Chapter 9
Meat We Don't Greet

How 'Sausages' Can Free Pigs or How Effacing Livestock Makes Room for Emancipation [1]

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INTRODUCTION

One of my recent culinary fascinations comes in the form of Beyond Sausage®—a sausage made of plants. With a caped super-cow as its logo, Beyond Meat® claim:

> We started with simple questions. Why do you need an animal to create meat? Why can't you build meat directly from plants? That's our company's mission. We hope our plant-based meats allow you and your family to eat more, not less, of the traditional dishes you love. Together, we can truly bring exciting change to the plate—and beyond. GO BEYOND! (As seen on Beyond Sausage® packaging, and on the company website)

I have been studying how new scientific concepts emerge from everyday ones. I have proposed this happens by what I call "finding" and "founding" everyday concepts into scientific contexts and practices thereby producing new "founded" concepts that often keep their everyday names but can work as scientific (Efstathiou 2009, 2012, 2016; Efstathiou et al. 2019). This type of creative meaning-making is arguably also happening with ideas of meat (and milk, mince, etc.) within food science and technology. Companies like Impossible Burger®, Beyond Meat®, or, cultured meat company, Just Meat® are founding everyday ideas of meat into novel food biotechnology contexts, by activities ranging from imitating the molecular properties of (animal-based) meat or growing tissue in a lab, to vision statements and marketing. Though the result here is not found science but found food.

As exciting and relevant as these innovation contexts are I begin this story one step back. Before looking at how meat concepts get found and founded into food biotech, I explore how they might get loose from animals: *How do current practices of meat production leave room to think of meat as independent from animals?*

I propose that the intensification of meat production is ironically what makes meat concepts available to be populated by plants. I argue that what I call "technologies of effacement" facilitate the intensification of animal farming and slaughter by blocking face-to-face encounters between animals and people (Levinas 1969; Efstathiou 2018, 2019). My previous ethnographic work on animal research identifies technologies of effacement as including (a) architectures and the built environment, (b) entry and exit rules, (c) special garments, (d) naming and labeling procedures, and (e) protocols for handling animals (Efstathiou 2018, 2019). Building on ethnographic research by Dawn Coppin (2003) and Nöellie Vialles (1994), in the United States and France respectively, I propose that (a) Concentrated Animal Feeding Operation (CAFO) buildings, gestation, and farrowing crates; (b) rules for entering and exiting the slaughterhouse; (c) white slaughterhouse garments; (d) unique identification systems; and (e) "trapping" animals before stunning can all operate as technologies of effacement. Though developed to serve other manifest aims, like hygiene, expediency, or safety, these technologies operate to sustain routine, inviting one to look at animals as tokens of a known type while blocking encounters between humans and animals (and also among animals) as radically different, morally significant Others (Efstathiou 2018, 2019).

The abundance of meat and animal products in global Western and Northern contexts thus relies on blocking face-to-face encounters, generating what I call an "original ignorance," perhaps a willful one, about "whom" meat comes from. Others

have problematized the disappearance of the animal during intensified meat production (Vialles 1994) and provision (Bjørkdahl and Syse 2016; Syse 2017; Syse and Bjørkdahl 2021)—a reality that is likely implicated in what psychologists have identified as "the meat paradox," that is, wanting to eat, but not wanting to hurt, animals (Loughnan et al. 2010; Volden and Wethal, this volume). In this analysis "original ignorance," the ignorance (willful or not) of the origins of (often technologically) produced artifacts, is seen as an opportunity: for escape, if not for revolt.

As Linsey McGoey argues, ignorance and ambiguity can challenge the dogmatic impositions of others leaving room for emancipation (2012, 2019). Leaving the animals and the humans working to turn them into food out of the public eye offers up a chance to escape: to dislocate, along with joints, the meaning of meat from the very animals whose flesh, blood, and organs are supposed to make it up.

Inventions like the 'sausage' thus offer a conceptual opening for industrialized food processing and provision to get out of the business of slaughtering animals, and to move back, or beyond, to plants. And with the effacement of the slaughtered and the slaughterer, this makes all the more sense as ethical.

This chapter has two main sections: "Technological Intensification and Effacement" and "Ignorance and Emancipation." Though structured in sequence to tell a story these processes are overlapping and incomplete. Effacement is never total and neither is ignorance, while emancipation is still more aspiration than reality. Still, I think that intensification, effacement, ignorance, and emancipation all feature in the story that takes us from the grass to the meat, and from the meat we don't greet to its lab-based alternative.

TECHNOLOGICAL INTENSIFICATION AND EFFACEMENT

First Encounters and Separation

I first met a cow in the summer of 2020. I grew up in Athens in the 1980s—a period of high urban consumerism, pre-financial crisis. I was a meat eater, my sister and I riding our bikes round and round our apartment block, until we got home and ordered pizza with "everything" or just "ham and cheese" from the pizzeria downstairs. Meeting this cow then, several decades later, in Inderøy, a rural part of Norway, while researching meat and climate change was quite a journey. This cow was an "alpha" cow—and I was scared of her. She was huge. An imposing animal, whose head when I put my hand on her could have definitely pushed me over. But I had to step in because she left her group, instead resting, or feeding their calves under a shade, to come forward and check out my dog. My heart skipped a beat. Poor Pavlo, he cowered down in the grass making himself small so she could sniff him and decide he was harmless. Both he and I were out of our league. I was thankful, and proud, to receive her approval.

How could it be that I, a chubby urban kid, was consuming the flesh of an animal like her for decades without lifting a finger—let alone skipping a heartbeat? That is an achievement of modern animal agriculture.

