. Within affect, relations multiply rather than negate each other. This leads to a different notion of what we think that the agency of that relation is. As Hoffmeyer argues, the embeddedness within semiotics of every living system, forces us to reconsider what we think agency is. As he defines it, agency is “a capacity of a unit system to generate end-directed behaviours.”¹¹⁹ Agency, for him, is a capacity that is oriented internally and externally towards directed behaviours. It belongs to the various human and non-human entities such as cells, or bacteria. Defined as “end-directed behaviour,” Hoffmeyer presupposes a prior embeddedness in the semiotic field. Agency is thus a capacity “to interpret (whether consciously or unconsciously) events or states as referring to something other than themselves, or in other words, the capacity to interpret signs,”¹²⁰ and now we would say, to interpret affects. To practice relations of

¹¹⁹ Jesper Hoffmeyer, “Why Do We Need a Semiotic Understanding of Life,” in *Beyond Mechanism: Putting Life Back into Biology*, 148.

¹²⁰ *Ibid.*, 152.

significance demands a new understanding of agency. What kind of sense of agency can we practice while maintaining the multiplication of relations? How can we think about agency in a way that does not work on the relations of oppositions and that instead organizes bodies according to a dynamic affect event? These are the urgent questions that relations of significance generate, and now it becomes important to encounter them more closely.