The domestication of animals for food originated independently in different parts of the world, most likely by herding wild animals and selectively breeding them into more manageable herds. Some of the earliest evidence of such activities is found in the Middle East, dating between 14,500 and 12,000 years ago. Fast forward to the current landscape of what geographer Tony Weis calls "islands of concentrated livestock within seas of grain and oilseed monocultures" (Weis 2013, 8): A lot has changed. However what Nöellie Vialles flags as a key shift in modern animal agriculture is separating slaughter—in space—from towns, and—in language—from killing.

Vialles's ethnography, *Animal to Edible* (1994), is a seminal study of slaughterhouses in the 1980s, in the French region of Adour. Because of the moment it captures of increasing intensification, with mechanization substituting skills, and because of its evocative theoretical insights, this book informs a lot of my analysis.

Slaughterhouses move away from town centers starting in the late eighteenth century (Vialles 1994, 20–21). Private slaughter is prohibited in the early nineteenth century in France, "clearing" the butcher—and the street where he works—from the blood of the animals and the sight of violence (Vialles 1994, 17). By the mid-nineteenth century this separation becomes definitive of the *abattoir*. The very first edition of Émile Littré's dictionary of French in 1863 defines it as "place set aside for the slaughter of animals such as bullocks, calves, sheep, etc. that are used for human consumption. Abattoirs are located outside the surrounding walls of towns" (quoted in Vialles 1994, 15).

The word "abattoir" dates from 1806, derived from the verb *abattre* meaning to bring down something standing, and used originally to describe felling trees before applied to "putting down" army horses, and then other animals (Vialles 1994, 22–23). The places originally called *tueries* [*tuer* = to murder] or *écorcheries* [*écorcher* = to flay] get thus named abattoirs:

set apart, and transforming animals from standing to recumbent. This cut, between the killing of the animal and its butchering, is one of the first big "scissions" that modern practices make to distance animals' death from the table:

> From this point on, slaughtering was required to be industrial, that is large scale and anonymous; it must be non-violent (ideally: painless); and it must be invisible (ideally: non-existent). (Vialles 1994, 22)

This evocative conclusion drawn by Vialles resonates with my proposal. Meat replacements promise to fulfill this ideal future of meat coming from painless and nonexistent slaughter. Perhaps one could stop here. Already in Vialles's analysis the "logic" of the intensified meat industry dissolving itself is visible.

However this is not the case until and unless meat replacements and/or alternative ways of making meat succeed. And alternatives arise also with a wish to relate to animals differently.[2]

What follows explores how intensified animal farming and slaughter block human-animal encounters, feeding into a loss of meaning and "original ignorance" that meat replacements come to fill in. But first, let us consider how and why encountering another being can be argued to be morally significant.

Levinas and the Ethics of the Face

Emmanuel Levinas (*b.* 1906–1995) was a French philosopher of Jewish Lithuanian origin. During World War II, Levinas was a prisoner of war, held in a forced labor camp in Germany. During that period, Levinas and his fellow prisoners made a friend: a dog they named Bobby. Levinas writes about how the gaze of "so-called free" German guards or citizens "stripped" them of their "human skin" reducing them to "a gang of apes" (1990, 152–153). Instead, Bobby came to meet the prisoners every morning and greeted them jumping happily every time they returned to the camp, recognizing them as (his) people (Levinas 1990, 153).

For Levinas, ethics is not premised on similarity, a shared family, nation, or species. Rather what binds us morally is a radical alterity, the "inner being," or "secrecy," we hold for each other (1969, 57–58). This secrecy escapes explanation. Being is not a matter of epistemology, but ethics. And ethics becomes accomplished when one pauses one's spontaneity to respond to the Other:

> The strangeness of the Other, his irreducibility to the I, to my thoughts and my possessions, is precisely accomplished as a calling into question of my spontaneity, as ethics. (Levinas 1969, 43)

Ethics is a pause or a questioning of one's spontaneity. This happens in encountering the Other through their "face":

> The way in which the other presents himself, exceeding *the idea of the other in me*, we here name face. This *mode* does not consist in figuring as a theme under my gaze, in spreading itself forth as a set of qualities forming an image. The face of the Other at each moment destroys and overflows the plastic image it leaves me, the idea existing to my own measure and to the measure of its *ideatum*—the adequate idea. It does not manifest itself by these qualities, but *kath'auto* [i.e., in person, per se]. It expresses itself. (Levinas 1969, 50–51. Emphasis in original)

The face is peculiar: on the one hand it is "superficial." It leaves a plastic image to sense or look at. Yet it is boundless. The face overflows any image it leaves, opening a window into the inner life of the Other, which though remains secret. The face acts as *a mode*, a way, or potential, for encountering the Other *according to themselves*, per se. This is the opposite of how social theorist Erving Goffman defines a "personal front" (Goffman 1990, 34): the face is not a sign vehicle for others to interpret or expect, but what destroys expectations.

I follow the work in Atterton and Wright (2019) in extending Levinasian ethics to nonhumans. Levinas emphasizes the importance of the eyes and the body in expressing as the face: "The eyes break through the mask—the language of the eyes, impossible to dissemble. The eye does not shine; it speaks" (Levinas 1969, 66). And further: "And the whole body—a hand or a curve of the shoulder—can express as the face" (Levinas 1969, 262). I thus here define animals' "face" as the modes through which an animal exudes their "inner being" or "secrecy" that may be expressed in the body, eyes, movements, or other sensescapes (voice, touch, smell, etc.) but that is not reducible to these.

Further, having a 'face' is not sufficient for facing (cf. Efstathiou 2019). As we see in the example of Levinas and his Nazi guards, humans who could face him, do not. It is then important to attend to what conditions facing

or—reversely—effacing the Other: blocking, erasing, or otherwise negating their face. By blocking face-to-face encounters and speeding up work, I suggest that "technologies of effacement" facilitate and shape the ethos of intensified industrial labor—perhaps generally—but especially in intensified meat production.

Technologies of Effacement in Intensive Animal Farming and Slaughtering

I have analyzed the normative challenges that researchers face in experimenting with other animals, as partly accounted for by the operation of *technologies of effacement* in the lab (Efstathiou 2018, 2019). These are techniques, tools, or procedures developed to "rationalize" engagements with others, while at the same time blocking a direct experience of the Other through their face, for example, by modifying sensory-symbolic, visual, olfactory, tactile, sonic, or other features the Other presents with. These technologies often script encounters between humans and animals, as encounters with what is already known as opposed to secret (Efstathiou 2019, 150). Five types of technology of effacement operate to structure human-animal encounters in the lab and seem to also operate in intensified farming and slaughter: (a) built environments and architecture, (b) entry and exit procedures and special garments;, (c) animal handling protocols, (d) naming and identification techniques (Efstathiou 2019, 150). I here discuss meat production not provision, as I focus on encountering a living Other, though arguably a dead other also has a face.

Architectures and Built Environments

Architecture and the built environment is one of the key ways to manage encounters between animals and people. I survey here CAFO building plans, as well as animal confinement technologies within CAFOs.

CAFO BUILDINGS

Besides slaughter, farming too has become invisible. One of the telltale signs of intensified animal farming is the absence of animals outside. The transition from "extensive" to "intensive" farming is marked by the development of large and technologically sophisticated built enclosures characterized—depending on their animal population and their density—as CAFOs. Capital-intensive CAFO buildings are designed to keep livestock inside year round, providing artificial light, air ventilation, and temperature-controlled conditions with no outside access and no windows for outsiders looking in. These usually unmarked and secured spaces make it almost impossible to physically encounter livestock animals if one is not part of the operation. But also for humans employed in a CAFO human-animal encounters become rare as the proportion of animals to humans increases, and the occasions for interaction diminish, taken over by automatic systems for feeding and watering animals, cameras for monitoring them, and dispensing medications. The CAFO building itself then secludes a general public from meeting animals, while minimizing human-animal encounters also within the farm. To illustrate these points I consider mega-hog farm development in the United States, following Dawn Coppin (2003).

Up to approximately the 1970s in the United States, most hogs lived in open farmland or dirt lots, with little protection from the weather. Farmers in the 1950s might have sent them to "finishing" facilities owned by companies like Cargill,[3] to get fattened up before sale. There, animals would be more confined but still have access to an open laying facility and open air (Coppin 2003, 599). This all changed in the 1970s and 1980s with the development of new technologies for total confinement, medication, reproduction, nutrition, and waste management (Coppin 2003, 599). Architectural innovations coevolved with pig breeding and consumer preferences. Pigs in industrial farming were bred to go down from 1.5 inches of back fat—which kept them warm during winters outside—to just a third of an inch, to match consumer demand for leaner meat (Coppin 2003, 603). Also lighter skin breeds, initially bred to distinguish domesticated pigs from their wild relatives, were sensitive to sunburn making sun exposure without shelter also problematic.

Confinement was coupled with concentration, small pig farms getting replaced by ones housing thousands of pigs. In 1967 the United States had over one million pig farms, that are now down to about 60,000 farms, while the number of hogs per farm increased more than fivefold (Coppin 2003, 601).[4] At the same time, family-owned farms got contracted by bigger now global conglomerates (Chemnitz and Becheva 2014, 12–13).

This sheer increase in the proportion of animals to humans per CAFO makes it hard for human-animal encounters to happen—let alone to offer occasions for humans and animals to face each other, as morally significant Others. But of further import are built enclosures that further script whom the human encounters if such encounters do take place.

The "assembling" of the pig, from fetus to a slaughter weight, takes place in purpose-built spaces. After pigs are

inseminated (most commonly artificially), the pregnant sow will be kept in an individual "gestation" crate for almost four months, and then a few days before she is due to give birth moved to another individual "farrowing" crate where she will stay for another two weeks suckling her piglets. The piglets will then be moved to a "nursery" for a month, then to a "growing" building, and then to a "finishing" one, where they will stay until they are five or six months old, when they will be loaded off to slaughter (Coppin 2003, 600).

Encountering an individual pig in a farm happens through architected pathways. The human gaze gets ordered by spatial enclosures to meet individuals of an animal type, or even a meat preparation stage—instead of facing radically different Others. Instead of allowing pigs to mix in a herd, achieving different relations to each other, but mandating the human carer to encounter animals individually and negotiate their social dynamics, spatial enclosures and specialized monitoring technology automatically deliver the care that each animal group is assumed to need, expediting work at the same time as blocking face-to-face encounters. Especially relevant here are confinement technologies that at once rationalize work and restrict a pig's body and face.

CONFINEMENT CRATES

The individual "gestation" crates sows are kept in in the United States are standardly 2 meters long by 60 centimeters wide, providing no option for the pig to turn around. The sow will be kept there throughout her pregnancy—estimated at three months, three weeks, and three days. The farrowing crate is slightly wider, giving her some space to lie down but again not turn around, for fear of either turning away from her piglets, or crushing them. In some cases sows are strapped down to the crate floor to make them continuously available for piglets suckle, but that seems to reduce their milk production (Coppin 2003, 604—see image on p. 606). The crates are not an environment that the sows prefer. Crates have plastic flooring with slits, through which sows' excrement is collected underneath in a "lagoon" and the floor is kept bare so that the excrement can fall through despite pigs' preference for solid flooring and for so-called environmental "enrichment" materials—"rich" only by comparison to bare human architectures: hay or toys. Sows will give on average 5 to 8 litters in their farm lifetime, and 2.5 litters a year. Thus for about 10 months a year, the sow will be confined in a space above her excrement, where she cannot move freely, let alone express species-specific behaviors like digging, playing, bathing, or nesting.

These confinement stalls prima facie provide individual care for the sow and her piglets. Gestation crates' manifest function is to immobilize a sow and to ensure that she is getting enough nutrition, vitamins, medicine, and water, with no competition from other pen mates while pregnant. Similarly farrowing crates manifestly provide for the mother and allow for breastfeeding, with the added function of ensuring that the sow's body does not crush any piglets with its substantial weight. Confinement technologies pay each sow individual attention. However, attention is not paid to her as a "secret" animal Other, but rather to her as a meat-maker. The crated sow is encountered as a piglet grower and a milk-dispenser: the gestation crate holds her womb in place, so the future piglet—and future meat—is not miscarried, and the farrowing crate makes her teats available to the piglets—in cases of restraint, continuously.

By blocking animals' bodies from full expression confinement technologies block their face. Yet, effacement is never total. The eyes still speak, the sow has a voice, and she bites the bars of her crate. Still, facing her becomes hard. The crates and automated systems for monitoring them expedite meat-growing, minimizing the chance that a human will come face-to-face with a sow, bar in an emergency. Note also that confinement crates also block animals from encountering each other. The crated sow then gets doubly effaced, from humans, and from others in her social group, including her piglets.[5]

Entry and Exit Procedures and Special Garments

During my work in an animal lab in Norway, I observed that procedures for entering and exiting the lab, and specifically the taking off of one's clothes (cute shirts, favorite jewellery, or other personal items) and rituals like washing of one's hands, before one dons the uniform and personal protective equipment of the lab, were important stages in blocking the face, and coming to assume the position, or professional "front" (Goffman 1990, 34), of the laboratory researcher. These rituals and garments operated as technologies of effacement by separating performances in the lab from "everyday" ones while also physically modifying people's faces and body: protective caps collecting hair and semi-covering ears, face masks muffling voices, protective goggles shielding eyes, rubber gloves sheathing hands. These preparations provided new surfaces with which humans and animals encountered each other, in and for research.

Vialles mentions the "standard whites" used in the slaughterhouse, consisting of "rubber boots, cotton jacket and

trousers, plastic apron and disposable cap" (1994, 101). Besides providing a uniform that symbolizes the special role one assumes as a slaughterer, white has a distinct symbolic and practical function. White fits a logic of hygiene. Though it looks like the color that can get dirtiest fastest, white is ironically most resistant to dirt as it can be washed at high temperatures and bleached. As a color that is no color it cannot get lost. White also fits a logic of innocence: medical doctors, high clergy, and brides are all known to dress in white. White complements the imagined red of blood. Following Vialles, white garments also operate to negate the blood of death also in the slaughterhouse: "The colour of blood has been everywhere ousted by white: white walls, white accessories, white clothing, from head to foot" (1994, 66). White uniforms thus work to erase encounters with the bleeding Other, practically and symbolically by evoking the clean and innocent.[6]

Entry and exit procedures are also crucial for slaughterhouse work. Consider the strict division between the "clean sector" in the "front" of the building and the "dirty sector" in the "back" (Vialles 1994, 35–36). The front of the slaughterhouse or the clean entrance is where people encounter meat. Instead, animals are off-loaded in the back of the building through the dirty entrance to the dirty sector, where also renderers' vans are loaded with what are considered waste products from the slaughtering process. Things in the "back" happen first, but by calling the front the "front," one assumes the gaze of someone meeting the meat first, never greeting the animal. Instead the animal gets "brought in" through the back door, symbolically and literally. Clean and dirty sectors are never to meet. The vans that service them never cross the middle (Vialles 1994, 36). In between the slaughter hall provides an ambiguous middle, where the animal exists and doesn't, a space of transfiguration that also performs this literal and symbolic cut between the animal and the meat, the dirty past, and the future animal-free meat one wishes to encounter.

Already the cut made in language between animals as carriers of dirt and pollution, yet of their own flesh as clean raises a paradox: removing the "animal" from the meat is what makes it clean—and yet the animal must, as part of itself, as its own meat, already be clean. These conflicts in how to encounter animals in these spaces are aggravated with technological intensification. Founding the animal as edible is a process effacing the animal. It involves immobilizing, stunning, suspending, and bleeding a living animal, then flaying him, cutting off his "extremities" (head, legs, sometimes tail), and cutting into (or punching through for sheep) the body to separate it from its skin (or scalded and de-haired in the case of pigs), eviscerating or gutting the animal and washing his insides, sometimes splitting his carcass in two (for pigs and large bovines), and weighing it, all to get to the meat (Vialles 1994, 41). This is what Vialles calls "de-animalising" the animal (1994, 49, 71): what I see as transfigurations needed to found an animal as food, and what also involves effacing him. These processes erase the animal's "face," literally by chopping off his head, almost immobilizing his body (movements will still occur when the animal is suspended and bleeding), and progressively silencing him, preventing an encounter with the animal as an Other, beyond the properties of his fascia. Taking the ground off one's feet is a key symbolic transformation of the animal to the edible, found, picked up, and on its way to meet a butcher (*French: boucher*) and a mouth (*French: bouche*).

Importantly, the division of clean and dirty sectors is a division of labor which blocks workers from facing animals, and from facing killing. A person working in either sector is not going to meet the same animal alive and as meat. Rather, one is stationed at, working and met with a stage in an animal's processing into a sellable carcass. This is important, because even when working to slaughter animals, one may be shielded from facing them, and from the full impact of one's actions.

Animal Handling Protocols

The introduction of technologies and built structures for guiding animals in a single file through a "race" to immobilize them before stunning contributed immensely to speeding up slaughter, resulting in fewer injuries and more intact carcasses, faster. Refining these technologies means livestock are slaughtered in the thousands every second, and billions annually making meat appear in the plenty.[7] I will focus on the stunning pen or "trap" (*piege*) in French. Stunning is a standard protocol and guaranteed encounter between a living animal and a human. The trap I argue is a key technology of effacement, blocking facing the moment before killing, promising its "painlessness."

Trapping a docile animal is analyzed by Vialles as the opposite of hunting a wild one: the hunted animal is often recognized for its individuality and skills, its plans or priorities, it may even be given a name by the hunter (1994, 113). Like in the instance of making the animal a pet, hunting recognizes an equal footing between the human and the animal (Vialles 1994, 113). Already hunting animals by trapping is designed to efface the individual animal (and human), designed with a certain species, environment, and hunter in mind.

Traps operate as technologies of effacement also in the slaughterhouse. In the absence of traps, and in the case of large

bovines, humans would have to throw their bodies onto the animal, pulling to restrain it by a rope around his horns or neck, or tying this to a hook in the floor, while someone drives a poleax to the bovine's forehead—now replaced by a captive bolt gun (Vialles 1994, 121). The trap is instead placed in the animal's path. Tricking the animal to walk into it, the animal gets immobilized before an encounter with a human, so that the slaughterer can shoot the bolt gun at a better stabilized target.

Even in this encounter one could face the animal in question, perhaps witness their surprise or struggle and pause or be moved by it. But in come the speed and "rationalization" of the work. Following guidelines, and with struggle removed, the human eyes will locate the right point to shoot on the animal's forehead versus meet his eyes (EC 2018b). As Vialles notes, in private slaughter, "a contract" might be made between the animal and human for the first to provide their flesh for the latter to eat in exchange for food, shelter, and protection, while the slaughter itself would be an activity celebrated with others, as the killing of the animal. Industrialized slaughtering challenges the terms of that contract, as the person killing the animal has no connection to it:

> "I tell people I'm a hired killer," slaughterers will say jokingly "I'm paid to kill." If there is still a contract here it is of a quite different kind, involving the animal purely as an object, just like the victim of a criminal "contract." (Vialles 1994, 119)

Here the lack of connection to the animal and the peculiarity of killing someone one does not know are negotiated by the slaughterers by joking.[8] Effacement works both ways: by killing someone one doesn't wish to kill one becomes a "hired" or "contracted" killer, masking their "face" vis-à-vis the Other, behind their professional front.

Effacement becomes especially morally problematic at the point of murder. Levinas says discussing murder,

> The alterity that is expressed in the face provides the unique "matter" possible for total negation. I can wish to kill only an existent absolutely independent, which exceeds my powers infinitely, and therefore does not oppose them but paralyzes the very power of power. The Other is the sole being I can wish to kill. (1969, 198)

The effacement of animals as morally significant Others creates a problem. If, following Levinas, the Other is the sole being one can wish to kill, then the killing of these faceless animals becomes something one cannot wish to do. No slaughterer can wish to kill these animals—and no consumer. And yet we do kill animals and allow them to be killed.

People who do not want to kill, kill animals who do not want to die, for people who do not want to hurt anyone, but who want to eat a lot of meat cheaply.

I consider one more technology of effacement before discussing the possible unintended benefits of effacing.

Identification and Labeling Techniques

Current systems for identifying animals can also contribute to efface them. Consider, for example, the Trade Control and Expert System (TRACES) developed by the EU. TRACES tracks the locations and movements of European livestock using unique identification numbers issued to them on birth, replicated as barcodes on their ear tags, and as passport numbers stored in national and international digital registries. TRACES aims to record information on animal travel to enable tracing the sources and pathways of possible disease or infection outbreaks among livestock.

These tools individuate an animal. Yet, they also typify them. Animal identification numbers are unique, but they are also the same: all numbers. Previous systems for identification on the bodies of animals, for example, by systems of cuts on animals' ears or branding, would at least beg one to look at the animal body—even if these signs are diagrammatic and operating in a similar manner as numbers to pinpoint individuals in a sequence. As a result, individuation tools such as identification tools and labeling techniques script human and animal encounters away from facing, and toward counting and measuring the Other, as one of the same.

Added Faces

Often the loss or blocking of the animal and human face will be supplemented by imagery that adds a face to it. Consider the cartoon animation produced to communicate the TRACES livestock identification system (European Commission, undated). The video playfully names one bull "Chuck" and one cow "Anna" showing them travel the world with their unique passports, until they meet and heart bubbles emerge. The personification of the animal is here working as what I call an "added face" (Efstathiou 2019, 156–157).

Added faces hope to work as faces, creating the sense of individuality that one might expect from a face. They are encountered with all kinds of technology of effacement. One can see them as animal images in institutional walls, "personalized" uniforms or—once it comes to food provision—as animal depictions on product boxes. A typical image is one of animals grazing freely, with a farmer on their side, or the image I saw recently on the side of the Norwegian milk company Tine®'s bus, inscribed with "Maybe the world's finest milk—on its way to you—Tussi, Turi and Tina," picturing three goats, two of them blurred in the background, but one featured with a close-up on her face. Added faces make faceless or effaced produce and labor possible to encounter again under some guise of "normality."

Added faces may be found in practices contrasting intensified farming and slaughter, what Bjørkdahl and Syse call "meat nostalgia" in consumption and marketing (2016). Consider, for example, Norwegian Michelin star awarded restaurant Credo. Customers of that restaurant are presented with an image of the named animal whose milk or flesh they are about to consume. This approach attempts to connect to the animal and recognize the work involved to get a meal to the table, a trend that Syse identifies with other young—predominantly—male chefs (Syse 2017). These changes may be pointing to alternative ways of making meat, though arguably in these encounters the animals are already found as food, rather than encountered as radically different Others who pause one's spontaneity.

Does Effacement Matter?

I have so far proposed that human-animal encounters in intensified animal farming and slaughter rely on technologies of effacement, blocking encounters between humans and animals as Others with a face. In the void of the ethics of the encounter, springs up industrial work ethos—so-called hired killing (Vialles 1994, 119). Another way to think of this transformation is that ethics gets taken over by epistemology: instead of facing radically different individuals one uses them as already known and knowable types (for profit).

But are such technologies of effacement really that important? Isn't de-animalizing already embedded in our language? After all, what is the point of intermediary concepts of animal products like "meat," "beef," "pork," "milk," "egg whites" if not to already provide a way to avoid explicitly referring to the animals they would have originated from? These are not "animal flesh," not "cow flesh," not "pig flesh," not "a mother cow's breast secretions," not "secretions from a chicken's ovum." Perhaps these terms fulfill the transformation needed in order to consume—respectfully—a living Other (Bjørkdahl and Syse 2016). Though note that no such distancing is afforded to chicken or to fish who we are allowed to eat as they come, despite the popular chicken "nuggets" and fish "fingers."

Arguably these concepts have functioned to shield the eater from the fact of choosing to kill and consume a—usually—healthy, young, living animal, its babies, or its babies' food. Perhaps they shield consumers of the so-called meat paradox: loving animals and loving meat (Loughnan et al. 2010; Volden and Wethal, this volume). But an important element in the intensification of agriculture is that these terms come to stand in completely for animals, who come to disappear from sight, literally, through the confined and secured spaces of the CAFO and the slaughterhouse, but also in and through the sped-up temporalities and reduced room that (human and nonhuman) animals' expressive bodies and relationships are allowed to take. Blocking the face amounts to blocking pauses, enforcing routine and speeding up production that will make more and more animals disappear and more and more meat appear, faster, closer, and more cheaply.[9]

The effacement of humans and animals within intensified production systems thus contributes causally to the omnipresence of animal products. The forms and textures and tastes that animal flesh and animal secretions come to take become what many humans in the global West and North are first familiar with, and love. Indeed with some more work and technology and some more ignorance these forms might prove sufficient to take animals out of the equation completely.

IGNORANCE AND EMANCIPATION

One of the important points Vialles raises, and which is also argued in Coppin (2003), is the transformation of slaughtering practices from public and celebrated to private and shameful:

> Nowadays, slaughtering has become an invisible, exiled, almost clandestine activity. We know it goes on, of course, but it is an abstract kind of knowledge. We have no wish to eat corpses (we are carnivores, not carrion-eaters), so animals have to be slaughtered. But we demand an ellipsis between animal and meat. (1994, 5)

In this ellipsis (what means “lack,” in Greek) there is a space for some emancipative thinking to flourish.

I here propose that, ironically, ignorance offers a key for moving away from—at least—intensified modes of making meat from animals. Blocking humans from facing animals keeps animal-based products familiar and their origin ambiguous. And here also comes, ironically, a possible way out: the possibility that we keep our “traditions” and keep cooking with meat, and products “we love,” just substituting their ingredients with plant-based materials, and adding a face to *them*. After all, wouldn’t plant-based products be better fronted by happy animals? Enter the Beyond Meat® “super-cow”[10] (figure 9.1).

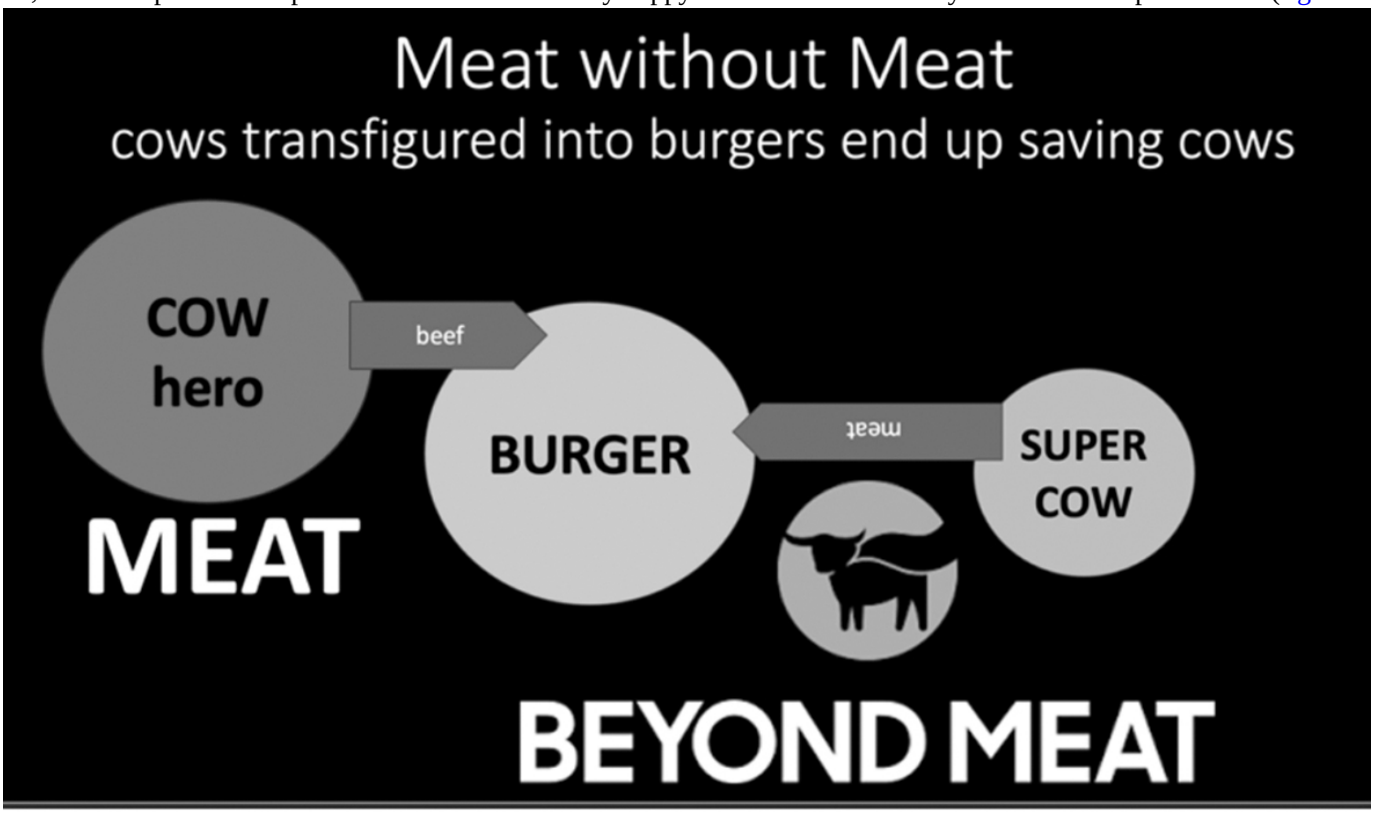

Figure 9.1 Meat Without Meat.

The super-cow of Beyond Meat® symbolizes a power that livestock have lost: staying alive. By putting an ellipsis between the animal and the food product, concepts like the “burger,” or “sausage,” or “milk” operate as bridging concepts, helping hold their animal origins ambiguous, but familiar enough for other “super-materials” to enter the picture. And yet the burger in its current meaning would not have been possible without cows dying. Picture here the billions of animals that throughout the development of intensified agriculture and slaughter have been “sacrificed” and transfigured into more and more processed food products with increasing speed and dropping prices, coming to spread and populate “traditional dishes” everywhere: taking on a life of their own, while the animal disappears. ‘Burgers,’ ‘sausages,’ ‘nuggets,’ ‘scallops,’ ‘pulled pork,’ and ‘milk’ as concepts and forms come to save their animal mothers and fathers by making them redundant. It would sound like science fiction, if it weren’t true.

This phenomenon of becoming and being more familiar with the outcome of a causal process, as opposed to its original causes or sources, is common in industrialized worlds. One way to identify it is as an “original ignorance” playing on the concept of an “original sin”—embodied in the Christian tradition by biting into the forbidden fruit of the tree of knowledge. Original ignorance is a lack of knowledge of things’ origins or their history. This captures the experience of knowing burgers a lot more and better than cows, but it is a general phenomenon. For example, I encountered a “stile” (a constructed gate for humans—and not animals—to enter and exit fields) after years of going through “turnstiles” (on the train, subway, etc.), even though the latter surely derived from the first. Similarly, I remember visiting the botanical gardens of the Huntington Library only to suddenly smell my childhood soap: I looked down and saw a strange little flower. Being more at home with the derivatives of often industrial or technical processes whose “original” sources become strange is what I propose to call “original ignorance.” Perhaps original ignorance is also a sin. But perhaps it leaves room for reinvention or even atonement.

Linsey McGoey’s work inspires me here (2012, 2019). Following feminist philosopher Eve Sedgwick, she notes that

deliberate ambiguity and ignorance can act as a "rebuke" of oppressive and inadequate classificatory ordering systems (McGoey 2012, 6–7). Similarly, the ambiguity of meat concepts and the original ignorance of consumers make space for meat to resist its animal origins. By holding a space of deliberate ambiguity concepts like "meat," "sausage," or "burger" rebuke their expected classification as animal-based. Combined, effacement, original ignorance, and ambiguity bend the proverbial crate bars for animals to escape their meat identities—and meat its (dirty) animal past.[11]

CONCLUSION

A lot of writing on the ethics of animal agriculture starts from a position of authority, or privilege, assumed to be had by humans. Instead I draw attention to human-animal encounters as occasions for radically different Others to meet and face each other. These encounters will all be unique. Yet I proposed that what I dub "technologies of effacement" are a significant part of intensified farming and slaughtering practices, operating to shape such encounters into encounters between meat professionals and livestock.

I started with the following question: *How do current practices of meat production leave room to think of meat as independent from animals?*

To an analysis of the de-animalization of the animal provided by Vialles (1994), I added his "effacement." I proposed that technologies of effacement are intimately involved in intensifying animal rearing and slaughter, making it faster and streamlined, while removing opportunities for humans and animals to pause their spontaneities and face each other, as morally significant Others. I identified CAFO architectures and confinement crates, slaughterhouse garments and entry and exit rules, protocols for stunning and identification and labeling as functioning to block the "face" of animals and humans.

Is 'facing' a moral solution to animal agriculture? There is no ethics recipe here for *how* to respond to the Other. What I offer are some ways to explore what conditions encounters as ethics, and why intensification may ironically dissolve itself.

The deliberate ambiguity of intermediary terms like "sausage," "milk," or "burger" coupled with an original ignorance of the animal and familiarity with animal products offers a space for emancipative action. Thus sausages, made plentiful and familiar in part by effacing the pig, come "back" as plant-based superheroes, breaking free their pen-mates from the hog farm.

As McGoey suggests: "Presumptions of equality demand not outrage at inequality but constant verifications of equality itself, as a practice rather than a reward or goal" (2012, 10). Maybe, like Carol Adams does (2018), this could mean introducing vegan burgers to meat eaters, or city kids to cows.

NOTES

1. I use single quotes to denote 'concepts', double quotes for "terms", and no quotes for things themselves.

2. Bjørkdahl and Syse analyze this shift in sensibilities and ethics about animals as a move from anthropocentrism to "biocentrism" (2016, 222–228).

3. Cargill founded in 1865 is the third biggest meat industry globally in sales, with a reported 114.6 billion USD revenues in the first quarter of 2020. https://www.forbes.com/companies/cargill/.

4. The largest pig farm is currently constructed in China, using vertical housing similar to apartment buildings to house 84,000 sows and their offspring, producing over two million pigs per year (https://www.reuters.com/article/us-china-swinefever-muyuanfoods-change-s-idUSKBN28H0MU). For an estimate of pig farms in the United States see https://www.porkcares.org/americas-pig-farmers/our-farms/.

5. Organizations concerned with animal welfare want to ban gestation and farrowing crates. This is the case for gestation crates in some regions, like Sweden, the UK, and nine U.S. states, but not for farrowing crates.

6. Note that recent EU recommendations advise personnel tasked with stunning to wear dark clothes (EC 2018a). Perhaps this soothes the animals, matching clothing used in livestock facilities that animals are familiar with.

7. Watch the seconds pass on this evocative Animal Kill Clock measuring the thousands of animals killed in the United States every second. https://animalclock.org.

8. Humor offers a way to express difficult emotions or tension in a manner that generates camaraderie more easily than anger or sadness. It is easier to laugh than to cry together.

9. Current meat pricing schemes exclude the environmental costs of intensified enterprises.

10. The iconography might be depicting a bull, a masculinized superhero, but it should be a cow, as the meat and dairy industry relies on primarily females' reproductive labor.

11. Note also the evocative claim in Van der Weele and Driessen (2019) that "normal" meat becomes further ambiguous, generating moral ambivalence, with the continued innovation of new meats.

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Chapter 10
What Happens When Cultured Meat Meets Meat Culture?

(Un)naturalness and (Un)familiarity in the Meat of Today and Tomorrow

Johannes Volden and Ulrikke Wethal

INTRODUCTION

The fifth of August 2013 would become a landmark date in the history of cultured meat. Mark Post, a leading scientist in the field, served the world's first hamburger grown directly from animal cells to a panel of judges. They were pleasantly surprised, noting that it "tasted close to meat."[1] Eight years later, this novel meat—commonly referred to as "cultured meat" [2] —is about to take the leap from laboratory bioreactors onto consumers' dinner plates. In what has been described as a "watershed moment," Singapore became the first country in the world to grant regulatory approval for a cultured meat product in December 2020 (Huling 2020). As a real step toward making cultured meat an accessible alternative for consumers, this development is indeed significant. Nevertheless, while proponents of cultured meat underscore its promise to radically transform our food system, we are in many ways "locked-in" to unsustainable agricultural practices and meat-intense diets (Joy 2009; McMichael 2009). As such, there may be many bumps in the road for such a transition—not least the issue of harnessing interest among consumers (Bryant and Barnett 2020).

In this chapter, we unpack consumers' response to cultured meat. We begin by introducing the phenomenon and history of cultured meat, before reviewing current literature on relations between cultured meat and sustainability. We devote our main discussion to the role of perceived (un)naturalness and (un)familiarity in mediating consumer skepticism toward cultured meat, and how consumer responses are imbued in contemporary "meat cultures." The concept of "meat culture" here refers to "shared beliefs about, perspectives on, and experiences of meat," developed through "representations and discourses, practices and behaviours, diets and tastes" (Potts 2016, 20). While meat cultures (and systems) do vary across geographies and social groups, we focus primarily on contemporary Western meat cultures characterized by industrial, "post-domestic" meat production.[3] We ultimately argue that deeply entrenched systems and cultures existing around meat pose barriers for consumer acceptance of such a "technotopian" alternative to conventional meat.

ON THE ROAD TO SUSTAINABLE (CULTURED) MEAT

There is little controversy in stating that contemporary food production is deeply unsustainable. The global food system requires vast amounts of energy, land, and water, and is responsible for at least 25 percent of global greenhouse gas (GHG) emissions (Ritchie and Roser 2020). Moreover, half a decade of rapidly industrialized and intensified agricultural practices has led to rapid deforestation, biodiversity loss, soil loss, and natural resource depletion (Ericksen 2008).

Neither is it controversial to point to *meat* as a culprit for this unsustainability. Globally, meat production has more than quadrupled since the 1960s, and consumer demand is expected to increase further in the next decades (Bhat et al. 2019). This growing rate of meat production and consumption poses extensive risks for the environment and global health (González et al. 2020). Therefore, perhaps *the* greatest challenge of transforming the food system, and indeed to ensure a sustainable future, will be to facilitate sustainable protein production (Fresco 2009). How to go about such a transition, however, is certainly a more controversial topic.

Most consumers seem unwilling to reduce meat intake despite being increasingly concerned about both animal welfare